

BALTIC SEA SCORECARD 2011

Technical reference document

FACTWISE

July 2011

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This document contains the background information for the WWF 2011 Baltic Sea Scorecard. The information is structured as data sheets, one for each indicator in the scorecard.

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1a. BSAP Nitrogen reduction requirements

Rationale			
<p>Eutrophication is a major problem in the Baltic Sea. Since the 1900s, the Baltic Sea has changed from an oligotrophic clear-water sea into a eutrophic marine environment. Eutrophication is a condition in an aquatic ecosystem where high nutrient concentrations stimulate the growth of algae which leads to imbalanced functioning of the system, such as:</p> <ul style="list-style-type: none"> • intense algal growth: excess of filamentous algae and phytoplankton blooms; • production of excess organic matter; • increase in oxygen consumption; • oxygen depletion with recurrent internal loading of nutrients; and • death of benthic organisms, including fish. <p>The BSAP contains provisional country-wise reduction requirements of waterborne nutrient input to be obtained by 2016 in order to reach good ecological and environmental status of the Baltic Sea by 2021. These reduction levels have been derived for each sub-basin by a step-wise procedure. The first step was to assess the maximum allowable input of nitrogen and phosphorus by applying a coupled physical-biogeochemical model to the specific conditions in each sub-basin and simulate the nutrient input to these sub-basins that fits the HELCOM goal for eutrophication. Specifically, values for Secchi depth were used as targets in the modelling, that was performed with the Baltic Nest Model. The second step was to calculate the specific reduction requirements for each sub-basin by subtracting the maximum allowable input from the mean load to the sub-basin during the period 1997-2003. The load 1997-2003 was corrected for already implemented measures in the municipal waste-water sector in the catchments, in accordance to the reduction levels in the EU wastewater treatment directive (91/271/EEC). Thereafter the reduction requirements were allocated to countries in proportion to their respective remaining input to the sub-basin. Both the maximum allowable inputs and country-wise reduction requirements are being revised and new targets are expected to be adopted by the HELCOM Ministerial Meeting 2013.</p>			
Assessment			
<p>Each country's reference load (corrected average 1997-2003) has been compared to actual loads 2008 and the difference has been measured as a percentage of the BSAP target.</p>			
Importance	Scoring		
	<p>0 - No reduction (or increase) 1 - Up to 50% of target reduction reached 2 - At least 50% but not 100% of target reduction reached 3 - 100% or more of target reduction reached</p>		
Countries	Percent reduction	Score	Comments
Denmark	93%	2	
Estonia	-607%	0	

Finland	-69%	0	
Germany	145%	3	
Latvia	-111%	0	
Lithuania	4%	1	
Poland	41%	1	
Russia	221%	3	Russia did not report load for the Baltic Proper for 2008 or 2007. Numbers for 2006 has been used for this sub-basin.
Sweden	38%	1	
References			
BSAP		EUSBSR	Other
1,2,3		2 SA	
Data sources			
Helcom, PLC5			

1b. BSAP Phosphorus reduction requirements

Rationale
<p>Eutrophication is a major problem in the Baltic Sea. Since the 1900s, the Baltic Sea has changed from an oligotrophic clear-water sea into a eutrophic marine environment. Eutrophication is a condition in an aquatic ecosystem where high nutrient concentrations stimulate the growth of algae which leads to imbalanced functioning of the system, such as:</p> <ul style="list-style-type: none"> • intense algal growth: excess of filamentous algae and phytoplankton blooms; • production of excess organic matter; • increase in oxygen consumption; • oxygen depletion with recurrent internal loading of nutrients; and • death of benthic organisms, including fish. <p>The BSAP contains provisional country-wise reduction requirements of waterborne nutrient input to be obtained by 2016 in order to reach good ecological and environmental status of the Baltic Sea by 2021. These reduction levels have been derived for each sub-basin by a step-wise procedure. The first step was to assess the maximum allowable input of nitrogen and phosphorus by applying a coupled physical-biogeochemical model to the specific conditions in each sub-basin and simulate the nutrient input to these sub-basins that fits the HELCOM goal for eutrophication. Specifically, values for Secchi depth were used as targets in the modelling, that was performed with the Baltic Nest Model. The second step was to calculate the specific reduction requirements for each sub-basin by subtracting the maximum allowable input from the mean load to the sub-basin during the period 1997-2003. The load 1997-2003 was corrected for</p>

<p>already implemented measures in the municipal waste-water sector in the catchments, in accordance to the reduction levels in the EU wastewater treatment directive (91/271/EEC). Thereafter the reduction requirements were allocated to countries in proportion to their respective remaining input to the sub-basin. Both the maximum allowable inputs and country-wise reduction requirements are being revised and new targets are expected to be adopted by the HELCOM Ministerial Meeting 2013.</p>			
Assessment			
<p>Each country's reference load (corrected average 1997-2003) has been compared to actual loads 2008 and the difference has been measured as a percentage of the BSAP target.</p>			
Importance	Scoring		
	<p>0 - No reduction (or increase) 1 - Up to 50% of target reduction reached 2 - At least 50% but not 100% of target reduction reached 3 - 100% or more of target reduction reached</p>		
Countries	Percent reduction	Score	Comments
Denmark	-56%	0	
Estonia	57%	2	
Finland	-99%	0	
Germany	172%	3	
Latvia	-542%	0	
Lithuania	-104%	0	
Poland	32%	1	
Russia	82%	2	Russia has not reported load for the Baltic Proper for any year. Average load 97-03 has been used for this sub-basin.
Sweden	56%	2	
References			
BSAP		EUSBSR	Other
1,2,3		2 SA	
Data sources			
Helcom, PLC5			

1c. Total Nitrogen reductions

Rationale
<p>Eutrophication is a major problem in the Baltic Sea. Since the 1900s, the Baltic Sea has changed from an oligotrophic clear-water sea into a eutrophic marine environment.</p>

Eutrophication is a condition in an aquatic ecosystem where high nutrient concentrations stimulate the growth of algae which leads to imbalanced functioning of the system, such as:

- intense algal growth: excess of filamentous algae and phytoplankton blooms;
- production of excess organic matter;
- increase in oxygen consumption;
- oxygen depletion with recurrent internal loading of nutrients; and
- death of benthic organisms, including fish.

In order to reach agreed country-wise provisional reduction targets, the Helcom countries have agreed to develop, and to submit for Helcom's assessment, national programmes by 2010 with a view to evaluate the effectiveness of the programmes at a Helcom Ministerial Meeting in 2013 and whether additional measures are needed.

Assessment

We have assessed reported actual waterborne nutrient loads (flow-normalised riverine + non flow-normalized direct coastal loads) and compared an average of the years 2005 to 2008 against a reference of the average on the years 1997-2004. The difference is measure as a percentage of the reference load.

Importance	Scoring
	0 - No reduction of nitrogen load 1 - More than 0 up to 10% reduction of nitrogen load 2 - More than 10% up to 20% reduction of nitrogen load 3 - More than 20% reduction of nitrogen load

Countries	% Diff	Score	Comments
Denmark	-21%	3	
Estonia	3%	0	
Finland	6%	0	
Germany	-13%	2	
Latvia	19%	0	
Lithuania	-7%	1	
Poland	-2%	1	
Russia	27%	0	
Sweden	-5%	1	

References

BSAP	EUSBSR	Other
1,2,3	2 SA	

Data sources

Helcom, PLC5

1d. Total Phosphorus reductions

Rationale			
<p>Eutrophication is a major problem in the Baltic Sea. Since the 1900s, the Baltic Sea has changed from an oligotrophic clear-water sea into a eutrophic marine environment. Eutrophication is a condition in an aquatic ecosystem where high nutrient concentrations stimulate the growth of algae which leads to imbalanced functioning of the system, such as:</p> <ul style="list-style-type: none"> • intense algal growth: excess of filamentous algae and phytoplankton blooms; • production of excess organic matter; • increase in oxygen consumption; • oxygen depletion with recurrent internal loading of nutrients; and • death of benthic organisms, including fish. <p>In order to reach agreed country-wise provisional reduction targets, the Helcom countries have agreed to develop, and to submit for Helcom's assessment, national programmes by 2010 with a view to evaluate the effectiveness of the programmes at a Helcom Ministerial Meeting in 2013 and whether additional measures are needed.</p>			
Assessment			
<p>We have assessed reported actual waterborne phosphorus loads (flow-normalised riverine + non flow-normalized direct coastal loads) and compared an average of the years 2005 to 2008 against a reference of the average on the years 1997-2004. The difference is measured as a percentage of the reference load.</p>			
Importance	Scoring		
	<p>0 - No reduction of phosphorus load 1 - More than 0% up to 25% reduction of phosphorus load 2 - More than 25% up to 50% reduction of phosphorus load 3 - More than 50% reduction of phosphorus load</p>		
Countries	% Diff	Score	Comments
Denmark	-2%	1	
Estonia	-6%	1	
Finland	0%	1	
Germany	-17%	1	
Latvia	44%	0	
Lithuania	-30%	2	
Poland	-6%	1	
Russia	-14%	1	
Sweden	-8%	1	

References		
BSAP	EUSBSR	Other
1,2,3	2 SA	
Data sources		
Helcom, PLC5		

2. National phosphate bans

Rationale		
Banning phosphates in detergents is a very simple and cost-effective way of reducing eutrophication of the Baltic Sea and could potentially reduce phosphorus loads with up to 24%.		
Assessment		
We have assessed current and planned legislation in each country both for laundry and dishwasher detergents.		
Importance	Scoring	
	0 - No measures taken 1 - In a legislative process to implement a ban 2 - Ban on laundry detergents in place 3 - Ban on both laundry and dishwasher detergents in place	
Countries	Score	Comments
Denmark	0	Nothing reported in NIP
Estonia	0	Nothing reported in NIP
Finland	1	According to NIP
Germany	2	Voluntary?
Latvia	2	From 01.06.2010
Lithuania	0	Only as “task” in NIP
Poland	0	No clear implementation process in NIP
Russia	0	No implementation process in NIP
Sweden	3	Total ban from 01.07.2011
References		
BSAP	EUSBSR	Other
6	FP 1.1 (FP 9.10)	7ST
Data sources		
Helcom BSAP, National Implementation Plans Personal communication with national authorities		

3. River basin management plans

Rationale		
<p>The core of the WFD is the drawing up of River Basin Management Plans (RBMPs) as the river basin in this case is the adequate natural geographical and hydrological unit to work with. The directive addresses inland surface waters, transitional waters, coastal waters and groundwater. For the Baltic Sea the WFD and its RBMPs are important although they mostly cover the treatment of freshwater, since this is the water that later runs out in the sea.</p> <p>The deadline for publishing River Basin management Plans was 22.12.2009, and the deadline for reporting these plans to the Commission was 22.3.2010.</p>		
Assessment		
<p>We have at this stage assessed the adoption of RBMPs. Later Scorecards may assess later stages of the implementation process as part of this indicator.</p>		
Importance	Scoring	
	<p>0 - No measures taken 1 - RBMPs published and reported to the Commission. 2 - (will be used to track further implementation in future Scorecards) 3 - (will be used to track further implementation in future Scorecards)</p>	
Countries	Score	Comments
Denmark	0	Consultation process finalized but RBMPs not yet adopted (as of 31.5.2011)
Estonia	1	
Finland	1	
Germany	1	
Latvia	1	
Lithuania	1	
Poland	1	
Russia	1	Russian Federation Water Code
Sweden	1	
References		
BSAP	EUSBSR	Other
3		WFD
Data sources		
European Commission (http://ec.europa.eu/environment/water/participation/map_mc/map.htm)		

4. Wetland conservation, restoration and re-creation

Rationale		
<p>Wetlands are multi-functional ecosystems that trap nutrients but also provide added values like for instance enhanced biodiversity, water storage and landscape beautification. Wetlands act by intercepting pollutant delivery, providing a buffer zone and can potentially clean up polluted water. Wetlands improve water quality by breaking down, removing, using or retaining nutrients, organic waste and sediment carried to the wetland with runoff from the watershed. They can trap sediment and through the retention of runoff reduce nitrates and phosphorus (soluble and particulate). Wetlands reduce the severity of floods downstream by retaining water and releasing it during drier periods and protect stream banks and shorelines from erosion. According to a Finnish study, wetlands have reduced 25-48% phosphorus and 20-90% nitrogen. Swedish studies show that wetlands can reduce phosphorus 90-100% and nitrates 76-90%. The effectiveness depends on the size of the wetland, vegetation, loading and influx.</p> <p>The EUSBSR says: "Establish and restore more wetlands" to recycle the nutrients (to stop the nutrients leaking into the Sea) and to mitigate floods (to stop the runoff of fertilisers during floods). The wetlands should be established where long term effects can be expected considering the different climatic conditions, the sensitivity for eutrophication etc."</p>		
Assessment		
<p>Many wetlands have been lost over the last centuries due to large-scale drainage for agriculture and other reasons. We have compared the original extension of wetlands in each country with what has been lost and with what has been recovered.</p>		
Importance	Scoring	
3	0 - No reported action on wetlands in NIP 1 - Strategy for wetlands included in NIP 2 - To be used in later scorecards 3 - To be used in later scorecards	
Countries	Score	Comments
Denmark	1	The establishment of 10,000 ha wetlands as part of nutrient reduction measures is mentioned in NIP.
Estonia	0	Not specifically mentioned in NIP
Finland	1	380 new areas of wetlands as measures in RBMPs are mentioned in NIP.
Germany	1	Brings up restoration and creation of wetlands including adequate management is a promising strategy for reducing diffuse pollution from agriculture in NIP.
Latvia	0	Not specifically mentioned in NIP
Lithuania	0	Not specifically mentioned in NIP
Poland	1	creation/restoration/conservation of wetlands is mentioned among measures that will contribute to better water management related to farming in NIP.

Russia	0	The role of wetlands is briefly mentioned in NIP but only in relation to biodiversity conservation.
Sweden	1	Investment support for wetlands as well as the support for management of wetlands are mentioned in the NIP.
References		
BSAP	EUSBSR	Other
	CA	WFD, Ramsar
Data sources		
Helcom BSAP, National Implementation Plans		

5. Hotspot cleanup

Rationale		
"FURTHERMORE WE AGREE to establish by 2009 a list of Hot Spots identifying existing installations for the intensive rearing of cattle, poultry and pigs not fulfilling the requirements in the revised Annex III of the Convention."		
Assessment		
We have looked at the reporting and subsequent deletion of agricultural hotspots. At the time of writing the report, all CPs have had a round of initial assessments trying to identify potential hot spots and that the work on further identification is still ongoing.		
Importance	Scoring	
	0 - No action 1 - Process started 2 - Agricultural hotspots identified and reported 3 - All agricultural hotspots cleaned up	
Countries	Score	Comments
Denmark	1	
Estonia	1	
Finland	1	
Germany	1	
Latvia	1	
Lithuania	1	
Poland	1	
Russia	1	
Sweden	1	
References		

BSAP	EUSBSR	Other
10		7ST
Data sources		
Helcom, personal contact.		

6. Implementation of international conventions

Rationale						
<p>A cocktail of hazardous substances has been released into the Baltic Sea over decades, including persistent and bio-accumulative substances such as PCBs and DDT, endocrine-disrupting chemicals, and heavy metals. Despite recognition of the problems associated with emissions of hazardous pollutants directly or indirectly into the marine environment and programmes to reduce pollution loads entering the Baltic Sea, many hazardous pollutants remain a cause for serious concern. Heavy metal concentrations are still significantly higher than in the North Atlantic and while concentrations of many metals in wildlife have decreased, some are increasing, such as cadmium concentrations in marine organisms from the western part of the Baltic proper. Decreases in dioxin levels in the 1980s levelled off in the 1990s suggesting continued inputs from around the Baltic Sea. Further action is needed to reduce inputs so that the dioxin content of all Baltic salmon and herring meets the EU food safety limits considered to be safe for human consumption.</p> <p>For the analysis of political commitment intended to protect the Baltic Sea from hazardous pollution, three international pollution agreements have been selected already in earlier scorecards: the Stockholm Convention, the Basel Convention, and the AFS Convention.</p>						
Assessment						
We have checked each country's status relating to the ratification of each of the three conventions.						
Importance	Scoring					
	0 - No measures taken 1 - Ratification and implementation of one of the conventions 2 - Ratification and implementation of two of the conventions 3 - Ratification and implementation of all of the three conventions					
Countries	POPs	Basel	AFS		Score	Comments
Denmark	1	1	1		3	
Estonia	1	1	1		3	
Finland	1	1	1		3	
Germany	1	1	1		3	
Latvia	1	1	1		3	
Lithuania	1	1	1		3	

Poland	1	1	1		3	
Russia	0	1	0		1	
Sweden	1	1	1		3	
References						
BSAP			EUSBSR			Other
34			SA			SC08, SC09
Data sources						
Each convention's own documentation						

7. Reductions of heavy metals

Rationale
<p>Once released into the sea, heavy metals will remain in the marine environment for very long periods and accumulate in the marine food web.</p> <p>HELCOM has already set a zero-emission target for all hazardous substances in the whole Baltic Sea catchment area by 2020. The actions on hazardous substances in the action plan focus on two heavy metals, mercury and cadmium. These substances have been selected by HELCOM as being of specific concern in the Baltic marine environment.</p> <p>Some countries have implemented a general ban on the use of mercury.</p> <p>Some have introduced restrictions on levels of cadmium in fertilizers.</p> <p>The Protocol on Heavy Metals targets three particularly harmful metals: cadmium, lead and mercury. According to one of the basic obligations, Parties will have to reduce their emissions for these three metals below their levels in 1990 (or an alternative year between 1985 and 1995). The Protocol aims to cut emissions from industrial sources (iron and steel industry, non-ferrous metal industry), combustion processes (power generation, road transport) and waste incineration. It lays down stringent limit values for emissions from stationary sources and suggests best available techniques (BAT) for these sources, such as special filters or scrubbers for combustion sources or mercury-free processes. The Protocol requires Parties to phase out leaded petrol. It also introduces measures to lower heavy metal emissions from other products, such as mercury in batteries, and proposes the introduction of management measures for other mercury-containing products, such as electrical components (thermostats, switches), measuring devices (thermometers, manometers, barometers), fluorescent lamps, dental amalgam, pesticides and paint.</p>
Assessment
<p>Each country has been assessed in relation to three criteria:</p> <p>A. Does the country have a general ban on mercury?</p> <p>B. Does the country have restrictions on levels of cadmium in fertilizers?</p> <p>C. Has the country signed the 1998 Aarhus Protocol on Heavy Metals to the Convention on</p>

Long-range Transboundary Air Pollution?					
Importance	Scoring				
	0 - No criteria are met 1 - One of the three criteria are met 2 - Two of the three criteria are met 3 - All criteria are met				
Countries	A.	B.	C.	Score	Comments
Denmark	1	0	1	2	
Estonia	0	0	1	1	
Finland	0	1	1	2	
Germany	0	0	1	1	
Latvia	0	1	1	2	Latvia did not make a submission to UNEP on Cd. Score based on translation of national legislation.
Lithuania	0	0	1	1	
Poland	0	1	0	1	
Russia	0	0	0	0	
Sweden	1	1	1	3	
References					
BSAP		EUSBSR		Other	
28, 29					
Data sources					
<p>Hg - European Commission (DG ENV), Reference 07.0307/2009/549558/ETU/G1, <i>Review of the Community Strategy Concerning Mercury</i>, Final Report 4 October 2010, In association with Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) mbH.</p> <p>Cd - UNITED NATIONS ENVIRONMENT PROGRAMME, Chemicals Branch, DTIE, <i>Final review of scientific information on cadmium</i>, Version of December 2010.</p> <p>Heavy Metals Protocol: http://www.unece.org/env/lrtap/status/98hm_st.htm</p>					

8. Reductions of dioxins and furans

Rationale
<p>Polychlorinated dibenzodioxins (PCDDs), or simply dioxins, and polychlorinated dibenzofurans (PCDFs), or simply furans, are a group of organic polyhalogenated compounds that are significant because they act as environmental pollutants.</p> <p>In the Baltic Sea Region, these hazardous substances continue to be a risk for the environment and for health.. Once released into the sea, they can remain in the marine environment for very</p>

<p>long periods and accumulate in the marine food web. They cause adverse effects in ecosystems, including health and reproductive problems in animals, especially top predators, with negative consequences eventually on human health. They may be hazardous because of their toxicity (acute and chronic effects, e.g. hormone-disruption, etc.), persistence and bio-accumulating properties. For example fish caught in some parts of the Baltic Sea, particularly herring and salmon; contain concentrations of dioxin that exceed maximum allowable levels for foodstuffs as defined at Community level.</p>			
<p>Assessment</p> <p>We have looked at data on emissions of PCDD/F (dioxins and furans) from all the countries around the Baltic Sea. We have compared last 5 years of measurement (2004-2008) with the 10 previous years (1994-2003) and calculated the reduction (and in some cases increase!) of emissions as a percentage.</p> <p>(For the region as a whole as a whole, there is an increase of 1%!)</p>			
<p>Importance</p>		<p>Scoring</p>	
		<p>0 - Increase in emissions 1 - 0-25% reduction in emissions 2 - 25-50% reduction in emissions 3 - More than 50% reduction in emissions</p>	
<p>Countries</p>	<p>Percentage</p>	<p>Score</p>	<p>Comments</p>
Denmark	-27%	2	
Estonia	-2%	1	
Finland	-46%	2	
Germany	-4%	1	
Latvia	+4%	0	
Lithuania	-11%	1	
Poland	-7%	1	
Russia	+16%	0	
Sweden	+4%	0	
<p>References</p>			
<p>BSAP</p>		<p>EUSBSR</p>	<p>Other</p>
<p>25, 26, 27</p>		<p>FP 3.7</p>	
<p>Data sources</p>			
<p>Helcom indicator fact sheet 2009, <i>Atmospheric emissions of PCDD/Fs in the Baltic Sea region</i>, http://www.helcom.fi/BSAP_assessment/ifs/ifs2009/en_GB/pcddfemissions/ updated with new data from EMEP MSC-E.</p>			

9. Hotspot clean-up

Rationale			
<p>The Baltic Sea Joint Comprehensive Environmental Action Programme (JCP), signed by Heads of States in 1990, specified a series of actions to be undertaken at "pollution hot spots" around the Baltic Sea. The most notorious hot spots are point sources such as municipal facilities and industrial plants, but the programme also covers pollution from agricultural areas and rural settlements, as well as sensitive areas such as coastal lagoons and wetlands where special environmental measures are needed. The Helcom hot spots list has been a powerful tool to reduce pollution to the Baltic Sea. It has had a major impact in many local coastal areas and is very well accepted among stakeholders in the region. As of March 2010, 72 of the original 162 hotspots are still "active", i.e. not yet cleaned up. There is no excuse for not delivering what was promised a long time ago.</p>			
Assessment			
<p>We have calculated the percentage of deleted hotspots compared to the original list of hotspots for each country. In the (few) cases where a hotspot is shared between two countries, we have counted it twice, once for each country.</p>			
Importance	Scoring		
	0 - Less than 50% of original hotspots cleaned up 1 - 50-75% of original hotspots cleaned up 2 - 75-99% of original hotspots cleaned up 3 - All original hotspots cleaned up		
Countries	%	Score	Comments
Denmark	25%	0	
Estonia	62%	1	
Finland	90%	2	
Germany	89%	2	
Latvia	30%	0	
Lithuania	56%	1	
Poland	60%	1	
Russia	44%	0	
Sweden	58%	1	
References			
BSAP		EUSBSR	Other
			7ST
Data sources			
Helcom List of JCP Hot Spots in the Baltic Sea catchment area as per June 2011			

10. Establishment of an ecologically coherent MPA network

Rationale			
<p>The establishment of marine protected areas is an explicit measure of the EU Habitats Directive, the Birds Directive and the Marine Strategy Framework Directive, as well as of the UN Convention on Biological Diversity. The successful completion of an ecologically coherent network of well-managed Baltic Sea Protected Areas (BSPAs) by 2010 is a fundamental target set forward initially by the 2003 Bremen Ministerial Meeting of HELCOM and OSPAR. Recent evaluations show that the current BSPA network does not fulfil the criteria for an ecologically coherent network (the criteria are: adequacy, representativity, replication and connectivity). This means that many species and habitats in the Baltic Sea are still under serious threat. In order to secure a healthy ecosystem for the future, there is an urgent need for actions to protect and restore them.</p>			
Assessment			
<p>We have assessed how large percentage of each country's sea (territorial and EEZ) areas is designated either BSPA or Natura 2000. No country has been able to show that its protected areas form a coherent network, according to Helcom's criteria, and therefore no country has received the full score of three points.</p>			
Importance	Scoring		
	<p>0 - Less than 10% protected 1 - At least 10% protected 2 - More than 20% protected 3 - At least 10% protected AND ecologically coherent</p>		
Countries	%	Score	Comments
Denmark	22.2%	2	
Estonia	18.0%	1	
Finland	8.8%	0	
Germany	51.1%	2	
Latvia	4.1%	0	
Lithuania	10.6%	1	
Poland	24.4%	2	
Russia	5.3%	0	
Sweden	6.2%	0	
References			
BSAP		EUSBSR	Other
39, 40, 41		FP 2.1	7ST
Data sources			
Helcom, Baltic Sea Environment Proceedings No. 124B, <i>Towards an ecologically coherent</i>			

network of well-managed Marine Protected Areas, 2010.

11. Sufficient management of existing MPAs

Rationale		
<p>An established MPA also needs management through a well defined management plan. The need for management arises from conflicts of interest and from specific nature conservation goals. But also the aim to keep an area as it is and to focus on an undisturbed natural succession needs to be described within a management plan. Conflicts between conservation interests and anthropogenic exploitation or side effects from such and other human activities detrimental to nature must be avoided in a BSPA. On the other hand, an activity by man, such as environment friendly farming practices may be essential for the upholding of conditions needed for certain species or habitats.</p>		
Assessment		
<p>We have looked at the percentage of the number of existing MPAs (in this case, only BSPAs) that have a management plan, existing or in preparation.</p>		
Importance	Scoring	
	<p>0 - Less than 50% of BSPAs covered by a management plan. 1 - At least 50 % of BSPAs covered by a management plan, existing or in preparation 2 - 100% of BSPAs management plans that at least are in preparation 3 - 100% of BSPAs have existing management plans</p>	
Countries	Score	Comments
Denmark	0	
Estonia	0	
Finland	1	
Germany	0	
Latvia	3	
Lithuania	2	
Poland	0	
Russia	0	
Sweden	0	
References		
BSAP	EUSBSR	Other
Data sources		
<p>Helcom, Baltic Sea Environment Proceedings No. 124B, <i>Towards an ecologically coherent</i></p>		

network of well-managed Marine Protected Areas, 2010.

12. Establishment of long term management plans for fisheries

Rationale

Although we are finally seeing some signs of hope in the situation for fish and fisheries in the Baltic Sea, many stocks and populations are still at or below critical levels. Some, like the eel, are even close to a total collapse.

There is a clear case for all fisheries to be managed under multi-species Long Term Management Plans (LTMPs). These would put an end to the annual negotiations for fishing opportunities for EU Member States and should lead to better management decisions. The CFP is being reformed, and we believe that mandatory LTMPs developed according to centrally agreed standards for all fisheries should be a cornerstone of the reform as a means to address all conservation and management issues, including potential excess fishing/catch capacity, and discards. LTMPs should be inherent in the context of regional marine strategies and policies to achieve Good Environmental Status.

The swift and systematic adoption of well designed Long Term Management Plans (LTMPs) will allow Baltic Sea states to manage fisheries on a multi annual basis, in line with the precautionary principle and an ecosystem based approach.

Key to the success of the plans will be the criteria and their implementation. These should include the following:

1. Plans are fisheries (or region) based instead of stock specific. This is a major change from what is happening at present, and will be one of the main issues to address but is essential if we are to take an ecosystems approach.
2. Appropriate stakeholder group(s) need to be established, as well as a means of co-ordination at a Regional level. Plans need to be agreed, implemented and reviewed by balanced stakeholder groups, which should include government managers, scientists, industry (processors as well as catching sector), control agencies and NGOs.
3. Description of the fishery(ies) – this should include vessels, gear, species, economics (revenue, management costs), employment, recreational interests.
4. Plans are ecosystem based – they need to introduce impact assessments, taking account of a wide range of impacts on target and non target species (including non fish species) in addition to habitat, as well as the impact of other fisheries/activities on the target species within a fishery.
5. Management is based on total removal and overall impact rather than landings.
6. Analysis and risk assessment are used to address data poor fisheries and allow precautionary quotas to be set.
7. Clear targets and timelines are set, and unambiguous harvest control rules are established.
8. At multi Member State level, the plans will need to establish targets other than simply stock and will be informed by the impact assessment process. These could include discard mitigation

- plans, by-catch reduction
plans, habitat protection strategies.
9. The fishery(ies) should be assessed for overcapacity which if identified should require a strategy to bring it into line with resources. Detailed capacity reduction would likely be delivered at Member State level. A marketing strategy (which would help maximise economic return) would also be useful at Member State level.
 10. Effective monitoring and control requirements.
 11. Formal penalties for failure to comply. These need to be standardised across Member States
 12. Triggers for fisheries, which would warn when management has to shift from rebuilding to recovery mode, are established in the plan.
 13. Formal periodic review and ability for flexibility in face of new data.

"Stressing the need for long-term management strategies with the aim of developing and implementing long-term management plans for all commercial species in the Baltic Sea"
The Stockholm Declaration on the Management of the Baltic Sea Fisheries

Assessment

For EU Member States the burden must be shared equally as LMTPs are decided at the European level. A proposal for an LMTP should be presented by the European Commission and with Lisbon Treaty, a final decision need to be made jointly by the European Parliament and the Council.

We have therefore looked at EU member states collectively and assessed the number and quality of LMTPs in the Baltic Sea. Scores have been given according to the criteria below.

For Russia we have looked at their performance in relation to the fisheries agreement of 2009 with the EU. Russia has made no further progress than the EU on LTMPs

Importance	Scoring	
	0 – No LTMPs 1 – More than 0 but less than 50% of the number of commercial fish stocks are subject to LMTPs. 2 - More than 50% but not all commercial fish stocks are subject to LMTPs. 3 - All relevant fisheries are subject to	
Countries	Score	Comments
Denmark	1	
Estonia	1	
Finland	1	
Germany	1	
Latvia	1	
Lithuania	1	
Poland	1	
Russia	1	Not an EU Member State but bound through agreement with EU
Sweden	1	

References		
BSAP	EUSBSR	Other
56, 59, 64	FP 9.4	
Data sources		
ICES data.		

13. A ban on eel fisheries

Rationale
<p>The European eel stock is at a historical minimum and continues to decline. Recruitment in 2008 and 2009 was especially low and a total decline of 99% has been estimated. Overfishing combined with habitat alteration, including barrier to eel passage and deterioration in water quality, contribute to the present situation. The International Council for the Exploration of the Sea (ICES) has repeatedly recommended that all anthropogenic impacts should be reduced to as close to zero as possible. Only with very radical measures do we stand a chance to save the eel population of the Baltic Sea. In the Baltic Sea Action Plan, governments promised to rapidly implement long-term management plans for eel so that “by 2008 successful eel migration from the Baltic Sea catchment area to the spawning grounds is ensured”. A total ban of all fishing of eel, combined with active measures to restore migration routes, is the only way to secure the survival of the eel population.</p> <p>Even if eel fisheries were to be banned immediately and completely, recovery of the stock is expected to take several decades or more. None of the current biologists studying the eel resource, nor the stakeholders or politicians influenced by or deciding on protection plans, would likely live to see the recovery. However, for there to be any hope at all for the stock, all analyses indicate that reductions in fishing and all other anthropogenic impacts should be made as soon and as stringently as possible.</p> <p>According to Åström & Dekker (2007) the forecast of the development in the eel stock recovery is that even a total stop in fishing will not rebuild the stock to the target level until about 80 years from now (see Figure 1). This is because eel recruitment has been so low in recent years. It can be seen from the figure that recruitment will increase to about 25% of the historic level in 5 years time, but then again decrease because of recent weak recruitment. The analysis shows further that in order to just prevent further decline in the stock in the long term, fishing needs to be reduced to only 15% of the present level.</p> <p>From 1 July 2009, all EU member states must prepare an eel management plan, the objective of which is to reduce anthropogenic mortalities to achieve a target escapement of adult eel equivalent to 40 % of the silver eel biomass relative to the best estimate of escapement that would have existed if no anthropogenic influences had impacted the stock.</p>
Assessment
We have used ICES assessment of EU Member States Eel Management Plans to assess whether

<p>a) there is an EMP in place, b) countries will live up to the 85% reduction in fishing effort that would be needed to maintain status quo, and c) there is a total ban implemented.</p>		
Importance	Scoring	
	<p>0 - No measures taken 1 - At least 40% escapement 2 - 85% reduction of fishing effort 3 - A total ban on eel fisheries implemented</p>	
Countries	Score	Comments
Denmark	0	
Estonia	0	
Finland	0	
Germany	1	
Latvia	0	
Lithuania	0	
Poland	0	
Russia	-	
Sweden	0	
References		
BSAP	EUSBSR	Other
59, 61	FP 2.3	7ST
Data sources		
<p><i>EVALUATION OF EEL MANAGEMENT PLANS, REPORT OF THE ICES SECRETARIAT, November 2009</i> <i>Report of the Workshop on Baltic Eel, ICES WKBALTEEL REPORT 2010, ICES ADVISORY COMMITTEE, ICES CM 2010/ACOM:59</i></p>		

14. MSFD implementation

Rationale
<p>Europe is committed to protecting marine ecosystems and biodiversity. Marine activities such as fishing, tourism and recreation rely on good quality waters. Europe's marine waters, including the Baltic Sea, are protected by a central piece of European legislation, the Marine Strategy Framework Directive 2008/56/EC.</p> <p>The aim of the European Union's Marine Strategy Framework Directive, which was adopted in 2008, is to more effectively protect the marine environment across Europe. It aims to achieve good environmental status of the EU's marine waters by 2020 and to protect the resource base</p>

<p>upon which marine-related economic and social activities depend. The Marine Strategy Framework Directive constitutes the vital environmental component of the Union's maritime policy, designed to achieve the full economic potential of oceans and seas in harmony with the marine environment, including a roadmap for the establishment of maritime spatial planning.</p> <p>Article 26 of the Directive: "Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 15 July 2010 at the latest. They shall forthwith communicate to the Commission the text of those provisions."</p> <p>Delays in implementing the directive lessen the probability of that good status being achieved within the deadline, with potentially serious implications for the users of Europe's seas.</p> <p>In the BSAP, Helcom is "STRESSING the need to co-ordinate and harmonise the work within the HELCOM Baltic Sea Action Plan to various on-going initiatives at the international and national level, including the proposed EU Marine Strategy Directive, the EU Maritime Policy and the Maritime Doctrine of the Russian Federation".</p> <p>One of the horizontal actions of the EUSBSR is to "Become a pilot project in implementing the Marine Strategy Framework Directive" and take early actions to restore the Baltic Sea.</p>		
<p>Assessment</p>		
<p>At this stage we have checked whether each Baltic Sea Member State has informed the European Commission about the transposition of the Directive.</p>		
Importance	Scoring	
	<p>0 - Failure to yet transpose into national law 1 - Has informed the European Commission about transposition 2 - To be used in later scorecards 3 - To be used in later scorecards</p>	
Countries	Score	Comments
Denmark	1	
Estonia	1	
Finland	0	Has not yet reported
Germany	1	
Latvia	1	
Lithuania	0	Has initiated transposition, but not yet reported
Poland	0	Has not yet reported
Russia	0	No national legislation of the same scope
Sweden	1	
<p>References</p>		
BSAP	EUSBSR	Other
(Importance of harmonisation mentioned in preamble)	Horizontal Action to make priority area	MSFD
<p>Data sources</p>		

European Commission - press releases and personal contact.

15a. Ratification of the Ballast Water Convention

Rationale		
<p>While ballast water is essential for safe and efficient modern shipping operations, it may pose serious ecological, economic and health problems due to the multitude of marine species carried in ships' ballast water. These include bacteria, microbes, small invertebrates, eggs, cysts and larvae of various species. The transferred species may survive to establish a reproductive population in the host environment, becoming invasive, out-competing native species and multiplying into pest proportions.</p> <p>The Ballast Water Management (BWM) Convention aims to prevent the potentially devastating effects of the spread of harmful aquatic organisms carried by ships' ballast water from one region to another.</p> <p>The Convention will require all ships to implement a Ballast Water and Sediments Management Plan. All ships will have to carry a Ballast Water Record Book and will be required to carry out ballast water management procedures to a given standard. Existing ships will be required to do the same, but after a phase-in period.</p>		
Assessment		
<p>We have assessed the ratification of the Ballast Water Management (BWM) Convention among the Baltic Sea nations.</p>		
Importance	Scoring	
	<p>0 - Has not ratified 1 - Has ratified</p>	
Countries	Score	Comments
Denmark	0	
Estonia	0	
Finland	0	
Germany	0	
Latvia	0	
Lithuania	0	
Poland	0	
Russia	0	
Sweden	1	<p>Ratified 24 November 2009 The instrument of accession of Sweden contained the following reservation: "Due to geographical, hydrographical and hydrological conditions, Sweden cannot fully comply with the requirements regarding Ballast</p>

		Water exchange, and will therefore not fully comply with the requirements of the said Convention until the year 2017. In addition, regulation B-3.3 will not be applied until the second yearly survey of ships, but at the latest by the end of December 2011.”
References		
BSAP	EUSBSR	Other
59, 61	FP 2.3	7ST, SC07, SC08
Data sources		
IMO: "Status of conventions as at 31 March 2011" (Excel spreadsheet)		

15b. HNS Convention

Rationale	
<p>The International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996 (HNS Convention) aims to ensure adequate, prompt and effective compensation for damage to persons and property, costs of clean up and reinstatement measures and economic losses resulting from the maritime transport of hazardous and noxious substances (HNS).</p> <p>The HNS Convention was adopted by an International Conference organised by the International Maritime Organization (IMO) in London in May 1996 and is based on the highly successful model of the Civil Liability and Fund Conventions which cover pollution damage caused by spills of persistent oil from tankers. As with the original oil pollution compensation regime, the HNS Convention will establish a two-tier system for compensation to be paid in the event of accidents at sea, in this case, involving hazardous and noxious substances, such as chemicals.</p> <p>Tier one will be covered by compulsory insurance taken out by ship-owners, who would be able to limit their liability. In those cases where the insurance does not cover an incident, or is insufficient to satisfy the claim, a second tier of compensation will be paid from a Fund, made up of contributions from the receivers of HNS. Contributions will be calculated according to the amount of HNS received in each Member State in the preceding calendar year.</p> <p>By 2009, the HNS Convention had still not entered into force, due to an insufficient number of ratifications. A second International Conference, held in April 2010, adopted a Protocol to the HNS Convention (2010 HNS Protocol), that was designed to address practical problems that had prevented many States from ratifying the original Convention.</p>	
Assessment	
We have assessed the ratification of the HNS Convention among the Baltic Sea nations.	
Importance	Scoring
	0 - Has not ratified 1 - Has ratified

Countries	Score	Comments
Denmark	0	
Estonia	0	
Finland	0	
Germany	0	
Latvia	0	
Lithuania	1	
Poland	0	
Russia	1	
Sweden	0	
References		
BSAP	EUSBSR	Other
		SC07
Data sources		
IMO: "Status of conventions as at 31 March 2011" (Excel spreadsheet)		

15c. OPRC-HNS 2000 Convention

Rationale
<p>The Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances 2000, or the OPRC-HNS Protocol, aims to provide a global framework for international co-operation establishing systems for preparedness and response in combating incidents or threats of marine pollution involving HNS at the national, regional and global levels; in improving scientific and technological understanding and knowledge in this field; in promoting technical cooperation in response techniques; and in developing specialized training programmes.</p> <p>The OPRC-HNS Protocol was adopted to expand the scope of the 1990 International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC Convention 1990), which entered into force on 13 May 1995, to apply, in whole or in part, to pollution incidents by hazardous substances other than oil. The OPRC-HNS Protocol was formally adopted in March 2000 by States already Party to the OPRC Convention and entered into force on 14 June 2007.</p> <p>States acceding to the OPRC-HNS Protocol must meet certain basic obligations as required under the Protocol, including:</p> <ul style="list-style-type: none"> • A national system for responding to HNS, including a designated national authority, a national operational contact point and a national contingency plan. This needs to be backstopped by a minimum level of response equipment, communications plans, regular

<p>training and exercises.</p> <ul style="list-style-type: none"> • Requiring ships that are entitled to fly its flag to carry a shipboard pollution incident emergency plan and for seaports and offshore units, floating production and related facilities that are within its jurisdiction to also have similar arrangements, which must be coordinated with national systems for responding promptly and effectively to HNS pollution incidents. • Providing assistance, to the extent possible and feasible, to other States in the event of a pollution emergency, with a provision for the reimbursement of any assistance provided. <p>States should also try to conclude bilateral or multilateral agreements for preparedness for and response to pollution incidents. This would act as a 'topping up' mechanism for accessing additional resources over and above what is available at the State level in the event of a pollution incident and for facilitating co-operation with other States, the shipping industry, industries dealing with HNS and other entities.</p>		
Assessment		
We have assessed the ratification of the OPRC-HNS Convention among the Baltic Sea nations.		
Importance	Scoring	
	0 - Has not ratified 1 - Has ratified	
Countries	Score	Comments
Denmark	1	
Estonia	1	
Finland	0	
Germany	1	
Latvia	0	
Lithuania	0	
Poland	1	
Russia	0	
Sweden	1	
References		
BSAP	EUSBSR	Other
		SC07
Data sources		
IMO: "Status of conventions as at 31 March 2011" (Excel spreadsheet)		

15d. Bunkers Convention

Rationale		
<p>The International Convention on Civil Liability for Bunker Oil Pollution Damage was adopted 23 March 2001 to ensure that adequate, prompt, and effective compensation is available to persons who suffer damage caused by spills of oil, when carried as fuel in ships' bunkers. The convention entered into force on 21 November 2008</p> <p>The Convention applies to damage caused on the territory, including the territorial sea, and in exclusive economic zones of States Parties.</p> <p>The bunkers convention provides a free-standing instrument covering pollution damage only. "Pollution damage" means:</p> <ul style="list-style-type: none"> • (a) loss or damage caused outside the ship by contamination resulting from the escape or discharge of bunker oil from the ship, wherever such escape or discharge may occur, provided that compensation for impairment of the environment other than loss of profit from such impairment shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken; and • (b) the costs of preventive measures and further loss or damage caused by preventive measures. <p>The convention is modelled on the International Convention on Civil Liability for Oil Pollution Damage, 1969. As with that convention, a key requirement in the bunkers convention is the need for the registered owner of a vessel to maintain compulsory insurance cover.</p> <p>Another key provision is the requirement for direct action - this would allow a claim for compensation for pollution damage to be brought directly against an insurer. The Convention requires ships over 1,000 gross tonnage to maintain insurance or other financial security, such as the guarantee of a bank or similar financial institution, to cover the liability of the registered owner for pollution damage in an amount equal to the limits of liability under the applicable national or international limitation regime, but in all cases, not exceeding an amount calculated in accordance with the Convention on Limitation of Liability for Maritime Claims, 1976, as amended.</p>		
Assessment		
We have assessed the ratification of the Bunkers Convention among the Baltic Sea nations.		
Importance	Scoring	
	0 - Has not ratified 1 - Has ratified	
Countries	Score	Comments
Denmark	1	
Estonia	1	
Finland	1	
Germany	1	
Latvia	1	

Lithuania	1	
Poland	1	
Russia	1	
Sweden	0	
References		
BSAP	EUSBSR	Other
Data sources		
IMO: "Status of conventions as at 31 March 2011" (Excel spreadsheet)		

16. Adequate port reception facilities for waste water

Rationale					
<p>Cruise ships annually carry some 80 million passengers around the Baltic Sea. The wastewater produced in these vessels is estimated to include some 72 tons of nitrogen and 18 tons of phosphorus. In addition to excess nutrients, ship borne wastewater also carries bacteria, viruses and other pathogens, leftover food, detergents, as well as heavy metals. Even with the IMO ban on the wastewater discharge, a considerable part of this wastewater is still discharged into the Baltic Sea, as long as many of the major ports around the Baltic Sea still lack adequate sewage reception facilities.</p>					
Assessment					
<p>Each Baltic Sea state has a major cruise port (Germany has two) according to the IMO MEPC list (see below under "Data sources"). Each port has been assessed in relation to three criteria:</p> <ol style="list-style-type: none"> 1. Are all relevant berths connected to a fixed sewage system? 2. Does the port apply the "no-special-fee" system? 3. Can the port reception facilities receive at least 100 m³/hour? <p>(These criteria do not ensure that port reception facilities are fully adequate. There is right now a process ongoing to agree shared criteria. The Scorecard uses criteria that are seen as "standard" at the time of writing.)</p>					
Importance	Scoring				
	<p>0 - No adequate facilities in major ports 1 - One of the three criteria are met 2 - Two of the three criteria are met 3 - All criteria are met</p>				
Countries	1.	2.	3.	Score	Comments
Denmark	0	1	0	1	Copenhagen

Estonia	0	1	0	1	Tallinn
Finland	1	1	1	3	Helsinki
Germany	0	0	0	0	Kiel and Rostock. (At least Rostock does not meet the criteria)
Latvia	0	0	0	0	Riga
Lithuania	1	1	1	3	Klaipeda
Poland	0	0	0	0	Gdynia
Russia	0	0	0	0	St. Petersburg
Sweden	1	1	1	3	Stockholm
References					
BSAP		EUSBSR		Other	
73, 74, 75, 76		FP 4.1, 4.5		7ST	
Data sources					
MARINE ENVIRONMENT PROTECTION COMMITTEE, 61st session, Agenda item 6: <i>INTERPRETATIONS OF, AND AMENDMENTS TO, MARPOL AND RELATED INSTRUMENTS, Proposal to amend MARPOL Annex IV to include the possibility to establish Special Areas for the prevention of pollution by sewage and to designate the Baltic Sea as a Special Area under Annex IV</i>					

17. Oil response preparedness

Rationale	
<p>WE AGREE to cooperate in order to develop best practices for shoreline response, to continue the research work and information exchange to close gaps in the knowledge in this field, in order to improve regional co-operation especially when introducing coastal planning and regional agreements on co-operation in response actions,</p> <p>WE AGREE FINALLY to integrate the subject of oiled wildlife response into oil pollution contingency plans either on a national or sub-national/local level, as deemed appropriate by the relevant Contracting State.</p>	
Assessment	
<p>We have assessed each country on three criteria relating to their preparedness to deal with oil pollution:</p> <p>A. More than 1 surveillance hour per 100 square kilometer (1 point)</p> <p>B. Oiled wildlife response part of national oil spill contingency plan. (1 point)</p> <p>C. Coastal sensitivity maps developed. (1 point)</p>	
Importance	Scoring
	<p>0 - No measures taken</p> <p>1 – One criteria met</p>

	2 - Two criteria met		3 - All three criteria met		
Countries	A	B	C	Score	Comments
Denmark	0	1	0	1	
Estonia	0	1	1	2	
Finland	0	1	1	2	
Germany	1	0	1	2	
Latvia	0	0	1	1	
Lithuania	0	0	1	1	
Poland	1	0	0	1	
Russia	0	0	1	1	
Sweden	1	0	0	1	
References					
BSAP		EUSBSR		Other	
81, 82, 83		FP 14.1-2			
Data sources					
Helcom documentation, including <i>Helcom Response 10/2008, Document 8/3, 17.10.2008.</i> Personal contacts with national authorities.					

18. Harmonized surveillance system

Rationale
<p>Each month there are around 3,500 to 5,000 ships on the waters of the Baltic Sea; around 2,000 sizeable ships are normally at sea at any given moment, including large oil tankers, ships carrying dangerous and potentially polluting cargoes, as well as many large passenger ferries.</p> <p>On top of the intense traffic with many crossing shipping routes, the Baltic Sea presents particular challenges to navigators because of its shallow waters, its many islands and its ice conditions in the winter.</p> <p>Looking 10 and 20 years ahead, forecasts predict a huge growth in the sector. The number of ships is expected to double by 2030 and the size of ships is expected to increase substantially as well. Shipping of oil, counted in tonnes, is predicted to grow by 64 % by 2030. This massive growth in the shipping sector is mainly due to the expansion and construction of oil terminals on the shores of the Gulf of Finland and regional economic growth. Also, the number of cruise ships in the area is increasing annually with a growing trend for the use of larger ships and more international cruisers.</p> <p>The growth in maritime traffic increases the risk that accidents will increase, unless improved safety and environmental risk reduction procedures are set in place. At the core of the required</p>

procedural improvements are traffic organisation measures, which involve the monitoring of ship movements, with the aim of preventing the development of dangerous situations.

It is in the interest of all countries bordering the Baltic Sea to reduce the risk of marine pollution, including hazardous spills. More efficient and more compatible surveillance, monitoring and routing systems, in particular at the level of sea basins as outlined in the Integrated Maritime Policy, would significantly improve maritime safety.

One effective measure to improve maritime safety is a Ship Reporting System (SRS) There are currently four mandatory SRSs in operation in the Baltic Sea: BELTREP in the Danish Belts; SOUNDREP in the Sound between Sweden and Denmark (will become mandatory 1 September 2011); GDYNREP outside Gdynia in Poland; and GOFREP in the Gulf of Finland.

A final goal for maritime safety in the Baltic Sea would be a pan-Baltic SRS covering the whole Baltic Sea maritime area.

Assessment

We have assessed countries willingness to set up and participate in Ship Reporting Systems in the Baltic Sea.

Importance	Scoring	
	0 - No Ship Reporting Systems (SRS) established 1 - At least one national mandatory SRS established 2 - Participation in at least one international mandatory SRS 3 - Participation in a pan-Baltic SRS	
Countries	Score	Comments
Denmark	2	BELTREP, SOUNDREP (mandatory 1 sep 2011)
Estonia	2	GOFREP
Finland	2	GOFREP
Germany	0	
Latvia	0	
Lithuania	0	
Poland	1	GDANREP
Russia	2	GOFREP
Sweden	2	SOUNDREP (mandatory 1 sep 2011)
References		
BSAP	EUSBSR	Other
87-93	SA, FP 13.1-4	
Data sources		
Helcom and IMO documentation		

19. National maritime spatial plans

Rationale		
<p>Increased activities in the Baltic Sea lead to competition for limited marine space between sectoral interests, such as shipping and maritime transport, offshore energy, ports development, fisheries and aquaculture in addition to environmental concerns. Maritime Spatial Planning is a key tool for improved decision-making that balances sectoral interests that compete for marine space, and contributes to achieving sustainable use of marine areas to benefit economic development as well as the marine environment. The development of a Maritime Planning System for the Baltic Sea, based on the ecosystem approach, is encouraged at national level as well as common cross-border cooperation for the implementation of the Maritime Spatial Planning in the Baltic Sea following the key common principles set out in the recently adopted Commission's Roadmap for Maritime Spatial Planning. The European Community and the HELCOM contracting States have agreed in the context of the HELCOM Baltic Sea Action Plan to develop such an integrated tool, and relevant initiatives are also in process with VASAB, Baltic Regional Advisory Council and relevant stakeholders.</p>		
Assessment		
<p>We have assessed whether the countries have developed Maritime Spatial Planning for their territorial waters and for their EEZs, respectively. We have also looked at to what extent these plans have an integrated approach including all sectors and uses, or if they are made sector-wise.</p>		
Importance	Scoring	
	<p>0 - No MSPs developed 1 - Plans for individual sectors and/or for some areas exist or are in the process of being developed 2 - Integrated plans that include all sectors and all sea areas are in the process of being developed 3 - Integrated plans that include all sectors and areas are adopted</p>	
Countries	Score	Comments
Denmark	1	
Estonia	1	
Finland	1	
Germany	2	
Latvia	2	
Lithuania	1	
Poland	2	
Russia	1	
Sweden	2	
References		
BSAP	EUSBSR	Other
38	HA	SC09

Data sources
National authorities Assessment from national WWF and partner offices

20. Future projections of growth in sectorial use of the Baltic Sea

Rationale		
<p>One of the main findings of WWF's "Future Trends in the Baltic Sea" study was that many sectors and countries do not have goals or strategies for the time perspective analysed, and that there was a deficiency of plans and strategies, even for the relatively short perspective of the next ten years. For some sectors, such as tourism, the report had to extrapolate existing information for the past 10 years to get a fair estimation of projections for the next two decades.</p> <p>The plans that do exist are mainly for single sectors and in most cases made country by country. There is a large lack of long term visions, goals and projections, not to mention coordination, for the future use of the space and resources of the Baltic Sea. So far, there has been no attempt to do a holistic and strategic plan for all sectors and human uses of the Baltic Sea combined. The lack of integrated planning and management in many cases results in counteracting decisions that hinder sustainable development in the region.</p>		
<p>We have assessed the level of projections for the future development of the various sectors that "use" the Baltic Sea (including fisheries, shipping, wind energy, tourism, mineral extraction etc.)? We have also looked at to what extent these projections are compiled and integrated or if they are presented for individual sectors?</p>		
Importance	Scoring	
	0 - No projections exist 1 - Projections exist, but only for some sectors 2 - Projections exist compiled for all sectors 3 - Not only projections but integrated plans exist	
Countries	Score	Comments
Denmark	1	
Estonia	1	
Finland	1	
Germany	1	
Latvia	1	
Lithuania	1	
Poland	1	
Russia	1	

Sweden	1	
References		
BSAP	EUSBSR	Other
		FT&D
Data sources		
National authorities Assessment from national WWF and partner offices		

21. An established marine authority

Rationale	
<p>To be operational and relevant, an Integrated Sea Use Management (ISUM) scheme for the Baltic Sea area will have to be built upon existing political structures and frameworks - within the relevant EU Directives, HELCOM and other regional or global conventions, regional processes, or modifications of these. Moreover, structures, agreements, commitments and coordination among the Baltic Sea governments are needed and should be developed and implemented.</p> <p>In every Baltic Sea state there should be one national body that has the overarching responsibility and mandate to coordinate and balance between different interests as well as to coordinate complex policies and jurisdictional arrangements (i.e., in cases where policies and jurisdiction overlap or are contradictory). Institutional mechanisms ensuring cooperation and integration have to be secured, both vertically within sectors, agencies and ministries, and horizontally between sectors, agencies and ministries with different mandates, nations, regions and local areas. National ISUM processes should be organized in a way that they guarantee:</p> <ul style="list-style-type: none"> • A cross-sectoral approach within the country • A consistent approach among all government and administrative levels as well as between territorial waters and the exclusive economic zones (EEZ) • A trans-boundary approach between neighbouring states. 	
Assessment	
<p>We have assessed how the countries have dealt with the need to coordinate management of maritime activities. We have looked at if there is one body in charge of all such functions, or if responsibilities are shared between several authorities. We have also checked whether planning and management are integrated in the same authority.</p>	
Importance	Scoring
	<p>0 - No integration of marine authorities</p> <p>1 - Several marine authorities but with an established coordination function</p> <p>2 - One marine authority</p>

3 - One marine authority in charge of both planning and management		
Countries	Score	Comments
Denmark	0	
Estonia	1	
Finland	1	
Germany	1	
Latvia	0	
Lithuania	0	
Poland	1	
Russia	0	
Sweden	3	
References		
BSAP	EUSBSR	Other
	HA	SC09
Data sources		
National authorities Assessment from national WWF and partner offices		

22. Integration of stakeholders in planning

Rationale	
<p>When planning and managing the uses of the sea, consideration must be given so that there is a just balance between the different user groups, between individual users and those of the international community. Consideration must also be given to the needs of present and future generations, minimizing negative environmental impacts from resource use and maximizing long-term benefits to society.</p> <p>All sectors of sea use should be integrated into the management and planning at an early stage of the process. Consultation and integration with all major stakeholders should be a permanent process. High level public participation is needed to gain the public support.</p>	
Assessment	
<p>We have assessed whether there a process in place to include stakeholders in the process of planning and managing activities in the Baltic Sea? We have also looked at to what extent this process include stakeholders from all groups of users and at what stages of planning and management stakeholders are involved.</p>	
Importance	Scoring
	0 - No process that involves stakeholders is in place

	<p>1 - There is a process in place but not all groups of users are included</p> <p>2 - There is a process in place and all groups of users are included.</p> <p>3 - There is a process in place and stakeholders are involved at all stages of planning and management.</p>	
Countries	Score	Comments
Denmark	1	
Estonia	2	
Finland	2	
Germany	2	
Latvia	0	
Lithuania	1	
Poland	1	
Russia	1	
Sweden	2	
References		
BSAP	EUSBSR	Other
		SC09
Data sources		
<p>National authorities</p> <p>Assessment from national WWF and partner offices</p>		