Baltic Sea Environment Proceedings No. 84

Activities 2001 Overview



Helsinki Commission

Baltic Marine Environment Protection Commission

HELCOM's activities 2001-2002

Introduction

This report summarises the activities of the Helsinki Commission (HELCOM) related to the protection of the Baltic marine environment over the period March 2001 to March 2002. The report is divided into five sections, corresponding to the work of HELCOM's four main groups and its Programme Implementation Task Force:

HELCOM MONAS – monitoring and assessment

HELCOM HABITAT – nature conservation and coastal zone management

HELCOM LAND – land-based pollution

HELCOM SEA – sea-based pollution

HELCOM PITF – Programme Implementation Task Force

More details of HELCOM's activities, projects and publications are available at www.helcom.fi together with background information about environmental issues related to the Baltic Sea.

Contents _____

1. The state of the Baltic Sea page 4

The state of the Baltic marine environment 1994-1998; Pollution loads; Radioactive substances; Improving assessment procedures; Remote sensing.

2. Nature conservation page 6

An ecosystem approach; Integrated coastal zone management; Baltic Sea Protected Areas; Fisheries; Marine mammals; Salmon.

3. Pollution from the land page 8

Nutrients; Hazardous substances (Priority substances; Successes; Pesticides; PCBs; Action; Publications); European co-operation (Harmonising Recommendations).

4. Pollution at sea page 11

Increasing risks; Making navigation safer – the Copenhagen Declaration; Emergency measures; Future tasks; Preparing for the worst; Deliberate oil discharges; Publications on marine pollution.

5. Environmental action page 14

Cleaning up hot spots; Regional workshops (Industries and municipalities; Agriculture; Coastal lagoons and wetlands); Reducing agricultural pollution; Working in co-operation.

Appendices -

Revisions in the observer status of NGOs Recommendations adopted by HELCOM 22 Recommendations adopted by HELCOM 23 HELCOM Contacts Baltic Sea Environment Proceedings

Foreword



The year 2001 has been a very active and successful year for the Helsinki Commission.

Boosted by a new organisational structure, HELCOM has sailed ahead at full steam, fully implementing working programmes in priority areas including eutrophication, hazardous substances, pollution hot spots, marine and coastal biodiversity, and the transport sector.

Maritime transport and navigational safety issues were prominent in September 2001, when all the ministers responsible for transport and the environment around the Baltic Sea convened for the HELCOM Extraordinary Meeting, and adopted HELCOM's Copenhagen Declaration. This rapid and decisive response to the "Baltic Carrier" accident of March 2001 once more highlights the political strengths of the Helsinki Commission.

Another important activity in 2001 has been the beginning of preparations for the high-level Joint Ministerial OSPAR/HELCOM Meeting, which will be held in 2003.

This report on our activities over the past year also contains details of several important HELCOM documents, including the 4th Periodic Assessment of the State of the Marine Environment of the Baltic Sea Area, a report on the MINDEC project, and reports on the Programme Implementation Task Force Regional Workshops held in Estonia, Germany, Poland and Russia.

It is my hope that this booklet will provide valuable information for all those wishing to gain a quick insight into current trends and activities related to the international protection of the sensitive Baltic marine environment by the Helsinki Commission.



1. The state of the Baltic Sea

The state of the Baltic marine **environment 1994-1998**

A summary of the HELCOM's 4th Periodic Assessment of the State of the Marine Environment of the Baltic Sea, for the period1994-1998, was published in May 2001. The report highlights improvements in water quality in coastal waters and the thickness of seabirds' eggshells, but also notes problems such as the high cadmium concentrations in Baltic Herrina.

HELCOM's five-yearly reports serve as the scientific basis for measures taken by coastal states to protect the Baltic marine environment. Some 150 scientists from the entire Baltic Sea region have been involved - monitoring and assessing inputs of nutrients and hazardous substances into the Baltic Sea, and their effects.

■ Tallinn RUSSIA LATVIA RUSSIA REI ARIIS Q 100 200 km CZECH REPUBLIC SLOVAK REPUBLIC

The Baltic Sea catchment area

Key facts

- Nitrogen and phosphorus inputs are still too
- Eutrophication remains the most pressing problem in the Baltic.
- Concentrations of most of the monitored hazardous substances, including mercury, lead and DDT, have decreased in marine organisms in the past 20-25 years, thanks to international environmental protection measures.
- Marine mammals are still suffering from reproductive disorders linked to the continued presence of PCBs and dioxins in the environment.
- Other, as yet unknown hazardous substances are a new worry.
- Cadmium concentrations in fish in the central Baltic and the Bothnian Sea have increased for unknown reasons.

Pollution loads

To assess the efficiency of measures taken to reduce the pollution load in the Baltic Sea catchment area, HELCOM's Fourth Pollution Load Compilation Report will quantify emissions, inputs of waterborne nutrients and of selected hazardous substances for the year 2000, as well as airborne pollution loads from 1996 to 2000.

For this purpose, new comprehensive guidelines outlining methods and quality assurance procedures have been elaborated, a new database for the data compilation has been developed, and a GIS system is being designed to map pollution in the Baltic region.

The draft report will be presented to the fourth meeting of HELCOM MONAS (Monitoring and Assessment Group) in October 2002, and published in 2003.

Key facts

- There are no current environmental threats from radioactive substances.
- Radiation doses from man-made radioisotopes in the Baltic Sea are below limits set in the EU Basic Safety Standards.

Radioactive substances

The Project Group for Monitoring Radioactive Substances in the Baltic Sea (MORS) is now finalising the Third Assessment of Radioactivity in the Baltic Sea, based on data collected from 1992 to 1998. The report will quantify the inputs of man-made radioactive substances into the Baltic, and their concentrations in various parts of the marine ecosystem. The main results have already been used in the Fourth Periodic Assessment's chapter on radioactivity, and the full report will be published in 2002.

Improving assessment procedures

The third meeting of HELCOM MONAS in October 2001 resolved to restructure the assessment of nutrient and hazardous substances inputs and their effects, to improve the availability of suitable upto-date information for various users. The requirements of European-level assessments are also being taken into account, particularly the harmonisation of HELCOM's assessment procedures and scheduling with the European Environment Agency's reporting, to improve the overall efficiency and quality of assessment work.

- n future, reporting will be based on:
- annual indicator reports covering selected topics from the COMBINE project (Co-operative Monitoring in the Baltic Marine Environment) related to problems in the Baltic Sea environment
- annual thematic reports on topical issues
- comprehensive periodic assessments examining environmental trends in the Baltic over periods of 5-10 years

The first indicator reports, on subjects including nutrients, oxygen, phytoplankton, zoobenthos and hazardous substances in Baltic herring, will be published in 2002.

Remote sensing: new techniques

A new remote sensing project "Validation of algorithms for chlorophyll retrieval from satellite data for the Baltic Sea" will improve monitoring within the framework of the COMBINE project. The project aims to develop and apply effective tools to monitor and assess phytoplankton biomass and blooms – the key links between nutrients and the living ecosystem.

2. Nature conservation

An ecosystem approach

HELCOM's Nature Conservation and Coastal Zone Management Group (HELCOM HABITAT) promotes ecosystem-based approaches in developing strategies for the management of marine resources of coastal and offshore waters, favouring broader, long-term management practices instead of a short-term, sectoral approach.

Integrated coastal zone management

Common concepts and visions for integrated coastal zone management (ICZM) are being developed for the nine countries around the Baltic Sea. A report summarising the current state of affairs was published in 2001, and a complementary strategic report setting out a common approach will be published during 2002.



Baltic Sea Protected Areas (BSPAs)

Baltic Sea Protected Areas (BSPAs)

A BSPAs Workshop, held in May 2001, once more urged HELCOM's Contracting Parties to further implement the formal protection of the Baltic Sea Protected Areas designated in HELCOM Recommendation 15/5. Full legal protection is the best way to preserve the ecological value of these areas, but a gradually differentiated protection scheme may be necessary in case of serious conflicts with user groups. Many BSPAs within the EU countries have also been designated for the Natura 2000 network, which entails management obligations. So far very few of the 62 designated BSPAs are fully implemented and protected.

Fisheries

Fostering sustainable fishery management practices designed to meet the needs of the whole Baltic ecosystem was a focus of HELCOM HABITAT's work in 2001. The ecological effects of fishing in the Baltic are worrying - particularly by-catches, conflicts concerning seal populations, and overfishing. HELCOM has intensified co-operation with the International Baltic Sea Fishery Commission (IBSFC), especially through the preparation of a joint seminar held in February 2002 in Gdynia, Poland.

Marine mammals

The implementation of several HELCOM recommendations has cut seal hunting and resulted in lower levels of organic pollutants in seals, and improved reproduction capacity. But the growing numbers of seals, especially grey seals in the Gulf of Bothnia and the Gulf of Finland, have given rise to conflicts with fishermen. As a result, Finland and Sweden have allowed restricted hunting of seals. The HELCOM Project on seals has submitted its report "Conservation and management of seal populations in the Baltic" to HELCOM HABITAT. The report contains advice on protection measures and outlines some possible solutions for resolving conflicts with fisheries. On the basis of this report HELCOM HABITAT will discuss a possible revision of HELCOM Recommendation 9/1 on seal protection.

An ASCOBANS workshop in January 2002 set out a recovery plan for harbour porpoises in the Baltic Sea, under the Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS).

Key facts

- The number of seals is increasing thanks to the implementation of HELCOM's recommendation on seal protection which has restricted the hunting of grey, ringed and harbour seals, and fosters the establishment of seal sanctuaries around the Baltic— and due to reductions in the inputs of organic pollutants following bans on the use of certain hazardous substances such as PCBs in the catchment area.
- Since 1998, the Baltic wild salmon stocks have increased owing to joint actions involving HELCOM and the International Baltic Sea Fishery Commission (IBSFC).

Salmon

The "Salmon Action Plan 1997-2010" of the International Baltic Sea Fishery Commission (IBSFC), which aims to save wild Baltic salmon stocks from extinction through joint efforts involving IBSFC and HELCOM, has resulted in improved spawning habitats, better smolt release practices, enhanced fishing restrictions and recently a slight increase in wild stocks.

3. Pollution from the land

3.1 Nutrients

Attempts to halve nutrient discharges only partly successful

The Baltic is still burdened by excess nutrients, according to a report summarising the results of a HELCOM project that investigated discharges and losses of the key nutrients nitrogen and phosphorus from 1987 to 1995. The report, published in February 2002, shows that measures to reduce nitrogen and phosphorus discharges have in most cases fallen short of the goal to reduce nutrient loads by 50%, as stipulated in the 1988 Ministerial Declaration. While most countries managed to curb phosphorus discharges from point sources such as municipal and industrial wastewater outlets by 50%, nitrogen discharges could not be sufficiently controlled.

Key facts

- None of the nine Baltic Sea countries have been able to halve total nutrient discharges from all sources since the late 1980s.
- The transitional countries around the Baltic Sea have come closer to the 50% reduction targets than the EU countries, largely due to political and economic changes.
- There is still plenty of scope for reductions in nutrient losses in the agricultural sector.

The nine HELCOM countries have been urged to develop better methods to determine agricultural nutrient loads. In 2003 there will be another opportunity for each country to assess and revise targets, when the pollution loads for the year 2000 are published in the Fourth Pollution Load Compilation.

Project report:

According to a project report prepared in Poland on the "Efficiency of Biological Removal of Phosphorus from Municipal Wastewater Treatment Plants", biological phosphorus removal using Volatile Fatty Acids (VFA) Generation Stages is the most efficient method, although this requires careful design and operation.

3.2 Hazardous substances

Phasing out emissions, discharges and losses of hazardous substances within a generation is one of HELCOM's priorities.

In 1998 HELCOM selected 42 hazardous substances for immediate priority action. They include pesticides and biocides such as lindane and pentachlorophenol; metals and metal compounds such as mercury and cadmium; and industrial substances including short-chained chlorinated paraffins and nonylphenol, and were selected from a list of numerous substances of concern.

HELCOM has been actively collecting data on the sources and pathways of these hazardous substances, as well as their legal status, production, trade and use in each country, in order to assess exposure levels and identify cost-effective measures to reduce risks. After certain achievements the working list of hazardous substances – as included in HELCOM Recommendation 19/5 – is now to be updated, taking into account the findings presented in the report "The specific conditions in the Baltic Sea Region to be taken into account when selecting hazardous substances for priority action".

Key facts

The inputs of many hazardous substances have been reduced by at least 50 % since the late 1980s. In the EU member states, progress has mainly been due to the effective implementation of environmental legislation, the substitution of hazardous substances with less harmful substances, and technological improvements. Reductions during the 1990s in the Baltic Republics, Russia and Poland were mainly due to socio-economic changes.

Some 26 hazardous pesticides no longer in use

Information has been compiled on the legal status, sale and use of the 26 pesticides selected by HELCOM for immediate priority action. These 26 pesticides, including nine POP-pesticides incorporated in the 2001 Stockholm Convention on Persistent and Organic Pollutants, are now all out of use around the Baltic, either for all uses or as pesticides – with many of them legally banned. This largely achieves the goal of HELCOM Recommendation 19/5 with regard to the selected pesticides, although there are some uncertainties concerning

the available data, and further steps must be taken to ensure that any obsolete pesticides still stored in unsafe conditions do not pose a threat.

Care still needed with PCBs

Polychlorinated Biphenyls (PCBs) are evidently no longer being produced or taken into new uses around the Baltic Sea. However, PCBs are still in use in existing equipment like capacitors and transformers. Inventories are still in full swing in the Baltic Republics, Poland and Russia, but measures to ensure the safe handling of PCBs, and reductions in releases, have already been identified.

Action on hazardous substances

HELCOM's Hazardous Substances project team is currently elaborating guidance documents on selected hazardous substances to help policy-makers select and apply appropriate measures to cease emissions, losses and discharges of these substances around the Baltic Sea.

Data collection strategies such as downstream user analysis are also being improved to provide tools to measure progress with reduction targets and policies. HELCOM is also co-ordinating the active development of a common strategy to obtain information on the occurrence of hazardous substances in various uses, markets and environments.

Various activities are being designed to raise awareness of hazardous substances, including a meeting about HELCOM's objectives and EU requirements with regard to hazardous substances, held in February 2002 in Sigulda, Latvia, which involved representatives from industry and the EU Commission.

Key facts:

Concentrations of PCBs and DDT are still much higher in the Baltic than in the North Sea or the open Atlantic Ocean.

Publications on hazardous substances

- Pesticides selected for immediate priority action: A compilation and evaluation of the information given by the Contracting Parties with the focus on use and legislation.
- Polychlorinated Biphenyls (PCBs): A compilation of information, derived from HELCOM
 Recommendations, EU-Directives, UN-ECE-LRTAP, UNEP and OSPAR, and analysis of appropriate measures aiming at safe handling and reduction of releases of PCB from PCB-containing equipment in use.
- Polychlorinated Biphenyls (PCB): A compilation and evaluation of the information given by the Contracting Parties with the focus on legislative situation, current uses, stockpiles and releases (working document).
- The Implementation of the 1988 Ministerial Declaration on the Protection of the Marine Environment of the Baltic Sea Area with regard to Hazardous Substances. A final overall conclusion including the new goals.
- Specific conditions in the Baltic Sea Region to be taken into account when selecting and prioritising hazardous substances for priority
- Mercury: A compilation and evaluation of the information given by the Contracting Parties with the focus on legislative situation, current uses, stockpiles and releases.

A final Hazardous Substances Project report will be published at the end of 2002.

New recommendation:

The pollution by mercury from light sources and electrical equipment is addressed by a revised product control recommendation adopted by HELCOM 23.

3.3 European co-operation

Harmonising recommendations

HELCOM is harmonising its recommendations with EU directives and the decisions and recommendations of OSPAR (The Oslo-Paris Convention for the Protection of the Marine Environment of the Northeast Atlantic) to streamline environmental protection work in the North Sea and Baltic Sea regions, and to help countries to use their resources efficiently by avoiding overlap or discrepancies.

The HELCOM project "Harmonisation of HELCOM Recommendations with EU regulations and OSPAR Recommendations and Decisions" led to the revision of eight HELCOM Recommendations at the Helsinki Commission Meeting of March 2002 (HELCOM 23). One of the revised recommendations aims to reduce discharges from urban areas through improved storm-water management. The seven other revised recommendations cover measures to reduce discharges from oil refineries, hard coal cokeries, the chloralkali, chemical and textile industries, metal surface treatment, and pesticide production. A report on this harmonisation was published by the Finnish Environment Institute in March 2001. Several more recommendations are currently being prepared for revision under the harmonisation project.

During the revision and elaboration of industrial recommendations, HELCOM has been using information from various sources, including the European Commission's Reference Documents on Best Available Techniques (BREFs), which provide valuable and comprehensive information including achievable emission levels. HELCOM's Land-based Pollution Group is still working to find ways to incorporate such information into HELCOM requirements, however.

HELCOM has also been working to improve the reporting of environmental data and of the implementation of HELCOM requirements, by reducing the data load and streamlining reporting procedures in co-operation with other international organisations.

HELCOM has invalidated six recommendations which have been superseded by the 1992 Convention or more recent recommendations, two of which address agricultural practices. Most of the earlier recommendations on agriculture are now covered by the 1992 Convention, and the HELCOM Working Group on Agriculture is presently elaborating a comprehensive new umbrella recommendation covering outstanding agricultural issues.

4. Pollution at sea

Increasing risks

Maritime traffic increased by 20% in the Baltic Sea between 1990 and 1995, mainly due to a 60% increase in the annual cargo turnover of the major harbours on the eastern coast of the Baltic Sea. According to figures provided by the EU programme TACIS the continued increase in shipping expected from 1997 to 2017 will result in a 50% higher risk of oil spills of less than 1,000 tonnes and a 25% higher risk of larger oil spills.

The construction of the Baltic Pipeline System between Tmimano-Perchiera in Russia and the Gulf of Finland is expected to lead to an additional increase of 40% in the risk of oil spills for the Baltic Sea overall, and a 100% risk increase for the Gulf of Finland.

To provide a more reliable picture of the maritime traffic situation in the Baltic, HELCOM is compiling an inventory of all traffic in the Baltic and defining probable risk areas. Computer-generated oil-spill scenarios for main oil transportation routes and entrances to major oil terminals will help in the preparation of suitable accident responses.

The importance of maintaining good technical co-operation with Estonia, Latvia, Lithuania and Russia in combattting marine pollution incidents is stressed in a recommendation adopted at HELCOM 23, designed to enable these countries to cope with the potential dangers linked to rising levels of maritime traffic.

The largest oil spill for 20 years

On 29 March 2001, the largest oil spill in the Baltic Sea for 20 years highlighted the risks associated with increasing levels of shipping. A collision between the tanker Baltic Carrier and the bulk carrier Tern occurred along a deep-water route north-east of the Kadetrenden, between Denmark and Germany. While 80% of the 2,700 tonnes of oil spilled was recovered, much of the remaining oil ended up along sensitive shores, and the necessary clean-up operations were difficult, time-consuming and costly.

Making navigation safer - the Copenhagen Declaration

In September 2001 the Environment and Transport Ministers from the nine countries around the Baltic Sea and an EU representative adopted a new package of measures to improve the safety of navigation in the Baltic Sea - the HELCOM Copenhagen Declaration. A follow-up meeting in December 2001 showed that considerable progress had already been achieved in the implementation of the declaration by HELCOM Contracting Parties.

Measures under the HELCOM Copenhagen Declaration:

- New and improved routes will be mapped out, such as the extension of the deep-water route north-east of Gedser as of January 2002, as well as a new deep-water route and amendments to existing traffic separation schemes in the Gulf of Finland, and recommended routes off the Swedish island of Gotland.
- Enhanced use of pilots in high-risk areas, such as "Route T" and the Sound, through a joint proposal to the International Maritime Organisation for the extension of the existing IMO resolution to use pilots in Route T to cover ships with a draught of at least 11 metres.
- The use of pilots in "Route T" and in the Sound will be enhanced through a recommendation adopted by HELCOM 23. The recommendation establishes a system to inform ships about the need to use pilots in accordance with the IMO resolutions, and a procedure for monitoring how this is followed in practice.
- Hydrographic surveys will be regularly carried out along main shipping routes to provide ships with updated information on depths.
- The use of the state-of-the-art ECDIS (electronic charts display and information system) navigational tool will be promoted, especially on ships whose cargoes are a risk to the marine environment. Electronic navigation charts will cover all major and secondary shipping routes by 2002 and 2004 respectively, and will be accepted as equivalent to paper charts.
- Land-based Automatic Identification Systems
 (AIS) monitoring systems may already be
 installed to monitor shipping by July 2004, a
 year earlier than had previously been planned.
 Denmark and Germany have already set up

24-hour AIS monitoring for the busy Kadetrenden, which is used by more than 60,000 ships a year.

The HELCOM countries will also strengthen compliance with maritime safety regulations:

- by providing electronic guidance and information for safe navigation
- by extending and intensifying Port State Control
- by establishing common procedures for investigations into accidents, to promote safety and environmentally conscious practices.

 Single-hull oil tankers will be phased out at the earliest possible date under the International Maritime Organisation regime, i.e. 2003-2015, depending on the age and type of the ship.

Emergency measures

The HELCOM countries will intensify co-operation on building up and maintaining adequate emergency capacity (fire fighting, emergency lightering and towing capacities):

- by drawing up plans to ensure that ships in distress can easily reach refuge
- by additional research and development activities on response methods for high-density oil and orimulsion which is a liquid fossil made up of 70% bitumen and 30% water spreading in water like milk in coffee, and almost impossible to combat or recover.

- by developing further response methods for emergencies in icy conditions
- by investigating opportunities to extend cooperation to include shore-line clean-up operations

The HELCOM countries will also strengthen ties to the European Community to benefit from activities related to maritime safety.

Future tasks

HELCOM will also explore the need for additional measures:

- by intensifying reporting procedures and the exchange of data to assess trends in maritime traffic as a basis for risk analysis
- by investigating the benefits from designating parts of the Baltic Sea as Particularly Sensitive Sea Areas

The Helsinki Convention is to be amended to make the consequent measures binding under international law as of 1 December 2002.

Preparing for the worst

In September 2001 Denmark led a joint HELCOM exercise in combatting oil-pollution, involving teams from all nine Baltic Sea countries. Alarm procedures, equipment and cooperation between national combatting units were tested. Such exercises are regularly carried out to provide useful experience for actual accidents.

Key facts:

- Aerial surveillance has revealed some 500-700 illegal oil discharges in the Baltic Sea every year, but there are probably many more such spills.
- During two recent 24-hour joint aerial surveillance operations over the Baltic, more than 20 illegal oil spills were detected.

Deliberate oil discharges

After accidental oil spillages, deliberate oil discharges have the greatest impact of all sources of sea-based pollution. Although individually the amounts of oil involved may be very small, taken together they add up to a larger volume of oil than accidents. All such discharges violate the global regulations set by the International Maritime Organisation as well as HELCOM's Baltic Strategy, which obliges all ships to dispose of oil residues and oily wastes in ports. HELCOM has teamed up with the Prosecutors General Expert Group in the Baltic Sea Region to make sure more polluters are successfully convicted.

Ship-generated waste and cargo residues are to be tackled by a recommendation adopted by HELCOM 23, which defines how ships must report on any wastes to be delivered to port reception facilities in the Baltic and other European waters.

Publications on maritime pollution

- Study of shipping accidents in the Baltic Sea Area 1989-1999, revealing 251 accidents, one-fifth of which resulted in oil pollution.
- Table of all major oil accidents in the Baltic Sea Area since 1980 (spills of more than 100 tonnes of oil).
- Compilation of "Emergency Towing, Fire Fighting and Intermediate Storage Capacity".
- Declaration on the safety of navigation and emergency capacity in the Baltic Sea Area HELCOM Copenhagen Declaration.
- HELCOM Recommendation 22E/5, Amendments to Annex IV to the Helsinki Convention, "Prevention of pollution from ships".
- Background document to the HELCOM Copenhagen Declaration.



Symbols	Quantity	Number
Category 1	> 0 - 1 m ³	442
Category 2	$>$ 1- 10 m^3	33
Category 3	$> 10-100 \text{ m}^3$	2

Total number of observations: 477Data by: **DE, DK, EE, FI, LT, PL, LV and SE**

Illegal oil discharges observed during aerial surveillance operations in 2000

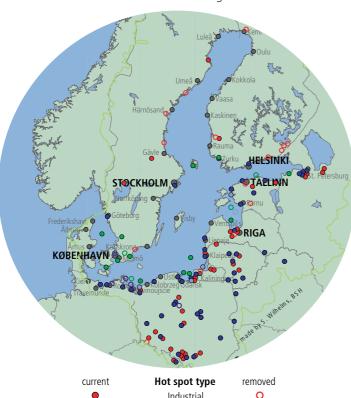
5. Environmental action

Cleaning up pollution hot spots

HELCOM's Programme Implementation Task Force (PITF) has continued to successfully implement the Baltic Sea Joint Comprehensive Environmental Action Programme (JCP) - the international environmental management framework for the longterm restoration of the ecological balance of the Baltic Sea - although many problems still remain.

Attitudes have been gradually changing regarding the integration of environmental considerations into decision-making. EU directives such as the Water Framework Directive and the Integrated Pollution Prevention and Control Directive can point the way towards improvements at many pollution hot spots in transitional countries.

During 2001 the PITF mainly focused on new investments targeting pollution, and on regional workshops assessing progress with investment and other activities at designated pollution hot spots. Increased involvement and support have been sought from the private sector. Four hot spots were deleted at the PITF meeting in November 2001.



Hot spots of the Joint Comprehensive **Environmental Action Programme**

Industrial

Municipal

Agricultural run-off Coastal Lagoon/Wetland 0

0

Key facts

- A list of 132 hot spots was compiled in 1992 together with the JCP action programme.
- So far a total of 26 hot spots have been deleted from the list after the elimination or reduction of pollution to a satisfactory level.
- As many as ten Polish hot spots are currently seeking deletion.

Regional Workshops

PITF Regional Workshops provide a forum for the people involved in the management of the hot spots, including owners, and national, regional and local authorities, to meet representatives of International Financial Institutions, NGOs and other invited guests.

During 2001 workshops were organised by the Preparatory Group (PG) in co-operation with host countries in Tallinn (Estonia), Lübeck (Germany), Cracow (Poland), Kaliningrad and St. Petersburg (Russia). At these workshops, information was presented on specific hot spots, and decisions were taken on the need for further measures, and prospects for the deletion of hot spots from the HELCOM list. The need to speed up the overall implementation of the JCP was highlighted. Thematic Reports covering the first three Regional Workshops (2000/2001) have been published (BSEP 83). The Regional Workshops "road show" will continue during 2002 in Sweden, and in Ukraine.

The Preparatory Group has prepared a report in the shape of a Preliminary Evaluation of the HELCOM PITF Regional Workshops held in Estonia, Latvia, Lithuania, Poland and Russia.

a) Industry and municipalities

Closures and production cuts at industrial plants due to recession have widely reduced pollution, but there are still serious problems, notably at pulp and paper mills or metallurgical plants. Relatively few proposals for industrial hot spot deletions have emerged so far, other than in Poland, where several industrial hot spots should soon be deleted. Finland has acted as lead-party and prepared a report on Progress at Industrial Hot Spots.

Investments in industrial wastewater treatment have generally been low, reflecting both the unsatisfactory state of the regulatory framework, and how the out-dated nature of many industrial plants raises investment costs.

At combined municipal and industrial hot spots many small and medium-sized industrial sites still cause problems for municipal wastewater treatment plants which are overburdened by urban wastewater, industrial discharges, sludge and solid waste.

In several countries large municipalities have made major improvements in wastewater treatment, reducing pollution loads substantially. In some regions serious problems must still be solved before such hot spots can be deleted, and investment plans are being actively sought to this end. One problem is that financing municipal projects through sudden rises in consumer tariffs may have negative social and economic consequences.

b) Agriculture

Farmland is still the main source of the nutrients entering the Baltic Sea. Nutrient loads in rivers remain too high, despite reductions in the use of fertilisers and other changes designed to reduce nutrient leaching. In the Baltic Republics pollution from agriculture has been reduced, although some precautionary measures must still be taken to avoid problems in the future. In Russia, all but one of the major pig farms within the Baltic catchment area have closed. The implementation of Annex III of the Helsinki Convention and the Code of Good Agricultural Practice must still be promoted.

c) Coastal lagoons and wetlands

Coastal lagoons and wetlands receive nutrients and hazardous substances from the rivers entering them. Agriculture, poorly treated municipal wastewater and industrial wastewater are all significant sources. Pollution threatens biodiversity and hinders nature conservation in these rich habitats.

- The Curonian Lagoon, shared by Lithuania and the Kaliningrad Region of Russia, is severely polluted both by agriculture and by industries in Kaliningrad.
- The Vistula Lagoon and Matsalu Bay and Wetlands receive most of their pollution from agriculture and insufficiently treated wastewater.
- The Gulf of Riga has seen considerable progress, with local hot spots deleted from the HELCOM list.

Reducing agricultural pollution

The HELCOM Working Group on Agriculture (WGA) held two meetings during 2001. There has been progress with the development of national Codes of Good Agricultural Practice and the implementation of Annex III of the Helsinki Convention. HELCOM's agricultural recommendations are currently being harmonised with EU regulations, and a new "umbrella recommendation" on agriculture is being prepared.

HELCOM also leads the Baltic 21 initiative's Task Force on Agriculture together with Poland.

Working in co-operation

HELCOM PITF is currently co-operating with several NGOs whose activities support or complement the work of the JCP, including the Union of Baltic Cities, Coalition Clean Baltic and WWF. NGO representatives regularly participate in HELCOM PITF meetings.

A Joint ad hoc Baltic 21/HELCOM Working Group considered possible overlap and co-ordination problems between the two organisations, and prepared recommendations for future co-operation. HELCOM contact persons have been nominated for the different sectors of Baltic 21. HELCOM participates in Baltic 21 "Lead Party and Responsible Actors meetings" and the Senior Officials Group (SOG).

The HELCOM Secretariat is participating in the EUfunded MANTRA-East Project, which deals with Integrated Strategies for the Management of Transboundary Waters on the Eastern European Fringe and a pilot study of Lake Peipsi and its drainage basin.

A new Global Environment Facility project - The Baltic Sea Regional Project - has been under preparation during 2001, and is due to be launched during spring 2002. The HELCOM Secretariat has been represented in the Project Core Group. The project aims to increase sustainable biological productivity, improve coastal zone management and reduce agricultural non-point source pollution through the introduction of ecosystem-based approaches for land, coastal and marine environmental management. HELCOM will manage the project in conjunction with IBSFC and ICES, and the implementation will also involve the Swedish University of Agricultural Sciences and WWF.

Appendices

Revisions in the observer status of NGOs

The Helsinki Commission has reviewed the status of its observers, and has prolonged the observer status for 16 international non-governmental organisations which have shown a strong and active interest in the work of HELCOM and its subsidiary bodies. Many of these international organisations provide useful and important contributions to the protection of the Baltic Sea environment.

Recommendations adopted by HELCOM 22

- 22/1 Installation of toilet retention systems and standard connections for sewage on board existing fishing vessels, working vessels and pleasure craft
- 22/2 Restricted use of chemical agents and other non-mechanical means in oil-combating operations in the Baltic Sea area
- 22/3 Unified interpretations to ensure a harmonised and effective implementation of the strategy for port reception facilities for ship-generated wastes and associated issues
- 22/4 Proper handling of solid waste/landfilling

Recommendations adopted by HELCOM 23

- 23/1 Notification of ship's wastes
- 23/2 Co-operation and assistance to Estonia, Latvia, Lithuania and Russia in the field of combatting marine pollution incidents
- 23/3 Enhancing the use of pilots in Route
 T and the Sound by notification to departing ships and establishment of an early
 warning system
- 23/4 Measures aimed at the reduction of mercury pollution resulting from light sources and electrical equipment
- 23/5 Reduction of discharges from urban areas by the proper management of storm water systems
- 23/6 Reduction of emissions and discharges of mercury from chloralkali industry
- 23/7 Reduction of discharges and emissions from the metal surface treatment
- 23/8 Restriction of discharges from oil refineries
- 23/9 Restriction of atmospheric emissions and waste water discharges from hard coal cokeries
- 23/10 Reduction of discharges and emissions from production and formulation of pesticides
- 23/11 Requirements for discharging of waste water from the chemical industry
- 23/12 Reduction of discharges and emissions from production of textiles

HELCOM Contacts

Chairman of the Helsinki Commission

Mr. Peter Ehlers, Germany

Secretariat

Katajanokanlaituri 6B FIN-00160 Helsinki, Finland Email: helcom@helcom.fi Internet: http://www.helcom.fi

Executive Secretary

Mr. Mieczysław S. Ostojski

Assistant Ms. Mari Lamio

HELCOM MONAS & HABITAT

Professional Secretary Mr. Juha-Markku Leppänen

Assistant Ms. Mervi Lehto

HELCOM LAND

Professional Secretary Mr. Kaj Forsius

Assistant Ms. Satu Tofferi

Project Co-ordinator Hazardous Substances Ms. Christine Füll

HELCOM SEA

Professional Secretary
Ms. Anne Christine Brusendorff

Assistant

Ms. Teija-Liisa Lehtinen

Programme Implementation Task Force (PITF)

Professional Secretary Mr. Claus Hagebro

Assistant

Ms. Leena Heikkilä

Information and Communication

Professional Secretary Ms. Ulrike Hassink

Administration

Administrative Officer Ms. Ritva Kostakow-Kämpe

Assistant

Mr. Håkan Blomberg

Assistant

Mr. Stefan Sacklén

Chairpersons of the subsidiary bodies

Strategy Group

Mr. Harry Liiv, Estonia Chairman of HELCOM STRATEGY

HELCOM MONAS

Mr. Juha-Markku Leppänen, Finland Chairman of HELCOM MONAS (until 15 October 2001)

Ms. Heike Herata, Germany Chairperson of HELCOM MONAS (as from 15 October 2001 for a two-year period)

HELCOM HABITAT

Mr. Henning von Nordheim, Germany Chairman of HELCOM HABITAT

HELCOM SEA

Mr. Thomas Fagö, Sweden Chairman of HELCOM SEA

HELCOM LAND

Mr. Heinz-Jochen Poremski, Germany Chairman of HELCOM LAND (until 31 October 2001)

Mr. Kaj Forsius, Finland Chairman of HELCOM LAND (from 1 to 30 November 2001)

Mr. Torben Wallach, Denmark Chairman of HELCOM LAND

HELCOM PITF

Mr. Göte Svenson, Sweden Chairman of HELCOM PITF

Baltic Sea Environment Proceedings

- No. 1 JOINT ACTIVITIES OF THE BALTIC SEA STATES
 WITHIN THE FRAMEWORK OF THE CONVENTION ON THE PROTECTION OF THE
 MARINE ENVIRONMENT OF THE BALTIC SEA
 AREA 1974-1978
 (1979)
- No. 2 REPORT OF THE INTERIM COMMISSION (IC)
 TO THE BALTIC MARINE ENVIRONMENT
 PROTECTION COMMISSION
 (1981)
- No. 3 ACTIVITIES OF THE COMMISSION 1980
 - Report on the activities of the Baltic Marine Environment Protection Commission during 1980
 - HELCOM Recommendations passed during 1980 (1981)
- No. 4 BALTIC MARINE ENVIRONMENT BIBLIOGRAPHY 1970-1979 (1981)
- No. 5A ASSESSMENT OF THE EFFECTS OF POLLUTION
 ON THE NATURAL RESOURCES OF THE
 BALTIC SEA, 1980
 PART A-1: OVERALL CONCLUSIONS
 (1981)
- No. 5B ASSESSMENT OF THE EFFECTS OF POLLUTION
 ON THE NATURAL RESOURCES OF THE
 BALTIC SEA, 1980
 PART A-1: OVERALL CONCLUSIONS
 PART A-2: SUMMARY OF RESULTS
 PART B: SCIENTIFIC MATERIAL
 (1981)
- No. 6 WORKSHOP ON THE ANALYSIS OF HYDRO-CARBONS IN SEAWATER Institut für Meereskunde an der Universität Kiel, Department of Marine Chemistry, March 23 -April 3, 1981 (1982)

No. 7 ACTIVITIES OF THE COMMISSION 1981

- Report of the activities of the Baltic Marine Environment Protection Commission during 1981 including the Third Meeting of the Commission held in Helsinki 16-19 February 1982
- HELCOM Recommendations passed during 1981 and 1982 (1982)

No. 8 ACTIVITIES OF THE COMMISSION 1982

- Report of the activities of the Baltic Marine
 Environment Protection Commission during
 1982 including the Fourth Meeting of the
 Commission held in Helsinki 1-3 February 1983
- HELCOM Recommendations passed during 1982 and 1983 (1983)
- No. 9 SECOND BIOLOGICAL INTERCALIBRATION
 WORKSHOP
 Marine Pollution Laboratory and Marine Division
 of the National Agency of Environmental
 Protection, Denmark, August 17-20, 1982,
 Rønne, Denmark

(1983)

- No. 10 TEN YEARS AFTER THE SIGNING OF THE
 HELSINKI CONVENTION
 National Statements by the Contracting Parties
 on the Achievements in Implementing the Goals
 of the Convention on the Protection of the
 Marine Environment of the Baltic Sea Area
 (1984)
- No. 11 STUDIES ON SHIP CASUALTIES IN THE BALTIC SEA 1979-1981
 Helsinki University of Technology, Ship Hydrodynamics Laboratory, Otaniemi, Finland P. Tuovinen, V. Kostilainen and A. Hämäläinen (1984)
- No. 12 GUIDELINES FOR THE BALTIC MONITORING PROGRAMME FOR THE SECOND STAGE (1984)

No. 13 ACTIVITIES OF THE COMMISSION 1983

- Report of the activities of the Baltic Marine Environment Protection Commission during 1983 including the Fifth Meeting of the Commission held in Helsinki 13-16 March 1984
- HELCOM Recommendations passed during 1983 and 1984 (1984)
- No. 14 SEMINAR ON REVIEW OF PROGRESS MADE IN WATER PROTECTION MEASURES

 17-21 October 1983, Espoo, Finland
 (1985)

No. 15 ACTIVITIES OF THE COMMISSION 1984

- Report of the activities of the Baltic Marine
 Environment Protection Commission during
 1984 including the Sixth Meeting of the Commission held in Helsinki 12-15 March 1985
- HELCOM Recommendations passed during 1984 and 1985 (1985)
- No. 16 WATER BALANCE OF THE BALTIC SEA
 A Regional Cooperation Project of the Baltic Sea
 States;
 International Summary Report
 (1986)
- No. 17A FIRST PERIODIC ASSESSMENT OF THE STATE
 OF THE MARINE ENVIRONMENT OF THE
 BALTIC SEA AREA, 1980-1985; GENERAL
 CONCLUSIONS
 (1986)
- No. 17B FIRST PERIODIC ASSESSMENT OF THE STATE

 OF THE MARINE ENVIRONMENT OF THE

 BALTIC SEA AREA, 1980-1985; BACKGROUND

 DOCUMENT

 (1987)

No. 18 ACTIVITIES OF THE COMMISSION 1985

- Report of the activities of the Baltic Marine Environment Protection Commission during 1985 including the Seventh Meeting of the Commission held in Helsinki 11-14 February 1986
- HELCOM Recommendations passed during 1986 (1986)

- No. 19 BALTIC SEA MONITORING
 SYMPOSIUM
 Tallinn, USSR, 10-15 March 1986
 (1986)
- No. 20 FIRST BALTIC SEA POLLUTION LOAD COMPILA-TION (1987)
- No. 21 SEMINAR ON REGULATIONS CONTAINED IN
 ANNEX II OF MARPOL 73/78 AND REGULATION
 5 OF ANNEX IV OF THE HELSINKI CONVENTION
 National Swedish Administration of Shipping
 and Navigation;
 17-18 November 1986, Norrköping, Sweden
 (1987)
- No. 22 SEMINAR ON OIL POLLUTION QUESTIONS 19-20 November 1986, Norrköping, Sweden (1987)
- No. 23 ACTIVITIES OF THE COMMISSION 1986
 Report on the activities of the Baltic Marine
 Environment Protection Commission during
 1986 including the Eighth Meeting of the Commission held in Helsinki 24-27 February 1987
 - HELCOM Recommendations passed during 1987 (1987)
- No. 24 PROGRESS REPORTS ON CADMIUM, MERCURY, COPPER AND ZINC (1987)
- No. 25 SEMINAR ON WASTEWATER TREATMENT IN URBAN AREAS
 7-9 September 1986, Visby, Sweden (1987)

No. 26 ACTIVITIES OF THE COMMISSION 1987

- Report on the activities of the Baltic Marine
 Environment Protection Commission during
 1987 including the Ninth Meeting of the Commission held in Helsinki 15-19 February 1988
- HELCOM Recommendations passed during 1988 (1988)

- No. 27A GUIDELINES FOR THE BALTIC MONITORING
 PROGRAMME FOR THE THIRD STAGE; PART A.
 INTRODUCTORY CHAPTERS
 (1988)
- No. 27B GUIDELINES FOR THE BALTIC MONITORING
 PROGRAMME FOR THE THIRD STAGE; PART B.
 PHYSICAL AND CHEMICAL DETERMINANDS IN
 SEA WATER
 (1988)
- No. 27C GUIDELINES FOR THE BALTIC MONITORING
 PROGRAMME FOR THE THIRD STAGE; PART C.
 HARMFUL SUBSTANCES IN BIOTA AND SEDIMENTS
 (1988)
- No. 27D GUIDELINES FOR THE BALTIC MONITORING
 PROGRAMME FOR THE THIRD STAGE; PART D.
 BIOLOGICAL DETERMINANDS
 (1988)
- No. 28 RECEPTION OF WASTES FROM SHIPS IN THE BALTIC SEA AREA
 - A MARPOL 73/78 SPECIAL AREA (1989)
- No. 29 ACTIVITIES OF THE COMMISSION 1988
 - Report on the activities of the Baltic Marine
 Environment Protection Commission during
 1988 including the Tenth Meeting of the Commission held in Helsinki 14-17 February 1989
 - HELCOM Recommendations passed during 1989 (1989)
- No. 30 SECOND SEMINAR ON WASTEWATER TREAT-MENT IN URBAN AREAS 6-8 September 1987, Visby, Sweden (1989)
- No. 31 THREE YEARS OBSERVATIONS OF THE LEVELS
 OF SOME RADIONUCLIDES IN THE BALTIC SEA
 AFTER THE CHERNOBYL ACCIDENT
 Seminar on Radionuclides in the Baltic Sea
 29 May 1989, Rostock-Warnemünde, German
 Democratic Republic
 (1989)

- No. 32 DEPOSITION OF AIRBORNE POLLUTANTS TO THE BALTIC SEA AREA 1983-1985 AND 1986 (1989)
- No. 33 ACTIVITIES OF THE COMMISSION 1989
 - Report on the activities of the Baltic Marine
 Environment Protection Commission during

 1989 including the Eleventh Meeting of the
 Commission held in Helsinki 13-16 February

 1990 HELCOM Recommendations passed during 1990
 (1990)
- No. 34 STUDY OF THE RISK FOR ACCIDENTS AND THE
 RELATED ENVIRONMENTAL HAZARDS FROM
 THE TRANSPORTATION OF CHEMICALS BY
 TANKERS IN THE BALTIC SEA AREA
 (1990)
- No. 35A SECOND PERIODIC ASSESSMENT OF THE STATE
 OF THE MARINE ENVIRONMENT OF THE BALTIC
 SEA, 1984-1988; GENERAL CONCLUSIONS
 (1990)
- No. 35B SECOND PERIODIC ASSESSMENT OF THE STATE
 OF THE MARINE ENVIRONMENT OF THE BALTIC
 SEA, 1984-1988; BACKGROUND DOCUMENT
 (1990)
- No. 36 SEMINAR ON NUTRIENTS REMOVAL FROM MUNICIPAL WASTE WATER
 4-6 September 1989, Tampere, Finland (1990)
- No. 37 ACTIVITIES OF THE COMMISSION 1990
 - Report on the activities of the Baltic Marine Environment Protection Commission during 1990 including the Twelfth Meeting of the Commission held in Helsinki 19-22 February 1991
 - HELCOM Recommendations passed during 1991 (1991)
- No. 38 THIRD BIOLOGICAL INTERCALIBRATION WORK-SHOP 27-31 August 1990, Visby, Sweden (1991)

- No. 39 AIRBORNE POLLUTION LOAD TO THE BALTIC SEA 1986-1990 (1991)
- No. 40 INTERIM REPORT ON THE STATE OF THE COASTAL WATERS OF THE BALTIC SEA (1991)
- No. 41 INTERCALIBRATIONS AND INTERCOMPARISONS
 OF MESUREMENT METHODS FOR AIRBORNE
 POLLUTANTS
 (1992)
- No. 42 ACTIVITIES OF THE COMMISSION 1991
 - Report of the activities of the Baltic Marine Environment Protection Commission during 1991 including the 13th meeting of the Commission held in Helsinki 3-7 February 1992
 - HELCOM Recommendations passed during 1992 (1992)
- No. 43 BALTIC MARINE ENVIRONMENT BIBLIOGRAPHY 1986-1990 (1992)
- No. 44 NITROGEN AND AGRICULTURE, INTERNA-TIONAL WORKSHOP
 9-12 April 1991, Schleswig, Germany
 (1993)
- No. 45 SECOND BALTIC SEA POLLUTION LOAD COMPI-LATION (1993)
- No. 46 SUMMARIES OF THE PRE-FEASIBILITY STUDIES
 Prepared for the Baltic Sea Joint Comprehensive
 Environmental Action Programme
 (1993)
- No. 47 HIGH LEVEL CONFERENCE ON RESOURCE
 MOBILIZATION
 Gdansk, Poland, 24-25 March 1993
 Compilation of Presentations and Statements
 (1993)
- No. 48 THE BALTIC SEA JOINT COMPREHENSIVE ENVI-RONMENTAL ACTION PROGRAMME (1993)

- No. 49 THE BALTIC SEA JOINT COMPREHENSIVE ENVI-RONMENTAL ACTION PROGRAMME

 Opportunities and Constraints in Programme
 Implementation
 (1993)
- No. 50 SEMINAR ON RECEPTION FACILITIES IN PORTS Turku, Finland, 16-19 November 1992 (1993)
- No. 51 STUDY OF THE TRANSPORTATION OF PACK-AGED DANGEROUS GOODS BY SEA IN THE BALTIC SEA AREA AND RELATED ENVIRON-MENTAL HAZARDS (1993)
- No. 52 ACTIVITIES OF THE COMMISSION 1992
 - Report on the activities of the Baltic Marine Environment Protection Commission during
 1992 including the 14th meeting of the Commission held in Helsinki 2-5 February 1993
 - HELCOM Recommendations passed during 1993 (1993)
- No. 53 BALTIC MARINE ENVIRONMENT BIBLIOGRAPHY 1991-1992 (1993)
- No. 54 FIRST ASSESSMENT OF THE STATE OF THE COASTAL WATERS OF THE BALTIC SEA (1993)
- No. 55 ACTIVITIES OF THE COMMISSION 1993
 - Report on the activities of the Baltic Marine Environment Protection Commission during 1993 including the 15th meeting of the Commission held in Helsinki 8-11 March 1994
 - HELCOM Recommendations passed during 1994 (1994)
- No. 56 INTERGOVERNMENTAL ACTIVITIES IN THE FRAMEWORK OF THE HELSINKI CONVENTION 1974-1994 (1994)
- No. 57 GUIDELINES FOR THE THIRD POLLUTION LOAD COMPILATION (PLC-3) (1994)

- No. 58 ICES/HELCOM WORKSHOP ON QUALITY

 ASSURANCE OF CHEMICAL ANALYTICAL PROCEDURES FOR THE BALTIC MONITORING PROGRAMME
 - 5-8 October 1993, Hamburg, Germany (1994)
- No. 59 HELCOM SEMINAR FOR EXPERTS FROM
 ESTONIA, LATVIA, LITHUANIA AND RUSSIA ON
 THE IMPLEMENTATION OF HELCOM ARRANGEMENTS, OTHER INTERNATIONAL INSTRUMENTS
 AND RELATED MATTERS
 30 August 3 September 1993, Riga, Latvia
 (1994)
- No. 60 ACTIVITIES OF THE COMMISSION 1994
 - Report on the activities of the Baltic Marine Environment Protection Commission during 1994 including the 16th meeting of the Commission held in Helsinki 14-17 March 1995
 - HELCOM Recommendations passed during 1995 (1995)
- No. 61 RADIOACTIVITY IN THE BALTIC SEA 1984 1991 (1995)
- No. 62 ACTIVITIES OF THE COMMISSION 1995
 - Report on the activities of the Baltic Marine Environment Protection Commission during 1995 including the 17th meeting of the Commission held in Helsinki 12-14 March 1996
 - HELCOM Recommendations passed during 1996 (1996)
- No. 63 COASTAL AND MARINE PROTECTED AREAS IN THE BALTIC SEA REGION (1996)
- No. 64A THIRD PERIODIC ASSESSMENT OF THE STATE
 OF THE MARINE ENVIRONMENT OF THE BALTIC
 SEA, 1989-1993; EXECUTIVE SUMMARY
 (1996)
- No. 64B THIRD PERIODIC ASSESSMENT OF THE STATE
 OF THE MARINE ENVIRONMENT OF THE BALTIC
 SEA, 1989-1993; BACKGROUND DOCUMENT
 (1996)

- No. 65 OVERVIEW ON ACTIVITIES 1996 (1997)
- No. 66 BALTIC MARINE ENVIRONMENT BIBLIOGRAPHY
 1993-1995
 (1997)
- No. 67 WORKSHOP ON THE REDUCTION OF EMIS-SIONS FROM TRAFFIC IN THE BALTIC SEA AREA (1997)
- No. 68 THE EVALUATION OF THE RELATION OF
 ATMOSPHERIC DEPOSITION TO RIVERINE INPUT
 OF NITROGEN TO THE BALTIC SEA
 (1997)
- No. 69 AIRBORNE POLLUTION LOAD TO THE BALTIC SEA a-1995 (1997)
- No. 70 THE THIRD BALTIC SEA POLLUTION LOAD COMPILATION (1998)
- No. 71 THE FINAL REPORT ON THE IMPLEMENTATION
 OF THE 1988 MINISTERIAL DECLARATION
 (1998)
- No. 72 THE BALTIC SEA JOINT COMPREHENSIVE ENVI-RONMENTAL ACTION PROGRAMME: RECOM-MENDATIONS FOR UPDATING AND STRENGTH-ENING (1998)
- No. 73 OVERVIEW ON ACTIVITIES 1997 (1998)
- No. 74 AGENDA 21 FOR THE BALTIC SEA REGION,
 SUSTAINABLE DEVELOPMENT OF THE AGRICULTURAL SECTOR IN THE BALTIC SEA REGION
 (1998)
- No. 75 RED LIST OF MARINE AND COASTAL BIOTOPES

 AND BIOTOPE COMPLEXES OF THE BALTIC SEA,
 BELT SEA AND KATTEGAT

 (1998)
- No. 76 MARINE SEDIMENT EXTRACTION IN THE BALTIC SEA - STATUS REPORT (1999)

No. 77 BALTIC LEGAL MANUAL - INFORMATION ON ANTI-POLLUTION REGULATIONS

AT SEA AND THE PROSECUTION OF VIOLATIONS THEREOF IN THE BALTIC SEA AREA (2000)

No. 78 GUIDELINES ON ENSURING SUCCESSFUL CON-VICTIONS OF OFFENDERS OF ANTI-POLLUTION REGULATIONS AT SEA (2000)

No. 79 TRANSPORT SECTOR INVESTMENT DECISION-MAKING IN THE BALTIC SEA REGION (2000)

No. 80 INTERCOMPARISON OF SEDIMENT SAMPLING
DEVICES USING ARTIFICIAL RADIONUCLIDES IN
BALTIC SEA SEDIMENTS - THE MOSSIE REPORT (2000)

No. 81 SECOND ICES/HELCOM WORKSHOP ON
QUALITY ASSURANCE OF CHEMICAL ANALYTICAL PROCEDURES FOR THE COMBINE AND
PLC-4 PROGRAMMES
21-23 October 1999, Helsinki, Finland
(2000)

No. 82A FOURTH PERIODIC ASSESSMENT OF THE STATE
OF THE MARINE ENVIRONMENT OF THE BALTIC
SEA, 1994-1998; EXECUTIVE SUMMARY
(2001)

No. 82B FOURTH PERIODIC ASSESSMENT OF THE STATE
OF THE MARINE ENVIRONMENT OF THE BALTIC
SEA, 1994-1998; BACKGROUND DOCUMENT
(2001)

No. 83 THEMATIC REPORTS ON HELCOM PITF
REGIONAL WORKSHOPS HELD IN THE BALTIC
REPUBLICS
Riga, Latvia, 24-25 May 2000; Vilnius, Lithuania,
26-27 October 2000;
Tallinn, Estonia, 1-2 March 2000
(2001)

Published by:
Helsinki Commission
Katajanokanlaituri 6B
FIN-00160 Helsinki, Finland
Email: helcom@helcom.fi
Internet: http://www.helcom.fi

Editor: Ulrike Hassink Helsinki Commission

Language revision: Fran Weaver, Helsinki, Finland

Cover photo:
The Baltic Sea from space
(photo: SeaWiFS Project, NASA/Goddard
Space Flight Center, and ORBIMAGE)

Maps: Sunhild Wilhelms, Federal Maritime and Hydrographic Agency, Germany

Design and layout: Leena Närhi Bitdesign, Vantaa, Finland

Number of pages: 24

Printing: Preses Nams Corp, Jana Seta Printing Group, Riga, Latvia

Number printed: 1000

ISNN: 0357-2994

Citations are welcome provided reference is made to the source.



www.helcom.fi