HELCOM news

2/2005 Newsletter

Helcom Conference on Maritime Safety and Response Issues

- Managing Global shipping risks
- Overview of navigational risks and HELCOM actions to improve safety of navigation
- Safety of navigation in the straits of Malacca and Singapore - Marine Electronic Highway
- Vessel Traffic Management and Information System in the Gulf of Finland
- Danish approach towards designating Places of Refuge
- HELCOM actions to ensure preparedness to respond to shipping accidents in the Baltic
- EMSA's contribution to environmental protection in the Baltic Sea

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Contents

The International HELCOM Conference on Maritime Safety and Response Issues was held in Helsinki, Finland, on 1 March 2005, prior to the 26th Meeting of the Helsinki Commission.

The following presentations were made during the Conference:

- **Managing Global shipping risks** (POWER POINT) - Mr. Wolf-Rüdiger Grohmann and Mr. Martin Shaw, British Petroleum – Shipping
- **Overview of navigational risks and HELCOM actions to improve safety of navigation** (POWER POINT) - Ms. Ingelore Hering, Chair of HELCOM MARITIME
- **Safety of navigation in the straits of Malacca and Singapore - Marine Electronic Highway** (POWER POINT) - Mr. James N. Paw, International Maritime Organization
- **Vessel Traffic Management and Information System in the Gulf of Finland** (POWER POINT) - Mr. Matti Aaltonen, Finnish Maritime Administration
- **Danish approach towards designating Places of Refuge** (POWER POINT) - Mr. Jørgen Magner, Danish Environmental Protection Agency
- **HELCOM actions to ensure preparedness to respond to shipping accidents in the Baltic** (POWER POINT) - Mr. Thomas Fagö, Chairman of HELCOM RESPONSE
- **EMSA's contribution to environmental protection in the Baltic Sea** (POWER POINT ONLY) - Mr. Leendert Bal, European Maritime Safety Agency

HELCOM2/2005 Newsletter

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E-mail: info@helcom.fi
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Editor: Nikolay Vlasov
Helsinki Commission

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Design and layout: Leena Närhi

Cover photos: FIMR Riku Lumiaro,
Seija Hällfors, Mika Raateoja

Introduction

The risks

The Baltic Sea is among the most crowded shipping regions in the world. The intensity of shipping activities in the Baltic has been growing very rapidly during the last decade, and there is no sign of this process slowing down. All kinds of cargo are being shipped in and out of the Baltic Sea countries, including oil and hazardous substances. Not only has the number of ships increased, but also their size: today we have ships in the Baltic carrying as much as 100,000 tons of oil. As the sizes of the ships increase, this adds to the risk of a major oil spill. It should also be kept in mind that large bulk or container ships today carry as much bunker oil as a small coastal tanker.

Navigation in the Baltic is complicated by the many narrow straights, shallow waters and, in some areas, ice cover. Every year about 70 shipping accidents happen in the Baltic. Fortunately most of them do not cause notable pollution, but even one large-scale accident would seriously threaten the Baltic marine environment.

Forecasts predict a further 40% increase in oil transportation by 2015 from today's level of more than 160 million tonnes a year. Economic factors favour the use of maximum size tankers (able to carry 100,000-150,000 tonnes of oil), as the cost per tonne of transported oil can be reduced considerably by using large tankers. Oil drilling is so far only carried out to a minor degree in the Baltic Sea, but will increase, especially if oil prices remain high.

Measures adopted in the Baltic

The Helsinki Commission has, from the very beginning of its activities in 1974, paid attention to the safety of navigation, although the focus was primarily on prevention of pollution, and preparedness to respond to ship accidents. HELCOM strengthened its activities on maritime safety significantly with the adoption of the HELCOM Copenhagen Declaration in 2001. This work is currently carried out by the HELCOM Response and HELCOM Maritime Groups.

Liudmila Romaniyk

Due to the international character of shipping, many of the numerous **safety of navigation** measures introduced in the Baltic Sea have been introduced through the coordinated efforts of HELCOM countries in the International Maritime Organization (IMO). These measures include:

- routeing measures for certain parts of the Baltic Sea,
- enhanced use of pilots,
- a vessel traffic and management system in the Gulf of Finland.

Additional work is carried out on regional (HELCOM and EU), sub-regional (Gulf of Finland) and national level to minimize the risk of shipping accidents, through measures including:

- coverage of major shipping routes and ports by electronic navigational charts (ENC),
- Electronic Charts Display and Information Systems (ECDIS),
- hydrographical surveys of major routes and ports,
- monitoring of ship traffic in the entire Baltic based on Automatic Identification System (AIS) data,
- port state control,
- unified investigations of marine casualties,
- information for mariners.

Comprehensive operational cooperation between the Baltic Sea States with regard to improvements in the joint capacity to respond to pollution incidents has been a trademark of HELCOM for many years. Preparedness is annually tested during BALEX Delta and other exercises, and from time to time during actual emergency response operations, where the high standards of preparedness around the Baltic have been proven.

HELCOM prioritises the need to strengthen **emergency capacity** in the Baltic Sea area, in order to be able to address any accident at a very early stage, and thus avoid pollution. An important component of this early response is the provision of **places of refuge**, where ships in distress can shelter, and where equipment and resources are located accordingly to ensure an early and efficient response operation.

Riku Lumiaro / FIMR

Further measures to deal with identified risks in the future

General

– Information services and public involvement to ensure that all cargo is transported first class in the Baltic Sea,
– Involvement of all stakeholders, including industry and local communities, to promote the development and exchange of best practices for ship management and cargo handling,
– Information for seafarers about the fragile Baltic marine environment and existing measures adopted to protect the Baltic Sea,
– Enhanced cooperation between HELCOM and EMSA; and between HELCOM States within IMO and EU.

Juha Flinkman / FIMR

Liudmila Romaniyk

Mika Raateoja / FIMR

Maritime

– Establishment of a HELCOM focal point for all information and data related to shipping in the Baltic, such as Automatic Identification System (AIS) information, port state control records, data on detected illegal oil discharges, accidents etc., to be used in an operational integrated traffic management system for the whole of the Baltic Sea,
– Use of AIS data for risk analysis,
– Investigation of the need for emergency towing,
– Investigation of the need for further specific routeing measures,
– Investigation of the need for further specific pilot measures,
– Investigation of the powers vested in port states for controlling and enforcing existing rules.

Response

– Oil spills in icy conditions,
– Pollution combating in bad weather and reduced visibility,
– Emergency capacity,
– Tailor-made location of response and emergency resources based on risk assessments and new data obtained from AIS,
– Places of refuge and coordination between neighbouring countries on the possible use of places of refuge for ships in distress.

Presentations

MANAGING GLOBAL SHIPPING RISKS

Mr. Wolf-Rüdiger Grohmann and Mr. Martin Shaw, British Petroleum – Shipping

The BP Group is a major owner and user of tanker, chemical and gas tonnage. In common with other majors, BP set up its own vetting service in the 1980s to provide assurance on the quality of tonnage used. The knowledge acquired from this, and from its own operations, has given BP a unique insight into Global Shipping Risks.

Global shipping has developed from its earliest days, when the major risk was vessels' ability to survive the seas, to a situation where the hardware is much more robust. It is safe to say that today some 80% of incidents result from human factors. In any industry the drive to improve safety goes through three phases:

1. Developing hardware
2. Developing procedures
3. Developing behaviours

The shipping industry was and is focussed on improving hardware, by increasingly insisting on the use of double hulls, for instance. Following serious incidents in the 1980s the ISM code introduced a regulatory focus on procedures.

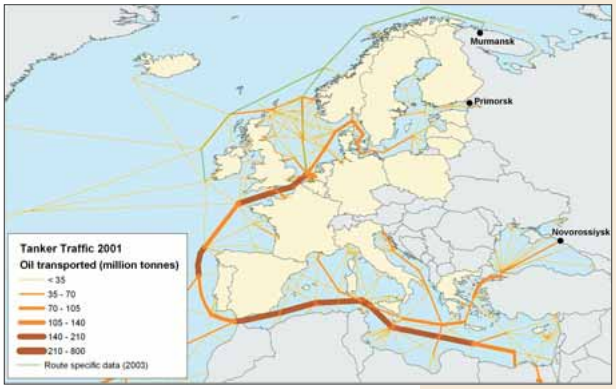
The improvements in hardware have been substantial and, particularly in the second half of the 20th century, have substantially reduced the amounts of oil released operationally and accidentally.

Improvements in procedures have also had a major impact, and while major incidents do still occur, there has been a noticeable reduction in incidents and oil spills in recent years.

This is not to say there is any reason to be complacent. BP's HSE goals are **No accidents, No harm to people, No damage to the environment**. We can only be satisfied when these zero levels are achieved. Two areas need to be stressed:

- L**evel Playing Field** While the ships owned and chartered by the oil majors exhibit high operating standards and a low level of risk, there is still essentially a two tier market out there. There are also ships trading with structural problems, minimal or non-existent procedures, and poorly trained crews, operating within a poorly regulated environment. As these ships do not come into contact with the oil majors' systems, they need to be controlled by flag states and indeed port states. These low quality ships drag down the standards of the industry as a whole.
- **Behaviours** To reduce further the level of risk on a well-designed, well-built tanker with a robust procedural system, behaviours need to be considered. Improvements in hardware and procedures can only go so far in preventing accidents. Developing a safety culture will avoid accidents. This requires training and leadership. It also requires an environment where people are encouraged to take the time to do things safely, rather than quickly and cheaply.

All this is **relevant to the Baltic** as well, particularly in view of the risks stemming from a significant and steady increase in exports of oil and oil products. Further and Baltic-specific regulation of the resulting traffic is regarded as the remedy of choice by some, and certain bottlenecks may indeed benefit from their own traffic guidance systems, with AIS enabling



the identification of non-compliance. We strongly suggest, however, that:

- Regulations should be international, and not limited to Europe, the Baltic or single countries.
- Much more important than new rules are the ratification and implementation by all states of existing rules and their strict enforcement vis-à-vis all ship owners and vessels.
- The regulatory and public focus on the age and structural criteria of vessels obscures more relevant causes of maritime incidents, namely behaviours, which need to be addressed to combat human negligence, error and ignorance.

A significant number of ship owners already fully adhere to and comply with existing rules; with many of them striving to go beyond this by developing a safety culture. Additional rules would increase their economic disadvantage in comparison with those "black sheep" whose disregard of safety and consequent competitive advantage are made possible by a lack of control and enforcement by some flag states and port states.

NAVIGATIONAL RISKS AND HELCOM ACTIONS TO IMPROVE SAFETY OF NAVIGATION

Ms. Ingelore Hering, Chair of HELCOM MARITIME

The Baltic region is a prospering economic region, with prospering trade and traffic between the region's countries and with other states and regions around the world. Due to economic growth, maritime traffic is also growing steadily. But during these developments it must be remembered that the Baltic Sea region is a sensitive ecological system which needs protection against detrimental influences arising from commercial activities such as maritime transport.

Although the potential risks from shipping are spread almost throughout the Baltic Sea, there are several areas where the risk is particularly high. The overall traffic situation in the Baltic Sea is characterised by potential west-east-bound traffic flows, as well as north-south-bound traffic, involving the transportation of goods and passenger ferries, as well as pleasure craft and fishing boats. Concerning the transportation of goods, special attention has to be paid to hazardous goods, and particularly the increasing amounts of oil being shipped across the Baltic. The navigational situation creating high risks in specific areas is characterised especially by narrow straits and passages, as well as limited depth and difficult winter conditions. In these areas traffic is funnelled through high-density bottlenecks, and the navigation of ships with draught exceeding certain limits is obstructed.

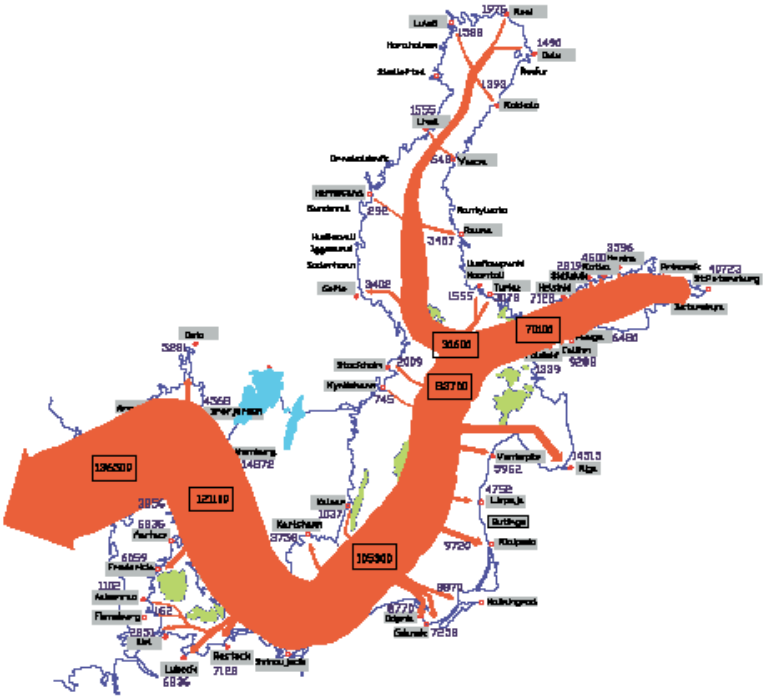
These critical navigational conditions mean on the one hand that ships must be technically well-equipped ships, and have well-trained crews and optimised management. On the other hand, navigational measures are also needed to route traffic and offer support to ships in order to reduce the potential risks.

Several measures to achieve this goal have already been taken in recent years on a regional basis, and through the IMO as the competent international body.

In the 2001 HELCOM Copenhagen Declaration, the HELCOM States agreed on needs and ways to improve the navigational situation in the Baltic. In this context, last year's declaration of the Baltic Sea as a Particularly Sensitive Sea Area (PSSA) is particularly worthy of mention. This declaration will be followed by specific measures to enhance safety of navigation to minimise environmental risks from shipping.

Taking into account the steadily growing world-wide transport, there is a need to further improve safety of navigation in the Baltic. When considering these measures the ongoing economic growth of the Baltic region and the increase in transportation should be taken into account. Measures should be flexible, in order to leave room for such developments. Considerable emphasis should be put on specific routeing measures combined with the enhancement of pilotage and the use of AIS as well as ECDIS as a basis for sophisticated on-board navigational equipment. This can create a basis for overcoming existing navigational deficiencies as well as coping with future trends arising from growing transportation, while taking into account the needs of the environment.

The navigational situation in the Baltic is not really so unique. Increases in shipping, the density of traffic flows and individual traffic in waters with difficult navigational conditions can be found in several maritime regions around the world. An international approach to tackle the navigational problems of the Baltic would seem to be helpful, not only in gaining international acceptance for specific measures, but also in promoting the exchange of experiences concerning suitable navigational solutions.



Forecast for the ship movements to 2015. Note the passenger traffic is excluded.

SAFETY OF NAVIGATION IN THE STRAITS OF MALACCA AND SINGAPORE – MARINE ELECTRONIC HIGHWAY

Mr. James N. Paw, Programme Co-ordination Officer, International Maritime Organization

The Straits of Malacca and Singapore are a major maritime trade route vital to economic globalization, particularly for the shipment of oil and related products from Europe/Middle East to the Asia-Pacific region. This is one of the busiest sea lanes in the world, with about 600 ships passing through the Straits on a daily basis. The placement of navigational aids such as the TSS, VTS, AIS Stations as well as the mandatory STRAITREP have significantly reduced the number of incidents of ship groundings and collisions, resulting in a concomitant decrease in ship-based pollution impacts, including oil spills. Yet even with these measures, some accidents resulting in oil spills have occurred in recent years. Moreover, the increasing demand for energy and the transhipment of goods will exacerbate the congested maritime traffic situation in the Straits, with negative environmental consequences.

The performance and utility of the maritime safety facilities in the Straits to handle multiple users and uses could be enhanced through the establishment of a Marine Electronic Highway System (MEH). In addition, the MEH integrates environmental protection systems for improved environmental monitoring and response, in case of oil and chemical incidents along the Straits. As a regional information system, the MEH will generate revenue from its products and services, which will be utilized for its operation, maintenance and upgrade, including emergency response in the event of an accident or oil spillage, for example.

The Baltic Sea has dense maritime traffic, including ships carrying oil and other hazardous or polluting substances. Navigational aids and maritime safety measures are already in place to manage, regulate and monitor this shipping traffic. However, ship accidents in the Baltic Sea are not uncommon, due to dense ship traffic, narrow sea lanes, shallow waters and difficult environmental conditions, including ice. Efforts by the coastal States and the European Union to mitigate the maritime and environmental problems of the Baltic Sea have resulted in various measures ranging from institutional mechanisms, the enactment of legal instruments and infrastructure development, to response capacity building and field response. From a broader perspective, the MEH concept can be applied to the Baltic Sea to achieve a balance between marine environment protection and economic development. In this context, the development of the "Motorways of the Sea", the network of AIS for a common Sea Monitoring System, and other maritime safety measures like the VTS and marine environment protection activities, all need to be integrated within a multi-sectoral framework for enhanced maritime safety and response, particularly where information flows and access are concerned. Such efforts will also improve the environmental security of the Baltic Sea area.

VESSEL TRAFFIC MANAGEMENT AND INFORMATION SYSTEM IN THE GULF OF FINLAND

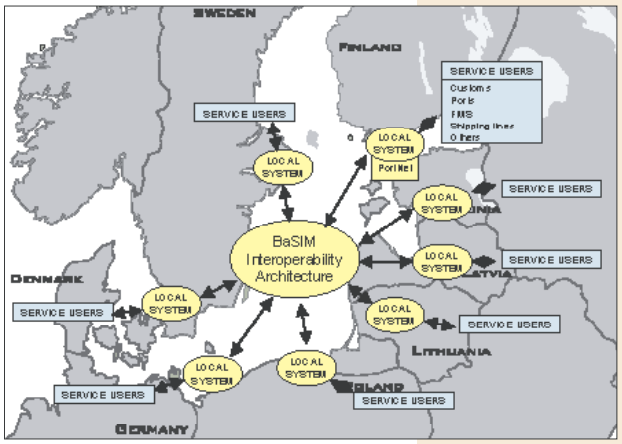
Mr. Matti Aaltonen, Director, Finnish Maritime Administration

Since the decision of the Russian Federation to build an oil terminal in Primorsk it has been obvious that the traffic image in the Gulf of Finland will change considerably. Oil was previously imported to the Gulf of Finland, but now it is being exported – in tens of millions of tons. Large tankers carrying 100,000 tons of oil or more are now everyday visitors in the area. This development along with the increased short sea shipping and passenger traffic across and along the Gulf of Finland has created a traffic pattern that has to be well known, monitored and organised as a whole. The traffic junctions off Helsinki, Tallinn and other ports are very difficult navigational areas. This puts navigational safety and lives at risk, and is also a threat to the environment.

The transport ministers of Estonia, Finland and the Russian Federation have signed a Memorandum of Understanding with the aim of creating a Vessel Traffic Management and Information System (VTMIS) in the Gulf. The present status is that there are three amended traffic separation schemes (TSSs), and a mandatory ship reporting system (GOFREP), all adopted by the IMO. These systems were prepared by a trilateral working group, and the system is currently managed by all three countries each using their own national operational and technical solutions. The reporting is, however, managed trilaterally. Once a ship has reported, the data is readable in all three centres and the ship needs to report again only when its status changes. The system works in the international waters of the Gulf of Finland and traffic inside national boundaries is managed by the national Vessel Traffic Services (VTS). GOFREP was launched on 1 July 2004 and has been working well. The Russian Federation will get its infrastructure ready in July 2005.

The centres do not give any orders to ships, but monitor traffic through the reporting system, radars and AIS, and inform the ships of circumstances and hazards to shipping. Shipmasters carry the responsibility for navigation, and must comply with the international collision regulations (ColReg). The IMO regulations do not give the centres any rights to give orders to ships. The benefits of the system are the increased safety of traffic through mandatory reporting and information. Traffic efficiency is enhanced through traffic monitoring, separation schemes and communication in English. Quick response when it comes to assistance and information in emergency situations helps to protect the environment. The allied services are also aware of the situation all the time.

The Gulf of Finland VTMIS has to be seen as a regional part of the whole Baltic Sea traffic information service. All traffic separation schemes are part of the Baltic Sea deepwater route for tankers and deep draught ships from the Skaw to Primorsk. A VTMIS is a set of efforts (measures, provisions, services and related functions), which within a given area and under specified circumstances, are intended to minimise risks for safety and the environment, whilst maximising the efficiency of waterborne and connecting modes of transport. The services aim to respond to public and private demand for facilitating Vessel Traffic Management. Allied services are services actively involved in the safe and efficient passage of vessels through the VTS area. There are several HELCOM and EU requirements to be fulfilled before a VTMIS can be established,



Scope of BaSIM Architecture.

such as harmonised safety procedures in winter navigation, new routeing measures in the Baltic with new surveys, pilotage recommendations, an AIS base station net for authorities in every country connected by HELCOM, escort towing and oil combating measures (MARIS), and the implementation of the EU traffic monitoring directive (SafeSeaNet and AIS). The EU project for Baltic Sea Information Motorways, BaSIM, will include a work package to prepare interoperability architecture for the Baltic Sea. This will create a framework where local systems and service users can connect to provide public to public or public to private information to each other and the authorities.

Ever since GOFREP was launched, the numbers of violations against ColReg have been falling in the TSSs. When shipmasters know they are being monitored, they tend to act appropriately. Even if a TSS only has the status of a recommended scheme, ships must comply with it according to ColReg. There have been two dangerous navigational situations each month on average. But over the whole period there have been only two reports of alleged oil pollution. The number of tanker calls per month (19 January to 17 February 2005) was 652. About 15% of these vessels were single hull-tankers.

DANISH APPROACH TOWARDS DESIGNATING PLACES OF REFUGE

Mr. Jørgen Magner, Head of Water Division, the Danish EPA

Denmark has designated 23 places of refuge as part of the implementation of Article 20 of the Directive 2002/59/EC on a Community vessel traffic monitoring and information system.

The aim of a place of refuge is to provide locations where ships in distress can seek refuge and have better access to assistance. A place of refuge can be an anchoring place, a sheltered marine area, or a harbour. Within a place of refuge, ships in distress can reload their cargo of fuel oil or have remedial repair work done to prevent the situation from worsening and perhaps resulting in oil pollution. The Danish places of refuge consist of 10 harbours and 13 sheltered areas at sea.

Denmark has designated these places of refuge so that they are spaced evenly, and located in the immediate vicinity of the main shipping lanes leading through Danish waters. The places of refuge have been designated according to a wide range of criteria, including navigational and hydrographical conditions, environmental and nature protection interests, tourism and fisheries activities, and the availability of equipment for combating oil pollution, etc.

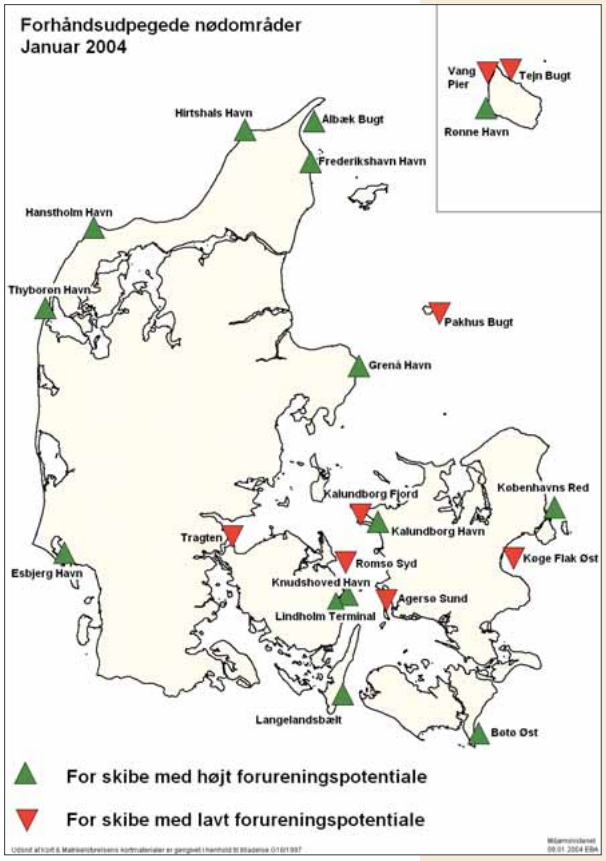
Their designation has also taken into account the factor that the nature of Danish waters makes it difficult to designate places of refuge that can be used without reservation under all conditions. In practice this means that factors such as the draught of the ship and the nature of the cargo must be considered in order to account for the potential risk of pollution, explosion, etc.

Furthermore, it cannot be excluded that acute situations may arise where places outside the designated places of refuge will be assigned as refuges owing to the nature of the event, special weather conditions, etc.

The Admiral Danish Fleet, which is responsible for the combating and surveillance of oil pollution at sea as well as search and rescue operations, has been appointed as the Maritime Assistance Service (MAS) in Denmark. Decisions to assign a place of refuge for a ship in distress will thus be taken by the MAS. Since the places of refuge were designated in February 2004, 3 incidents have occurred where ships in distress have been taken to a place of refuge in Danish waters.

In preparing for the designation for places of refuge, all proposals for places of refuge were sent to all the relevant national and local authorities, harbours, businesses and environmental NGOs for comments, and consultative meetings were held. The proposals and the final list of places of refuge have also been sent to the press.

During the next phase of the establishment of places of refuge, specific plans will be prepared for each designated area in accordance with the IMO Guidelines. These plans will contain all the relevant information regarding possibilities for tug boats and towing assistance, the availability of fire-extinguishing equipment and pumping equipment, and reaction times for oil combating facilities, as well as other relevant information on state and private equipment. The financial and liability issues for ship owners, harbours and the local authorities nearby the marine areas designated as places of refuge are also included in the plans.



HELCOM ACTIONS TO ENSURE PREPAREDNESS TO RESPOND TO SHIPPING ACCIDENTS IN THE BALTIC

Mr. Thomas Fagö, Chairman of HELCOM RESPONSE

Developments in the 1990s

Oil exports are a major source of income for Russia. Russia accounts for about 10% of world oil production. In comparison, the OPEC countries produce around 40%. In the year 2000, a total of more than 160 million tons of oil was handled in the Baltic Sea. This annual figure had doubled during the nineties, and the sizes of oil tankers have also increased immensely. The average tonnages handled by some harbours doubled in just a few years. Tankers carrying more than 100,000 tons are an everyday sight, and the newest terminals are being constructed to receive tankers of up to 150,000 tons.

Future developments

Forecasts up to 2015 predict a further strong increase in oil handling, of some 40%. Economic factors promote the use of tankers of the maximum permissible size for the Baltic Sea (100,000-150,000 tons), as the cost per ton of transported oil is reduced considerably by using large tankers. Oil drilling is so far only a minor issue in the Baltic Sea, but will increase, especially if oil prices remain high.

Risks

Increases in oil handling during the 1990s have brought serious problems to the Baltic. One of these problems was the number of "substandard ships", old ships and insufficiently maintained ships. In some cases the ownership of these ships was unclear, due to their having changed hands several times, and they often lacked professional crews and sometimes even sea-charts and modern navigational aids. Sometimes the ownership of the oil cargo was also unclear. The more unclear such factors are, the

greater the likelihood that substandard ships will be used for transportation.

Winter conditions in the Baltic Sea can be quite hard, especially due to the extensive ice in the Gulf of Finland and the Gulf of Bothnia. Most oil tankers lack sufficient ice classification, but they have still sailed in these waters. Two years ago, there were some narrow escapes with tankers that got stuck in the ice, and some collisions also occurred. Hopefully subsequent agreements have now more or less solved these problems, but the last two winters have been so mild that the willingness to live up to these commitments has not yet been really tested.

I also believe that some tanker or cargo owners got "cold feet", and were not too happy about the "ill will" they had created by having ships or cargoes involved in such situations. The increasing sea traffic in general increases the risks of collisions and groundings, especially with so many substandard ships at sea. If the sizes of ships also increase, the risks of a major oil spill get still higher. A large bulk or container ship carries as much bunker oil as a small coastal tanker.

The Fu Shan Hai, a bulk carrier which sank after a collision in the southern Baltic in May 2003, had around 1,800 tons of fuel and lubrication oils in her tanks. The POLO M, which went adrift and was grounded before Christmas 2004 had around 1,000 tons. It is, however, still possible to recover such volumes of oil. But the rapidly growing size of oil tankers brings other types of risks that cannot be dealt with simply by increasing oil recovery capacity. A collision or grounding of an average coastal tanker might involve up to 5,000 tons of oil, but a total loss could mean around 10,000 tons. Large quantities of oil can still be recovered at sea, if the weather is good and international co-operation is effective.

A collision or severe grounding involving a 100,000-ton tanker could result in a discharge of 20,000-30,000 tons, and a total loss could mean a discharge of maybe 50,000 –70,000

tons, with the rest remaining in leaking tanks on the sea bed. The ERIKA and the PRESTIGE incidents were of that magnitude, and we are all familiar with the consequences of these spills. Both of these tankers had picked up their cargoes of oil from Baltic Sea terminals.

Intensive sea traffic also brings a high number of illegal deliberate oil spills. Most of these spills involve volumes less than 1 m^3, but they nevertheless harm sensitive marine life and food chains. The number of species in these brackish waters is only a tenth of that in the oceans, and it takes around 30 years to change the water of the Baltic Sea.

What have we done so far?

For many years there has been a 24-hour network for response co-operation. The related Response Manual provides all the information needed in advance to facilitate efficient co-operation, including:

- alarm routines
- contact points
- command structures
- radio schemes within the response fleet
- customs matters
- reimbursement regulations.

This enables the "HELCOM Fleet", which consists of more than thirty response ships from the different Baltic Sea States, to be used promptly and efficiently. In order to keep the fleet fighting fit, regular alarm and equipment exercises are organised. These exercises are conducted in different parts of the Baltic Sea, partly in order to ascertain that crews are familiar with varying navigational and other conditions, but it is also very important to ascertain that each party is able to command and control an operation with a lot of ships involved, and that they can do their work by communicating in English.

Besides the Response Manuals, HELCOM works through Recommendations. A Recommendation is a "soft law" which the Contracting Parties to the Helsinki Convention have agreed to implement in their national regulations. The Recommendations deal with various issues related to incident response, including the use of dispersants, national ability to respond, the use of oil drift forecasting, aerial surveillance, and also with administrative matters like the reimbursement of costs.

There is also a common system for oil drift forecasting, the Sea Track Web, which covers the whole of the Baltic Sea. This system has been of great value during incidents, and also has been beneficially used for the backtracking of oil spills, allowing the authorities to finger possible illegal polluters.

In some issues HELCOM's work has been a trigger for action by the EU, in that actions initiated within the Baltic Sea have later been considered for implementation throughout the EU. On the other hand, the EU has also contributed to processes within HELCOM with regard to matters of great importance for safer sea traffic in the Baltic Sea.

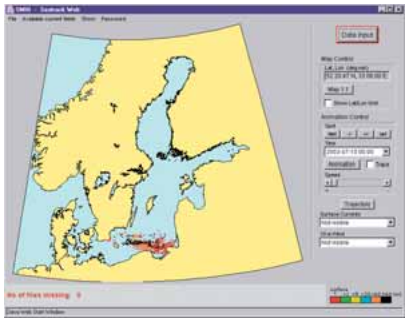
What is HELCOM doing for the time being?

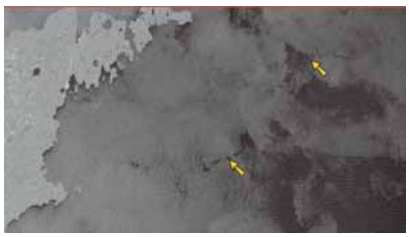
HELCOM Copenhagen Declaration

A lot of HELCOM's ongoing work has its basis in the "HELCOM Copenhagen Declaration, 2001" which adopted a comprehensive programme for safer navigation and response.

The Declaration includes the following aims and measures:

- Routeing measures for certain parts of the Baltic Sea,
- Enhancing the use of pilots,
- Re-surveying of major shipping routes and ports,
- Ensuring ENC coverage of major shipping routes and ports,
- Enhancing the use of ECDIS,
- Intensifying Port State Control (PSC) of paper charts onboard tankers and other ships,
- Enhancing the use of AIS - Ascertaining the availability of emergency capacity, response capacity and places of refuge.





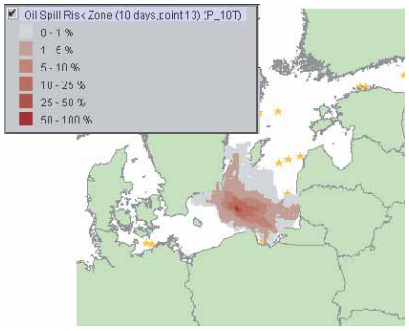
The phasing out of single-hull tankers should additionally be prioritised, and steps must be taken to ensure all the region's countries become full members of the Paris Memorandum of Understanding on PSC. Co-operation on shoreline clean-up and the application for the Baltic Sea to be designated as a PSSA were on the agenda, but these issues could not be elaborated, because of the belated dissention of one party. The PSSA issue is however well under way within the IMO, and proposals for Associated Protective Measures are also in the pipeline.

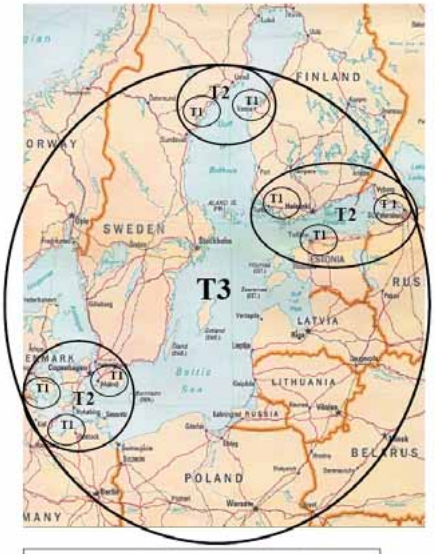
MARIS

The draft Maritime Accident Response Information System (MARIS) has now been introduced, consisting mainly of a number of datasets, describing

- the areas most sensitive and vulnerable to oil spills,
- the traffic and risk distribution,
- available response resources.

The purpose of MARIS is to visualize the risks of maritime transportation in the Baltic Sea, and the capacity to handle these risks. Some datasets, e.g. sea charts, data on shore types, traffic and risk data, are still missing, but these will be included at a later stage.





+ Co-operation in beach cleaning

Further development of drift modelling

By using the available comprehensive meteorological and oceanographic information about the Baltic Sea, regarding winds, temperature and currents, it is possible to make thousands of oil drift simulations, and thus predict where an oil spill will probably end up, or where the likelihood of oil contamination is low. Changes in the mass balance of the oil can also be calculated. This information gives us a useful basis for decisions on alertness, and the need for aerial surveillance, exercises and co-operation.

Illegal discharges

As mentioned above, illegal oil discharges are a matter of great concern for the Baltic Sea. Sweden has already aimed to eliminate illegal oil spills by 2010. In other countries the situation is more unclear. Organisational and particularly economic constraints make the situation unsatisfactory, and sometimes even preclude comprehensive surveys.

The lack of aerial surveillance and unsatisfactory remote sensing equipment makes our statistics for the Baltic Sea as a whole uncertain. Some countries have very reliable statistics, while others hardly conduct any aerial surveillance. This means that the considerable reductions noted in some parts of the Baltic Sea may not be taken to indicate overall reductions. It could merely mean that the polluters have been choosing areas of less risk for making their illegal discharges. Hopefully further co-operation on aerial surveillance and the use of satellites can help us on this.

In other respects the situation is not so gloomy. For many years the parties of HELCOM have been making co-ordinated aerial surveillance operations over specific sea areas, with planes and ships from a number of parties taking part. The aim is to catch the polluters red-handed, and this has happened from time to time. The prospect of being taken to court and accused in the mass-media for an illegal discharge is a considerable deterrent for a shipowner or a captain; and this threat has at least helped to halt the rising trend in oil spills, and in some areas led to a considerable decrease. In recent years a network of prosecutors from the different parties has also been built up in order to improve international co-operation on law enforcement.

Denmark, "the door keeper" to the Baltic Sea, has for a few years applied a hailing procedure, in which ships are called on channel 16 and asked about their call sign, port of call and other questions, but are also reminded about the Baltic Sea's status as a MARPOL Special area, where

no oil discharges are permitted. This hailing procedure is for the time being also considered for other areas of the Baltic Sea. It must be remembered, of course, that most seafarers are honest people, entitled to freedom of navigation without having to deal with any unnecessary communications from coastal states.

Other activities

HELCOM Maritime and HELCOM Response Groups also deal with a lot of other questions concerning the Baltic Sea. One example is the munitions gas containers dumped on the seabed in some areas after the Second World War, which still represent a threat to fishermen. Other matters include bunkering at sea, oil platforms and wind plants at sea.

What more can be done?

Shipping is an international activity, so the related work has to be planned in the long term. The conditions for shipping have to be global, and only in certain circumstances should there be regional restrictions. In the first place, we must work to ensure that existing regulations are fully respected, for example the MARPOL Annexes 1and 2. If this can be achieved, there would be less need for more new regulations. I am also quite sure that the STCW and ISM safety codes will contribute to a cleaner Baltic Sea, as will the Baltic Strategy. Some questions, like whether to ban or phase out single-hull tankers, take time, although progress in speeding up these processes has been made lately within the EU and IMO. In this field, pressure can also be applied by the public, through boycotts of oil or other products transported in substandard ships. The designation of the Baltic Sea as a PSSA will also enhance the awareness of the ecological sensitivity of this unique brackish sea.

I would like finally to present a simple but useful guiding principle for our future work:
Oil should always travel first class, meaning:

- first class flag states
- first class ship owners and cargo owners
- first class ships
- first class crews
- first class terminals
- first class routes, and
- first class response to incidents.