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BALTIC SEA SCORECARD

A SEA IN TROUBLE



“ The scorecards clearly show that none of the countries in the region overall are performing at an acceptable level.”

The Baltic Sea is in serious trouble. Despite a rich tradition of environmental stewardship, eutrophication, toxic pollution, over-exploitation of fish stocks and irresponsible shipping practices continue to threaten the health of this unique and highly sensitive sea. Moreover, it threatens the quality of life of the entire region, which is home to around 90 million people.

The Baltic Sea is one of the most studied seas in the world. We have excellent scientific knowledge at our disposal, and the world's oldest regional seas convention to guide us. Yet, despite innumerable international and regional agreements and conventions aimed at improving the management and conservation of the Baltic Sea, the situation continues to get worse.

Too often, political statements urging action to protect the Baltic Sea have been countered with decisions taken by policy makers in defiance of scientific recommendations and based on short-term interests. Without strong leadership, many of these threats are going to become more, not less, of a problem in the coming years.

MEASURING PERFORMANCE¹

WWF has assessed how governments actually perform and whether political commitments are being met, by identifying and analysing some of the international and regional agreements to manage and protect the Baltic Sea.

WWF has produced a 'scorecard' result of this analysis to measure the performance of each of the nine coastal Baltic Sea governments in five areas of crucial importance to the Baltic Sea: maritime transport, pollution from hazardous substances, biodiversity protection, fisheries management and eutrophication. Have these governments taken the action they promised? Have they done what they said they would do? On the basis of commitments made in international/regional conventions and agreements, we have assessed the rate of implementation of these agreements and / or the lack of corresponding actions and have measured what they have actually delivered.

The result of the analysis is expressed in ten grade levels, from the top grade A+ to the weakest grade C-. At the bottom of the scale is an F, indicating that the government has failed and that no grade can be given due to poor performance or a lack of progress.

¹) The assessment of each component and subsequent ranking of Baltic Sea States and grading of progress varies for each assessment due to the nature of the subject. A short explanation is given in each section. For each assessment, an overall ranking of the nine coastal Baltic Sea States is shown and a grade allocated based on the percentage achieved. In a number of cases, the agreement selected is relevant to only the eight EU Member States or the system of management has changed considerably in recent years due to political changes such as the accession of four Baltic Sea States to the European Union in 2004.

FAILURE TO DELIVER²

The result of this grading shows disappointing and slow progress across the board. Only on the issue of pollution from hazardous substances has any significant progress been made. Although, it should also be recognized that Germany has made a considerable effort to protect marine habitats and wildlife. With respect to delivering on international or regional commitments to address shipping management, fisheries and eutrophication, progress is extremely disappointing - much too slow or even non-existent. Since the trends predicted for these threats in the coming years indicate strongly increasing pressure on the ecosystem, and the Baltic Sea States are not even yet adequately addressing the current threat, the outlook for the Baltic Sea is dire.

The scorecards clearly show that none of the countries in the region overall are performing at an acceptable level. A detailed analysis shows that Germany, on average, has the best grade in the class. However, it is indeed a very weak class.

Despite the overall poor performance, the best performers should be recognised. Germany came top of the grading on two occasions – achieving the top grade for protection of biodiversity and for addressing pollution by hazardous substances. Finland also came on top for one category – achieving an equal top grade with Germany for addressing hazardous substances. Moreover, Sweden and Latvia came on top for one category – achieving an equal top grade for tackling maritime transport.

Percentage achieved	Grade allocated
96 – 100 %	A+
90 – 95 %	A
84 – 89 %	A-
79 – 83 %	B+
73 – 78 %	B
67 – 72 %	B-
62 – 66 %	C+
56 – 61 %	C
50 – 55 %	C-
Less than 50 %	F

OVERALL RANKING

Country	Average percentage	Grade
Germany	63%	C+
Denmark	51%	C-
Lithuania	51%	C-
Latvia	50%	C-
Poland	49%	F
Sweden	48%	F
Finland	47%	F
Estonia	36%	F
Russia	17%	F

Each country's total grade was produced by calculating an average of the percentage scores from each assessment.

SUMMARY OF OVERALL GRADING

	Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Russia	Sweden	Baltic Sea Countries (total)
Maritime transport	F	F	F	F	C	F	F	F	C	F
Haz. subst.	C	C	A	A	C+	B	C	F	B	B-
Biodiversity	C+	F	F	A-	F	C-	C+	F	F	F
Fisheries	F	F	F	F	F	F	F	F	F	F
Eutrophication	F	F	F	F	F	F	F	F	F	F

²⁾ The assessment on which this Scorecard is based is only as good as the data on which it relies. Every effort has been made to ensure that the data is as up to date as possible and sourced from reliable sources. In most instances, the assessment is based on data provided by the Baltic Sea States to the relevant bodies managing the international and regional agreements which form the basis of the Scorecard assessment. A full list of references is available. A further limitation of a scorecard of this nature is that it is purely an assessment of existing environmental commitments made by the nine Baltic Sea States. There has been no evaluation of whether or not the commitments are in themselves sufficient to deliver a strategic and holistic approach to the management of the Baltic Sea.

TOTAL GRADES



Fisheries is not included since performance in this area requires collective action. All governments received the same grade - an F.
Russia is only assessed on Eutrophication on one out of three areas as the other two are based on EU agreements.

	Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Russia	Sweden
Average	C-	F	F	C+	C-	C-	F	F	F



In the summer, many areas of the Baltic Sea are covered by a greenish toxic slime. The long term effects of this make it difficult for marine organisms to survive.

“ In order to reverse the current negative environmental trends, real leadership, integrated concerted action and a new approach is urgently needed.”

Not only is the overall poor performance a major concern which is undermining the future of the Baltic Sea, it is also notable that lack of commitment and delivery in one area can undermine progress in another. For example, while some progress has been made to recover Baltic salmon stocks, further recovery is likely to be hampered by lack of improvement in water quality and lack of protection for spawning areas.

It is clear that the current patchwork of government approaches and regulatory frameworks in and around the Baltic have failed to effectively manage and restore the Baltic Sea.

The Baltic Sea deserves better. In order to reverse the current negative environmental trends, real leadership, integrated concerted action and a new approach is urgently needed. We will need commitments from all levels and sectors of society to counter the present trends. But only with strong leadership and commitment from the highest level of governments will we be able to turn the tide.

MARITIME TRANSPORT

THREAT

The Baltic Sea is one of the oldest trading routes in Europe and today remains one of the busiest shipping routes in the world. Shipping traffic is predicted to increase by over 100% in the Gulf of Finland by 2015 and by 80% in the Baltic properⁱ. Oil transport in the Gulf of Finland is predicted to increase from 40 million tonnes a year in 2000 to 250 million tonnes a year in 2015ⁱⁱ. Over the last 25 years, the Baltic Sea has experienced an average of one major shipping accident each year, resulting in an oil spill larger than 100 tonnes. While illegal discharges of oil have decreased, there were still almost 300 illegal spills recorded as recently as 2004ⁱⁱⁱ. Inevitably, as the number and size of oil tankers increases, so does the risk of a major accident.

ASSESSMENT

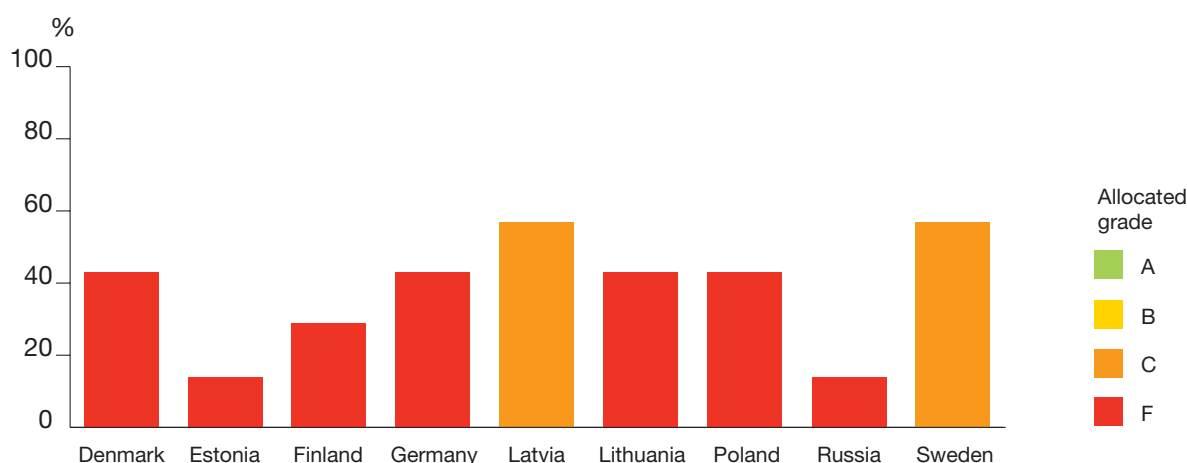
The analysis focuses on the ratification of seven comparatively recently agreed international shipping agreements. The first group of international agreements focuses on oil / chemical spill response and compensation arrangements (see Table 1). **OPRC 90**³ provides a framework for international cooperation in tackling major shipping incidents or threats of marine pollution and is currently ratified by 89 states representing 65.2 % of the world's merchant shipping tonnage. **OPRC / HNS 2000**⁴, which entered into force in June 2007, does the same for pollution by hazardous and noxious substances from ships.



The Baltic Sea is one of the oldest trading routes in Europe and today remains one of the busiest shipping routes in the world.

Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Russia	Sweden
F	F	F	F	C	F	F	F	C

MARITIME TRANSPORTS





A large number of islands, narrow straits and long periods of ice cover greatly increase the risk of a devastating oil accident in the Baltic Sea.

The **HNS Convention**⁵ makes compensation possible to the victims of shipping accidents involving hazardous and noxious substances. Eleven years on it is still not in force, having only been ratified by 8 Parties representing only 3.9% of the world's merchant shipping tonnage. The **Bunkers Convention**⁶ focuses on compensation following damage by spills of fuel oil and is not yet in force, having been ratified by only 15 Parties representing 15.6% of the world merchant shipping tonnage. Finally, the **Fund Protocol** (Fund 2003), which entered into force in March

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2005, establishes a supplementary fund for compensation for damage in the territory, including territorial seas and the exclusive economic zone of a contracting state.

The second group of international shipping agreements focuses on two new Conventions addressing shipping standards relating to the use of antifouling systems on ships' hulls (**AFS**)⁷ and the management ballast water wastes (**BWM**)⁸ (see Table 2). Neither are yet in force, having been ratified by 24 states representing 16.6 % and 10 states representing 3.4 % of the world's merchant shipping tonnage, respectively.

GRADING

The total grading is calculated by allocating one point for each ratified convention/agreement and then adding the points and calculating a percentage of maximum available points.

CONCLUSION

When it comes to ensuring responsible practices for maritime transport only Latvia and Sweden pass the minimum mark in this assessment. The rest of the governments are seriously lagging behind.

This is a serious concern given the expected growth in maritime transport in the Baltic Sea. It is therefore of vital importance that governments around the sea break the habit of waiting for others to act first, demonstrate real leadership and take the measures needed to ensure safe and environmentally responsible maritime transports.

³ The International Convention on Oil Pollution, Preparedness, Response and Cooperation, 1990 (OPRC 90)

⁴ The Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC/HNS 2000)

⁵ The International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS), 1996 (HNS 96)

⁶ The International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 (Bunkers 2001)

⁷ The International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001 (AFS 2001)

⁸ The International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (BWM 2004)

TABLE 1: RATIFICATION OF OIL OR CHEMICAL SPILL RESPONSE AND COMPENSATION AGREEMENTS^{iv}

Country	OPRC 90	OPRC/ HNS 2000	HNS 96	Bunkers 2001	FUND 2003	Total score (maximum=5)
Denmark	1	0	0	0	1	2
Estonia	0	0	0	1	0	1
Finland	1	0	0	0	1	2
Germany	1	0	0	1	1	3
Latvia	1	0	0	1	1	3
Lithuania	1	0	0	0	1	2
Poland	1	1	0	0	0	2
Russia	0	0	1	0	0	1
Sweden	1	1	0	0	1	3

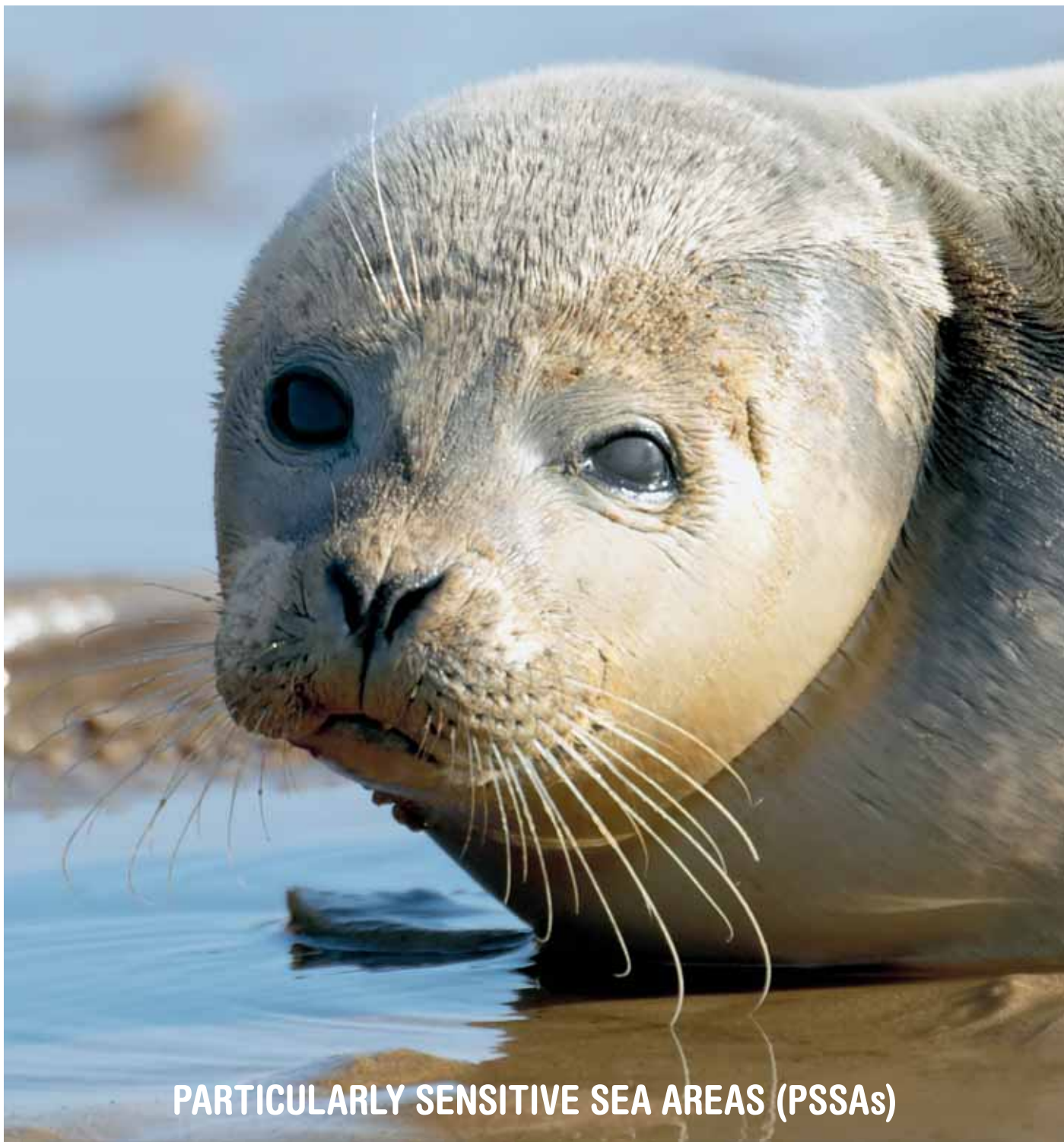
(1=ratified, 0=not ratified)

TABLE 2: RATIFICATION OF SHIPPING STANDARDS AGREEMENTS^v

Country	AFS 2001	BWM 2004	Total score (maximum=2)
Denmark	1	0	1
Estonia	0	0	0
Finland	0	0	0
Germany	0	0	0
Latvia	1	0	1
Lithuania	1	0	1
Poland	1	0	1
Russia	0	0	0
Sweden	1	0	1

TABLE 3: TOTAL GRADING – MARITIME TRANSPORTS

Country	Response and compensation	Shipping standards	Total score (maximum=7)	Percent of maximum available	Grade
Denmark	2	1	3	43%	F
Estonia	1	0	1	14%	F
Finland	2	0	2	29%	F
Germany	3	0	3	43%	F
Latvia	3	1	4	57%	C
Lithuania	2	1	3	43%	F
Poland	2	1	3	43%	F
Russia	1	0	1	14%	F
Sweden	3	1	4	57%	C



PARTICULARLY SENSITIVE SEA AREAS (PSSAs)

In 2005, a proposal from the eight EU Baltic Sea States to the International Maritime Organization's (IMO) Marine Environmental Protection Committee (MEPC) for the Baltic Sea (excluding Russian waters) to be designated a Particularly Sensitive Sea Area (PSSA) was successful. The Baltic Sea PSSA Resolution includes seven new associated protected measures (APMs) as proposed by the eight States^{vi}. Disappointingly two new areas to be avoided (ATBAs) are only recommendatory, despite the initial PSSA proposal seeking mandatory ATBAs.

Initially the Russian Federation did not support or adopt the MEPC Resolution on the designation of the Baltic Sea as a PSSA, and indicated that they not only disagreed with the decision to grant PSSA status to the whole Baltic Sea, but also reserved their right to not give effect to any approved recommendations, regulations or action^{vii}. They did eventually, however, indicate that they would fulfil all the current protective measures adopted in connection with the PSSA^{viii}.

HAZARDOUS SUBSTANCES

THREAT

A cocktail of hazardous substances has been released into the Baltic Sea over decades, including persistent and bioaccumulative 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^x. 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^x.

ASSESSMENT

For the analysis of political commitment intended to protect the Baltic Sea from hazardous pollution, two international pollution agreements have been selected (see Table 1), along with progress in addressing regional Baltic Sea Hot Spots as identified under the Helsinki Convention (see

Table 2). It is too early to assess a new EU law on chemicals - REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals), which entered into force on 1 June 2007 although this agreement should also improve the protection of the environment of the Baltic Sea over coming years.

The **Stockholm Convention**^{xi} is a global agreement to protect human health and the environment from persistent organic pollutants (POPs). It was adopted on 22 May, 2001 and entered into force on 17 May 2004. The Convention requires governments to prepare National Implementation Plans (NIPs)^{xii} and undertake measures to eliminate or reduce the release of POPs into the environment. National states are either Signatories or Parties, if they have ratified the Convention (see Table 1).

The **Basel Convention**^{xiii} on the Control of Transboundary Movements of Hazardous Wastes and their Disposal came into force in May 1992. It is the most comprehensive environmental agreement on hazardous and other wastes. Its 169 Parties aim to protect human health and the environment from the adverse affects resulting from the generation, management, transboundary movement and disposal of hazardous and other wastes. Annual national reporting is required but information is only available up to 2004^{xiv} (see Table 1).

Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Russia	Sweden
C	C	A	A	C+	B	C	F	B

HAZARDOUS SUBSTANCES

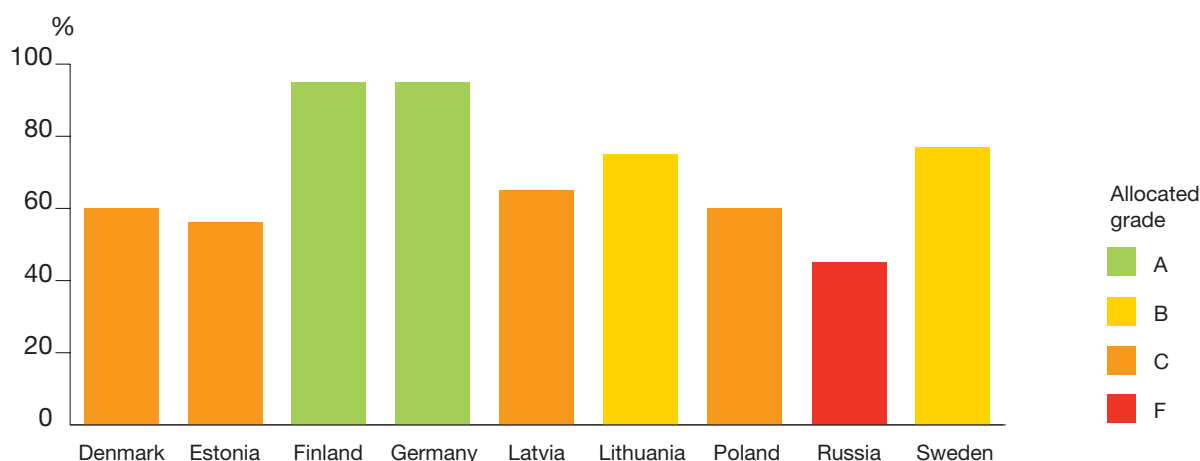


TABLE 1: RATIFICATION AND IMPLEMENTATION OF THE STOCKHOLM AND BASEL CONVENTIONS

State	Stockholm Convention	National Plan	Basel Convention	National Reports in 2002 – 2004	Points scored (maximum=8)	Percent of maximum available
Denmark	Party 17 Dec 03 (2p)	18 May 06 (2p)	Party 6 Feb 94 (2p)	* (1p)	7	88%
Estonia	--- (0p)	--- (0p)	Party 21 July 92 (2p)	√ (2p)	4	50%
Finland	Party 3 Sept 02 (2p)	17 May 06 (2p)	Party 19 Nov 91 (2p)	√ (2p)	8	100%
Germany	Party 25 Apr 02 (2p)	1 May 06 (2p)	Party 21 Apr 95 (2p)	√ (2p)	8	100%
Latvia	Party 28 Oct 04 (2p)	7 June 05 (2p)	Party 14 Apr 92 (2p)	√ (2p)	8	100%
Lithuania	Party 5 Dec 06 (2p)	6 Apr 07 (2p)	Party 22 Apr 99 (2p)	√ (2p)	8	100%
Poland	Signatory 23 May 01 (1p)	--- (0p)	Party 22 Mar 92 (2p)	√ (2p)	5	63%
Russia	Signatory 22 May 02 (1p)	--- (0p)	Party 31 Jan 95 (2p)	√ (2p)	5	63%
Sweden	Party 8 May 02 (2p)	23 May 06 (2p)	Party 2 Aug 91 (2p)	√ (2p)	8	100%

(Party=2 points, Signatory=1 point, Complete report/plan submitted=2 points, Incomplete report/plan submitted=1 point)

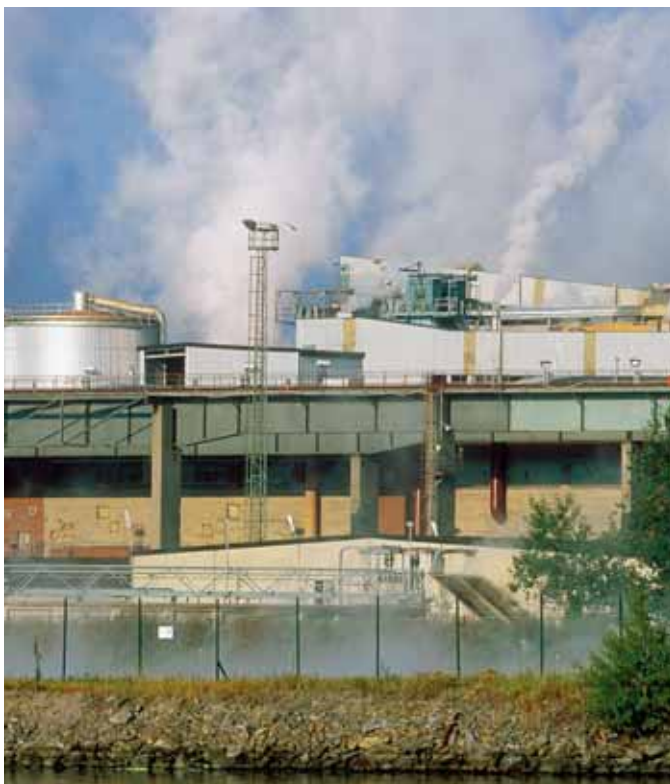
* Denmark's reports for 03 and 04 were incomplete.

Helcom Hot Spots. Since 1992, Baltic Sea States have identified 162 serious pollution areas or “hot spots” around the Baltic Sea and in its catchment. Hot spots are grouped according to the source of the problem. Agricultural sites are largely runoff problems and will include nitrogen, phosphorus and pesticide pollutants. Coastal lagoon / wetland hot spots are areas influenced by agricultural activity. Industry hot spots cover a wide range of polluting sources including mining, pulp and paper, metal plating, oil refineries and chemical plants. Municipality sites generally include industrial waste water sewerage and treatment as well as urban waste sites. Over 80% of the sites included in the assessment fall into the Industry and Municipality categories. Of the original 162 hot spots, around half have been cleaned up and removed from the HELCOM list (see Table 2).

TABLE 2: HELCOM HOT SPOTS ASSESSMENT⁹

Country	Number of hot spots (total)	Percentage of hot spots cleaned up against total number of sites identified
Denmark	3	33%
Estonia	13	62%
Finland	10	90%
Germany	9	89%
Latvia	10	30%
Lithuania	16	50%
Poland	52	58%
Russia	34	27%
Sweden	13	54%

⁹⁾ The numbers of hot spots in the assessment will not always match the information presented on the Helcom website, because a few hot spots are shared between two countries and have been included twice for the purposes of this assessment. Also, some hot spots are in the catchment of the Baltic Sea but are not the responsibility of the nine Baltic Sea States (e.g. Belarus and Ukraine sites).



“ In the areas of ratifying international conventions on toxic pollution and cleaning up polluting hot spots, we have at least seen some progress and leadership among the Baltic Sea States.”

POLISH SUCCESS

While Finland and Germany have consistently high rankings for commitment (ratification and implementation of international Conventions) and delivery (reduction in number of hot spots), it is worth noting that Poland has achieved considerable progress in reducing the number of hot spots where action is needed. The highest number of hot spots identified was in Poland (52) and more than 50% of these have now been deleted from the hot spots list.

GRADING

The Grading is based on the average % of maximum points available on the ratification and implementation of the conventions, and the percentage of pollution hot spots cleaned-up.

The points are allocated as follows:

- Stockholm Convention: Party – 2 points, Signatory – 1 point, National Implementation Plan submitted – 2 points
- Basel Convention: Party – 2 points, Signatory – 1 point, National Report submitted for past 3 years – 2 points, Incomplete National Report(s) submitted in past 3 years – 1 point.

The Hot Spots calculation is done on the basis of the percentage of sites cleaned up against the total number of sites identified.

CONCLUSION

In the areas of ratifying international conventions on toxic pollution and cleaning up polluting hot spots, we have at least seen some progress and leadership among the Baltic Sea States. Both Finland and Germany have signed, ratified and implemented all relevant conventions and in addition cleaned up a majority of their HELCOM defined hot spots. They clearly are leading the Baltic Sea States with respect to addressing pollution by hazardous substances. Lithuania is close behind, but most of the other countries are only earning a C grade which means that more work urgently needs to be done. Russia is found at the bottom with an F grade.

TABLE 3: TOTAL GRADING – HAZARDOUS SUBSTANCES

Countries	Conventions, percent	Hot spots, percent	Average, percent	Grade
Denmark	88%	33%	61%	C
Estonia	50%	62%	56%	C
Finland	100%	90%	95%	A
Germany	100%	89%	95%	A
Latvia	100%	30%	65%	C+
Lithuania	100%	50%	75%	B
Poland	63%	58%	61%	C
Russia	63%	27%	45%	F
Sweden	100%	54%	77%	B

BIODIVERSITY

THREAT

The Baltic Sea's unique biodiversity is under serious threat from a variety of sources. Besides threats from eutrophication, overfishing, inputs of hazardous substances, and illegal discharges of oils and chemicals, biodiversity suffers from a loss of natural habitats. Benthic flora and fauna are in many areas threatened by physical exploitation and other human activities and Baltic harbour porpoise populations are now so threatened that only urgent action will prevent extinction. Over decades, up to 90% of southern Baltic wetlands have been drained and action is needed to restore the massive loss of natural coastal defenses, restore and protect nutrients sinks created by the wetlands and protect spawning and nursery grounds.

ASSESSMENT

A tried and tested method for protecting biodiversity is the establishment of networks of marine protected areas (MPAs). Many international frameworks have made strong commitments to networks of MPAs covering from 10% to 30% of the world's seas. The Convention on Biological Diversity (CBD) recommends 10% of all marine and coastal ecoregions be conserved by 2012, while the 2003 World Parks Congress recommends a global network of MPAs by 2012 protecting at least 20 – 30% of each marine and coastal habitat types as "strictly protected areas".

The analysis of Baltic Sea States' political commitment to protect biodiversity focuses on the designation of Baltic

“It is obvious, however, that the overall progress in designating marine protected areas falls short of commitments to establish an ecologically coherent network of MPAs in the Baltic Sea by 2010.”

Sea Protected Areas and the establishment of the Natura 2000 / Emerald Network of protected areas.

In 1994, parties to the Helsinki Commission adopted a recommendation (HELCOM Recommendation 15/5), which led to the designation of **Baltic Sea Protected Areas (BSPAs)**. Nearly a decade later, in 2003, the joint HELCOM / OSPAR Ministerial meeting reaffirmed existing commitments to establish a network of marine protected areas, with the aim of achieving a well-managed, ecologically coherent network by 2010. The HELCOM BSPA database includes information on 105 sites of which 78 are considered notified and designated (see Table 1)^{xv}. It has been calculated that the area of the sites designated to date covers only 6% of the Baltic Sea and even if all 105 proposed sites were notified and designated not even 10% of the sea would be protected.^{xvi}

Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Russia	Sweden
C+	F	F	A-	F	C-	C+	F	F

BIODIVERSITY

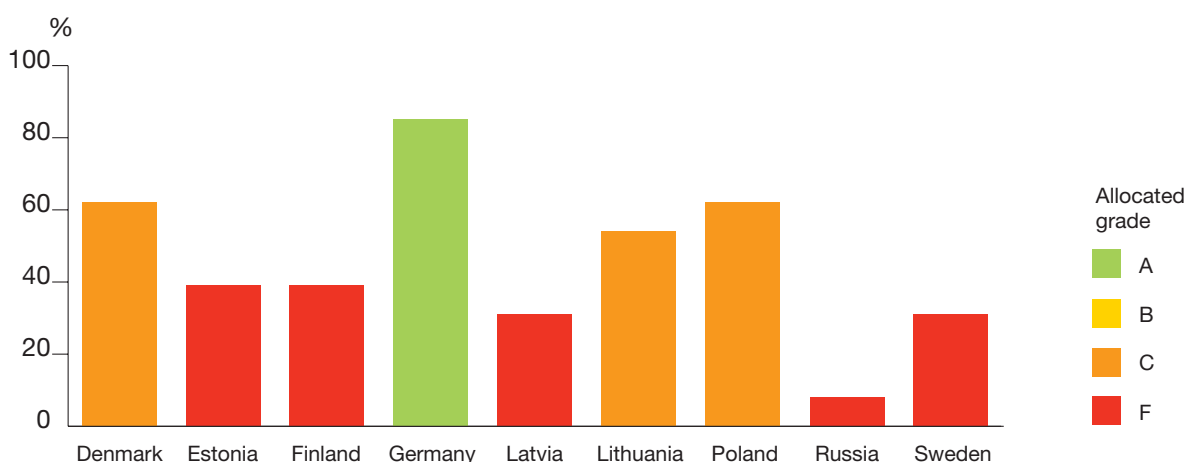


TABLE 1: PROPOSED AND DESIGNATED BSPAS^{xvii}

Countries	Proposed BSPAs	Notified and designated BSPAs	Percent notified and designated	Points scored (maximum =3)*
Denmark	16	16	100%	3
Estonia	7	5	71%	1
Finland	23	22	96%	2
Germany	17	9	53%	1
Latvia	5	4	80%	2
Lithuania	4	3	75%	2
Poland	8	4	50%	1
Russia	4	2	50%	1
Sweden	21	13	62%	1

*100 % = 3 points, 75+ % = 2 points, 50+ % = 1 points

TABLE 2: PERCENTAGE OF BALTIC SEA TERRITORIAL SEA (TS) AND EXCLUSIVE ECONOMIC ZONE (EEZ) PROTECTED AS A CONTRIBUTION TO NATURA 2000 / EMERALD NETWORK^{xviii}

Countries	Percentage of TS designated	Points Scored (maximum = 5)*	Percentage of EEZ designated	Points Scored (maximum = 5)*
Denmark	24%	4	3%	1
Estonia	26%	4	0%	0
Finland	13%	3	0%	0
Germany	37%	5	46%	5
Latvia	5%	2	0%	0
Lithuania	34%	5	0%	0
Poland	52%	5	9%	2
Russia	0%	0	0%	0
Sweden	6%	2	2%	1

*30+% of total area of territorial sea or exclusive economic zone protected = 5 points

20+% protected = 4 points

10+% protected = 3 points

5+% protected = 2 points

0.5+% protected = 1 point

Natura 2000 is an ecological network, established under the EU's 1979 Birds Directive and the 1992 Habitats and Species Directive¹⁰, which aims to conserve natural habitats and the habitats of wild fauna and flora, while taking into account the economic, social and cultural requirements and specific regional and local characteristics of each EU Member State. Progress on implementing Natura 2000 in the marine environment has been slower than originally anticipated, and initial confusion over the relevant geographic application led to many countries not identifying possible Natura 2000 sites in their EEZ (see Table 2)^{xviii}.

The **Emerald Network** is a complimentary ecological network of "areas of special conservation interest" in non-EU countries. It falls under the auspices of the Bern Convention on the Conservation of European Wildlife and Natural Habitats, and extends to the whole European

continent and some states of Africa. As a Contracting Party to the Bern Convention, the European Community developed the Habitats Directive. Although the Emerald Network lacks the legal backing of Natura 2000, it is based on the same principles and "represents its de facto extension to non-Community countries"^{xix}.

Russia, the only non-EU Baltic Sea State, has not signed or ratified the Bern Convention^{xx} and is therefore assessed as having zero protected areas contributing to the Natura 2000 / Emerald Network (see Table 2). The EUNIS Database, which collects and maintains data to assist the Natura 2000 / Emerald Network process, includes a small number of protected Russian sites bordering the Gulf of Finland and Kaliningrad^{xxi}.

¹⁰⁾ Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora and Council Directive 79/409/EEC on the conservation of wild birds.

TABLE 3: TOTAL GRADES – BIODIVERSITY

Countries	Points BSPA	Points Natura 2000/ Emerald Network, TS	Points Natura 2000/ Emerald Network, EEZ	Total points	Percentage of maximum available	Grade
Denmark	3	4	1	8	62%	C+
Estonia	1	4	0	5	39%	F
Finland	2	3	0	5	39%	F
Germany	1	5	5	11	85%	A-
Latvia	2	2	0	4	31%	F
Lithuania	2	5	0	7	54%	C-
Poland	1	5	2	8	62%	C+
Russia	1	0	0	1	8%	F
Sweden	1	2	1	4	31%	F

GRADING

Data on BSPAs is based on a recent HELCOM paper^{xxiii} considered by HELCOM Habitat, while data on the Natura 2000 / Emerald Network assessment is taken from the Balance project^{11, xxiv} and the EUNIS Database. The grading is based on allocating points as follows:

For Baltic Sea Protected Areas:

- 100 % designation of proposed sites = 3 points,
- 75+ % designation of proposed sites = 2 points,
- 50+ % designation of proposed sites = 1 point.

For the Natura 2000 / Emerald Network:

- 30+ % of total area of territorial sea or exclusive economic zone protected = 5 points,
- 20+ % protected = 4 points,
- 10+ % protected = 3 points
- 5+ % protected = 2 points,
- 0.5+ % protected = 1 point. See Table 3.

For the Natura 2000 / Emerald network the 30+%, 20+%, and 10+% divisions are selected on the basis of international commitments which focus on designating at least 10% of the seas or possibly as much as 30% as marine protected areas.

The grades are calculated using each country’s percentage of maximum available points.

CONCLUSION

The assessment shows that the Baltic Sea States have tackled the issue of protecting biodiversity with a varying degree of commitment. Germany is leading the way, followed by Denmark, while Russia, Latvia, Sweden, Finland and Estonia are all lagging behind. Germany is showing strong leadership by protecting more than 40 % of its EEZ,

which provides a good example for others to follow. It is obvious, however, that the overall progress in designating marine protected areas falls short of commitments to establish an ecologically coherent network of MPAs in the Baltic Sea by 2010.

“ The assessment shows that the Baltic Sea States have tackled the issue of protecting biodiversity with a varying degree of commitment.”

¹¹⁾ Baltic Sea Region INTERREG III B (Neighbourhood Programme) BALANCE, Baltic Sea management – Nature Conservation and sustainable development in the marine ecosystem through marine spatial planning. www.balance-eu.org



HARBOUR PORPOISE

In the last 30 years, harbour porpoises have declined in the Baltic Sea, and the population is now in a critical state with urgent action required to avoid extinction. A number of causes of decline in the harbour porpoise population have been identified including by-catch in fishing gear, commercial harvesting, habitat degradation and periodic catastrophic mortality due to severe winter sea ice conditions. Of these, by-catch is identified as the most likely cause to prevent recovery of the population.

The 2002 Jastarnia recovery plan for Baltic harbour porpoises^{xxv} prioritises measures to reduce fishing effort using driftnet and bottom-set gillnet gears - known to cause high porpoise by-catch. However, while driftnet fishing is banned throughout the EU, an exception allows continued use of drift nets for salmon in the Baltic until 2008 – six years after the development of the harbour porpoise recovery plan.

MPA MANAGEMENT

Progress on management of MPAs is very slow, and contrasts sharply with some countries in other regions of the world, which have resisted designating marine protected areas until a management plan has been produced and is supported by the stakeholders. Of the 78 designated BSPAs, only Germany has notified one (of a possible 17) BSPA as being a managed BSPA. HELCOM have recently assessed management of the BSPAs^{xxvi} as follows:

- Management plan implemented (21) 27%
- Management plan exists (3) 4%
- Management plan in preparation (25) 32%
- No management plan (19) 24%
- No information (10) 13%

With respect to Natura 2000, no formal assessment of management of designated sites has yet been undertaken. Natura 2000 networks in the marine environment are due to be completed by 2012, including the development of management plans. However, sites will only all be identified by 2008^{xxvi}. Following this deadline greater focus on management of sites will be required.

FISHERIES

THREAT

Poor fisheries management decisions, damaging fishing practices, high levels of by-catch and illegal, unregulated and unreported (IUU) fishing all contribute to the decline of Baltic fish stocks and Baltic biodiversity. Gulf of Finland wild Baltic salmon and eastern Baltic cod stock populations are at all time lows.

For two decades, scientists have recommended reduced catches of Baltic cod, yet landings have regularly exceeded the scientific advice and agreed catch levels. For 4 of the past 7 years, scientists recommended no fishing! To make matters worse, IUU fishing for cod in the eastern Baltic Sea is conservatively estimated to account for an additional 35-45% above the legally reported catches. The eastern Baltic cod stock will collapse without urgent action to address the current all-time low level of stocks^{xxviii}.

While driftnet fishing is banned throughout the EU, an exception allows continued use of driftnets for salmon in the Baltic Sea until 1st January 2008. This has been allowed, despite the awareness that the incidental entanglement and death in drift nets of harbour porpoise is undoubtedly a major factor contributing to their demise.

ASSESSMENT

In 2002, at the World Summit on Sustainable Development, a commitment was made to maintain or restore fish stocks to levels that can produce the maximum sustainable yield. The aim was to achieve this goal for depleted stocks on an urgent basis, and where possible no later than 2015.

The analysis of Baltic Sea States' political commitment to manage the Baltic Sea's fisheries is developed on the basis of the International Council for the Exploration of the Seas (ICES) annual assessment of the current status of Baltic Sea commercial fish stocks. The ICES scientific community brings together more than 1,600 marine scientists from 20 countries around the North Atlantic including the Baltic and North Seas. It coordinates and promotes marine research in the region and, based on the findings of the research, provides unbiased, non-political advice.

The assessment looks at the advice provided by ICES for each of the last three years for most of the commercial fish species targeted in the Baltic Sea (see Table 1) and the current status of these species. It then focuses on the exploitation of eastern Baltic cod, looking in particular at

Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Russia	Sweden
F	F	F	F	F	F	F	F	F

TABLE 1: ICES ADVICE ON EFFORT FOR 2006 – 2008 ^{xxix}

Species and sub-area	2006, tonnes	2007, tonnes	2008, tonnes	Current status
Cod 22–24	<28,405	20,500	13,500	Overexploited
Cod 25–32	<14,900	0	0	Overexploited
Herring IIIa, 22–24	<95,000	99,000	71,000	Overexploited
Herring 25–29 + 32, excl. Gulf of Riga	<120,000	164,000	194,000	Undefined
Herring Gulf of Riga	<29,900	33,900	30,100	Overexploited
Herring 30	<93,400	83,400	67,300	Undefined
Herring 31	c. 4,500	4,700	3,000	
Sprat 22–32	<439,000	477,000	432,000	Underfished
Flatfish	No advice offered – lack of information			
Salmon Main Basin + Gulf of Bothnia	Current levels in 2 units / zero in 3 units	Catches should not increase	Substantial reduction of catch / effort	
Salmon Gulf of Finland	Only where no chance of catching wild salmon	Catches should not increase	0	

TABLE 2: PERCENTAGE REDUCTION IN EASTERN BALTIC COD LANDINGS BY COUNTRY BETWEEN 1984 AND 2006^{xxx}

Country*	1984 tonnes	2006 tonnes	Percent reduction in catch
Denmark	90,089	9,766	89.2%
Finland	9,358	427	95.4%
Germany	32,276*	2,025	93.7%
Poland	93,429	14,290	84.7%
Sweden	59,685	9,672	83.8%
Total**	391,952	65,532	83.3%

* includes Germany Democratic Republic and Germany Federal Republic

** includes landings by Norway, Faroe Islands, and unallocated landings

Note: Russia, Latvia, Lithuania, Estonia are not included due to data prior to 1991 being combined for USSR

“Poor fisheries management decisions, damaging fishing practices, high levels of by-catch and illegal, unregulated and unreported (IUU) fishing all contribute to the decline of Baltic fish stocks and Baltic biodiversity.”

TABLE 3: ADVICE AND DECISIONS ON EFFORT FOR EASTERN BALTIC COD STOCKS (SUB-DIVISIONS 25 – 32)^{xxxi}

Year	ICES Advice	Total Allowable Catch (TAC) tonnes	Landings tonnes
2008	No fishing	To be determined later in 2007	---
2007	No fishing	44,300	Not yet available
2006	Management plan <14,900 tonnes	49,200	66,000
2005	No fishing	42,800	55,000
2004	90% reduction in mortality	45,400	68,000
2003	70% reduction in mortality	75,000*	69,000
2002	No fishing	76,000*	68,000

* figures include TAC for sub-divisions 22–24

the reduction in reported landings by country since 1984 (see Table 2), and the advice offered by ICES in recent years, the decisions made by Baltic Fisheries Ministers, and the subsequent landings (See Table 3). The recently published results report from the European Lifestyles and Marine Ecosystems (ELME¹²) project concludes that Baltic cod stocks are in a precarious state due to heavy exploitation including high unreported catch and long-term unfavourable environmental conditions which affect reproduction.

For each of the preceding six years, the Total Allowable Catch (TAC) for Eastern Baltic cod agreed by Baltic Sea Fisheries Ministers has significantly exceeded the advice from ICES. Furthermore, the actual landings from 2002 – 2006 as recognised by the ICES Advisory Committee on Fisheries Management frequently exceeded the TAC. In 2007, ICES has advised that the fishery for the eastern Baltic cod is closed and not reopened until a recovery plan has been developed and implemented.

¹² See www.elme-eu.org



Overfishing, damaging fishing practices, by-catch and illegal, unregulated and unreported fishing (IUU) are the primary threats facing Baltic fish stocks.

GRADING

Since 2006, the management of commercial fisheries in the Baltic Sea has been the responsibility of the European Commission under the Common Fisheries Policy (CFP) with a bilateral agreement with Russia, which is yet to be ratified. Before this fisheries management was the responsibility of the International Baltic Sea Fishery Commission (IBSFC). The fact that management of fisheries lies at the regional level means that a comparison of national level commitment to secure fisheries and the health of fish stocks is more difficult and will depend on positions adopted in EU level negotiations. As a result, no attempt is made to grade the individual Baltic Sea States performance on fisheries management, but rather all Countries are awarded an “F” grade due to the current status of Baltic Sea fish stocks - less than 50% can be considered to be managed sustainably - and since ultimately the responsibility to ensure a healthy marine ecosystem including sustainable fisheries lies with the individual Baltic Sea States working collectively.

CONCLUSION

The current levels of fishing effort for most commercial species are unsustainable with most species being over-exploited or the status of the stocks unknown. Yet, this scorecard illustrates that, for example in the case of the eastern Baltic cod stock, landings regularly exceed the agreed Total Allowable Catch (TAC), which in turn exceeds the advice offered by scientists. This has had devastating consequences for the stock. Between 1984, the year of highest landings, and 2006 recorded landings of eastern Baltic cod have declined by over 80% across the Baltic Sea and in some countries by more than 90%. Compounding the problem is the fact that, recorded landings are only a portion of total landings, and do not include illegal, unregulated and unreported (IUU) fishing. This pointedly illustrates that the management and regulatory system in the Baltic is broken. Without regional, concerted action to radically change the way fisheries in the Baltic Sea are managed, it will only be a matter of time before fish stocks reach a point of irreversible collapse.

ILLEGAL, UNREGULATED AND UNREPORTED (IUU) FISHING

IUU is perhaps more commonly associated with the high seas, i.e. seas and oceans beyond any national jurisdiction, often because of the absence or inadequacy of a fisheries regulatory body. It is, however, a serious threat in highly regulated waters as well. Under-reporting of cod catch levels in the Baltic is recognised to be chronic.

IUU of the eastern cod catch in the Baltic Sea is conservatively estimated by the International Council for the Exploration of the Seas (ICES) to account for an additional 35-45% above the legally reported catches. European Commission inspectors subsequently broadly confirmed these figures following missions in 2005 and 2006. A recent unpublished Commission evaluation of fisheries control in the Baltic Sea identifies Poland as the main culprit but also recognises severe problems in all six countries where inspections were carried out – Poland, Sweden, Lithuania, Germany, Denmark and Latvia^{xxxii}.

The European Commission’s Scoreboard 2005^{xxxiii} reports on Member State behaviour which seriously infringed the rules of the CFP in 2003 (as reported by Member States). For the four EU Baltic Sea States in 2003, Denmark had the poorest record with 485 infringement cases discovered, of which 285 received a penalty. Germany had 128 cases identified – all were penalised. It should be noted, however, that the figures for Denmark and Germany relate to vessels fishing in

the Baltic Sea and in the North Sea. Sweden had 97 cases identified but only 23 received a penalty while Finland only had 10 cases identified, although 50% received a penalty. Behaviour which infringed the CFP included, falsifying or failing to record data in logbooks, using or keeping on board prohibited gear, failure to comply with rules on minimum sizes, fishing without holding a fishing license, a fishing permit or any other authorisation required for fishing.

The problems caused by under-reporting of catches are made worse by the fact that recreational fishing catches are not included in the assessments and there are indications that levels of fish removed can be high.

WILD BALTIC SALMON – A DEGREE OF PROGRESS^{xxxiv}

Total wild salmon smolt production has increased four-fold since the adoption of a Salmon Action Plan in 1997 and it is now estimated to be two-thirds of the potential smolt production, however a negative trend in smolt production has been observed in the southern Baltic rivers^{xxxv}. In addition, recreational fishing and fishing tourism is not recognised in the Salmon Action Plan but these activities have increased in some areas in recent years and, along with coastal commercial fisheries, are considered to have potential for growth in the future^{xxxvi}. Furthermore, environmental degradation remains an obstacle to the recovery of salmon stocks requiring that migratory obstacles are removed, spawning areas protected and water quality improved^{xxxvii}.

EUTROPHICATION

THREAT

Eutrophication is identified as the primary concern for the Baltic Sea. Eutrophication due to excessive inputs of nutrients already affects a majority of Baltic biotopes, while the area affected by hypoxia (shortage of oxygen) has increased four-fold since the early 20th century^{xxviii}. Anoxic bottom water has a severe impact on the reproductive success of commercial fish stocks such as flatfish and cod^{xxxix}.

In 2000, around 75% of the nitrogen input to the Baltic Sea was waterborne and 25% airborne, whereas for phosphorus the major input route is waterborne (over 95%)^{xl}. Runoff from agriculture accounts for half of total inputs of nutrients to the Baltic Sea. In the coming ten years, the use of fertilizers is expected to increase by 25 – 30%^{xli}, and pig meat production, which is a major source of excess nutrients, is expected to increase by 70% by 2015^{xlii}.

ASSESSMENT

For the purposes of eutrophication the analysis focuses on three agreements, the EU Nitrates Directive, the EU Water Framework Directive and Annex III of the Helsinki Convention.

The **EU Nitrates Directive**^{*} is a critical agreement to manage and reduce nitrate pollution from agricultural

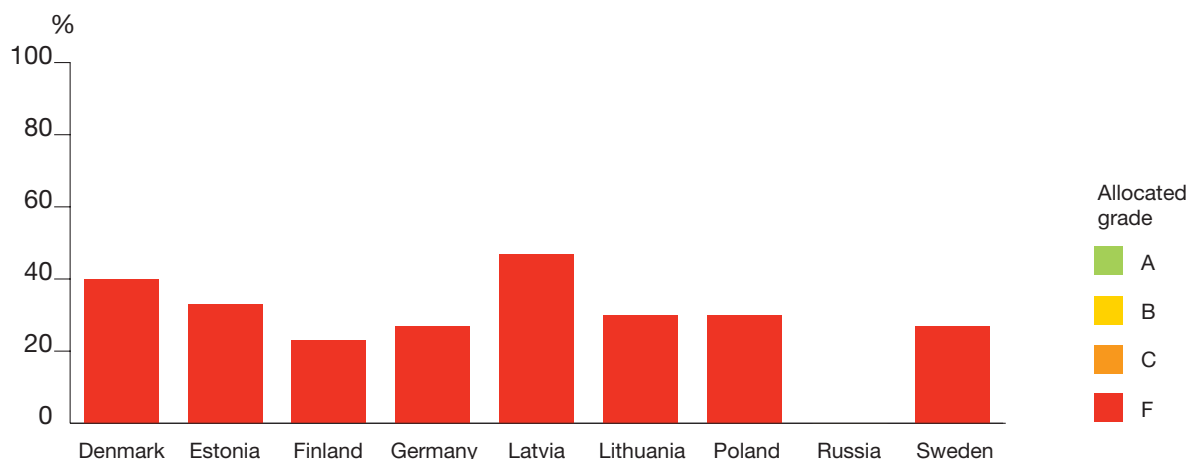
sources. Adopted on 12 December 1991, EU Member States are expected to report every four years on the development codes of good environmental practice, the results of water monitoring, the designation of nitrate vulnerable zones (NVZs) and action programmes for nitrate vulnerable zones. The latest information (see Table 1), published in 2007, relates to the reporting period 2000 – 2003^{xliii} and therefore primarily to the EU15 including Denmark, Germany, Sweden and Finland. Limited information is provided on the steps towards implementation of the Nitrates Directive by the 2004 Accession States including Poland, Estonia, Latvia and Lithuania. Russia is not covered by this assessment.

“Eutrophication is one the most serious and immediate threats to the Baltic Sea, and none of the nine countries has even come close to implementing satisfactory measures to address this problem.”

^{*} (Council Directive 91/676/EEC)

Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Russia	Sweden
F	F	F	F	F	F	F	F	F

EUTROPHICATION



^{*}Russia is only partially covered by this assessment since the Water Framework Directive and the Nitrates Directive are only relevant to the eight EU Member States.

TABLE 1: ANALYSIS OF DELIVERY OF COMPONENTS OF THE NITRATES DIRECTIVE AND WATER FRAMEWORK DIRECTIVE*

Countries	Nitrates Directive ^{xlvi}			Water Framework Directive ^{xlvii}			
	Water Monitoring	Designation of NVZs	Action Programmes for NVZs	Legal transposition		Article 3: administrative arrangements	
				Infringement proceedings	Conformity	Report	Infringement proceedings for non-communication
Denmark	1	1**	1	1	0	1	-1
Estonia	1	1	1	1	0	1	1
Finland	1	1	1	-1	0	1	1
Germany	1	1**	-1	-1	0	1	1
Latvia	1	1	1	1	0	1	1
Lithuania	1	1**	1	1	0	1	1
Poland	1	1	1	-1	0	1	-1
Sweden	1	1	1	-1	0	1	-1

1= successfully completed element, 0=non-compliance or lack of or poor quality data, -1=infringement proceedings initiated, (1=infringement proceedings not initiated)

TABLE 2: ANALYSIS OF TOTAL NITROGEN AND TOTAL PHOSPHORUS WATERBORNE INPUTS TO THE BALTIC SEA

Countries	N total ^{xlix}		P total ^l	
	Percent change from 1994 to 2004	Points scored (maximum=10)	Percent change from 1994 to 2004	Points scored (maximum=10)
Denmark	-21.9%	3	-39.5%	4
Estonia	40.8%	0	-7.5%	1
Finland	12.8%	0	-18.9%	2
Germany	-18.8%	2	-3.7%	1
Latvia	-41.5%*	5	33.3%*	0
Lithuania	19.8%	0	32.1%	0
Poland	-24.8%	3	-7.2%	1
Russia	85.8%**	0	57.5%**	0
Sweden	-4.0%	1	-12.5%	2

Points were allocated on the basis of each 10 % reduction for the ten year evaluation between 1994 and 2004 so that:
0 to -10% = 1
-10.1% to -20% = 2
Etc.

*For Latvia, the 03 level is calculated as a percentage of the 1994 level.

**For Russia, the 03 level is calculated as a percentage of the 2000 level.

TABLE 3: TOTAL SCORE - EUTROPHICATION

Countries	Directives implementation score	Waterborne inputs of N	Waterborne inputs of P	Total Points (maximum=30)	Percentage of maximum points	Grade
Denmark	5	3	4	12	40%	F
Estonia	9	0	1	10	33%	F
Finland	5	0	2	7	23%	F
Germany	5	2	1	8	27%	F
Latvia	9	5	0	14	47%	F
Lithuania	9	0	0	9	30%	F
Poland	5	3	1	9	30%	F
Russia	-	0	0	0	0%	F
Sweden	5	1	2	8	27%	F

The final grading is based on the percentage of maximum points.

Article 5: Environ + Economic Analysis			Total (maximum=10)
Surface water bodies defined	Drainage Area per river water body	Size of groundwater bodies	
0	0	1	5
1	1	1	9
1	0	0	5
1	1	1	5
1	1	1	9
1	1	1	9
1	1	1	5
1	1	1	5

The **EU Water Framework Directive*** establishes a legal framework which aims to guarantee sufficient quantities of good quality water across Europe by expanding water protection including coastal waters, achieving “good ecological status” for all waters by 2015, and delivering river basin water management. Seven years since its adoption, implementation remains in relatively early stages. In its first assessment published in March 2007^{xiv}, the Commission’s focused on four aspects –conformity of legal transposition, compliance with Article 3 on administrative arrangements, compliance with Article 5 on environmental and economic analysis and the overall reporting performance (see Table 1). The EC assessment demonstrates significant shortcomings in implementation to date and the final assessment is that poor transposition and the lack of economic analysis are the biggest gaps in implementation so far^{xiv}.

The **Helsinki Convention Annex III** addresses pollution from land-based, including airborne, sources. It aims to control inputs of nitrogen and phosphorus, the primary nutrient pollutants of the Baltic Sea, from industry, municipalities and from agriculture. The requirement for diffuse sources including agriculture is to eliminate pollution through best environmental practice. Table 2, however, suggests that between 1994 and 2004, levels reaching the Baltic via waterborne sources have levelled off, and in some cases are increasing^{xlviii}. This analysis uses HELCOM Indicator fact sheet data for nitrogen and phosphorus inputs (t/year) from riverine, coastal and direct point sources adjusted against the yearly flow (m³/s) to account for variation in flux due to increased run-off.

With respect to airborne inputs of nutrients to the Baltic Sea, in open sea areas in particular, airborne inputs are

* It should be noted that with respect to the Nitrates Directive a “1” in Table 1 to the left means that the exercise has been performed but not necessarily approved by the Commission. For the Water Framework Directive, all the infringement cases on legal transposition are now resolved. Germany’s case was referred to the European Court of Justice and the Court ruled against Germany. With respect to the administrative arrangements under Article 3 of the WFD, Denmark and Poland have modified arrangements following infringement proceedings. No legal action has been taken against Baltic Sea States with respect to Article 5.

**Denmark, Germany, and Lithuania are implementing action programmes for nitrate vulnerable zones on a whole territory basis

the main source of nitrogen input. In addition to airborne inputs coming from the Baltic Sea States, airborne nutrients from States beyond the Baltic (36%) and from shipping (6%) are significant sources^{li}. In 2000, the biggest contributors within the Baltic Sea States were Germany (20%), Poland (13%) and Denmark (8%)^{lii}. In 2003, the same three countries remained the biggest contributors followed by Baltic shipping. Airborne inputs have, however, not been included in the assessment.

GRADING

For the grading of performance in implementing the Nitrates and Water Framework Directives, one point was allocated for each successfully completed element, zero was awarded for non-compliance or lack of or poor quality data, and one point was subtracted for each infringement proceedings initiated (see Table 1). For the assessment of nitrogen and phosphorus waterborne input levels, points were allocated on the basis of each 10 % reduction for the ten year evaluation between 1994 and 2004, (or 2000 - 2003 for Russia and between 1994 - 2003 for Latvia) (see Table 2). The final grading is based on the average percentage of maximum points for each assessment.

CONCLUSION

The result of the assessment on eutrophication is truly disappointing. Eutrophication is one the most serious and immediate threats to the Baltic Sea, and none of the nine countries has even come close to implementing satisfactory measures to address this problem. Neither the Nitrates Directive nor the Water Framework Directive has been successfully implemented and the waterborne inputs of N and P are still much too high.

The problem becomes even more serious when one acknowledges that this assessment only looks at current agreements. Clearly, given the fact that fertilizer use is expected to increase dramatically in the coming years, it is an accepted fact that even more and stronger commitments are needed in order to tackle eutrophication in the future. Only urgent and concerted action with strong leadership at the highest political levels can accomplish this.

*(Council Directive 2000/60/EC)

USE OF RURAL DEVELOPMENT FUNDS

Of the total amount of nitrogen and phosphorus entering the Baltic Sea each year, roughly half comes from diffuse pollution from the agricultural sector. EU agriculture policy promotes intensification and concentration of agricultural production which leads to extensive use of fertilisers, resulting in large subsidies paying for nutrient-intensive farming.

The **European Agricultural Guidance and Guarantee Fund (EAGGF)**, established under Council Regulation (EC) No 1258/1999, consumes a large part of the general budget of the European Union. Prior to 2004, it was only available to the EU15. It has recently been superseded by Council Regulation (EC) No 1290 / 2005 which applies from 1 January 2007. **The Special Accession Programme for Agriculture and Rural Development (SAPARD)** provided financial support aimed at making structural improvements to the agriculture and rural environment to the accession countries between 2000 and 2004, when they joined the EU. By far the largest expenditure of rural development funds is against agri-environment measures, yet there is relatively little take-up of opportunities to use agri-environment funds for environmental benefit such as organic farming and protection of the environment (possible under EAGGF), or environmentally friendly agricultural practices (under SAPARD).

Table 4 shows expenditure on environmentally friendly activities in 2003, the last year for which SAPARD was available to the new accession Baltic Sea States.



Of the total amount of nitrogen and phosphorus entering the Baltic Sea each year, roughly half comes from diffuse pollution from the agricultural sector.

TABLE 4: ENVIRONMENTALLY FRIENDLY ACTIVITIES EXPENDITURE AGAINST TOTAL RURAL DEVELOPMENT EXPENDITURE IN 2003ⁱⁱⁱⁱ

Countries	Overall Rural Development Expenditure (1000 EUR) 2000 – 2005	Percentage of total national EAGGF spent on agri-environmental measures (2000 – 2005)	Rural development expenditure in 2003 (1000 EUR)	Expenditure on environmentally friendly activities in 2003* ('000 EUR)	Percentage of rural development funds spent on environmentally friendly activities
Denmark (EEAGF)	262,954	43	47,474	9,900	21
Estonia	139,461		17,056	0	0
Finland (EEAGF)	2,109,302	48.9	360,144	7,503	2
Germany (EEAGF)	7,035,986	49.8	1,281,645	50,881	4
Latvia	253,700		21,048	0	0
Lithuania	326,128		24,922	0	0
Poland	1,878,997		99,712	0	0
Sweden (EEAGF)	1,076,965	85.7	184,452	30,480	17

*Denmark, Finland, Germany and Sweden = organic farming + protection of the environment Estonia, Latvia, Lithuania, Poland = environmentally friendly agriculture practices

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All of the material presented in this document is based on a report prepared for WWF by Dr. Sian Prior.

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The **Baltic Marine Rescue (BMR)** is part of WWF, set up to save the Baltic marine environment and restore vitality and beauty to the surrounding region.

Please contact us for more information!

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