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New challenges are lying ahead of us. For an organisation like HELCOM to be successful it has to be quick to react to political and economic changes, like they are happening in the Baltic region in the wake of the extension of the European Union in 2004.

I am confident that the political decisions taken by the HELCOM ministers in June 2003 will pave the way forward for HELCOM to meet the new challenges, and ensure the successful protection of our unique sea for future generations.

Mieczysław S. Ostojki
Executive Secretary

The blooming Baltic - a bumper year for blue-green algae

This year's exceptionally sunny and calm summer was good for marine cyanobacteria - blue-green algae - as well as sun worshippers. Floating microscopic algae bloomed extensively, once more providing visible evidence of one of the region's major problems - the eutrophication caused by excessive nutrient loads from agriculture, traffic and municipal wastewater.

Intense blue-green algal growth is directly linked to high phosphorus concentrations in the surface waters. In warm and calm weather the algae can form extensive mats, as happened throughout the Baltic region this summer.

High phosphorus concentrations in the water are ultimately due to continuous high phosphorus inputs from the surrounding land. Despite various water protection measures, phosphorus discharges have only been slightly reduced in countries like Denmark, Finland, Germany and Sweden. The intensive use of fertilisers over a long period has widely saturated soils with phosphorus, and progress in reducing phosphorus loads will only be visible after a long time lag.

In terms of blue-green algal blooms the Gulf of Finland has special problems. Nutrient loads per square kilometre are probably the highest in the Baltic. About half of the phosphorus load stems from coastal towns.

But the story behind the high phosphorus concentrations in surface waters is more complex. In most years, the gradually accumulating phosphorus is tightly bound up in sea-floor sediments - by oxygen. In anoxic conditions, however, high amounts of phosphorus are released from the sediment into the sea water - as happened in 2001. Later in 2001 the phosphorus-rich bottom water welled up to the surface during autumn storms.

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Chair's Corner



Former Latvian Environment Minister takes the Chair of the Helsinki Commission

Ms Inese Vaidere, who is currently a Riga City Councillor and an associate professor of economics at the University of Latvia, and served as Latvia's Minister of the Environment from 1998 to 1999, has taken the chair of HELCOM until 30 June 2004.

Ms Vaidere has great experience in local and central governmental administration within the fields of economics, environmental protection, politics and education, and has been playing a major role in preparing her country for EU accession.

She stresses HELCOM's crucial role in ensuring the involvement in Baltic environmental co-operation of Russia - the only country in the region not currently in or acceding to the EU.

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Attempts to halve nutrient discharges only partly successful

The Baltic is still burdened by excessive loads of nutrients, according to a report published by the Finnish Environment Institute (SYKE) in February 2002.

The report summarises the results of a HELCOM project that investigated discharges and losses of the key nutrients nitrogen and phosphorus from 1987 to 1995, showing that measures to reduce nitrogen and phosphorus discharges have fallen short of their aims in most cases:

- None of the nine coastal countries were able to halve total nutrient discharges from all sources.
- The transitional countries around the Baltic Sea have come closer to the 50% reduction target for nutrient discharges than the EU countries, due to profound changes in their economies and political systems.

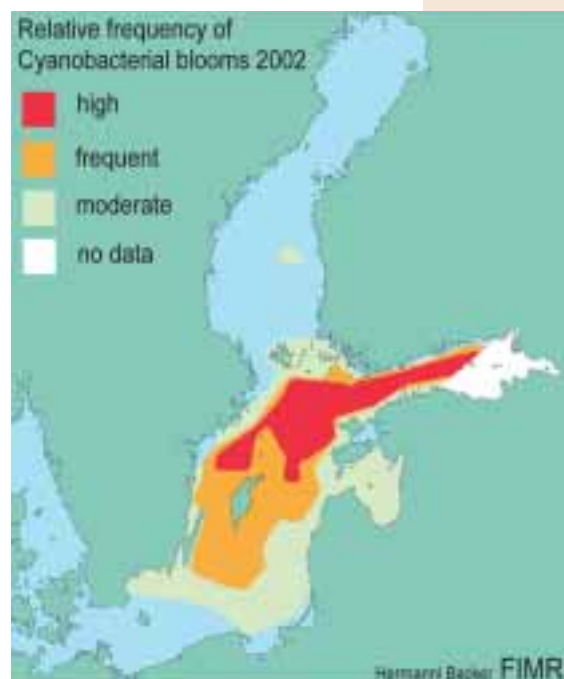
- While most countries curbed phosphorus discharges from point sources such as municipal and industrial wastewater outlets by 50%, they could not sufficiently control nitrogen discharges.

- There is still a great need and plenty of scope for reductions in nutrient losses in the agricultural sector.

The report also outlines predicted trends until 2005. Municipalities and industries in the nine coastal countries should be technically capable of reaching the 50% reduction target for phosphorus and nitrogen emissions from point sources. The agricultural sector will face more difficulties in retaining nutrients.

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Compilation map based on information collected by FIMR, frontier guards & SMHI (shipborne & satellite data, visual observations).

Moving from concepts to action - HELCOM at the World Summit on Sustainable Development

By Inese Vaidere

It was a great opportunity to represent the Helsinki Commission at the United Nations World Summit and to present HELCOM in a plenary session and in the special seminar as a model for successful international cooperation on the protection of the marine environment - including its long-term experiences and lessons learned in sustainable development. I am confident that this can be a source of inspiration also for other regions in the world.

The health of the oceans and coasts is directly linked to their watersheds. Eighty percent of all the marine pollution comes from land-based sources.

In this way it is imperative to have integrated coastal and marine management approaches that link "hilltops to oceans" - a concept well-known to HELCOM, since the Helsinki Convention spells out the need to take protective measures in the whole Baltic catchment area.

The progressive role of HELCOM also becomes evident looking at the main outcome of the World Summit - a ten-chapter "Plan of Implementation". It is evident that many of the proposed actions, if not all, are already under way or being planned in the HELCOM framework, for example by the Joint Comprehensive Action Programme,

the protection of coastal areas and the development of integrated coastal zone management guidelines for the Baltic Sea Area, the scientific cooperation under MONAS, and the Baltic cooperation in enhancing safety of shipping.

It is my hope that all the players in the HELCOM framework will keep up the good work and continue in setting an example of international cooperation on marine protection - also in the light of political changes in the wake of the EU enlargement process.

Getting rid of hazardous substances by 2020

One of HELCOM's main priorities is to phase out any emissions, discharges and losses of hazardous substances within a generation. This should reduce the concentrations of man-made hazardous substances to zero by 2020, while the concentrations of naturally occurring substances should be lowered to their natural background concentrations.

From 1999 to 2002, the HELCOM Hazardous Substances Project compiled the available data on sources, pathways, market and the legal situation relating to selected hazardous substances, in order to assess the exposure situation and identify suitable cost-effective measures. The project team prepared special documents covering mercury, cadmium, short-chained chlorinated paraffins, nonylphenol and nonylphenoethoxylates, dioxins and PCBs. These guidance documents have been designed to help policy makers to choose the most efficient instruments and measures to eliminate the emissions, dis-

charges and losses of hazardous substances. The documents also contain proposals for relevant actions at HELCOM level.

The project has also kicked off numerous activities, including stakeholder meetings with representatives of administrations and industry to raise awareness of the problems associated with hazardous substances. These activities need to be continued in the future to ensure targets are reached by 2020.

The final report will be available by the end of 2002. The project has been funded by the EU, Sweden and the Helsinki Commission.

Hazardous substances - everybody's business

Hazardous substances are emitted at all stages of the production chain, from the raw materials, through production processes and the use of products to the handling of the products as waste.



The task of curbing emissions of mercury, for instance, can involve consumers, who can choose products like mercury-free batteries and thermometers, as well as the chloralkali industry. On an industrial scale, filters can be installed and Best Available Technologies can be applied, but everybody can contribute, for example by stopping the uncontrolled burning of waste in order to prevent the formation of dioxins.

The HELCOM brochure "Invest in less hazardous products" gives guidance on how to substitute hazardous substances or change related processes, and is intended to be used as a tool for a hazard reduction approach within small and medium-sized companies.

Twenty-six hazardous pesticides are no longer in use

A HELCOM pesticide report reveals that 26 hazardous pesticides selected for immediate priority action are no longer in use in the countries bordering the Baltic Sea, and in many cases they are banned. The cessation goal can therefore be taken as largely



Obsolete pesticides in a deteriorating container. Photo: Timo Seppälä.

reached with regard to these pesticides, assuming that further steps will be undertaken to combat problems with the obsolete pesticides still stored unsafely in some countries, which may pose a serious threat to human health and the environment.

Hazardous substances in the Baltic - a dangerous cocktail

Hazardous substances are substances which are toxic, persistent, and which may accumulate in organisms, or which otherwise give reason for concern for example by influencing organisms' hormone or immune systems.

In the Baltic Sea region the harmful influence of hazardous substances is further aggravated by the unique natural conditions in this almost land-locked sea, with its slow exchange of water, low salinity and low winter temperatures.

In a report focusing on these specific conditions, HELCOM's project group identified the physical, chemical and biological features, which can make the Baltic ecosystems more vulnerable to man-made chemicals, and which need to be taken into account when selecting hazardous substances for priority action. The report also identifies socio-economic factors in the Baltic region which might contribute to occurrences and uses of hazardous substances that significantly differ from those within EU markets.

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HELCOM successfully tests readiness to respond to oil accidents at sea

Seventeen ships, one aircraft and more than 30 observers from the Baltic coastal countries participated in BALEX 2002 - this year's international oil spill response exercise held in Liepaja, Latvia, on 21-22 August 2002. Ten cubic meters of popcorn were dumped in the open sea to simulate a large oil spill of 800 tonnes of crude oil.

Six hours after the spill, more than one third of the contaminated water - which consisted of two popcorn-slicks measuring approximately 500 metres by 200 metres - had been recovered. According to oil-drift modelling no oil would have been washed ashore.

The exercise also allowed the Latvian authorities to test their newly-acquired oil combating equipment.

The degree of international co-operation in the Baltic on marine environmental protection is unrivalled around the world. This exercise was also closely observed by 60 delegates from 15 nations within the NATO Partnership for Peace Programme.

BALEX oil spill response exercises have been held annually since 1991. Throughout this time HELCOM has steadily improved the readiness of the countries around the Baltic to jointly respond to an oil spill at sea. The coastal countries have a total of 30 response vessels on stand-by.



Latvian Coastguard making ready for the exercise - pouring popcorn into the sea.



Danish "Gunnar Seidenfaden" and Estonian "Triin, PVL 200" towing a boom.



Popcorn recovered by the Swedish "KBV 202" by a brush and skimmer system.

Aerial surveillance of the Gulf of Finland - HELCOM detects nine illegal oil spills

During 24 hours of continuous aerial surveillance on 29-30 August, nine patches of deliberately and illegally spilled oil were observed in the Gulf of Finland area - one of them 50 kilometers in length.

But since almost 70 ships were currently in the surveyed area, none of the polluting ships could be caught red-handed.

The HELCOM Co-ordinated Extended Pollution Control Flight (CEPCO North flight 2002) was carried out jointly by aircraft from Finland, Estonia, Latvia and Sweden, and nine patrol vessels. CEPCO flights are organised annually within the framework of the Helsinki Commission, with one flight covering the southern waters of the Baltic, and a second survey further north.

Go surfing and pick up tools for better navigation in Danish waters

The Danish HELCOM site <http://www.helcom.dk> has detailed information on navigation in Danish waters, major Danish ports, meteorology, oceanography, ice-breaking services, places of refuge and vital links for mariners.

Denmark is the first state to carry out a HELCOM resolution that all coastal countries should provide detailed information on the Internet within a year.

More ships and oil on the troubled waters of the Baltic

Too much oil continues to be illegally discharged into the Baltic, even though the total number of observed oil discharges fell slightly in 2001, according to figures presented at a meeting of HELCOM SEA in Turku, Finland (13 - 17 May 2002).

The seriousness of these illegal discharges is highlighted by the fact that the total volume of oil released into the Baltic during deliberate illegal discharges in 2001 was about 100 times more than the amount that entered the sea accidentally during 2000 and 2001.

HELCOM SEA splits into HELCOM MARITIME and HELCOM RESPONSE

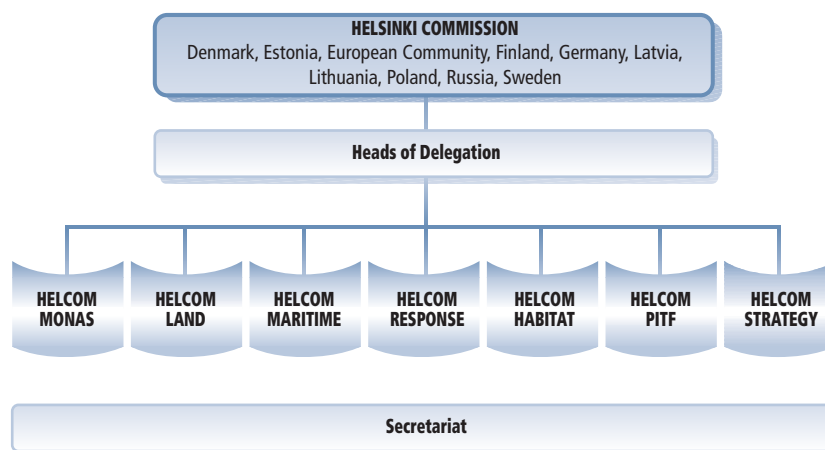
HELCOM SEA (the Helsinki Commission's former Sea-based Pollution Group) has split into two groups - HELCOM MARITIME and HELCOM RESPONSE. This will enhance HELCOM's work in ensuring safer shipping

in the Baltic - as decided by the ministers responsible for the environment and transport in September 2001.

The Maritime Group (HELCOM MARITIME) will develop measures to ensure

that shipping in the Baltic is environmentally safe and sound, by identifying sea-based sources of pollution and proposing actions to limit emissions and discharges.

The Response Group (HELCOM RESPONSE) will work to ensure a swift national and trans-national response to marine pollution incidents. This involves preparing and testing response equipment and emergency routines where co-operation between neighbouring states is needed.



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Sustainable fishery management in the Baltic - HELCOM and IBSFC combine efforts to boost dwindling fish stocks

At a joint seminar held in Gdynia, Poland, 20-21 February 2002, HELCOM and the International Baltic Sea Fishery Commission (IBSFC) agreed on a sustainable fishery management strategy designed to meet the needs of the whole Baltic ecosystem.

HELCOM and IBSFC agreed that current levels of commercial fishing

have been having a major impact on the Baltic food web. The abundance and distribution of non-commercial fish stocks have changed, as well as those of the main target fish species. By-catches also continue to threaten non-target species including many marine mammals and birds.

Production of wild Baltic salmon increased to more than 1.3 million during 2001

The efforts of HELCOM and the IBSFC to protect and restore weak wild Baltic salmon populations have now started to show promising results.

Over one million more wild Baltic salmon have been produced in 2001 than in 1995 - raising the annual yield of juvenile wild salmon from 0.3 million fish to over 1.3 million fish, according to the latest data of the International Council for the Exploration of the Sea (ICES).

Last year's wild salmon production equals about 70% of the estimated

potential production capacity of the 27 Baltic salmon rivers unaffected by hydroelectric power production.

The status of most of the larger salmon populations in the Gulf of Bothnia can now be described as promising, but further scientific reviews are needed to eliminate uncertainties about the potential production capacities for each river.

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Taking stock at HELCOM Hot Spots in Ukraine and Belarus - focusing on wastewater treatment, water pricing and obsolete pesticides

For the first time HELCOM was invited to a Regional Workshop in Ukraine to assess conditions at four Hot Spots in Ukraine and Belarus. While it will be some time before these pollution sites are cleaned up, the workshop produced useful information and discussions, which form a good basis for intensified co-operation in the future.

Improvements are needed most urgently in the treatment of municipal

and industrial wastewater at Brest, Grodno and Vitebsk (Belarus), and Lvov (Ukraine).

The Ninth HELCOM PITF Regional Workshop took place in Lvov, Ukraine, on 18-19 June, and was attended by representatives from the environmental authorities in the Lvov Oblast, the Water Company in Lvov, Belarus and the Nordic Environment Finance Corporation (NEFCO).

Taking stock at Finnish and Swedish pollution Hot Spots - agriculture still a major problem



Conditions at 22 Finnish and Swedish pollution hot spots were re-assessed during the Eighth HELCOM PITF Regional Workshop in Stockholm on 27-28 May 2002.

HELCOM's PITF preparatory group concluded that four pollution hot spots might be deleted from the list later this year, including metal smelters at Outokumpu in Finland and Boliden/Rönnskär in Sweden, Stockholm's wastewater treatment plants, and Finnish fish farms in the Archipelago and the Åland Sea.

Helsinki's wastewater treatment plant is also likely to disappear from the hot spots list within the next few years, since further investments are in place to improve the efficiency of nitrogen-removal.

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Forthcoming meetings

11-14 November 2002

Sixth Meeting of the Land-based Pollution Group (HELCOM LAND 6/2002); Vilnius, Lithuania.

18-19 November 2002

19th Meeting of the HELCOM Programme Implementation Task Force (HELCOM PITF 19/2002); Stockholm, Sweden.

25-28 November 2002

Joint Meeting of the HELCOM/OSPAR Heads of Delegation; Bremen, Germany.

2003

January 2003

Meeting of the HELCOM Project Group "Validation of algorithms for chlorophyll retrieval from satellite data for the Baltic Sea area"; Ispra, Italy.

25-28 March 2003

Joint Meeting of the HELCOM/OSPAR Heads of Delegation; Berlin, Germany.

13-16 May 2003

Joint Meeting of the HELCOM/OSPAR Heads of Delegation, Germany.

12-16 May 2003

Fourth Meeting of the Nature Conservation and Coastal Zone Management Group (HELCOM HABITAT 4/2003), Helsinki, Finland.

23-27 June 2003

24th Meeting of the Helsinki Commission (HELCOM 24/2003), at ministerial level together with OSPAR; Bremen, Germany.

2003

IMO/HELCOM/EU Workshop "Environmental impacts due to the increased density of shipping in the Baltic Sea Area"; Rostock, Germany.

HELCOM proudly presents its new promotional film

For the camera team given the job of portraying the work of the Helsinki Commission, highlighting environmental trends and pollution hot spots meant getting wet and dirty, and spending several days in planes, helicopters and research vessels.

The 9-minute HELCOM promotional film can be obtained from the HELCOM Secretariat. It has also already been sent out to observers, institutes, schools involved

in the UNESCO "Baltic Sea Project", the "WWF Naturewatch Baltic" network, aquaria and coastal national parks in the Baltic Sea region and to interested organisations as far away as India, South Korea, Japan, Tanzania, and USA.

The English-language narration will also be translated into the national languages of the HELCOM countries, and the film will then be distributed at national level.

Press excursion on a Finnish Frontier Guard vessel

On 1 July 2002, 20 foreign correspondents from 12 countries took part in a trip on the Finnish Frontier Guard vessel "Merikarhu" to learn about the work of HELCOM and the state of the Baltic Sea.



Publish your Baltic news in the new HELCOM News Portal

In line with HELCOM's Information and Communications Strategy, all governments, agencies, institutes and non-commercial institutions in the Baltic Sea region are invited to submit their news related to the Baltic marine environment to HELCOM's news portal (<http://www.helcom.fi>).

To submit news items, please fill in the form at <http://www.helcom.fi/helcom/pressroom/submit.html>. Only English-language news can be submitted.

HELCOM's website has become a lively and popular international platform for news on the marine environ-

ment. Up to 1,300 visits a day have been recorded at www.helcom.fi.

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