



Baltic Marine Environment Protection Commission

Annual report on

Shipping accidents in the Baltic Sea in 2012



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Table of contents

- 1 Introduction..... 1
- 2 Ship traffic in the Baltic 2
- 3 Overview of accidents in the Baltic Sea 9
- 4 Types of accidents 11
 - 4.1 Collisions..... 14
 - 4.2 Groundings 21
- 5 Types of vessels involved in the accidents 27
- 6 Causes of accidents 29
- 7 Accidents with pollution..... 32
- ANNEX 1 37

1 Introduction

Annual reports on shipping accidents in the Baltic Sea area have been compiled by HELCOM since 2000. According to the agreed procedure all accidents are reported irrespectively if there was pollution or not. This includes accidents which involved tankers over 150 gross tonnage and/or other ships over 400 GT, both in territorial seas or EEZ of the HELCOM Contracting Party. Accident types cover i.a. groundings, collisions (striking or being struck by another ship), contacts with fixed or floating objects, pollution accidents (e.g. during fuel transfer) and other types of accidents like fires and explosions, machinery damage and capsizing.

A new reporting format was taken into use in 2004. Data collected before 2004 is thus not fully comparable with the data collected in 2004 and subsequent years. In 2012 the HELCOM reporting format was modified in order to harmonize with reporting formats for incidents of the International Maritime Organization (IMO) and the European Maritime Safety Agency (EMSA). Attached to this report are the guidelines for the 2012 HELCOM reporting format containing additional information on the categorization used in this report (Annex 1).

This report focuses on the shipping accidents data collected for year 2012 as well as for the longer term data series for 2004-2012. All Baltic Sea coastal states (Denmark, Estonia, Finland, Latvia, Lithuania, Poland, Russian Federation and Sweden) have provided national reports on shipping accidents in 2012. This report was compiled by the HELCOM Secretariat and approved for publication by the HELCOM MARITIME Group.

Due to the submission of a new Danish dataset in December 2013 and the subsequent request for re-analysis by Denmark (see box below for more information) this report on data collected 2013 was published in July 2014.

Secretariat note on the accident data reported by Denmark for this report:

Please note that a major revision of the shipping accidents database of Denmark, maintained by DMA, took place in 2013. This has influenced the preparation of this report, which includes data on accidents in 2012, as reported by all the Baltic Sea countries in 2013.

Danish data on shipping accidents is currently stored in a new accident database which is compatible with the European Marine Casualty Information Platform (EMCIP) of EMSA. This new Danish database includes only accidents which took place in 2010 and later.

Denmark has informed that the accident data of the old database (used in previous HELCOM reports) and of the new database can both be considered valid. However, due to the differences in the content and structure of the two databases care should be taken when presenting regional information on accidents which include Danish data both from the old (-2009) and new (2010-) databases. This is the case e.g. in the southwestern Baltic Sea, where the relative influence of data from Denmark to overall trends is higher.

In this report this need for precaution is highlighted in a number of graphs with a vertical dotted red line, to indicate that columns right of the line include data from the new Danish accident database.

However, based on HELCOM Secretariat comparisons between regional datasets including either old or new Danish data for the years 2010-2012, the effect of the revision on regional trends can be considered minor Baltic wide, but also within all sub-regions.

2 Ship traffic in the Baltic

To get a full picture of the shipping safety in the Baltic, basic information on the intensity of shipping is of importance. IMO regulations (SOLAS) require Automatic Identification System (AIS) transponders to be fitted aboard all ships of 300 GT and upwards engaged on international voyages, cargo ships of 500 GT and upwards not engaged on international voyages, as well as all passenger ships irrespective of size. The AIS enables the identification of the name, position, course, speed, draught and main type of ships, and displays all available data over a common background map.

In the Baltic Sea area movements of ships are gathered in the regional HELCOM AIS network and database. The intensity of traffic can also be illustrated by the number of ships crossing the pre-defined statistical lines as presented in **Figure 1** (according to the type of vessels) and **Figure 2** (according to draught of vessels). A snapshot illustrating the spatial distribution of shipping activities in the whole Baltic at a specific moment can be seen in **Figure 3** and in the southwestern Baltic Sea in **Figure 4**. **Figure 5** shows the average traffic in the Baltic Sea based on AIS signals during one year (2011). The numeric data behind maps in Figure 1 and Figure 2 are presented in **Table 1** and **Table 2**.

HELCOM AIS has been in operation since July 2005, providing additional information for the analysis of each individual accident case by respective Contracting States. The findings of such investigations are discussed during meetings of HELCOM groups with a view to identify the need and possibilities for further HELCOM actions.

The HELCOM AIS historical statistics on ship traffic allow for the assessment of annual changes in traffic intensity. Since 2006, HELCOM has been following the trends in vessel traffic crossing fixed AIS lines, which are shown in **Figure 6** and **Table 3**. The overall ship traffic in 2012 stayed approximately at the same level as in 2011 with roughly 407 500 ship crossings in total. The decrease in 2009 and 2010 for passenger, cargo and other ship types was likely due to decreased shipping activity resulting from the economic recession.

Shipping in the Baltic Sea based on AIS data, data on shipping accidents and other relevant data collected under the HELCOM framework has been visualized in a movie to be found on the [HELCOM web page](#).

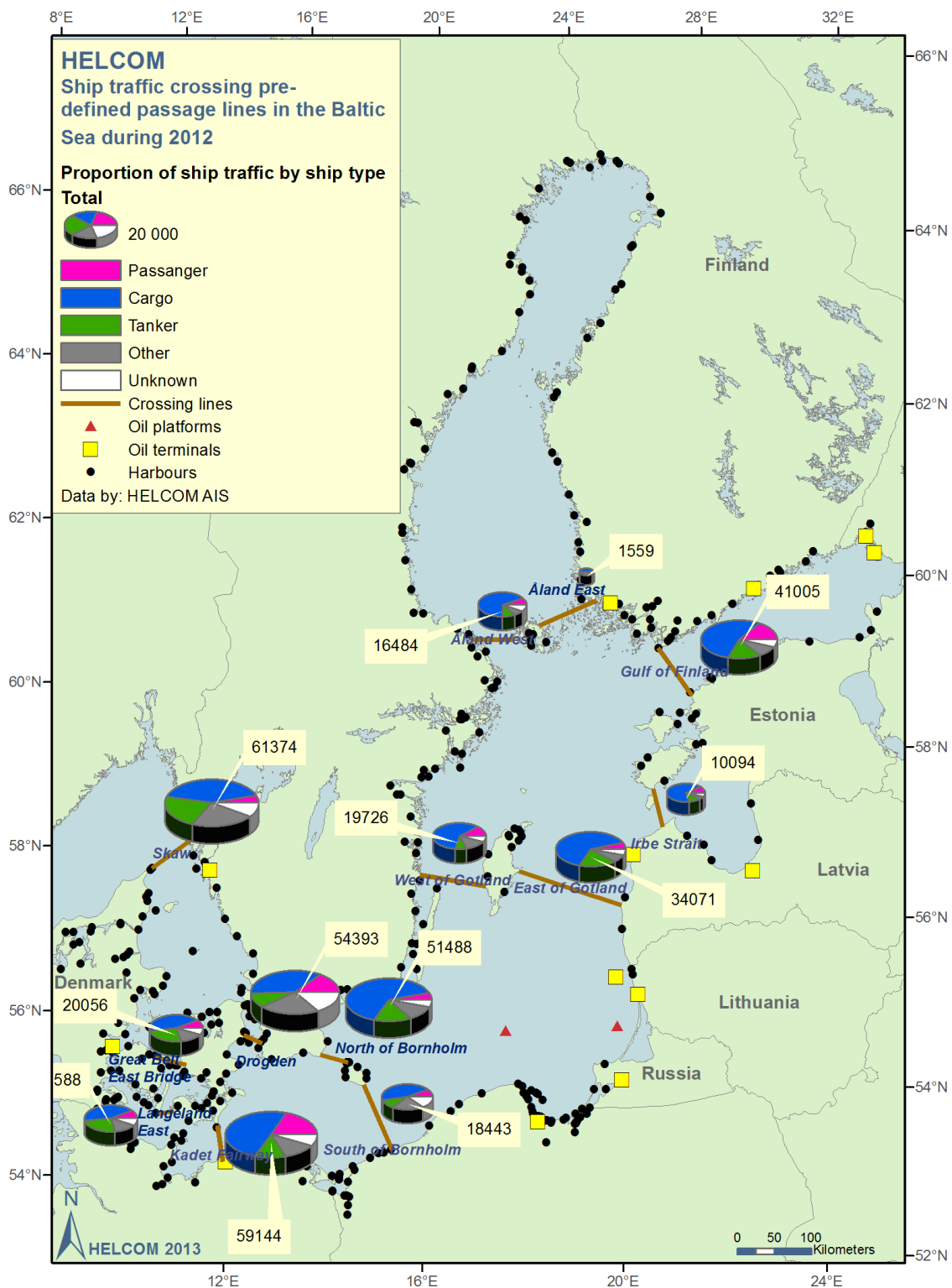


Figure 1 Number of ships crossing AIS fixed lines in the Baltic Sea in 2012 according to the type of the vessels.¹

¹ Please note that the Drogden passage line in the Danish Sound also takes into account smaller vessels that only move between Copenhagen and Malmö and thus doesn't pass through the entire Sound. The number of ships passing the AIS passage line Sundet Syd, south of Drogden, is around 35000.

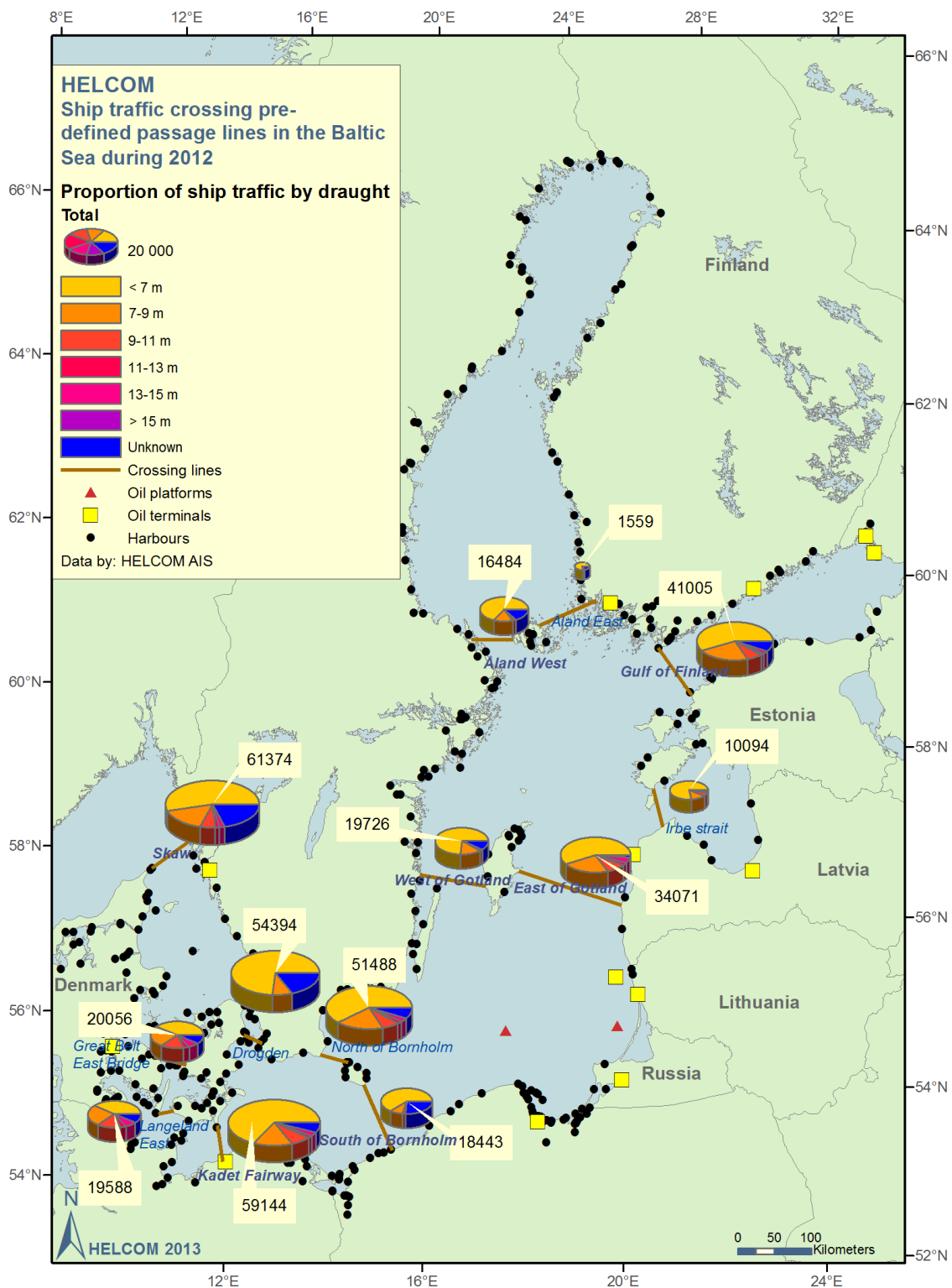


Figure 2 Number of ships crossing AIS fixed lines in the Baltic Sea in 2012 according to the draught.²

² Please note that the Drogden passage line in the Danish Sound also takes into account smaller vessels that only move between Copenhagen and Malmö and thus doesn't pass through the entire Sound. The number of ships passing the AIS passage line Sundet Syd, south of Drogden, is around 35000.

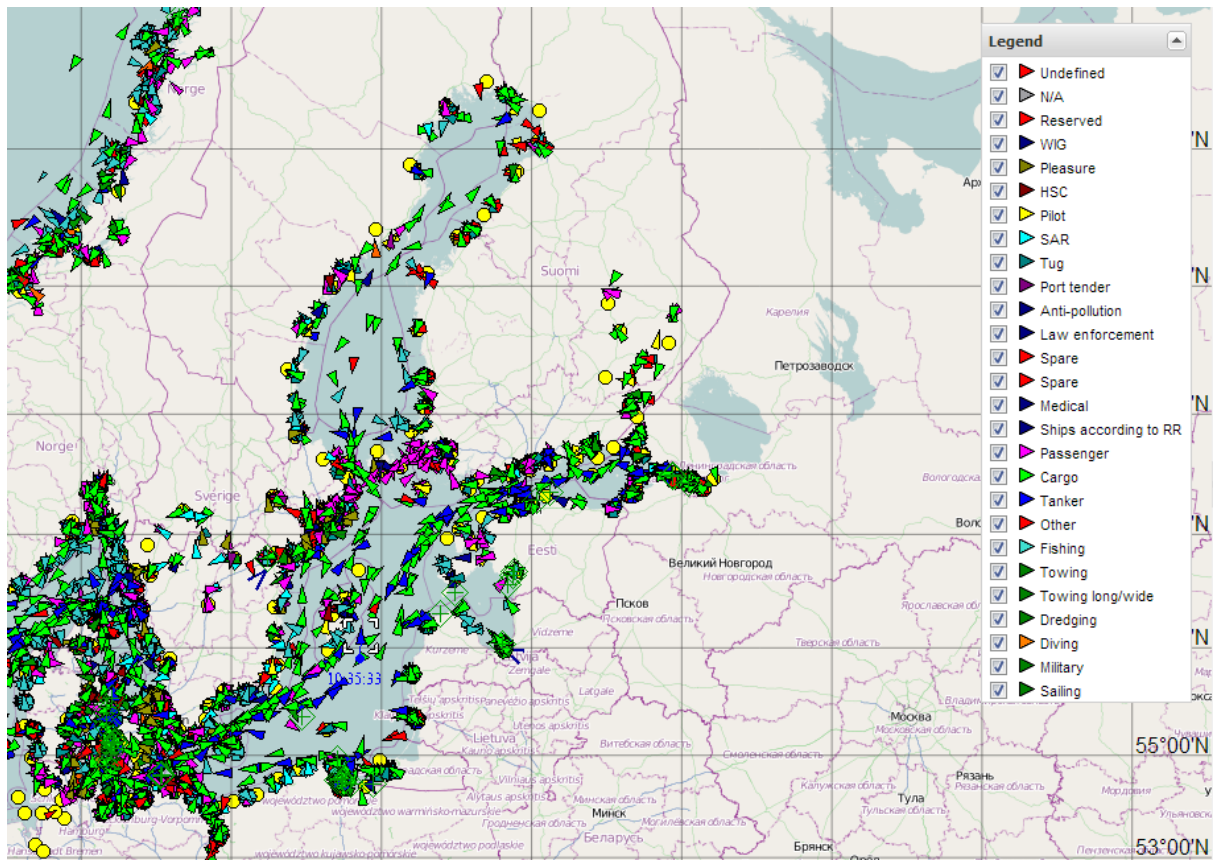


Figure 3 Snapshot of ship traffic in the Baltic Sea on 29 October 2013. Note: the yellow dots illustrate AIS stations and the arrowheads depict different types of ships and direction of travel.

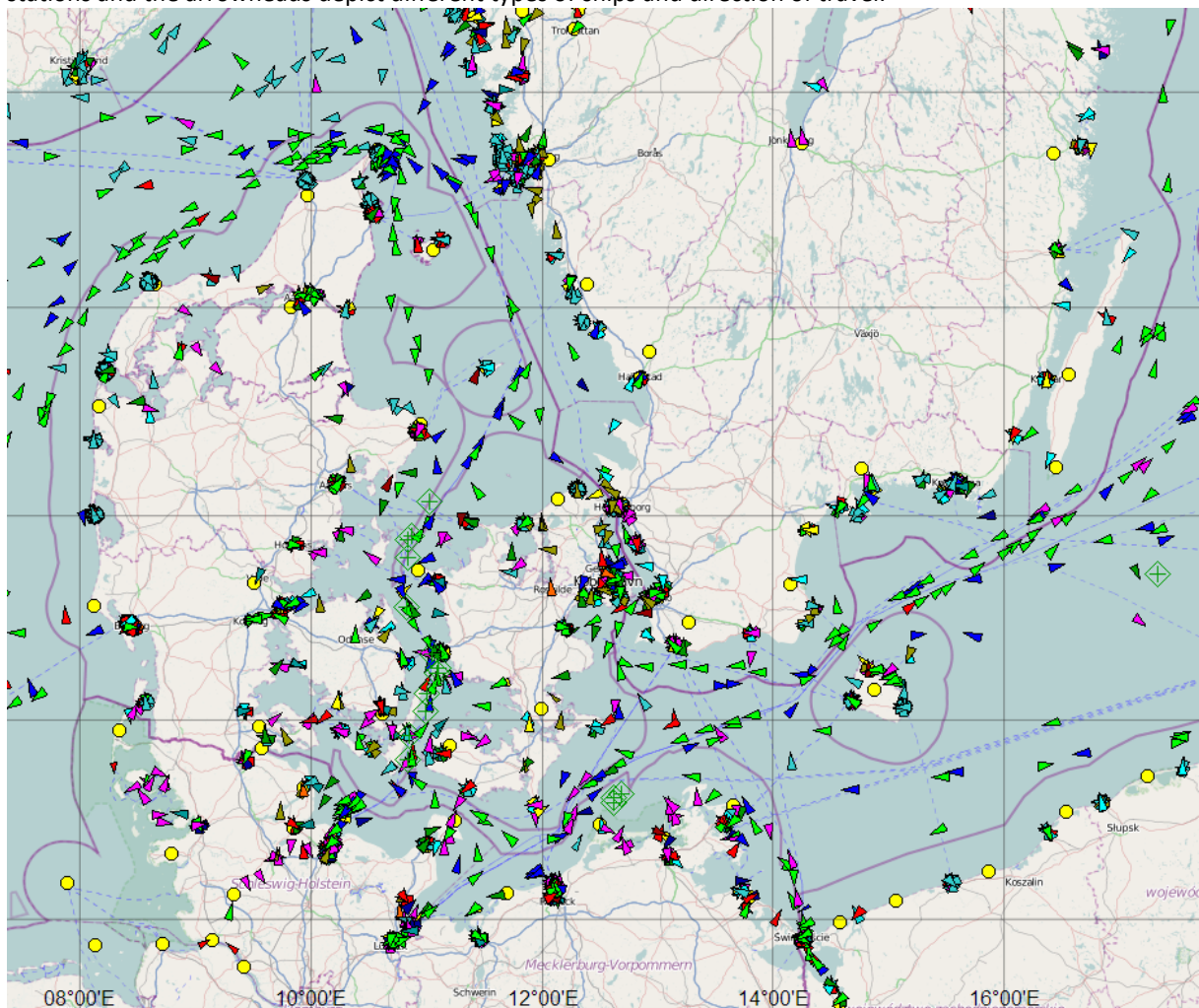


Figure 4 Snapshot of ship traffic in the southwestern Baltic Sea on 29 October 2013.

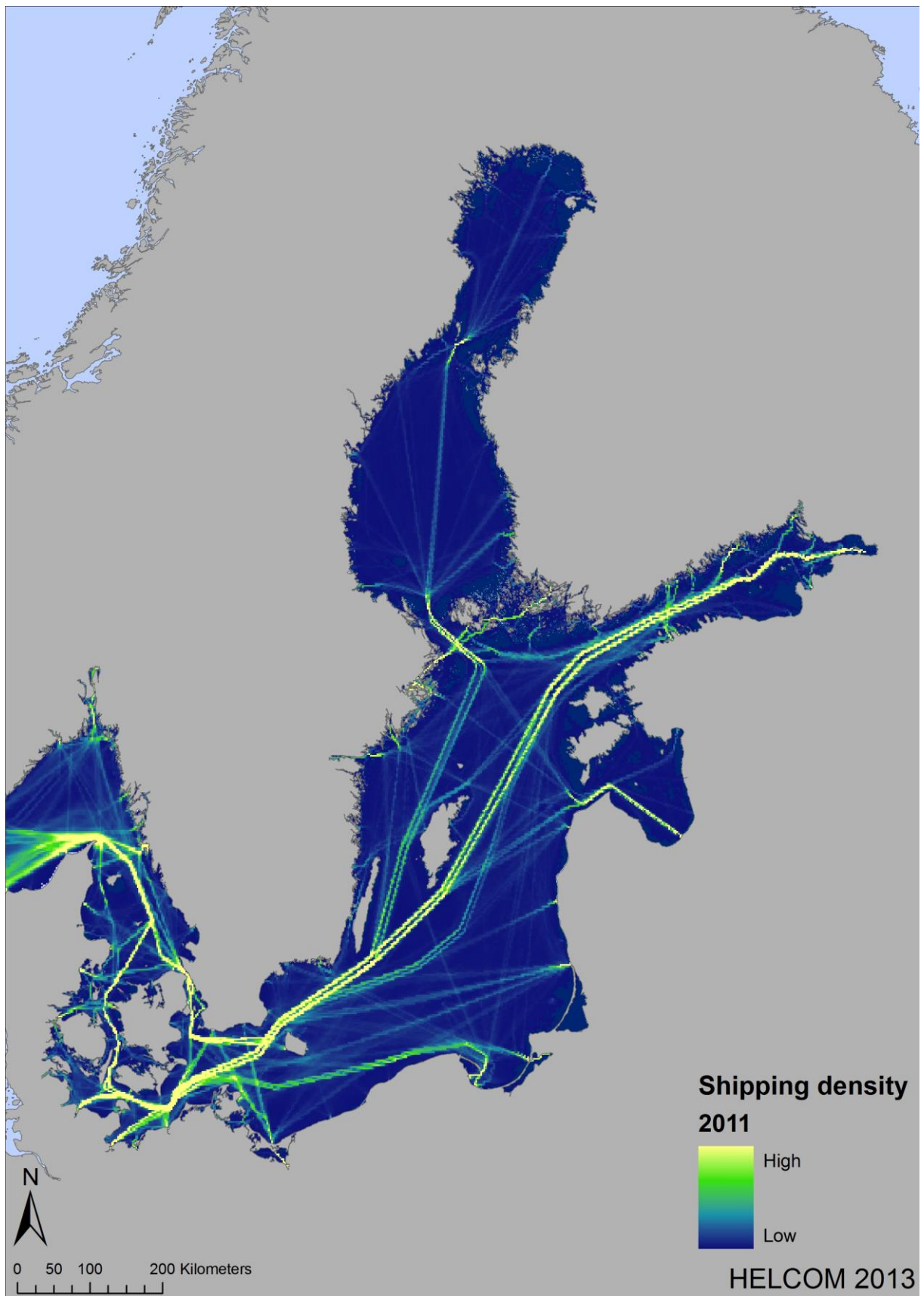


Figure 5 Monthly average density of shipping traffic during 2011, with the busiest routes highlighted in yellow.

Table 1 Number of ships crossing AIS fixed lines in the Baltic Sea in 2012 according to the type of the vessels.

Location	Type of ship					
	Passenger	Cargo	Tanker	Other	Unknown	Total
Skaw	2188	26533	11683	16418	4552	61374
Great Belt East Bridge	1582	8926	5355	3013	1180	20056
Drogden ³	6731	20784	4445	15094	7339	54393
Langeland East	1584	8555	5126	3074	1249	19588
Kadet Fairway	10514	29179	8697	7213	3541	59144
North of Bornholm	2028	32594	9840	4987	2039	51488
South of Bornholm	1360	8435	1780	4666	2202	18443
West of Gotland	1959	12083	1869	2760	1055	19726
East of Gotland	1489	21587	7634	1995	1366	34071
Åland West	1116	11163	1860	1161	1184	16484
Åland East	15	762	92	558	132	1559
Gulf of Finland	5504	22548	7549	3456	1948	41005
Irbe Strait	857	7035	1260	456	486	10094
Total	36927	210184	67190	64851	28273	407425
Percentage of total	9	52	16	16	7	100

Table 2 Number of ships crossing AIS fixed lines in the Baltic Sea in 2012 according to the draught.

Location	Draught							Total
	<7 m	7-9 m	9-11 m	11-13 m	13-15 m	> 15	Unknown	
Skaw	32595	9743	4351	1226	1429	204	11826	61374
Great Belt East Bridge	8310	4036	3567	938	1369	171	1665	20056
Drogden ³	39984	5256	84	7	0	2	9061	54394
Langeland East	7998	3988	3545	918	1365	174	1600	19588
Kadet Fairway	38520	10695	4449	898	1367	165	3050	59144
North of Bornholm	30537	11582	3840	815	1311	179	3224	51488
South of Bornholm	11227	1783	498	79	35	6	4815	18443
West of Gotland	14483	3090	424	32	49	1	1647	19726
East of Gotland	19150	8898	3180	657	1318	242	626	34071
Åland West	10736	2841	481	31	48	0	2347	16484
Åland East	1188	65	9	0	0	0	297	1559
Gulf of Finland	22901	10691	3057	504	982	239	2631	41005
Irbe Strait	7784	1476	461	78	126	3	166	10094
Total	245413	74144	27946	6183	9399	1386	42955	407426
Percentage of tot.	60.2	18.2	6.9	1.5	2.3	0.3	10.5	100

³ c.f previous footnote 1 or 2.

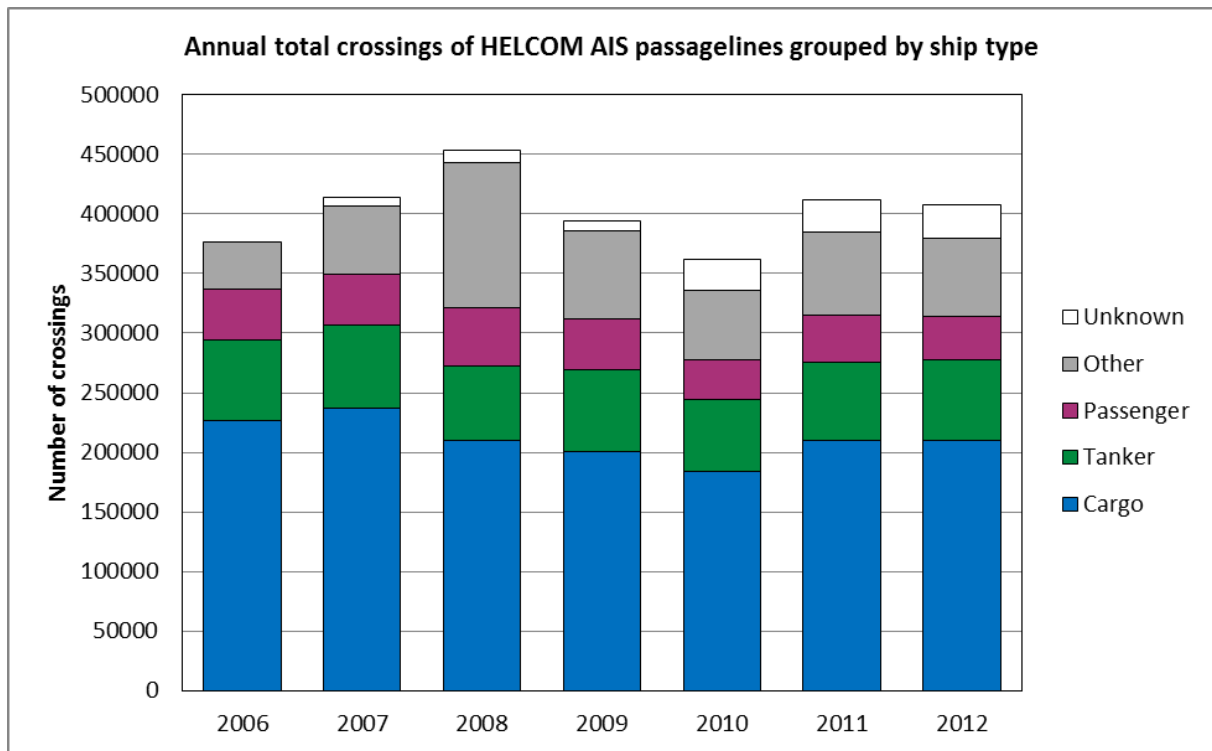


Figure 6 Number of ships crossing fixed AIS lines in the Baltic Sea during 2006-2012, shown here by ship type.

Table 3 Total number of ships crossing all fixed AIS lines in the Baltic Sea during 2006-2012.

Year	Passenger	Cargo	Tanker	Other	No info	Total
2006	42731	226855	67458	39627	-	376671
%	11.3	60.2	17.9	10.5	0	100.0
2007	43215	237342	69335	56981	6901	413774
%	10.4	57.4	16.8	13.8	1.7	100.0
2008	49355	210021	61996	122029	10297	453698
%	10.9	46.3	13.7	26.9	2.3	100
2009	42408	200595	69021	73906	8096	394026
%	10.8	50.9	17.5	18.8	2.1	100.0
2010	32779	184166	60200	58684	26383	363293
%	9.0	50.7	16.6	16.2	7.3	100.0
2011	39943	210030	65605	69353	26509	411440
%	10	51	16	17	6	100
2012	36927	210184	67190	64851	28273	407425
%	9	52	16	16	7	100

3 Overview of accidents in the Baltic Sea

According to the reports from the Contracting States 149 ship accidents occurred in the Baltic Sea area in 2012 (**Figure 7**).⁴ The total number of accidents in the Baltic Sea has been increasing in last three years. The number of accidents increased only slightly (4%) compared to 2011.

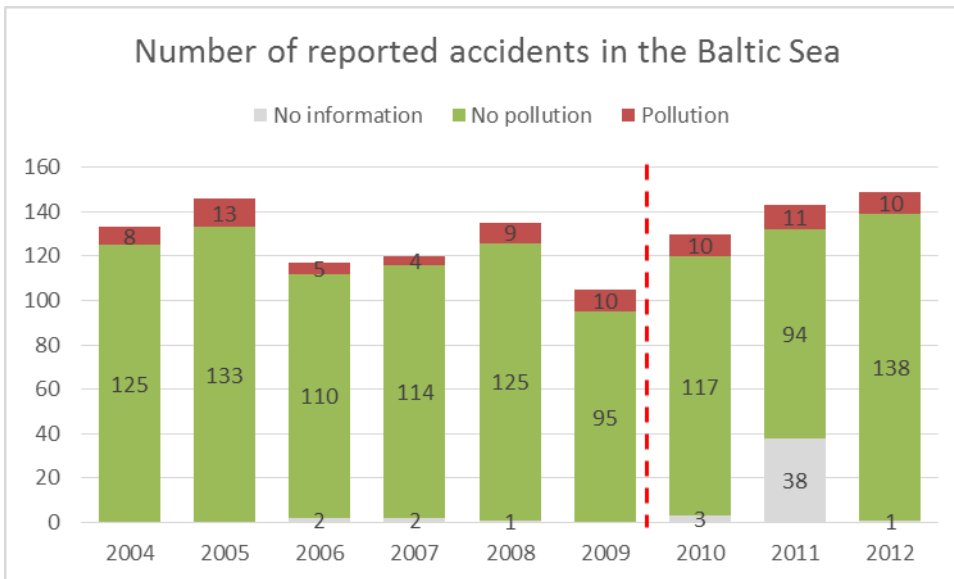


Figure 7

The spatial distribution of the reported accidents in 2012 is presented in **Figure 9**. A more detailed categorization of the location of the accidents – open sea, port approach and port - was introduced for the reporting in 2012. Most accidents occurred close to shore (44% in port and 14% in port approach) as can be seen in **Figure 8**.

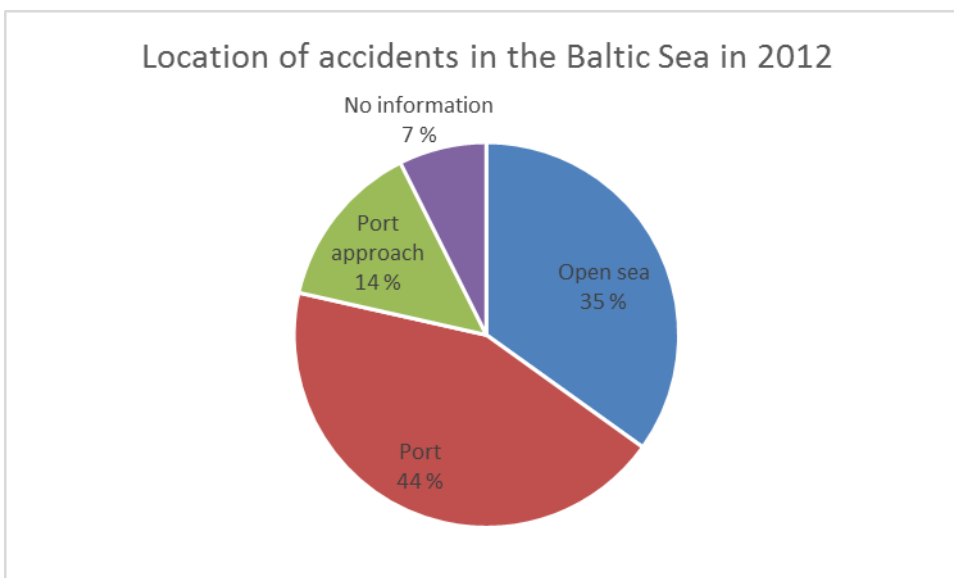


Figure 8

⁴ The columns right of the vertical dotted red line in this graph include data from the new Danish accident database (see box on page 1).

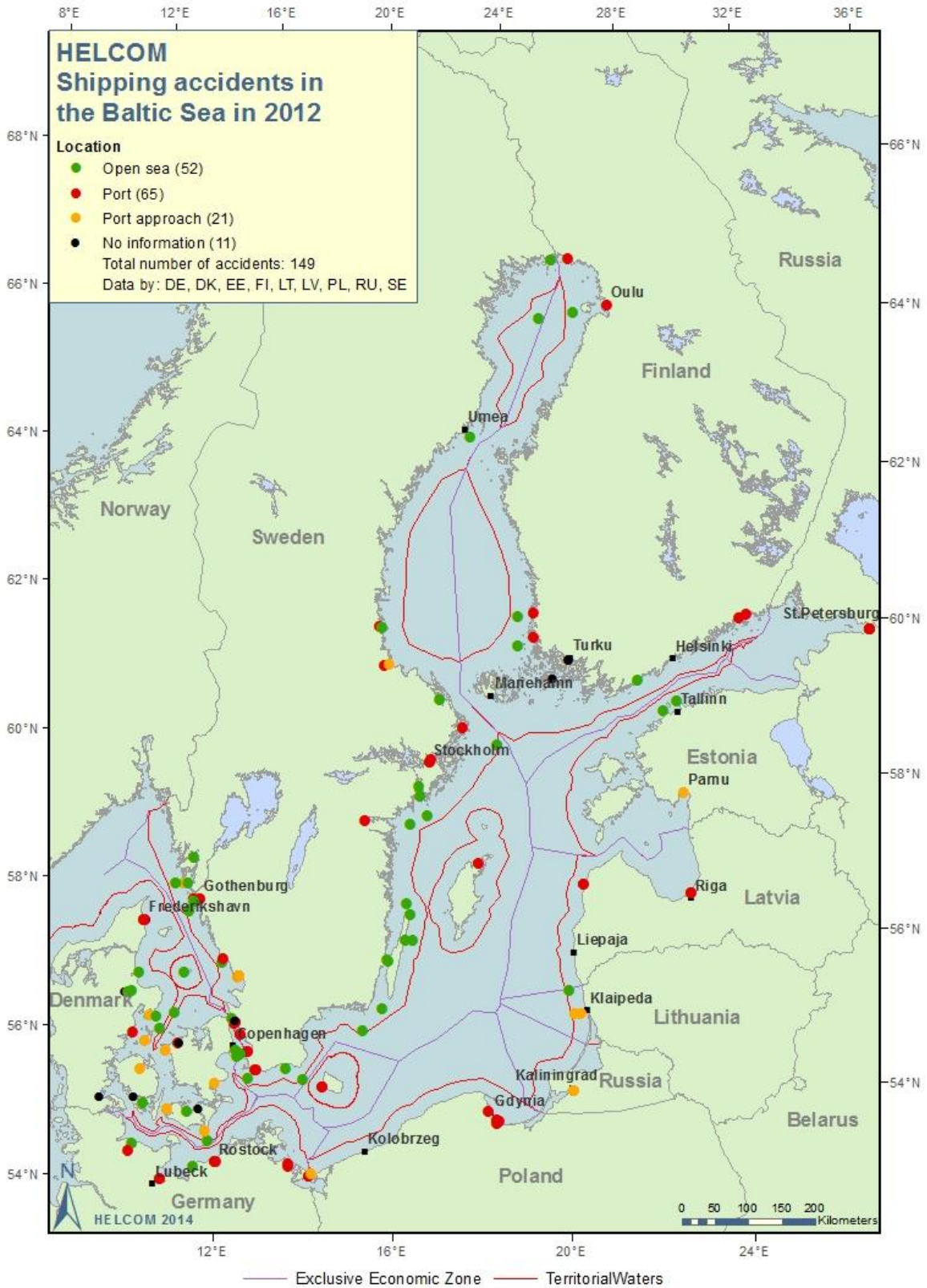


Figure 9

4 Types of accidents

Due to modification of the reporting format in 2012, the new category “contact”, as a type of accident, was included in the reporting, defined as striking any fixed or floating object other than ships or underwater objects (wrecks etc.). In previous reports “collisions” accounted for both collisions with ships and objects. In order to retain comparability both “collision” and “contact” accidents will be referred to as “collisions” in following text.

Collisions (contact 22% and collisions 10%) and groundings or strandings (hereafter referred to only as groundings) accounted for an equal share (31%) of the accidents in 2012 (**Figure 10**). Also other types of accidents, like fires and explosions, machinery damage and capsizing in total made up 31% of all accidents in 2012 while pollution accidents (accidental pollution events) accounted for 7%.

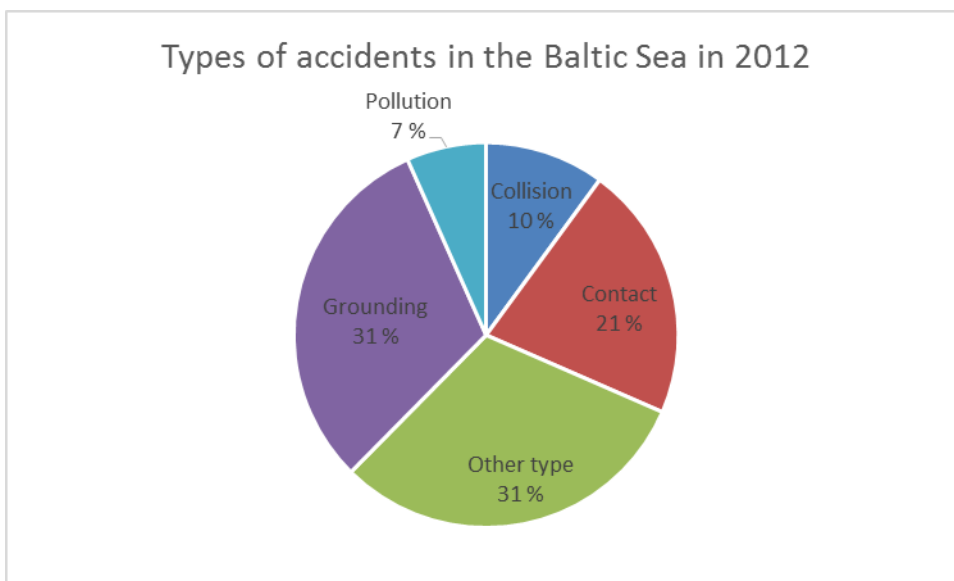


Figure 10

The share of collision and grounding accidents in 2012 was somewhat lower in 2012 than the average share of collisions and groundings in 2004-2012 (35% and 37% respectively) as shown in **Figure 11**. The share of other accidents was somewhat higher in 2012 compared to the average for 2004-2012 (24%). Spatial distribution of different types of reported accidents in the Baltic Sea in 2012 is presented in **Figure 12**.

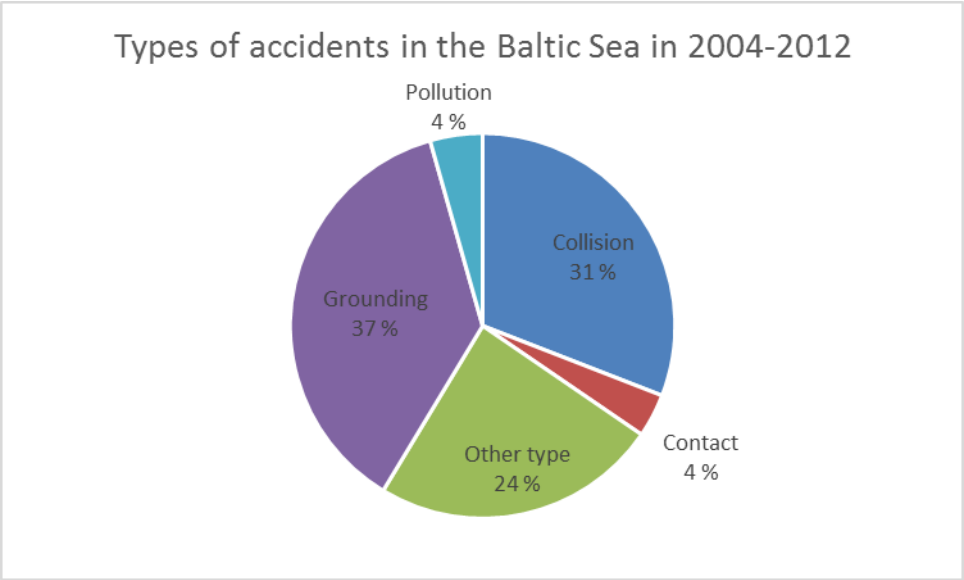


Figure 11

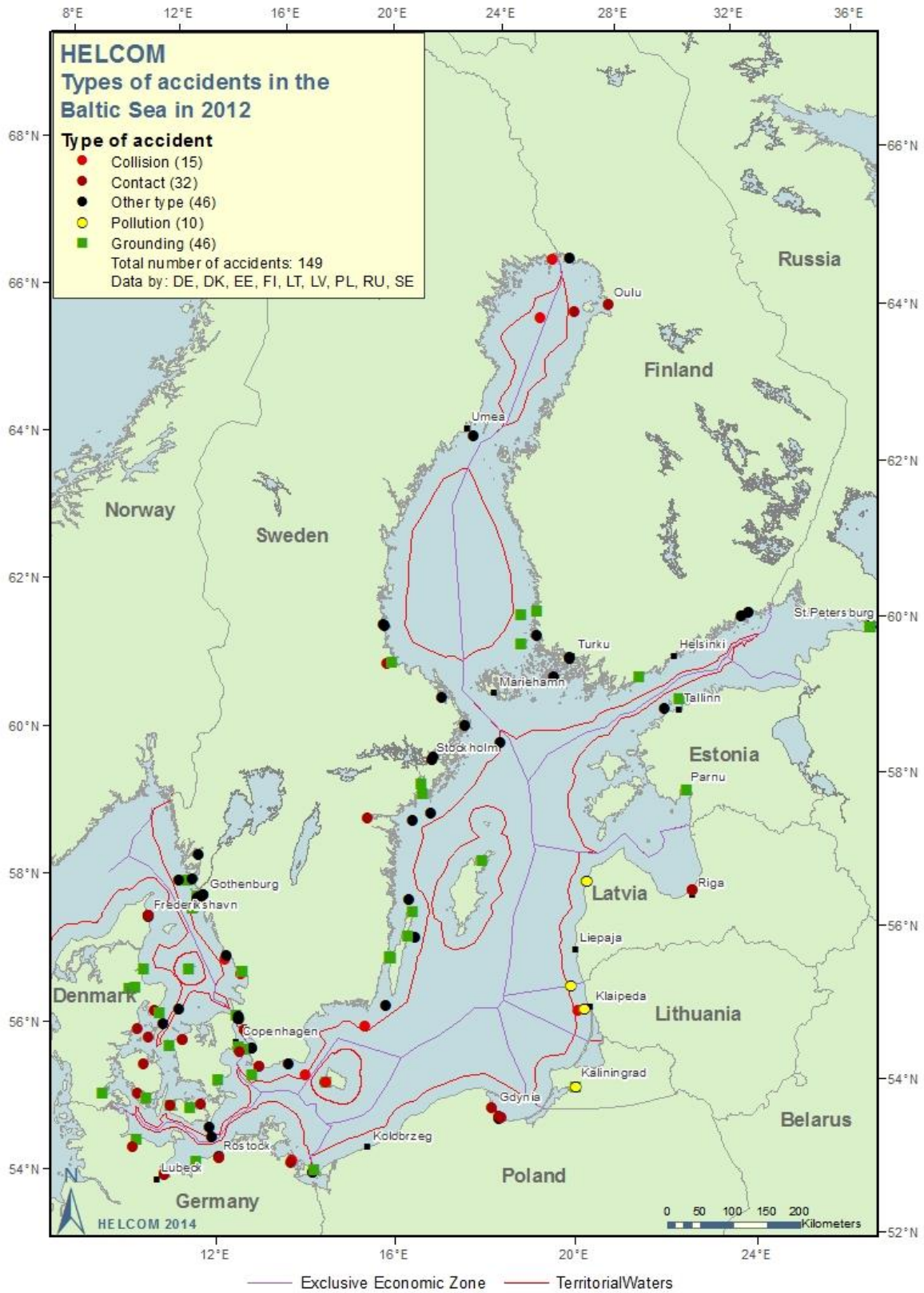


Figure 12

4.1 Collisions

Collisions have been the most common type of shipping accidents in 2011 and 2010 while in 2006-2009 groundings were more common than collisions. In 2012 collisions accounted for 31% (47 cases) of all accidents which is the same percentage as for groundings and the collective category of other accidents. The number of collisions have stayed on the same level during the last three years (**Figure 13**).⁵

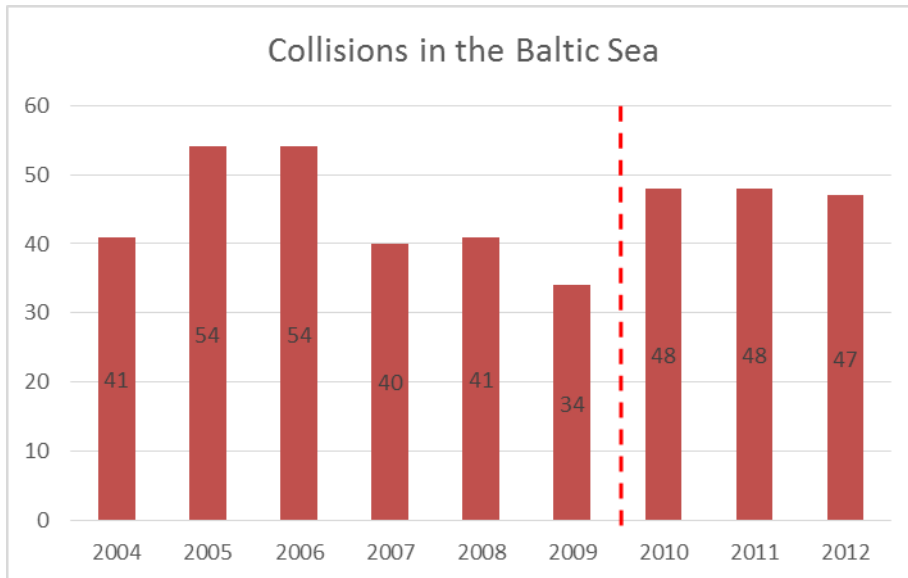


Figure 13

Collisions with objects accounted for the major part (66%) of all collision accidents in 2012, which is significantly higher than in previous years. This number corresponds to the number of accidents categorized as contact accidents (Figure 10). Ship to ship collisions accounted for 26% of the collision accidents and collisions with vessel and object accounted for 6% of the accidents (**Figure 14**).

⁵ The columns right of the vertical dotted red line in this graph include data from the new Danish accident database (see box on page 1).

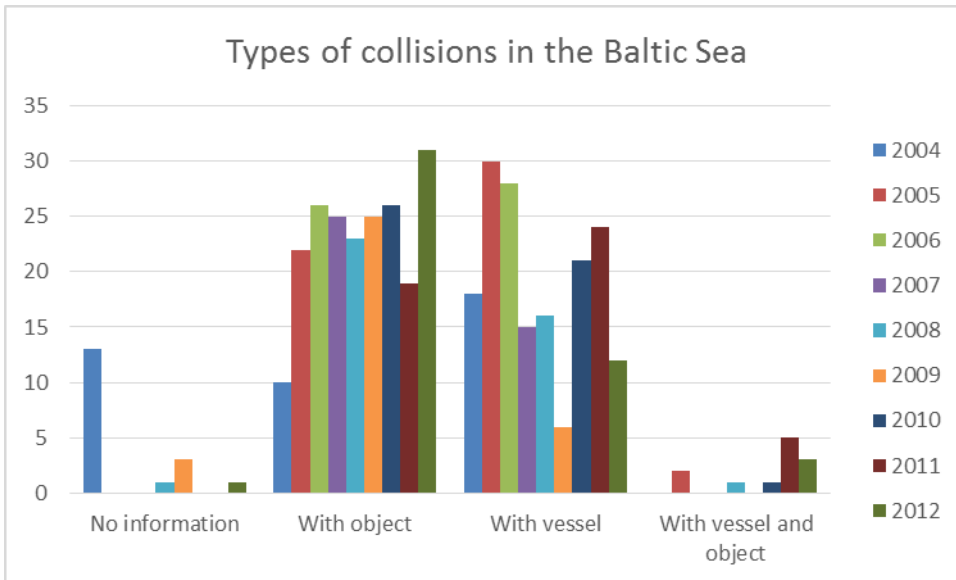


Figure 14

Spatially, collisions in 2012 occurred mostly in near shore areas and the Danish Straits (Figure 15).

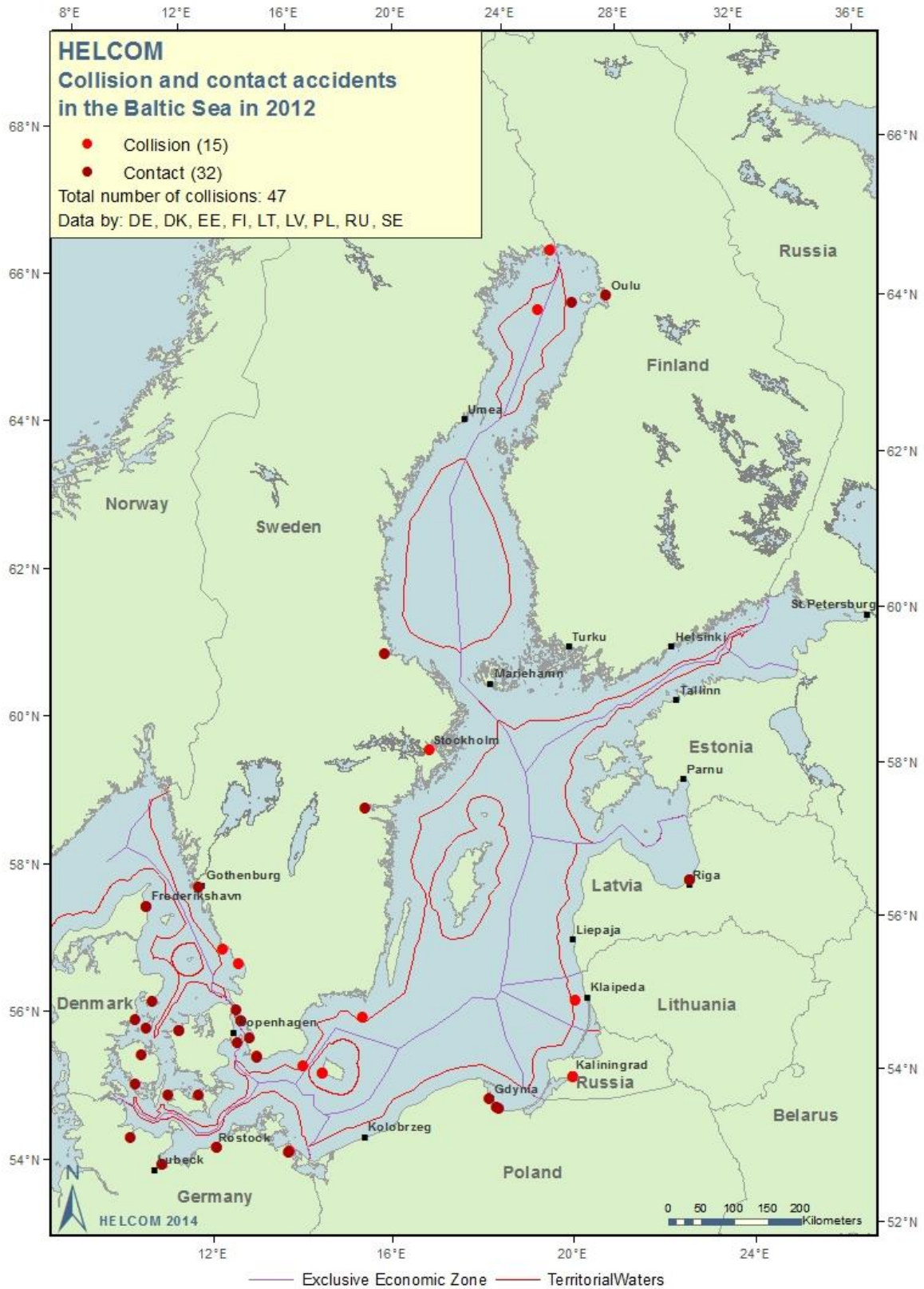


Figure 15

Also the map of collisions in 2004-2012 (**Figure 16**) points toward approaches to ports and the Danish Straits in addition to the Gulf of Finland and the Bothnian Bay as the most risky areas for ships to collide.

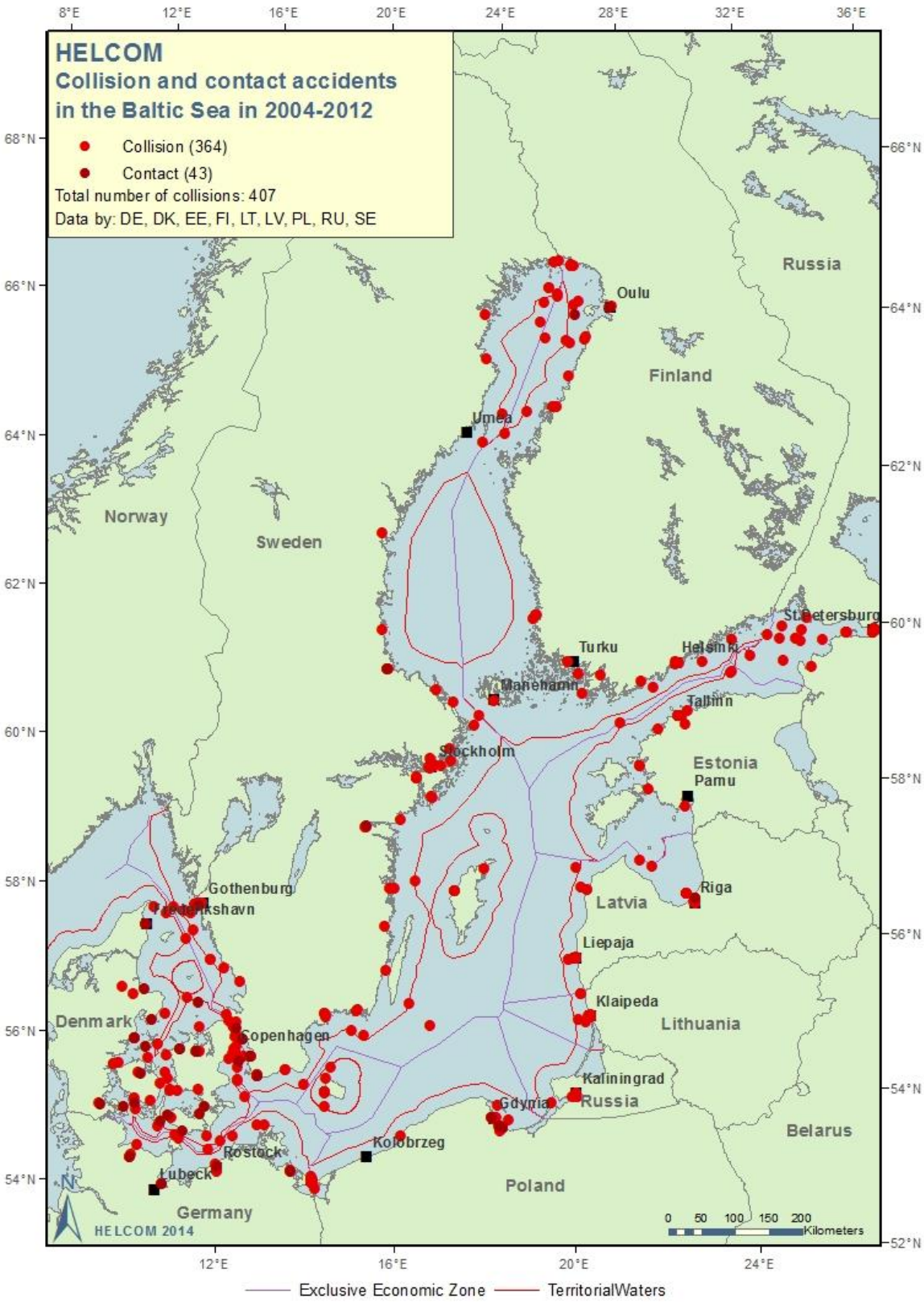


Figure 16

The southwestern Baltic Sea, including the Danish Straits has been one of the hot spots for collisions in the Baltic. In 2012 the number of collisions in the southwestern Baltic Sea was record high with 31 collisions which accounted for 66% of all collisions in 2012 and indicating an almost doubling of the number of cases compared to previous years. In the two previous years the collisions in this area accounted for on average 36% of all collisions in the Baltic Sea. **Figure 17**⁶ and **Figure 18** show the number and spatial distribution of collisions in the southwestern Baltic Sea in 2004-2012.

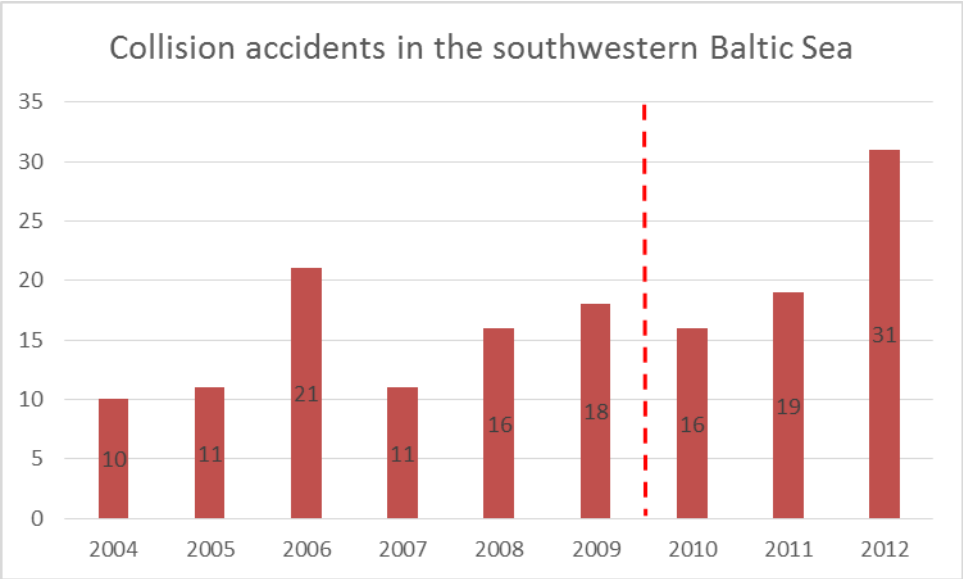


Figure 17

⁶ The columns right of the vertical dotted red line in this graph include data from the new Danish accident database (see box on page 1).

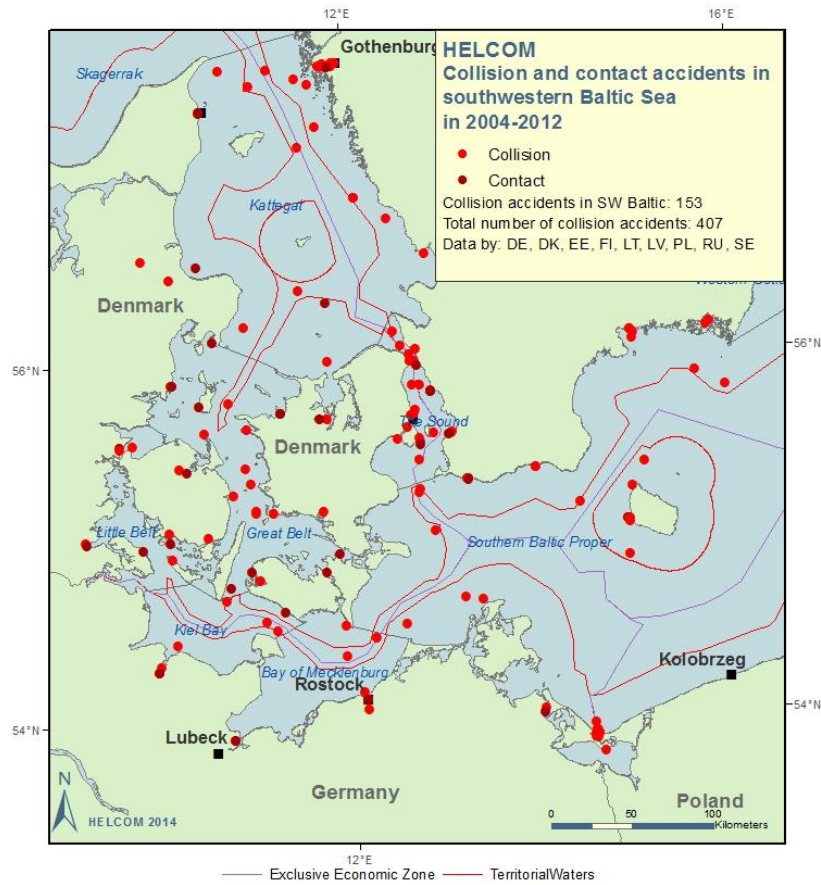


Figure 18

The number of collisions in the Gulf of Finland has reduced drastically since 2005 and in 2012 there were no reported collisions in the area. For the time period 2004-2012 14% of all reported collisions took place in the Gulf of Finland. **Figure 19** and **Figure 20** show the number and spatial distribution of collisions in the Gulf of Finland.



Figure 19

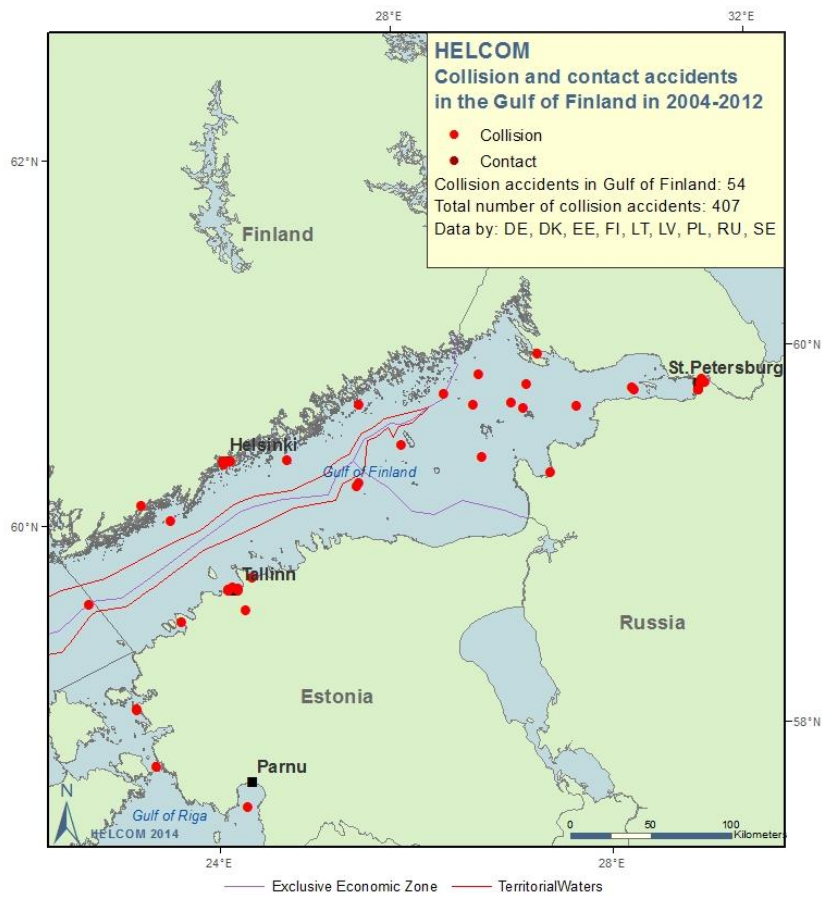


Figure 20

4.2 Groundings

In 2012, there were 46 reported groundings or strandings (hereafter referred to as groundings) in the Baltic Sea area accounting for 31% of the total number of reported accidents in 2012, which is the same share as for collisions and the collective category of other accidents. A slight increase in the number of groundings can be seen during recent years (**Figure 21**).⁷

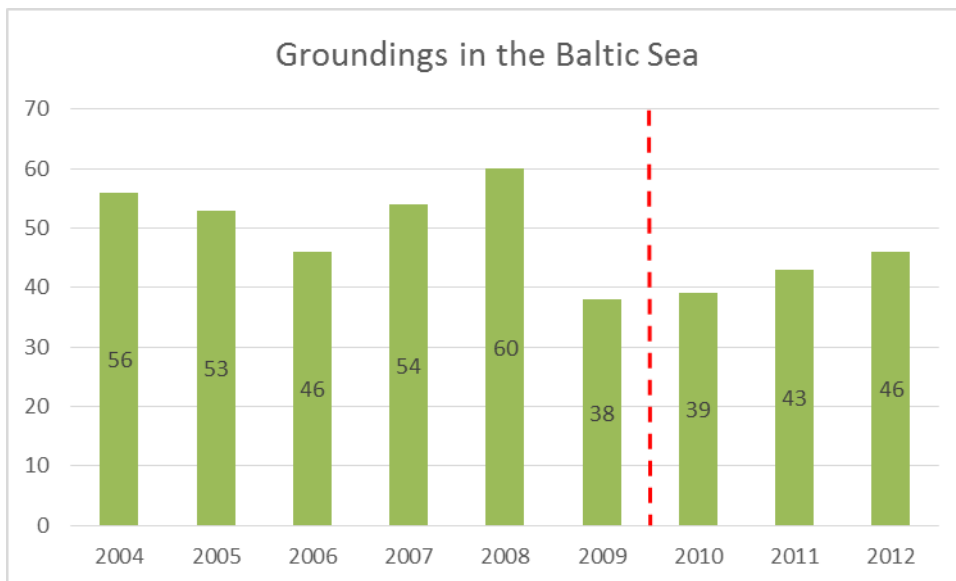


Figure 21

Figure 22 illustrates the presence or absence of a pilot on board vessels in cases of grounding accidents in 2012. In most cases (58%) information on the presence of a pilot was missing and in 46% of the cases no pilot was on board at the time of a grounding. In 2012, most reported groundings (46%) occurred with vessels having a draught of less than 7 meters (**Figure 23**). Small vessels are not covered by IMO's recommendations on the use of pilotage. Information on presence of pilot and draught size for vessels involved in groundings in 2012 was missing in many cases. Only 2% of the ships had a draught of 13-15 m and none had a draught of more than 15m.

⁷ The columns right of the vertical dotted red line in this graph include data from the new Danish accident database (see box on page 1).

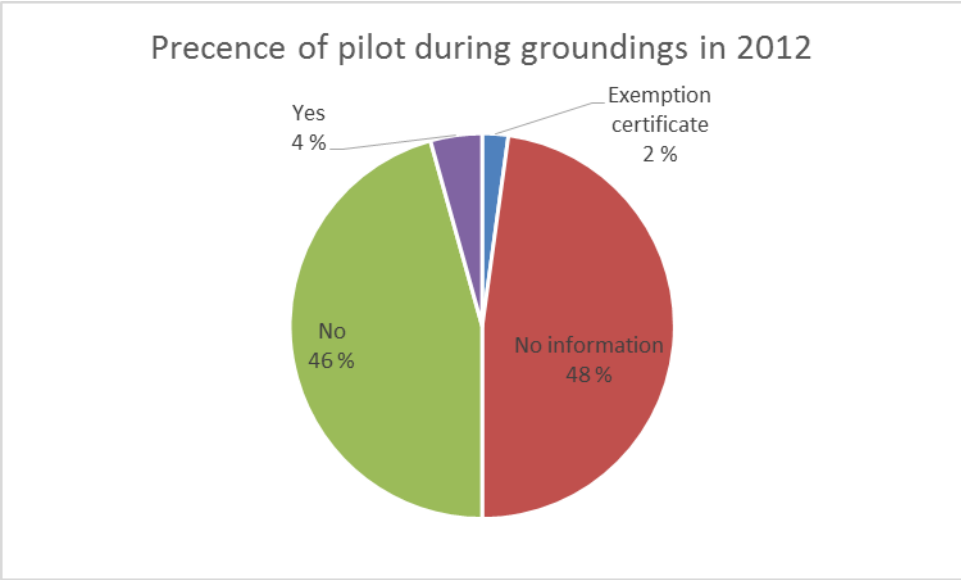


Figure 22

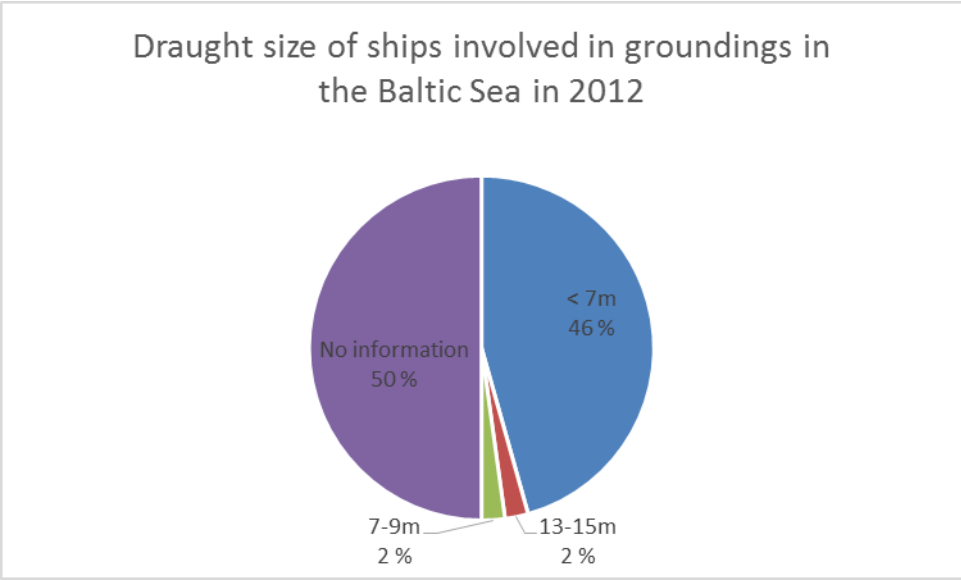


Figure 23

The map of reported groundings in 2012 (Figure 24) especially points to the Danish Straits and approaches to ports.

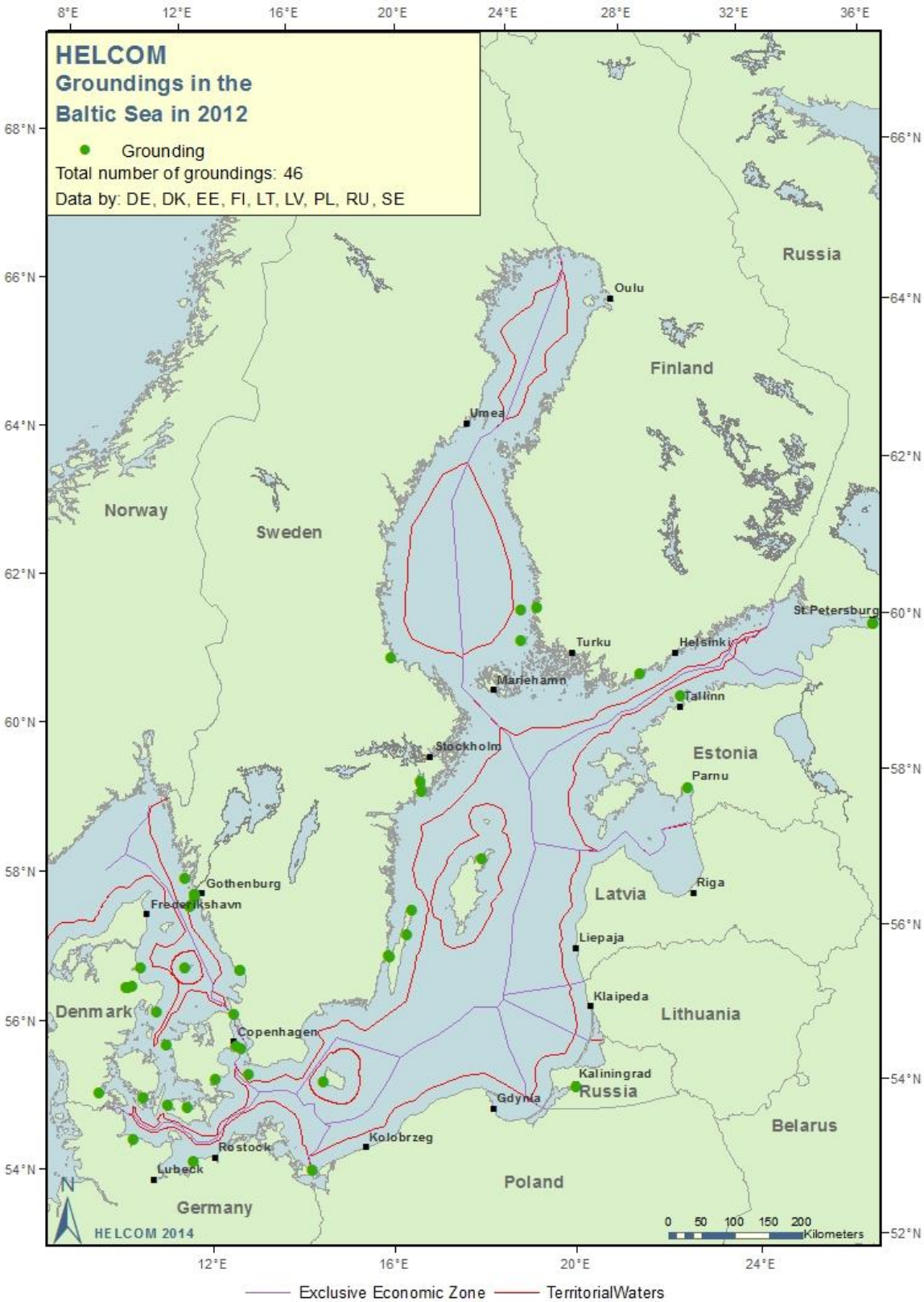


Figure 24

The map of the reported groundings in 2004-2012 (**Figure 25**) indicates that the areas of primary concern are the Danish Straits, Gulf of Finland, Åland/Archipelago Sea area, ports and near shore areas.

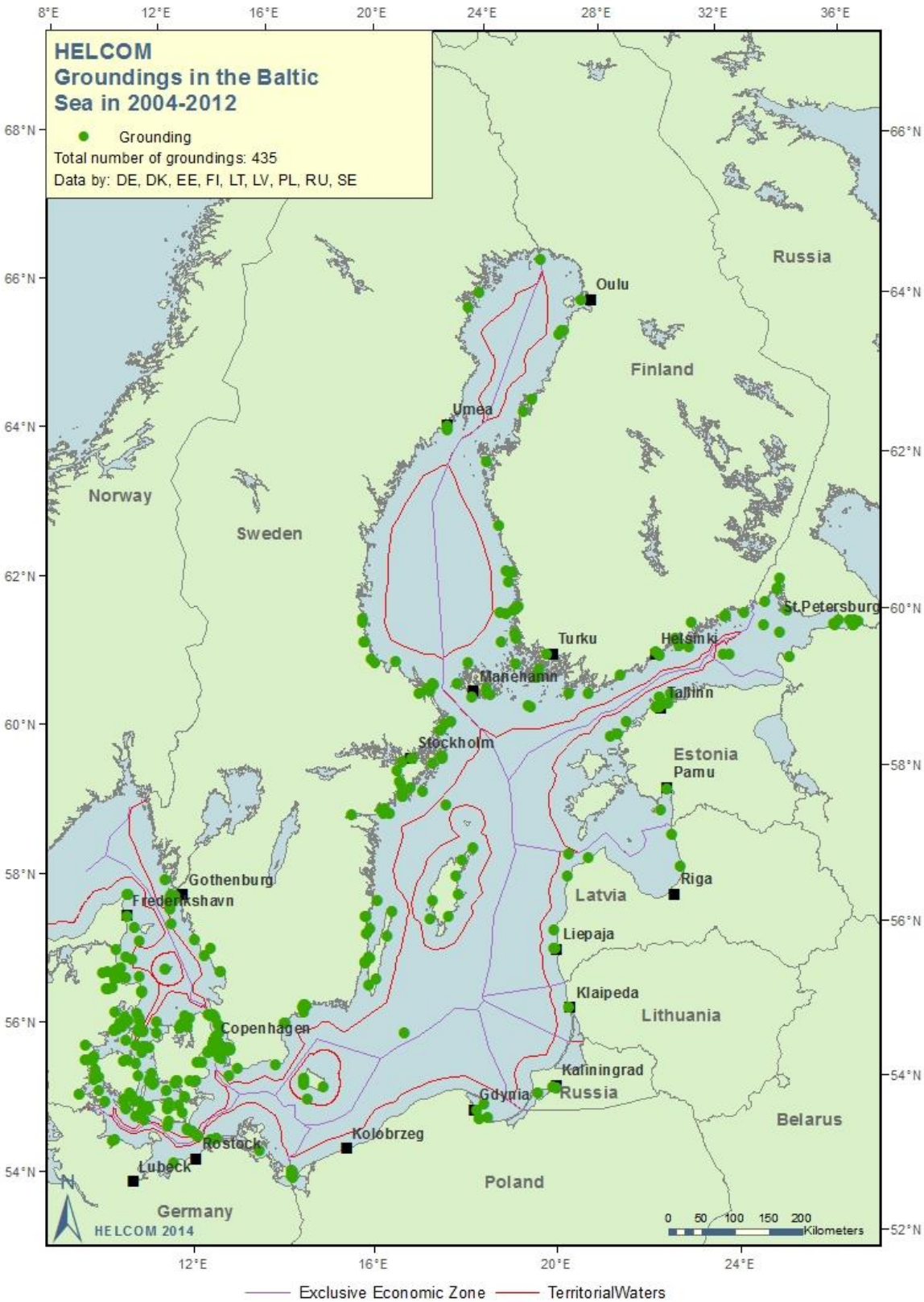


Figure 25

The southwestern Baltic Sea, including the Danish Straits, is the main problem area for groundings in Baltic, with 59% of the groundings in 2012 occurring in the area. **Figure 26**⁸ and **Figure 27** show the number and spatial distribution of groundings in the southwestern Baltic Sea in 2004-2012.

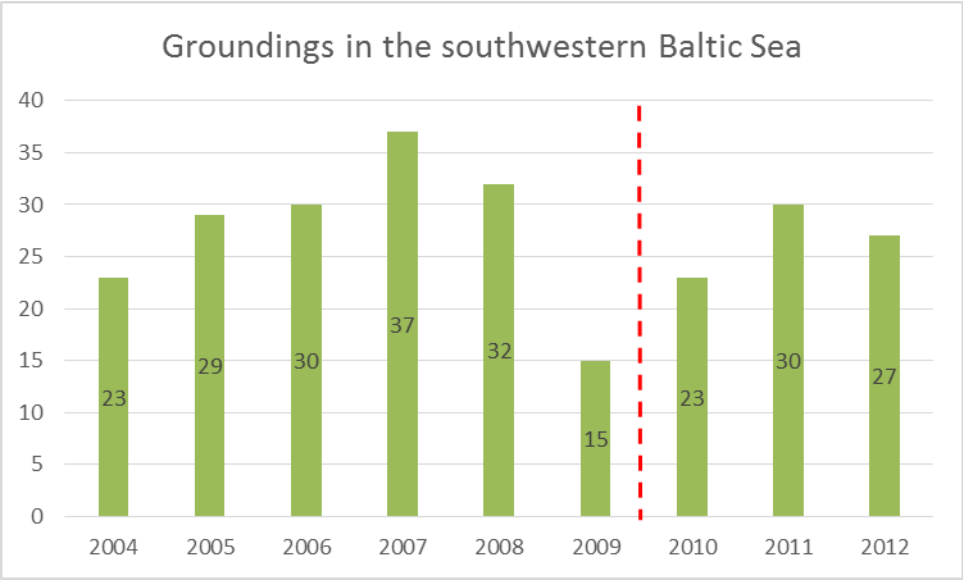


Figure 26

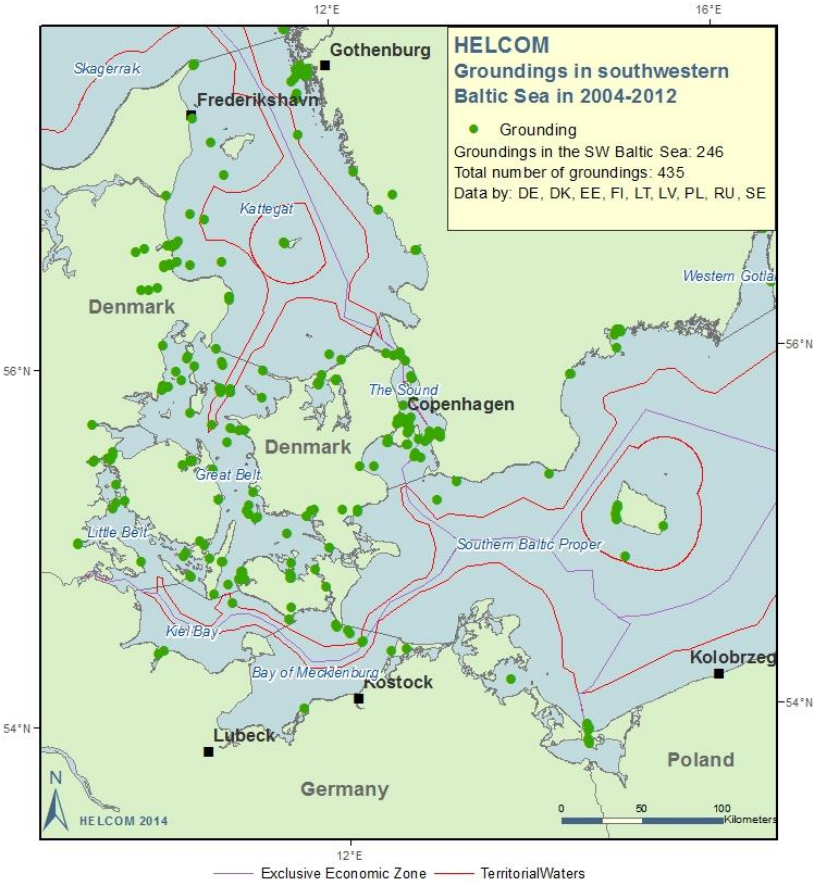


Figure 27

⁸ The columns right of the vertical dotted red line in this graph include data from the new Danish accident database (see box on page 1).

The number of the groundings in the Gulf of Finland has during the previous years been low with only a few groundings per year. In 2012 six groundings were reported in the areas, accounting for 13% of all groundings in the Baltic Sea, which is the same percentage as the average for the years 2004-2012. **Figure 28** and **Figure 29** show the number and spatial distribution of groundings in the Gulf of Finland.

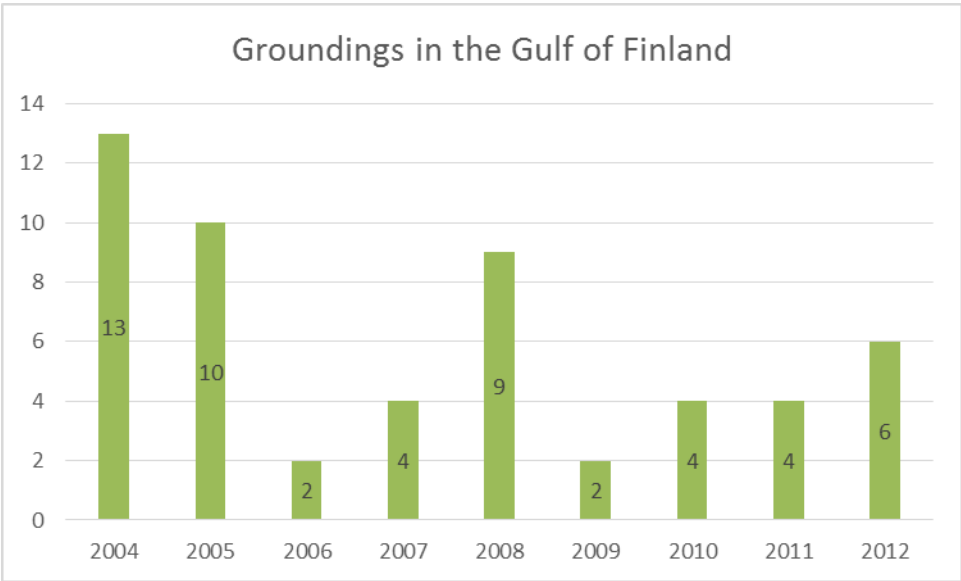


Figure 28

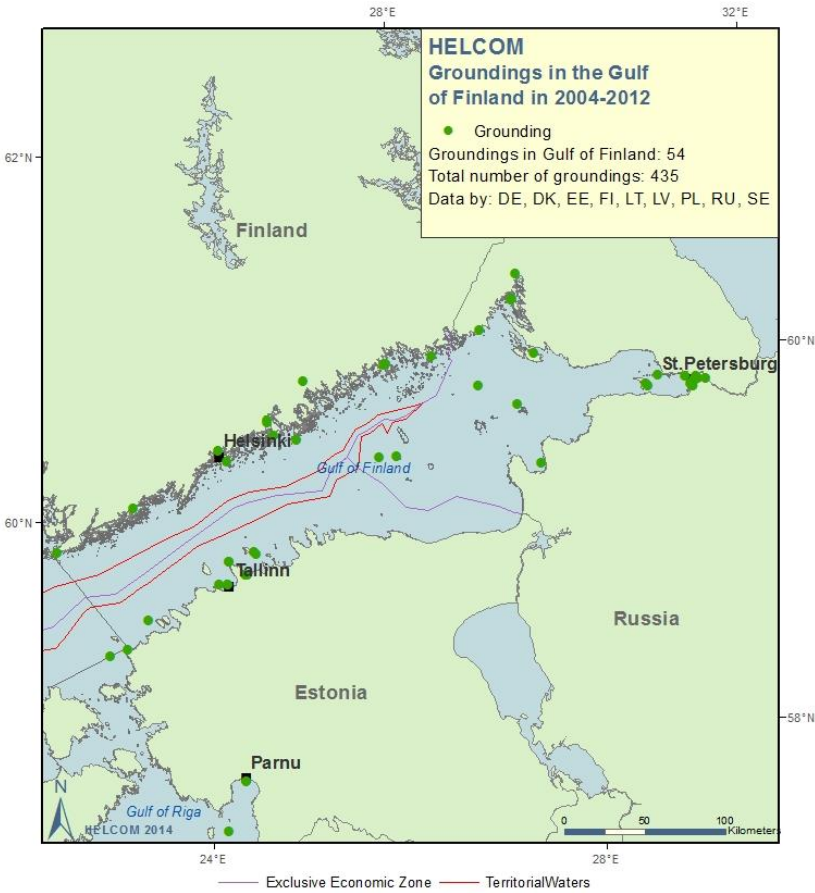


Figure 29

5 Types of vessels involved in the accidents

Cargo vessels were the most common type of ships involved in accidents in 2012 accounting for 48% of all vessels (**Figure 30**). Passenger vessels were involved in 24% of all reported accidents and tankers were involved in 13% of the accidents. Other unspecified types of vessels were involved in 15% of all accidents in 2012.

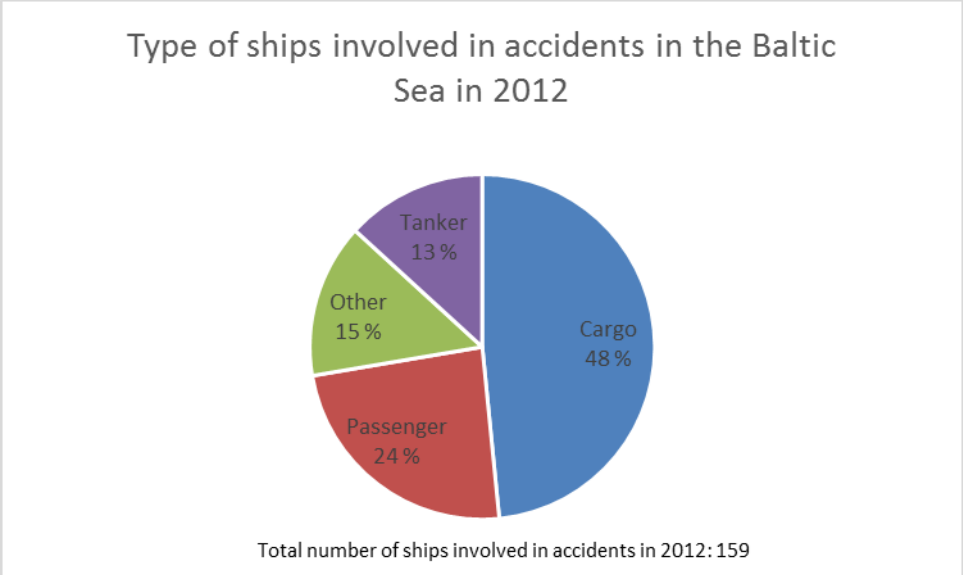


Figure 30

As tankers are the major issue of concern, a map on accidents involving tankers in 2004-2012 is presented in **Figure 31**. Of the 21 tankers involved in accidents in 2012, two were reported as single hulled and ten were double hulled. Data on hull type was not available for 43% of the accidents involving tankers.

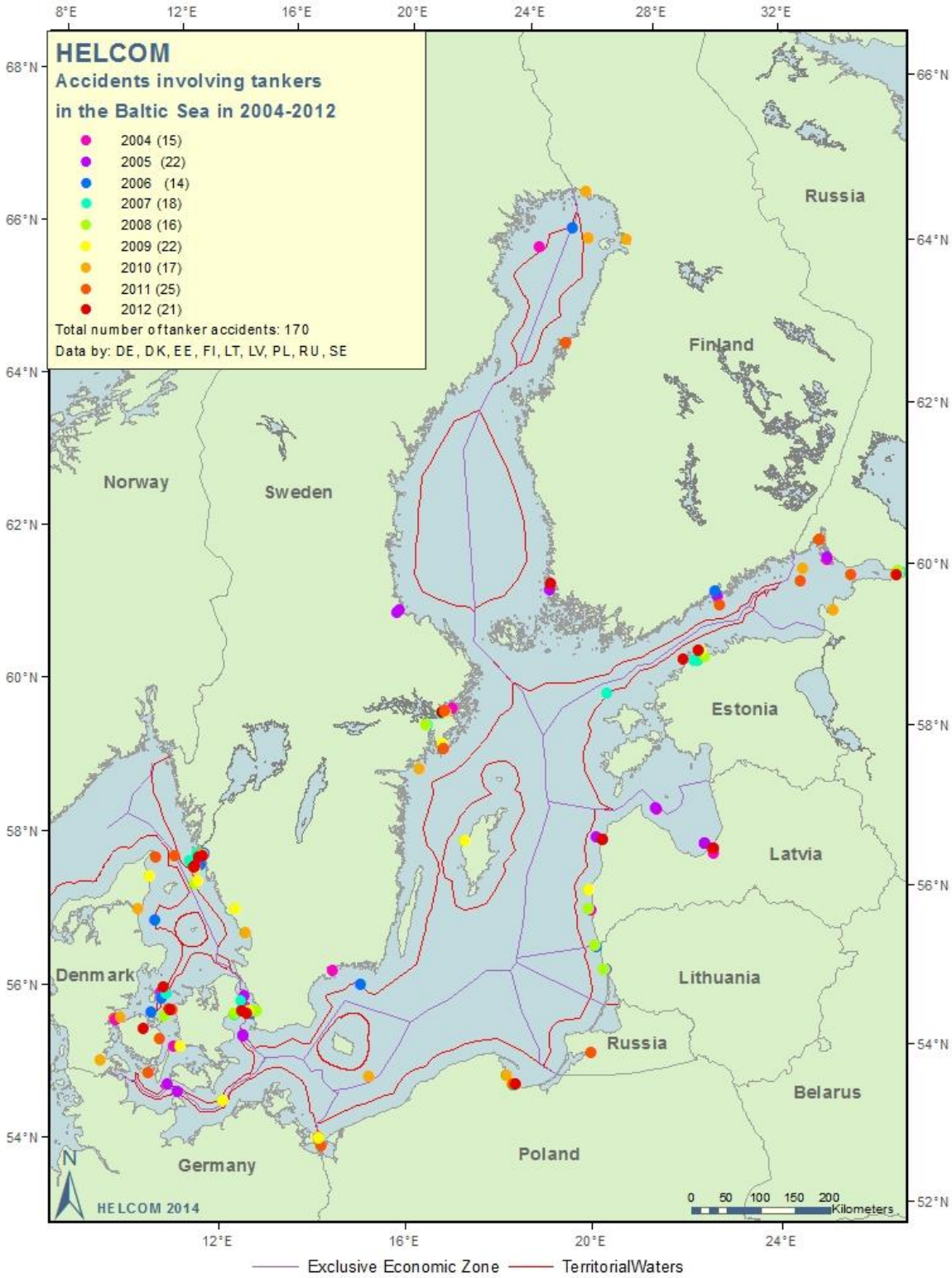


Figure 31

6 Causes of accidents

The main cause of accidents, accounting for 43% of all accidents in 2012, was human element as in many previous years. In 2012 in as much as 36% of the accidents the cause of the accidents was reported as unknown. Technical failure accounted for 17% of the cases while 4% of the accidents were due to external causes (**Figure 32**).

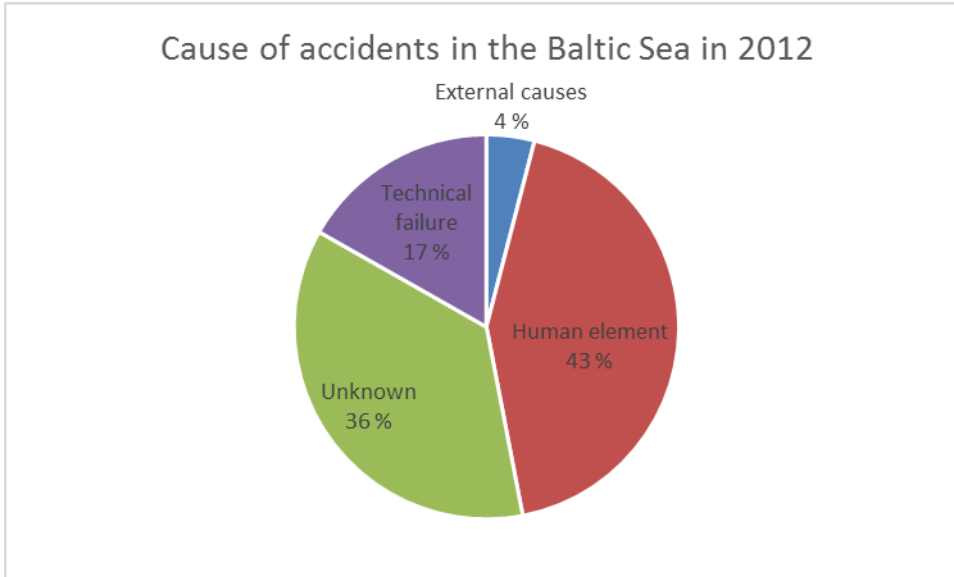


Figure 32

As a new component of the reporting in 2012, more detailed information was collected on the dimensions of the human element. In most cases (73%) no additional information was reported. However, from the data received, mistakes in the planning process or unintentional actions (slip and lapse) accounted for 16% and 9%, respectively, while violations only accounted for 2% (**Figure 33**).

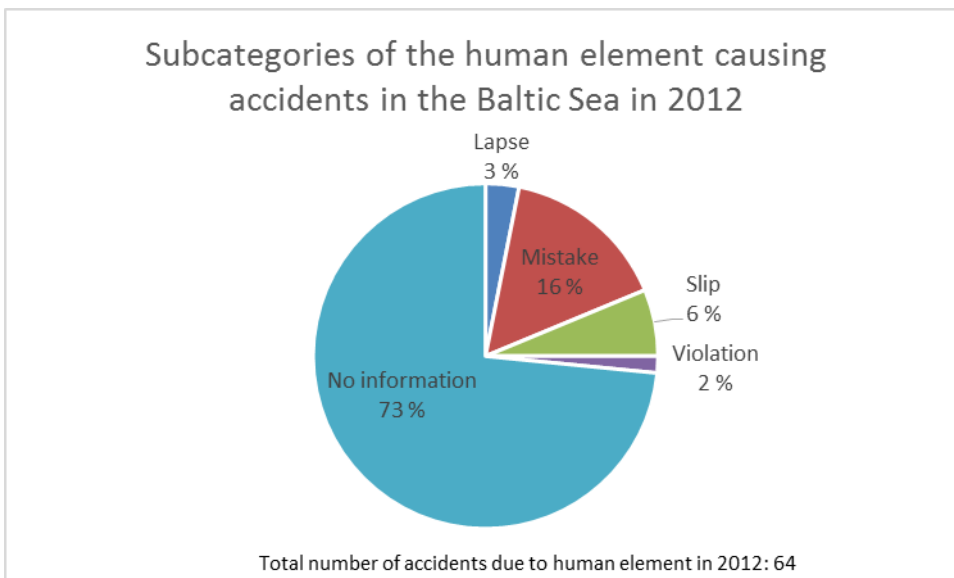


Figure 33

Spatial distribution of accidents with indication of the cause of the accidents in 2012 is presented in **Figure 34**.

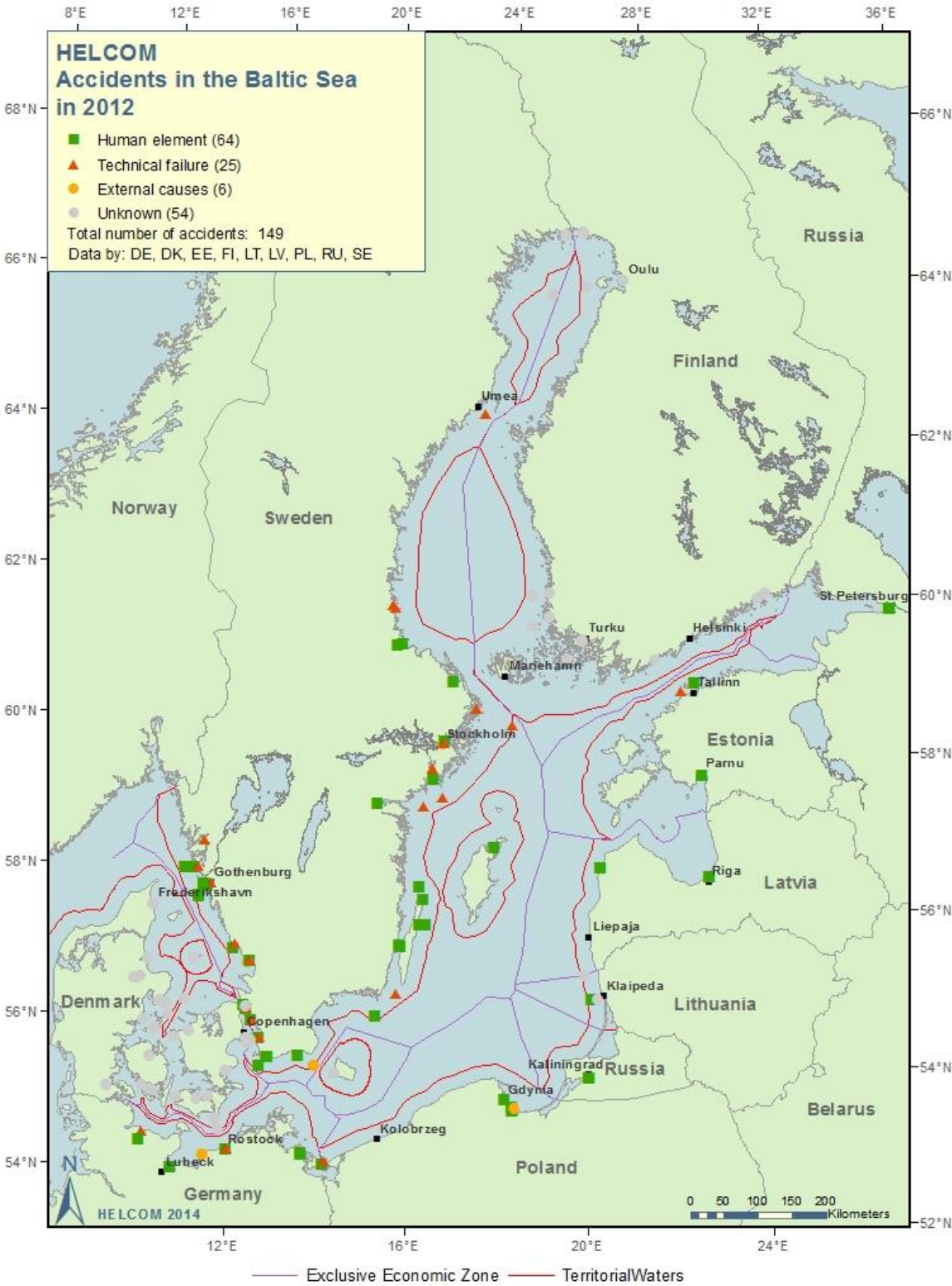


Figure 34

Of the reported accidents in 2012, 7 took place in icy conditions (**Figure 35**). No information was provided on ice presence for 77% of the accidents.

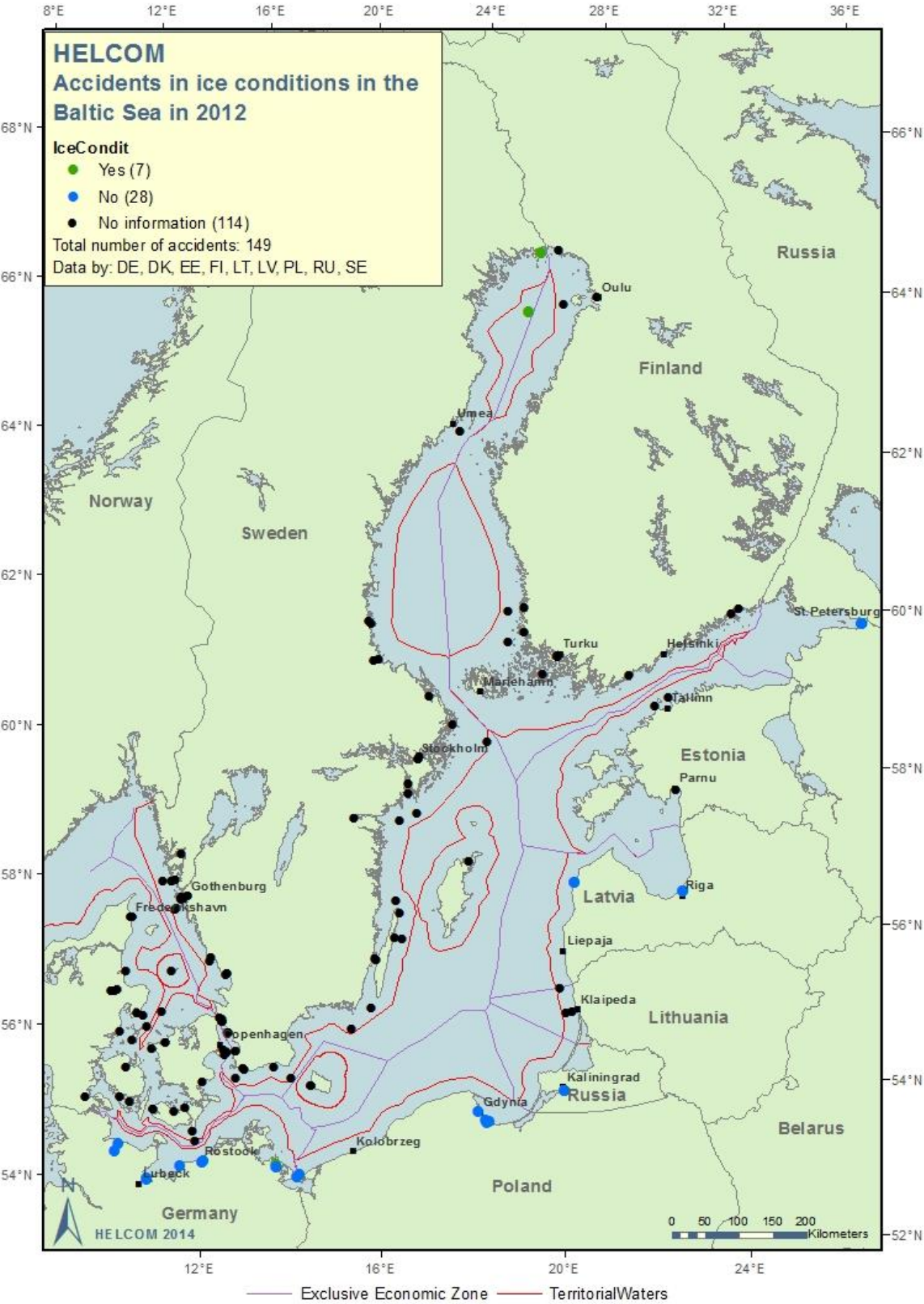


Figure 35

7 Accidents with pollution

According to the 2004-2012 data, 7% of the reported accidents ended up with some kind of pollution, which is the same percentage as for the accidents in 2012, with 10 out of the total 149 reported accidents resulting in pollution. All incidents with pollution in 2012 were pollution incidents occurring e.g. during fuel transfer except for one which was caused due to contact with fixed or floating object (**Figure 36**).

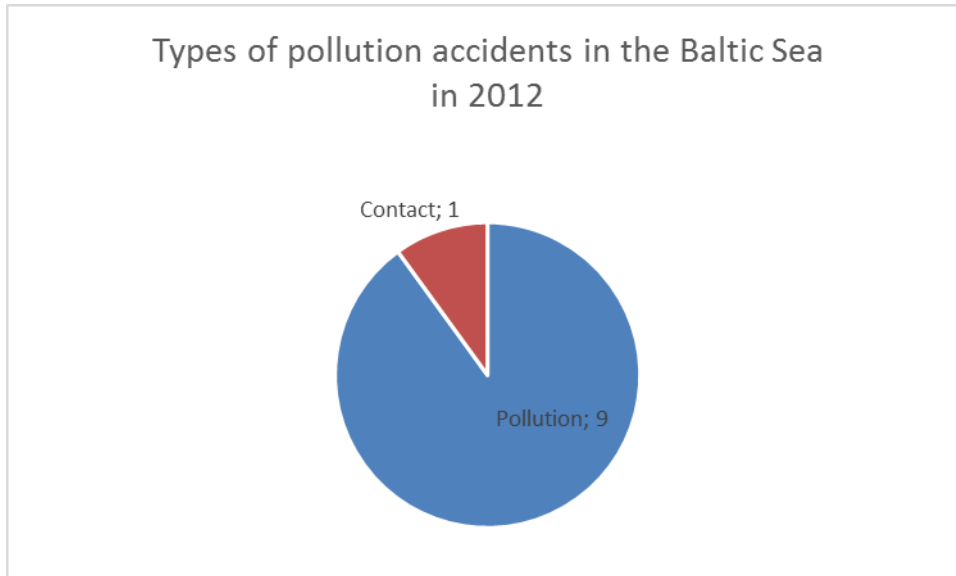


Figure 36

The type of vessels involved in pollution accidents in 2012 included four tankers, three cargo vessels and three vessels of some other type (**Figure 37**).

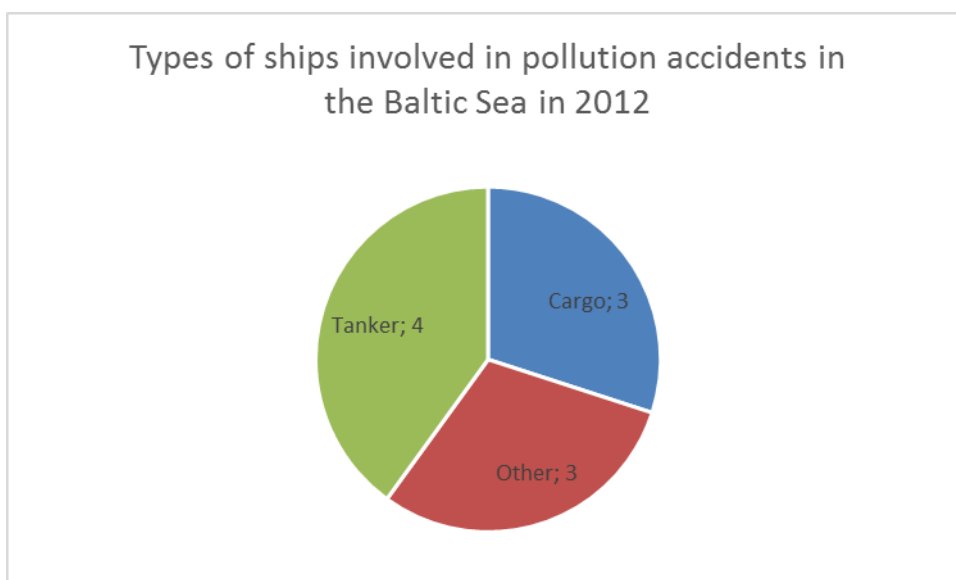


Figure 37

Eight out of the ten accidents resulting in pollution in 2012 occurred due to human element. The cause of the remaining two accidents was unknown (**Figure 38**).

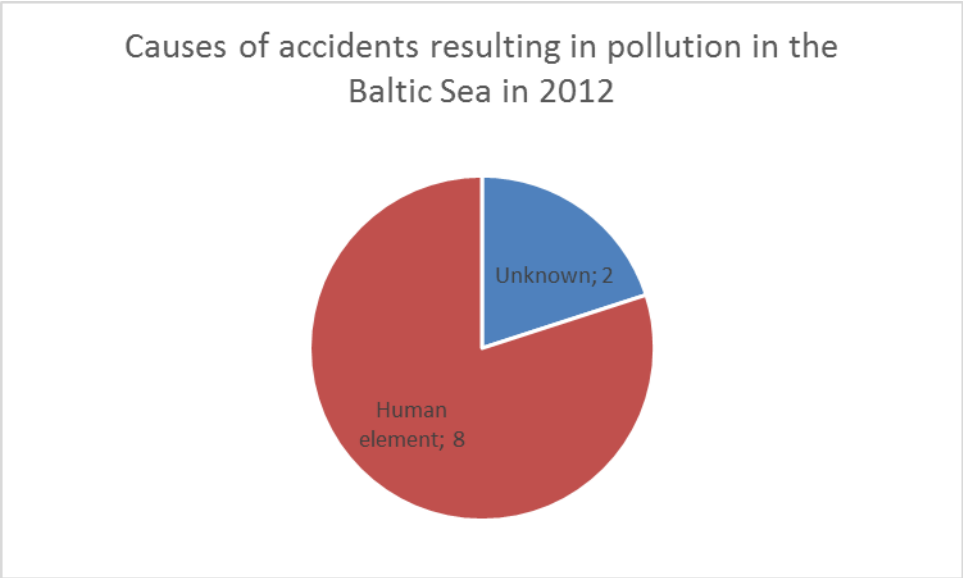


Figure 38

Special characteristics such as low salinity, small water volume, restricted connection to the ocean, seasonality and the ice cover during winter make the Baltic Sea highly vulnerable to the effects of oil spills which makes swift response very important. Intensive regional cooperation in the field of response and preparedness to spills in the Baltic Sea has been carried out within HELCOM since the 1970s (HELCOM RESPONSE Group). Due to such cooperation efforts the oil recovery rate in the Baltic Sea is generally much higher than the global average and, as proved by previous pollution accidents of regional importance, it can reach as much as 50%.

The spatial distribution of the accidents in 2012 resulting in pollution is presented in **Figure 39** and some additional details of the pollution accidents are contained in **Table 4**.

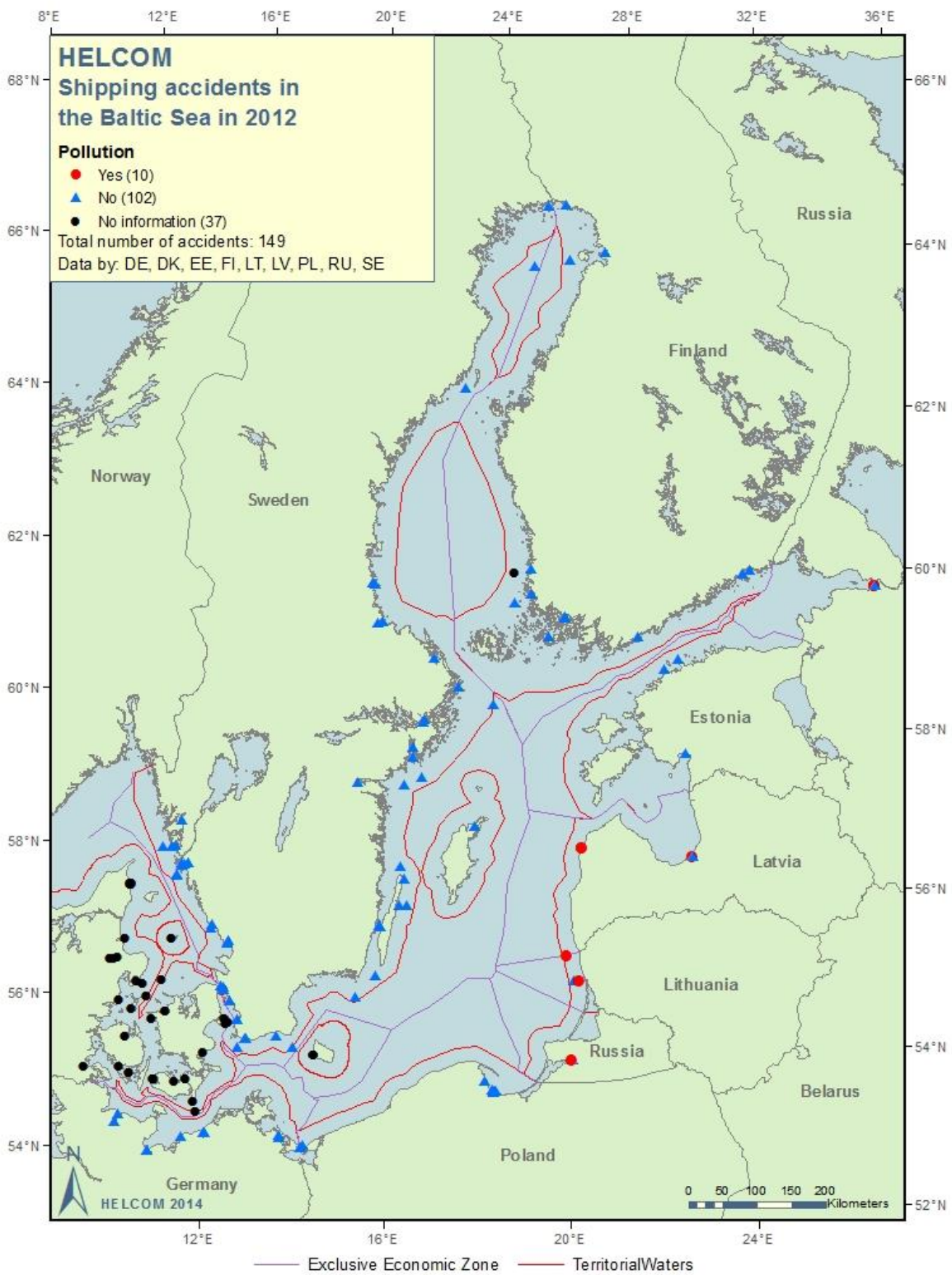


Figure 39
(Note that three pollution accidents took place near St Petersburg, two took place near Ventspils and one in the Sound)

Table 4 Data on accidents resulting in pollution in 2012.

Country waters	Date	Latitude	Longitude	Ship type(s)	Ship size (gt)	Cargo	Type of accident	Cause of accident	Type of pollution
Russia	1.1.2012	59,9000	30,2500	Cargo	n.i.	n.i.	Pollution	Human element	Fuel oil IFO-180 (mazut)
Latvia	8.1.2012	57,0310	24,1240	Tanker	3356	Ballast	Contact	Human element	Lubricant oil
Russia	30.3.2012	59,9000	30,2500	Tanker	6945	n.i.	Pollution	Human element	Mazut
Latvia	18.4.2012	57,4007	21,5456	Tanker	26218	Ballast	Pollution	Human element	Gasoil
Sweden	23.4.2012	56,0200	12,7000	Cargo	1525	Bulk (ore, coal, grain etc.)	Pollution	Human element	Diesel fuel
Russia	30.4.2012	59,9000	30,2500	Cargo	16623	n.i.	Pollution	Human element	Fuel oil IFO-180 (mazut)
Russia	19.7.2012	54,6833	20,5167	Other	n.i.	No cargo	Pollution	Human element	Mazut
Latvia	26.7.2012	57,4000	21,5448	Tanker	26634	Ballast	Pollution	Human element	Gasoil
Lithuania	3.11.2012	55,6950	20,9800	Other	869	n.i.	Pollution	Unknown	Dumping of 1249 mt
Lithuania	18.12.2012	56,0317	20,7617	Other	437	n.i.	Pollution	Unknown	Dock

More information

For more information about maritime traffic and accidents, see the HELCOM website:

<http://www.helcom.fi/action-areas/shipping/>

The complete HELCOM dataset on shipping accidents from 1989-2012 can be accessed via the HELCOM map and data service (<http://www.helcom.fi/baltic-sea-trends/data-maps/helcom-map-and-data-service>) for viewing, querying and/or downloading. Information on establishing a *web map service* connection to the dataset is also available via the HELCOM map and data service

HELCOM work in the maritime field

HELCOM is a regional intergovernmental organization which was established with the *Convention on the Protection of the Marine Environment of the Baltic Sea Area* (Helsinki Convention), a regional treaty originally signed in 1974 by the coastal countries of the Baltic Sea. This cooperation, since 1992 covering all the Baltic Sea countries and the European Union, has from the start involved work on clean and safe shipping and response to pollution at sea as key elements.

The Declaration on the safety of navigation and emergency capacity in the Baltic Sea area (HELCOM Copenhagen Declaration), adopted on 10 September 2001 in Copenhagen by Ministers of Transport of the Baltic Sea region, agreed to a number of further measures on safety of navigation, later incorporated to the Helsinki Convention Annex IV "Prevention of pollution from ships".

The HELCOM MARITIME Group works within the specific topic of cleaner and safer shipping in the Baltic Sea region since 1976 and consists of the representatives of competent maritime authorities or Ministries of the all coastal states and the European Union.

The HELCOM RESPONSE Group works on operational regional oil spill response and aerial surveillance in the Baltic Sea since 1977 and consists of governmental authorities responsible for response to pollution at sea and on the shore.

Numerous observers from the shipping industry, ports and environmental NGOs provide their valuable practical experience to the cooperation within these groups.

ANNEX 1

Guidelines for filling-in the HELCOM Reporting Format on Shipping Accidents

Selection of accidents

All accidents (including, but not limited to grounding, collision with other vessel or contact with fixed structures (offshore installations, wrecks, etc.), disabled vessel (e.g. machinery and/or structure failure), fire, explosions, etc.), which took place in territorial seas or EEZ of the Contracting Party and involved tankers over 150 GT and/or other ships over 400 GT should be reported to the HELCOM Secretariat using the agreed reporting format, irrespectively if there was pollution or not.

The reporting format is provided as an excel file and includes the following information entries:

Country	Country in whose water the accident took place	
Year	Year of accident	
Date (dd.mm.yyyy)		
Time (hh:mm)		
Latitude (DD)	Please provide latitude in decimal degrees, e.g. 57.123	
Longitude (DD)	Please provide longitude in decimal degrees, e.g. 18.456	
Location of accident	Fixed answers; please choose from: “Port”, “Port approach”, “Open sea” or “n.i.” (no information available). The category “Open sea” covers all accidents at sea i.e. not defined as “Port” or “Port approach” . Categories are used only for the purpose of statistics and are too be defined according to national practice of the reporting authority.	
Ship 1	Ship 1 name, ID, flag	
	Ship 1 AIS category	Fixed answers; please choose from: “Tanker”, “Cargo”, “Passenger” or “Other” .
	Ship 1 type (detail)	Please, provide further details on type of ship, e.g. tanker (oil, chemical, gas tanker), cargo ship (general cargo, bulk carrier, etc) and other ships (icebreaker, tug boat, ro-ro, etc).
	Hull construction (tankers only)	Fixed answers; please choose from: “Single, hull”, “Double hull”, “Double bottom”, “Double sides”, “Mid deck” or “Other” .
	Size (gt)_ship1	
	Draught (m)_ship1	Fixed answers; please choose from: “< 7m”, “7-9m”, “9-11m”, “11-13m”, “13-15m”, “>15m” or “n.i.” .
Ship 2 (if relevant) <i>Fill this in only if accident involved two ships, e.g. in case of a collision</i>	Ship 2 name, ID, flag	
	Ship 2 AIS category	Fixed answers; please choose from: “Tanker”, “Cargo”, “Passenger” or “Other” .
	Ship 2 type (detail)	Please, provide further details on type of e.g. tanker (oil, chemical, gas tanker), cargo ship (general cargo, bulk carrier) and other ships (icebreaker, tug boat, ro-ro etc).
	Hull construction (tankers only)	Fixed answers; please choose from: “Single, hull”, “Double hull”, “Double bottom”, “Double sides”, “Mid deck” or “Other” .
	Size (gt)_ship2	
	Draught (m)_ship2	Fixed answers; please choose from: “< 7m”, “7-9m”, “9-11m”, “11-13m”, “13-15m”, “>15m” or

		"n.i."
Type of cargo	If relevant, please specify amount and type of cargo, e.g. people (passengers and crew), oil, dangerous goods, harmful substances, bunker, ballast and empty, other.	
Type of accident	Fixed answers; please choose from: "Collision" (striking or being struck by another ship) "Stranding/grounding" (being aground, or hitting/touching shore or sea bottom or underwater objects (wrecks, etc.)) "Contact" (striking any fixed or floating object other than those included previously) "Pollution" (e.g. during fuel transfer) "Other type" including: <ul style="list-style-type: none"> - Fire or explosion - Hull failure/ failure of watertight doors/ports etc. - Machinery damage - Damages to ships or equipment - Capsizing/listing - Missing (assumed lost) - Accidents with life-saving appliances - Other 	
Type of collision (<i>collision accidents only</i>)	Fixed answers; please choose from: "With vessel" , "With vessel and object" or "n.i." .	
Further details about accident	More detailed information, especially if "Other" was selected in the "Type of accident" column.	
Cause of accident	Fixed answers; please choose from: "Human element" (violations or error) "Structural failure" "Technical failure" (machinery/equipment incl. design errors) "Cargo related" "External causes" (including environment, navigational infrastructure, criminal acts etc.) "Unknown"	
Human element subcategories	Please provide further details if "Human element" was selected in the previous column. Fixed answers; please choose from: "Violation" (deliberate decision to act against a rule or plan) "Slip" (unintentional action where failure involves attention) "Lapse" (unintentional action where failure involves memory) "Mistake" (an intentional action where there is an error in the planning process; there is no deliberate decision to act against a rule or procedure):	
Accident in ice conditions	Fixed answers, please choose from: "Yes" , "No" or "n.i." .	
Crew trained in ice navigation	Fixed answers, please choose from: "Yes" , "No" or "n.i." .	
Further details on cause of accident	Please, provide further details on cause e.g. hard winds, heavy waves, reduced visibility, etc.	
Pilot on board	Fixed answers, please choose from: "Yes" , "No" , "Exemption certificate" or "n.i." .	
Offence against rules or regulations	Please, specify e.g. use of pilot, routeing, weather restriction, deficiency of the ship, operation of the ship, COLREG, speed limits, max draft, others.	
Damage	Please specify, e.g. lives (crew and passengers), total loss, leakage, others.	

Need of assistance	Please specify, e.g. SAR, towing, lightering, salvage, others.
Pollution	Fixed answers; please choose from: “Yes” , “No” or “n.i.” .
Amount of pollution (m³)	
Amount of pollution (tonnes)	
Type of pollution	Please, specify e.g. crude oil, diesel fuel, other.
Consequences/response action	Please, specify e.g. consequences of pollution, response to contamination taken, amount of pollution recovered, etc.
Additional info	Any other relevant information, e.g. needed to evaluate the limitation of data, etc.



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