



Clean Seas Guide

The Baltic Sea Area
A MARPOL 73/78 Special Area

Information for Mariners
- Baltic Marine Environment Protection Commission -
2012



Contents

Introduction	3
The Helsinki Convention	4
The pollution prevention regulations	4
Oil	5
Noxious liquid substances carried in bulk	5
Sewage	6
Garbage	7
Fuel oil quality	7
Prohibition of incineration	7
Prohibition of dumping	7
Regulations for small ships	7
Alien species from ships' ballast water and sediments	8
Discharge of ships' wastes to port reception facilities	9
Mandatory delivery of wastes to port reception facilities	9
Availability of port reception facilities	9
Delivery of oil to reception facilities	9
Delivery of residues of noxious liquid substances carried in bulk	9
Delivery of sewage and garbage	10
Notification of the intended use of port reception facilities	10
The "no-special-fee" system	10
Detection and prosecution of offenders of anti-pollution regulations	11
Cargo, Oil and Garbage Record Books	11
Aerial surveillance	11
Co-operation in investigation	11
Fines	12
Countermeasures against spillages of oil or other harmful substances	12
Reporting on incidents	12
Safety of navigation	13
Ship reporting systems	13
Automatic Identification System (AIS)	13
Route - T and deep-water routes	13
Traffic separation schemes	14
Pilotage	14
Safety of winter navigation	15
Electronic Chart Display and Information Systems (ECDIS)	15

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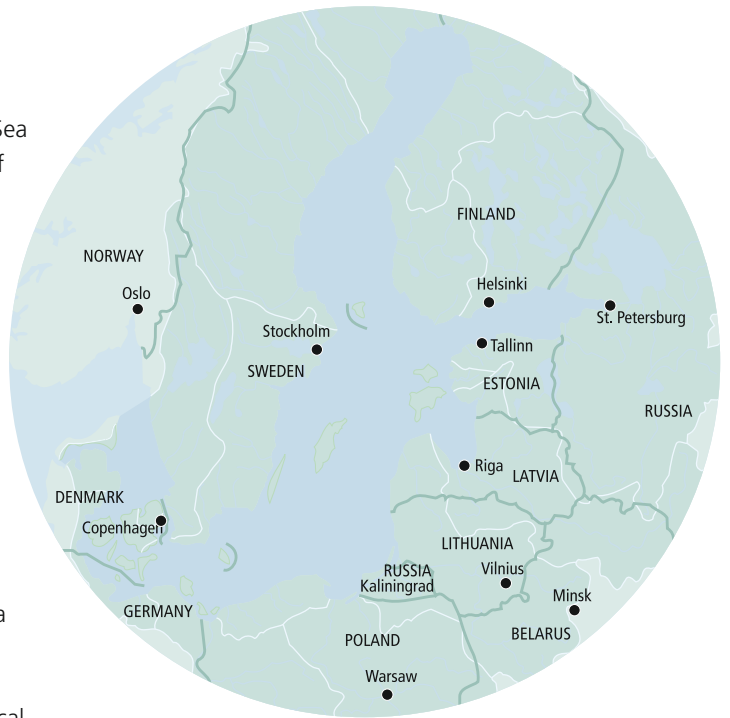
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Introduction

The Baltic Sea area comprises the Baltic Sea proper, plus the Gulf of Bothnia, the Gulf of Finland, and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at 57°44.43'N. With a total area of about 370,000 km², the Baltic Sea area is one of the world's largest brackish water basins.

The Baltic Sea area has always been of great importance to the people living around it, providing a natural bond as well as routes of navigation. Fisheries remain a valuable part of people's livelihood and the Baltic Sea area is also a recreational resource of growing value.

Because of the very specific hydrographical, chemical and physical conditions of the Baltic Sea area, and its geological history, it possesses quite unusual fauna and flora. Marine and freshwater organisms live side by side, and there is a number of living relicts. The exchange of water in the Baltic Sea is very slow, and if harmful substances are



introduced they will remain there for a very long time. As the fauna and flora of the Baltic Sea area are extremely sensitive to changes in their environment there should be no discharges of harmful substances, especially oil and noxious liquid substances, into this vulnerable sea.



The Helsinki Convention

Growing awareness that national measures alone are not sufficient to protect this highly sensitive marine environment led the Baltic Sea States to adopt the Helsinki Convention (Convention on the Protection of the Marine Environment of the Baltic Sea Area), which was signed in 1974 and came into force in 1980. The 1974 Convention was the first international agreement worldwide to take into account all aspects of marine environment protection. The Convention aims to prevent pollution from ships (including dumping), pollution from land-based sources, and pollution resulting

from the exploration and exploitation of the seabed and its subsoil. The Convention also regulates the co-operation to respond to marine pollution by oil and other harmful substances.

A revised Convention was signed in 1992 in order to extend, strengthen and modernize the legal regime for the protection of the marine environment of the Baltic Sea area. The 1992 Helsinki Convention entered into force on 17 January 2000. The Convention text and HELCOM Recommendations can be found in the internet, see www.helcom.fi.

The pollution prevention regulations

To protect the marine environment of the Baltic Sea area from pollution, every ship entering the area is urged to comply with the anti-pollution regulations of the Helsinki Convention. This applies to all ships, irrespective of whether or not they are flying the flag of a Contracting Party to the Helsinki Convention.

In accordance with the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL), under which the Baltic Sea area has been designated as a special area (regarding Annexes I, oil, IV, sewage and V, garbage), far-reaching prohibitions and restrictions on any discharge into the sea of oil or oily mixtures, sewage from passenger ships and garbage have been introduced by the Baltic Sea States. The restrictions under Annex IV are yet to take effect, which is expected by 2015 at the latest.

Until then, the existing specific regulations concerning the discharge of sewage into the sea as adopted by the Contracting Parties to the Helsinki Convention are to be followed. The discharges of noxious liquid substances are also strictly regulated. In addition, the prohibition of incineration of ship-generated wastes in the territorial seas of the Baltic Sea States has been adopted by the Contracting Parties to the Helsinki Convention. There is also a general ban on dumping and incineration of other wastes, not incidental to or derived from the normal operation of ships, in the entire Baltic Sea area.

The discharge regulations must be strictly observed owing to the vulnerable marine environment of the Baltic Sea area and in order to keep the shorelines and beaches clean.

The responsibility for avoiding discharges of oil or other harmful substances rests not only

with the master and his crew but also with the charterer, the ship-owner and the ports.

The master and his crew should be fully proficient in carrying out the correct procedures and should apply them carefully and consciously.

The charterer should include in the Charter Party a clause stating his policy on pollution prevention compliance.

The ship-owner should ensure sound management in safety and pollution prevention, as required by the International Safety Management Code for certain categories of ships.

Ports must be prepared to accept tank cleaning slops, or cargo that has been mixed with retained residues.

Oil

Any discharge of oil or oily mixtures into the Baltic Sea area is prohibited. Oil means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products. The prohibition applies not only to discharges from the cargo tanks of oil tankers but equally to discharges from the machinery spaces of any ship. Only if the oil content in the effluent does not exceed 15 parts per million can a discharge be permitted. For ships of 400 gross tonnage and above the oil filtering equipment must be provided with arrangements that ensure that any discharge of oil or oily mixtures is automatically stopped when the oil content in the effluent exceeds 15 parts per million. Ships of less than 400 tons gross tonnage, flying the flag of a Baltic Sea State, should comply with

adopted guidelines concerning holding tanks/oily water separating or filtering equipment.

Finland has prohibited the use of bilge water separators in her inland waterways and in the territorial waters, within the area 4 nautical miles from the nearest land.

Noxious liquid substances carried in bulk

There is a prohibition on discharges from tanks that have contained Category X, Y or Z substances, specified by IMO's International Bulk Chemical Code, which categorizes noxious liquid substances (NLS) carried in bulk according to their magnitude of harm to the marine environment if discharged, unless specific provisions of Annex II "Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk" to MARPOL 73/78 are met.

Tanks having contained Category X substances must be pre-washed before a ship leaves the port of unloading and the resultant tank washings must be delivered to a reception facility. The



concentration of the substance in the effluent to the facility must be at or below 0.1% by weight and the tank must be fully emptied.

For high-viscosity or solidifying substances in category Y the specified pre-wash procedure must be applied and similarly the residue must be discharged to a reception facility until the tank is empty.

The cargo residues in category Y or Z must be removed to specified small quantities and any tank washings must be discharged to a reception facility of the port of unloading or another port with a suitable reception facility provided that it has been confirmed that a reception facility at that port is available and is adequate for such a purpose.

The eventual discharge of any residues of substances in category X, Y or Z into the sea must comply with specific provisions for each substance category on the speed of the ship, discharge below the waterline, distance from the nearest land and depth of water.

The carriage and discharge into the sea of noxious liquid substances which have not been categorized, provisionally assessed

or evaluated, or of ballast water, tank washings, or other residues or mixtures containing such substances is prohibited.

Sewage

The discharge of sewage from ships is prohibited within 12 nautical miles off 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. In any case, when discharging from a sewage holding tank, the discharge must be at a moderate rate and the ship must be proceeding en route at a minimum speed of 4 knots. Only if a sewage treatment plant, approved according to the requirements of IMO, is used onboard, can the discharge take place at any distance from the nearest land.

For ships engaged in international voyages in the Baltic Sea area, of 400 gross tonnage and above or which are certified to carry more than 15 persons, regulations on surveys and certification of Annex IV "Regulations for the Prevention of Pollution by Sewage from Ships" to MARPOL 73/78 also apply.

The Baltic Sea has been designed as a special area under MARPOL Annex IV, whereby any discharge of sewage from passenger ships in the Baltic Sea will be allowed only for sewage processed through a sewage treatment plant which type is approved by the administration, taking into account the standards and test methods developed by the organization, and which also reduces the nitrogen and phosphorous concentration to specified levels. The discharge of sewage



within a special area will be prohibited for new passenger ships on, or after, 1 January 2016, and for existing passenger ships on, or after, 1 January 2018. These regulations are yet to take effect.

Garbage

The discharge of garbage in the Baltic Sea area is prohibited. However, food wastes may be discharged, but in any case not less than 12 nautical miles from the nearest land.

Fuel oil quality

The Baltic Sea has been designated as a SOx emission control area, which requires that all ships navigating in its waters use fuel oil with a sulphur content not exceeding 1.5% m/m or an exhaust gas cleaning system/ any other technical method reducing the total emissions of sulphur oxides from ships ensuring the same level of efficiency. A bunker delivery note accompanied by a representative sample of the delivered fuel oil should be kept on board the ship for inspection and according to Annex VI "Regulations for Prevention of Air Pollution from Ships" to MARPOL 73/78.

In accordance with Annex VI deliberate emission of ozone-depleting substances is prohibited.

Prohibition of incineration

Incineration means the deliberate combustion of wastes or other matter at sea for the purpose of their thermal destruction,

excluding activities incidental to the normal operation of ships or other man-made structures.

Incineration, except for the incineration of ship-generated wastes, is prohibited throughout the Baltic Sea area. However, the incineration of wastes deriving from the normal operation of the ship is also prohibited in the territorial seas of the Baltic Sea States.

Prohibition of dumping

Dumping means any deliberate disposal at sea of wastes or other matter from ships, or any deliberate disposal from ships at sea. The prohibition of dumping does not apply to the disposal of dredged materials at sea, provided specific provisions are complied with.

Dumping is prohibited throughout the Baltic Sea area.

Regulations for small ships

All the discharge regulations, described above, apply equally to small ships, including fishing vessels, working vessels and pleasure craft. This includes small ships fitted with a toilet which must comply with the sewage discharge regulations of Annex IV to MARPOL 73/78 and be able to connect to sewage reception facility pipes. Small ships built before 1 January 2000 can be exempted by the Baltic Sea countries from this obligation if the installation of toilet retention systems in these ships is technically difficult or the cost of installation is high compared to the value of the ship.

Ships flying the flag of a Baltic Sea State should have onboard garbage retention appliances suitable for collection and separation of garbage.

Alien species from ships' ballast water and sediments

In order to reduce the risk of non-indigenous species invasion through ballast water all vessels transiting the Atlantic or from routes passing the West African Coast are requested to conduct on a voluntary basis ballast water exchange before entering the North-East Atlantic and the Baltic Sea. The ballast water exchange should be conducted to meet the D1 Ballast Water Exchange Standard of the International Convention for the Control and Management of Ships' Ballast Water and Sediments and in waters

at least 200 nautical miles from the nearest land and at least 200 metres in depth, and in cases where these criteria cannot be met, at least 50 nautical miles from the nearest land and in water at least 200 metres in depth.

Also vessels leaving the Baltic and transiting through the North-East Atlantic to other destinations are requested on a voluntary basis not to exchange ballast water in the Baltic or until the vessel is 200 nm off the coast of North-West Europe and in waters deeper than 200 m.

A similar kind of measure to address the risk of shipping acting as a vector for the movement of non-indigenous species between the ports of the Mediterranean Sea and the ports in the North-East Atlantic and the Baltic Sea is expected to be adopted in the near future.



Discharge of ships' wastes to port reception facilities

Mandatory delivery of wastes to port reception facilities

All ships, with some exceptions, are under an obligation to deliver to a port reception facility, before leaving the port, their ship-generated wastes and cargo residues that cannot be legally discharged under the global MARPOL 73/78, or under the Helsinki Convention.

Availability of port reception facilities

To enable ships to deliver their ship-generated wastes and cargo residues, over 210 port reception facilities are provided in ports located around the Baltic Sea area. Information on reception facilities in ports of the Baltic Sea States can be found in the Global Integrated Shipping Information System (GISIS) developed by IMO on <http://gisis.imo.org/Public/>.

Delivery of oil to reception facilities

Oil loading terminals and repair ports are provided with reception facilities to receive and treat all the dirty ballast and tank washing water from oil tankers. Additionally, all ports are provided with reception facilities for other residues and oily mixtures from all ships.

The consignor in the loading port is responsible for reception arrangements



for cargo-related wastes covered by Annex I (oil residues from cargo tanks) to MARPOL 73/78.

Delivery of residues of noxious liquid substances (NLS) carried in bulk

Facilities are available to receive ballast water or tank washings containing cargo residues of noxious liquid substances in Categories X, Y and Z:

- at ports and terminals involved in handling of cargo of categories X, Y and Z;
- at ships repair ports undertaking repairs to NLS tankers.

The consignee in the unloading port is responsible for reception arrangements for wastes covered by Annex II (residues of noxious liquid substances) to MARPOL 73/78.



The facilities are expected to have adequate capacity to meet the needs of ships without causing undue delay. Waste discharge procedures and arrangements are described in waste management plans elaborated by the ports.

Delivery of sewage and garbage

Reception facilities are available for sewage and garbage.

Additionally, the Contracting States to the Helsinki Convention are undertaking to ensure that reception facilities in all relevant ports and terminals are provided for the reception of sewage, without causing delay to ships, adequate to meet the needs of the passenger ships using them, in relation to the designation of the Baltic Sea as a special area under Annex IV of MARPOL. The Baltic Sea countries agreed to upgrade port reception facilities for sewage accordingly by 2015 at the latest.

Notification of the intended use of port reception facilities

To ensure the use and efficiency of the port reception facilities, an information sheet must be forwarded to the next port of call 24 hours in advance of the intended use of a port reception facility or, if the voyage takes less than 24 hours, on departure from the previous port. If the ship's next port of call is determined less than 24 hours before arrival thereto, the notification shall be submitted immediately upon determination of the next port of call. The sheet must include the following information: the capacity of the waste storage tanks/bins on board; the amounts of wastes delivered at the last port of call; and the estimated amounts of wastes to be delivered at the next port of call.

The “no-special-fee” system

According to the “no-special-fee” system, a fee covering the cost of reception, handling and final disposal of ship-generated wastes is levied on the ship irrespective of whether or not ship-generated wastes are actually delivered. The fee is included in the harbour fee or otherwise charged to the ship.

The “no-special-fee” system should be applied in all Baltic Sea ports to oily wastes from machinery spaces, sewage and garbage as well as litter caught in fishing nets.

Additionally, in many Baltic Sea ports economic incentives have been introduced to encourage environmentally friendly shipping, like a system of environmentally differentiated fairway dues.

Detection and prosecution of offenders of anti-pollution regulations

The Baltic Sea States place high priority on the elimination of violations of anti-pollution regulations, and on the conviction of any offenders.

Various actions have been taken to this end.

Cargo, Oil and Garbage Record Books

MARPOL 73/78 and the Helsinki Convention lay down a duty to keep Cargo, Oil and Garbage Record Books, and specify the operations requiring entries in the appropriate Record Books. Accurate and timely entries in Cargo, Oil and Garbage Record Books are of utmost importance to ensure compliance with the special discharge regulations. A copy of the relevant Record Book may be used in judicial proceedings as evidence of facts stated in the entry.

Aerial surveillance

In order to prevent and detect any violation of discharge regulations, the Baltic Sea States regularly conduct aerial surveillance supported by satellite observations of their response regions and jointly survey specific parts of the Baltic Sea area.

During the joint surveys a chosen traffic route is surveyed for a minimum of 24 hours by a number of aircraft from the Baltic Sea States. A joint command post manages the surveillance in close co-operation with patrol

vessels, ready to take proper measures when offenders are detected.

Co-operation in investigation

The Baltic Sea States are co-operating to investigate violations of anti-pollution regulations.

This is particularly important when a ship violates the discharge regulations in the waters of one State, without calling at a port in that State, and proceeds to a port in another State.



Thus, a Baltic Sea State can request another State to conduct a Port State Control upon the ship's arrival at the next port of call, to obtain necessary information and evidence of the suspected violation.

To enhance this co-operation, the Baltic Sea States have elaborated a Baltic Legal Manual specifying the requirements for obtaining a conviction in each Baltic Sea State and Guidelines on ensuring successful convictions of offenders of anti-pollution regulations at sea.

Fines

The Baltic Sea States have agreed to harmonize administrative fines by deciding on a minimum level, which is intended to be preventive – discouraging the master or other person in charge of a ship from violating the anti-pollution regulations. The minimum level will prevent fines varying greatly between the Baltic Sea States, and will also avoid a situation in which it is cheaper to discharge illegally than to port reception facilities.

Countermeasures against spillages of oil or other harmful substances

Reporting on incidents

In order to facilitate countermeasures against spillages of oil or other harmful substances, it has been agreed internationally that the master or other person in charge of any ship involved in an incident must report the particulars of the incident in the following cases:

- a) a discharge above the permitted level or probable discharge of oil or of noxious liquid substances for whatever reason, including those for the purpose of securing the safety of the ship or for saving life at sea; or
- b) a discharge or probable discharge of harmful substances in packaged form, including those in freight containers, portable tanks, road and rail vehicles and shipborne barges; or
- c) damage, failure or breakdown of a ship of 15 metres in length or above which:
 - i) affects the safety of the ship; including but not limited to collision, grounding, fire, explosion, structural failure, flooding and cargo shifting; or

- ii) results in impairment of the safety of navigation; including but not limited to, failure or breakdown of steering gear, propulsion plant, electrical generating system, and essential shipborne navigational aids.

Furthermore, the Baltic Sea States have agreed that the master or other person in charge of any ship shall report in case of

- d) observations of significant spillages of oil or other harmful substances.

Reports shall be made by the fastest telecommunication channels available with the highest possible priority to the nearest coastal State. In case of incidents involving oil, the procedures in the shipboard oil pollution emergency plan shall be followed.

Additionally, the Baltic Sea States have agreed that ships bound for or leaving a port of a Baltic Sea State and carrying dangerous or polluting goods, must report on the substances to the competent authority of that Baltic Sea State.

Safety of navigation

In addition to the pollution prevention measures referred to above, the Baltic Sea States have agreed on certain safety measures in the Baltic Sea area, like ship traffic monitoring, ship routing systems, including numerous traffic separation schemes and deep-water routes, ship reporting systems, pilotage and measures related to safety of winter navigation. Mariners' Routing Guide for the Baltic Sea has been prepared and is available in a form of a chart serving as a single source of navigational information for ships sailing in the Baltic Sea. Web-based version of the Mariners' Routing Guide for the Baltic Sea is available at www.helcom.dk/map.

Ship reporting systems

Four mandatory ship reporting systems (SRS) adopted by the IMO are in force in the Baltic Sea area, requiring a ship to submit a report to the Vessel Traffic System (VTS) Centre operating the SRS:

- BELTREP in the Great Belt area, applying to ships of 50 GT and upwards, and all ships with an air draught of 15 metres or more;
- SOUNDREP in the Sound between Denmark and Sweden, applying to ships of 300 GT and upwards;
- GOFREP in the Gulf of Finland, applying to ships of 300 GT and upwards;
- GDANREP on the approaches to the Polish Ports in the Gulf of Gdańsk, applying to passenger ships certified to carry more than 12 passengers, ships with a gross tonnage equal to or exceeding 150 gross tonnage and all vessels engaged in towing.

Participation is free of charge.

Mandatory ship reporting systems have also been established nationally by the Baltic Sea States in approaches to oil terminals.

Automatic Identification System (AIS)

The Baltic Sea area has been covered by land-based monitoring systems for ships, based on AIS signals, from 1 July 2005.

The AIS improves the safety of navigation via real time information as well as provides statistical data on shipping in the Baltic Sea. The AIS information is also used to enforce MARPOL 73/78 and the Helsinki Convention and to identify offenders of anti-pollution regulations. For example, the monitoring system based on AIS signals has been put into operation to detect in the Baltic all ships non-compliant with Annex I to MARPOL 73/78 regarding banning the carriage of heavy oil in single hull tankers. A drift forecasting and backtracking system combined with AIS called SeatrackWeb/AIS is in use in the Baltic Sea countries to identify illegal oil polluters.

Route - T and deep-water Routes

A transit route (Route - T) through the Kattegat, the Great Belt and the Western Baltic has been established for deep draught ships passing through the shallow entrances to the Baltic Sea. When passing through the entrances to the Baltic Sea, ships should note that the maximum obtainable depth in most parts of Route - T is 17 metres. However, in

some areas the maximum obtainable depth is to some extent permanently reduced due to sand migration.

Six IMO adopted deep-water (DW) routes have been established:

- DW Route “Between Hatter Rev and Hatter Barn” for ships with a draught exceeding 13 metres. The minimum depth of water below mean sea level is 19 metres;
- DW Route “Off the East Coast of Langeland” for ships with a draught exceeding 10 metres. The minimum depth of water below mean sea level is 19 metres;
- DW Route “Kadetrenden” north–east of Gedser for deep draught ships. The minimum depth of water below mean sea level is 16.5 metres;
- DW Route “Off Gotland Island” for all ships passing east and south of the island of Gotland bound to or from the north-eastern part of the Baltic, with a draught exceeding 12 metres;
- DW Route “Åland Sea” for deep draught ships. The minimum depth of water below mean sea level is 17.9 metres;
- DW Route “Inside the borders of the TSS from Gogland Island to Rodsher Island” intended for the passage of ships with a draught up to 15 metres, including laden tankers sailing from Primorsk.

Traffic separation schemes

Traffic separation schemes (TSS) adopted by the IMO are established in the following parts of the Baltic Sea area:

Area	Number of schemes
In Samsø Belt/Great Belt	2
In the Sound	2
Off Kiel lighthouse	1
South of Gedser	1
North of Rügen	1
In Bornholm gat	1
South of Öland Island	1
In the Gulf of Gdańsk	2
South of Gotland Island	1
South East of Gotland Island	
In the deep-water route	1
West of Gotland Island	1
Åland Sea	1
Entrance to the Gulf of Finland	2
In the Gulf of Finland	5
The Quark (in force 1.5.2013-)	3

Pilotage

Pilotage services are established locally by the coastal states.

IMO recommends that, when navigating the Sound, local pilotage services should be used by

- loaded oil tankers with a draught of 7 metres or more;
- loaded chemical tankers and gas carriers irrespective of size; and
- ships carrying a shipment of irradiated nuclear fuel, plutonium and high-level radioactive wastes (INF cargoes).



IMO also recommends that, when navigating Route - T, established pilotage services should be used by

- ships with a draught of 11 metres or more; and
- ships irrespective of size or draught carrying a shipment of irradiated nuclear fuel, plutonium and high-level radioactive wastes (INF cargoes).

Certified Baltic deep sea pilots are available in all Baltic Sea States and ships' masters are recommended through IMO Resolution A.480 to use the service.

Safety of winter navigation

Adequate ice strengthening is required for ships sailing in ice.

Information on ice conditions, traffic restrictions, icebreakers and other issues relevant to mariners navigating in the Baltic Sea during wintertime can be obtained from the website www.baltice.org.

Additional information about ice conditions in the Baltic Sea countries, including contact information of the national ice services can be obtained from the common website of the national ice services of the Baltic Sea States www.bsis-ice.de.

Electronic Chart Display and Information Systems (ECDIS)

Ships engaged on international voyages shall be fitted with Electronic Chart Display and Information Systems (ECDIS) according to the timetable of Chapter 5 of SOLAS. Newbuilt vessels are the first to be covered by a mandatory carriage requirement for ECDIS, with the first implementation date of 1 July 2012 for specific types and sizes of ships.

Bon Voyage!



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