



HELCOM Baltic Sea Action Plan Stakeholder Conference 2010
Helsinki, Finland, 3 March 2010

MARITIME ACTIVITIES

Draft (1 March 2010) overview of the already initiated/accomplished projects and activities serving the implementation of the HELCOM Baltic Sea Action Plan and EU Strategy for the Baltic Sea Region, as well as suggestions for projects in areas lacking actions

HELCOM measures included in the Maritime Activities segment of the HELCOM Baltic Sea Action Plan have served development of the many strategic and cooperative actions as well as flag ship projects of the EU Strategy for the Baltic Sea Region, in its environmental pillar (priority area 2 and 4) and safety and security pillar (priority area 13 and 14).

EU Strategy has given an additional political support and has strengthened the commitments already made by the Baltic Sea countries in the BSAP. It has also pushed for more coordinated approach among different authorities in the countries, local governments, NGO's and other stakeholders in implementing various activities, including those aiming at making the Baltic Sea region an environmentally sustainable as well as safe and secure place.

Many of the actions and projects to implement HELCOM BSAP have already been initiated; some have even been accomplished or are close to being finalized. This work by the multiple stakeholders working together under the HELCOM umbrella or with HELCOM support has already substantially contributed to the implementation of the EU Strategy.

However, there are still some areas related to maritime transportation and safety in which there has been little progress or no actions have been taken yet, and which require additional efforts to kick-off the activities in coordinated manner and with involvement of all relevant/interested stakeholders.

This paper provides an overview of the already accomplished/ongoing HELCOM actions as well as actions by other stakeholders (to the possible extent) in the maritime field as well as is an attempt to identify areas lacking actions, to be further discussed e.g. at the 5th HELCOM Stakeholder Conference, and amended accordingly. The aim is to identify a list of project areas/activities which will be endorsed by the HELCOM Ministerial Meeting on 20 May 2010.

1. TO PRESERVE NATURAL ZONES AND BIODIVERSITY, INCLUDING FISHERIES - restrict the introduction of new alien species

HELCOM, Sweden and Germany are the lead parties for this action of the EU Strategy. This action reflects the commitments of the HELCOM BSAP and its Road Map on Ballast Water¹. The countries have agreed on ratification of the Ballast Water Management Convention (BWMC) by 2010, and by 2013 at the latest. Sweden is the first country in the region to have ratified the Convention (on 23 November 2009). The ratification process is ongoing in a number of other Baltic Sea countries.

¹ http://www.helcom.fi/BSAP/ActionPlan/otherDocs/en_GB/roadmap/

Existing activities and projects

1. Voluntary measure to avoid ballast water discharge in the Baltic Sea by ships engaged in oceanic voyages (agreed among HELCOM and the North Sea countries and communicated to the International Maritime Organization)²
2. Scientific work to support implementation of the BWMC:
 - A list of alien species in the Baltic Sea has been compiled³ and is regularly updated by HELCOM;
 - work is ongoing to develop an indicator on distribution of alien species in the Baltic Sea. This work has given input to the inclusion of alien species in the HELCOM Holistic assessment of the state of the marine environment of the Baltic Sea;
 - work is ongoing to categorize the alien species in the Baltic Sea according to their impact (led by Finland in cooperation with Estonia);
 - guidelines to distinguish between “high risk” and “low risk” of secondary spreading of alien species by ship on intra-Baltic Sea voyages are close to finalization (HELCOM HOLAS Project⁴).
3. The North Sea Opportunity Project⁵ promotes development of the ballast water treatment technology, which will benefit also the Baltic Sea.

Topics requiring intensified efforts/new projects:

- Coordinated monitoring of alien species in the Baltic Sea to serve the EU Marine Strategy Framework Directive, BWMC and other international instruments.
- Provision of adequate reception facilities for sediments in ports and terminals where cleaning and repair of ballast tanks occurs.
- Bigger involvement of ports in implementation of the BWMC, including setting incentives for ships treating ballast water according to the requirements of the Convention.
- Practical measures to address alien species transferred to the Baltic Sea via inland corridors.

2. MODEL REGION FOR CLEAN SHIPPING

-Actions to reduce emissions from shipping

Emissions from shipping are regulated internationally by Annex VI of MARPOL 73/78.

The Annex introduces stricter requirements on sulphur (S) content in fuel oil used on ships operating in the Baltic Sea SOx Emission Control Area (SECA). Currently the S limit is set at a level of 1.50% m/m (in force from 19 May 2006), and shall not exceed 1.00% m/m from 1 July 2010, and 0.10% m/m from 1 January 2015. Hence, SOx emissions will be reduced substantially from 2015. SOx emissions amounted for 135 kilotonnes in 2008.

The revised international regulations also require worldwide that ships constructed on or after 1 January 2011 achieve a 15% reduction level of NOx in comparison to the current legislation. Stricter reduction level can also be achieved if a marine area is established as a NOx Emission Control Area – NECA. NECA rules, requiring 80% NOx reduction, would apply only to new ships (built on or after 2016), meaning that it will take 20-30 years for all ships operating in a given NECA area to be covered by the more stringent requirements. In 2008, 393 kilotonnes of NOx were emitted from ships in the Baltic Sea. On average, shipping is responsible for 9% of the total atmospherically deposited nitrogen to the Baltic Sea.

² http://www.helcom.fi/shipping/ballast/en_GB/ballast/

³ http://www.helcom.fi/environment2/biodiv/alien/en_GB/alienlist/

⁴ http://www.helcom.fi/projects/on_going/en_GB/HOLAS/

⁵ <http://projects.nioz.nl/northseaballast/>

Existing activities and projects

1. The Baltic Sea countries have already initiated actions to internationally designate the Baltic Sea a NECA. HELCOM *ad hoc* Correspondence Group on NECA has been collecting information needed for the joint application by HELCOM countries to IMO (MEPC 62 in July 2011 is the target date for the proposal).
2. A study on economic implication and cost-efficiency of the Baltic Sea NECA will be conducted in spring 2010 by HELCOM.
3. Few Baltic Sea countries have applied economic incentives to voluntary reduce emissions from ships (HELCOM Recommendation 28E/13⁶)
4. The ongoing Finnish-Estonian SNOOP Project (Shipping-induced NO_x and SO_x emissions – Operational monitoring network) will produce further information on shipping emissions in the Gulf of Finland and their effects on marine environment as well as human health.⁷
5. A new BSR InnoShip Project (Baltic Sea cooperation for reducing ship and port emissions through knowledge- & innovation-based competitiveness) (previously called REBAS) is being developed by Finland in cooperation with other countries under the HELCOM umbrella to give advice to decision-makers on cost-efficient policy options to further reduce ship emissions, especially in the light of designation of the Baltic Sea as a NECA and the need to create a level playing field for existing ships. The Project will also assess the impact of NO_x emission on the marine environment in the whole Baltic Sea.
6. A new Green Ferry Project is being developed by Trelleborg Commune and Baltic Energy Forum to elaborate joint models for environmentally differentiated harbour dues, shoreside electricity, gas and LNG systems for ships in regular and irregular service (e.g. ferries and cruise ships, respectively), and LNG logistics in the Baltic Sea.

Topics requiring intensified efforts/new projects:

- Introduce economic incentives for ships to reduce NO_x (and other) emissions before NECA comes into force e.g. to address also the “existing” ships and come to a level playing field. Numerous tools are available: differentiated port dues, differentiated fairway dues, emission trading, and taxation. Good examples and theoretical studies are available, however, practical implementation is lacking in many countries/major ports.
- Develop a mechanism/model for ships’ indexing – a tool that could be used for implementing economic incentives/emission trading whereby ship’ emissions could be easily and quickly assessed with high reliability.
- Estimate the impact of ship emissions in the North Sea on the Baltic Sea, including NO_x.
- Establish short side electricity facilities in major ports of the Baltic Sea.
- Introduce LNG and biogas as alternative fuel for ships (ferries).

Ship-generated wastes and port reception facilities

The regulations for sewage discharges in the Baltic Sea are regulated by IMO (Annex IV of MARPOL 73/78) for bigger ships and the Helsinki Convention also for small vessels.

Currently, the discharge of sewage from ships is prohibited within 12 nautical miles of the nearest land unless sewage has been comminuted and disinfected using an approved system and the distance from the nearest land is longer than 3 nautical miles. The amount of nutrients discharges in ships sewage is rather small (about 356 tonnes of nitrogen (N) and 119 tonnes of phosphorous (P) annually), however not negligible due to sensitivity of the Baltic Sea.

⁶ http://www.helcom.fi/Recommendations/en_GB/rec28E_13/

⁷ <http://snoop.fmi.fi/>

In December 2009 HELCOM countries submitted a joint proposal⁸ to IMO (MEPC 60) to establish the Baltic Sea as a control area for sewage under Annex IV of MARPOL 73/78, whereby passenger ships will be banned from discharging sewage in the Baltic unless it has been treated to remove phosphorus and nitrogen to a certain level. Alternatively, sewage can be delivered to port reception facilities. It has been proposed to apply these new regulations for new ships built on or after 2013 and for the existing ships from 2018; however the implementation dates will be still negotiated by IMO.

Existing activities and projects

1. HELCOM countries have already undertaken actions to change international legislation in order to ban discharge of untreated sewage in the Baltic Sea.
2. An extensive policy framework to encourage delivery of ship-generated waste to port reception facilities is already in place (IMO and HELCOM).
3. Some voluntary agreements on delivery of sewage to port reception facilities between the national administration in the countries and shipping companies are in place. The European Cruise Council, representing the leading cruise companies operating in Europe, has committed their members to undertake to discharge waste water ashore at Baltic ports with adequate port reception facilities which operate under a “no-special-fee” system⁹.
4. HELCOM Correspondence Group on PRF, under the lead of Germany, is developing a plan and recommendations for improving port reception facilities for sewage and application of the “no-special-fee” system in some selected major passenger ports. The plan will be brought to the attention of the HELCOM Ministerial Meeting on 20 May 2010 in Moscow.

Topics requiring intensified efforts/new projects:

- Further agreements with shipping companies to voluntarily deliver sewage to port reception facilities.
- Practical work and investments on port level to enhance reception facilities for sewage in order to close the existing gaps and meet future demands for sewage delivery once the new IMO regulations have come into force; Big cruise (and ferry) ports need to be addressed in first place (e.g. Copenhagen, Rostock, Tallinn, Gdynia, Riga, etc.). Arrangement of direct discharge to sewer system is recognized as an adequate PRF.
- Development of new technology able to treat sewage onboard ships to reach the required P and N reduction levels.¹⁰
- Full implementation of the “no-special-fee” for delivery of ships-generated waste, including for sewage. In some ports, cruise and ferries are excluded from the “no-special-fee” system and have to pay extra for sewage delivery. Major ports in the Baltic Sea need to be addressed in first place.
- Set economic incentives for ships managing their waste in a sustainable way.

3. A LEADING REGION IN MARITIME SAFETY AND SECURITY

The shipping intensity in the Baltic Sea has increased enormously during recent years, and is predicted to increase even further. There are around 2000 sizable ships at sea at any given time. In 2008, 60,843 times vessels entered or left the Baltic Sea via the Skaw, 18 % more

⁸ Contained in three documents: MEPC 60/6/3, MEPC 60/6/4 and MEPC 60/INF.7.

⁹ The “no-special-fee” system means that ships should not be charged for using port reception facilities, and the costs should instead be covered from general harbour fee or general environmental fees.

¹⁰ N < 20 mg/l or at least 70% reduction; P < 1.0 mg/l or at least 80% reduction; still to be negotiated by IMO

than in 2006. 20 % of these vessels were tankers carrying as much as 170 million tonnes of oil. Due to the construction and expansion of Russian oil terminals, export of Russian oil through the Baltic ports is expected to reach 180 million tonnes in 2020.

The Baltic Sea has always been a difficult area for ships to navigate, due to its narrow straits and shallow waters. Since 1 July 2005, the whole Baltic Sea area has been covered by land-based Automatic Identification System (AIS) stations, making the Baltic Sea the first region in the world capable of real-time monitoring of ship traffic, considerably increasing the safety of navigation. Since the “Fu Shan Hai” incident in 2003, resulting in the release of 1,200 tonnes of fuel oil, no major shipping accident has occurred in the Baltic Sea.

Since 2001, when the Copenhagen Declaration¹¹ was adopted, numerous safety measures have been implemented in the Baltic Sea, including ship traffic monitoring, traffic separation schemes and deep water routes, ship reporting, pilotage and measures related to safety of winter navigation. The coordinated position of the Baltic Sea countries on new safety measures towards IMO was provided by the HELCOM Expert Working Group on Routeing Measures.

The recently adopted EU Maritime Safety Package further strengthens the regulations in eight of the nine Baltic Sea countries.

Existing activities and projects

1. HELCOM has served as a platform for discussing and proposing new routing and safety measures in the Baltic Sea. The establishment of new HELCOM expert group on safety measures is under consideration.
2. Comprehensive risk assessment of shipping accidents covering the whole Baltic Sea is carried out within the BRISK Project.¹²
3. Work is ongoing to increase the use of AIS application-specific messages (e.g. by Finland and in the Efficient Sea Project¹³) to enhance the information exchange between ships and shore authorities; the progress is reviewed by HELCOM AIS Expert Working Group.
4. Joint aerial surveillance and satellite surveillance of the Baltic Sea to detect illegal discharges of oil is well established, in cooperation with the European Maritime Safety Agency. Some tools to identify illegal polluters are available (SeaTrackWeb drift forecasting tool).
5. Revised Baltic Sea Hydrographic re-survey Plan is being developed by the Baltic Sea Hydrographic Organization in cooperation with HELCOM to speed-up re-surveys of areas important for safety of navigation.
6. Testing of e-navigation concept in the Baltic Sea is ongoing (EfficientSea Project).

Topics requiring intensified efforts/new projects:

- Conduct a formal safety assessment (IMO risk analysis) to propose new safety measures in the Baltic Sea, including new/amended routing measures.
- Hydrographic re-surveys of the Baltic Sea by the countries according to the tighten time-schedule.

¹¹ <http://www.helcom.fi/stc/files/MinisterialDeclarations/Copenhagen2001.pdf>

¹² <http://www.brisk.helcom.fi/>

¹³ <http://www.efficientsea.org/>

- Voluntary agreements with shipping companies to carry Electronic Chart Display and Information System (ECDIS) onboard ships not required to do so by the international regulations (SOLAS).
- Intensified training of mariners on navigation in ice conditions and on the use of ECDIS.

4. TO REINFORCE MARITIME ACCIDENT RESPONSE CAPACITY

The Baltic Sea countries maintain the ability to respond to pollution incidents threatening the marine environment, including adequate equipment, ships and manpower prepared for operations in coastal waters as well as on the high sea. Principles, rules and operational procedures for joint, international response operations have been put in place, including a system for reporting on accidental spills, requesting and providing assistance as well as solving related financial aspects. Today, the HELCOM fleet has more than 45 oil-combating ships on standby located around the Baltic Sea and several new response vessels are to be delivered soon (in Finland and Sweden). However, the increasing maritime transportation in the Baltic Sea also leads to the increased risks of accidental pollution.

Existing activities and projects

1. A stand-by network of response vessels, including vessels chartered by EMSA, and strike teams in all Baltic Sea countries has been established.
2. BRISK Project will – based on the outcome of the risk assessment - identify missing response resources in each sub-region of the Baltic Sea and will prepare investment plans to make sure that major pollution at sea can be effectively tackled. Also work to facilitate and speed-up development of sub-regional agreements on joint response areas is being carried out. A corresponding Nordic Council of Ministers funded project in Russia (BRISK-RU) has also been initiated.
3. HELCOM Mutual Plan for Places of Refuge to create a unified liability and compensation regime in the Baltic Sea and to be able to provide the safest shelter for a ship in need of assistance irrespective of countries' borders (close to finalization).
4. Policy framework for international co-operation on shoreline response and oiled wildlife response, and their integration into the contingency plans is being further developed by HELCOM, following the already established routines and policies for responding to pollution at sea.
5. The ongoing OILRISK Project (Applications of ecological knowledge in managing oil spill risks) is developing operation tools to support oil spill contingency planning in Estonia and Finland.¹⁴
6. Practical implementation of cross-border cooperation on shoreline and wildlife response in Finland, Sweden, Estonia and Russia, involving various stakeholders (local authorities, specialized NGOs, governmental authorities) within the EnSaCo Project.¹⁵

Topics requiring intensified efforts/new projects:

- Practical implementation of cross-border cooperation among the governmental and local authorities as well as other specialized stakeholders regarding oiled wildlife response and planning as well as shoreline response (especially in the countries not covered by the EnSaCo project), e.g. development of agreements on mutual assistance.
- Research projects to enhance technical capabilities to respond to pollution in ice conditions.
- Improved aerial surveillance to detect illegal oil spills in some parts of the Baltic Sea.

¹⁴ <http://www.helsinki.fi/science/fem/projects.html>

¹⁵ http://meeting.helcom.fi/c/document_library/get_file?p_l_id=83439&folderId=174027&name=DLFE-35157.pdf