Baltic Marine Environment Protection Commission

Annual report on

Shipping accidents in the Baltic Sea in 2013

Photo: Swedish Coast Guard

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1 Introduction

Annual reports on shipping accidents in the Baltic Sea area have been compiled by HELCOM since year 2000. According to an 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). Some further fine-tuning was also made to the reporting in 2013. Attached to this report are the guidelines for the 2013 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 2013 as well as for the longer term data series for 2004-2013. All Baltic Sea coastal states (Denmark, Estonia, Finland, Latvia, Lithuania, Poland, Russian Federation and Sweden) have provided national reports on shipping accidents in 2013. This report was compiled by the HELCOM Secretariat [and approved for publication by the HELCOM Maritime Working Group].

Secretariat note on the accident data reported by Denmark:

Please note that a major revision of the shipping accidents database of Denmark, maintained by the Danish Maritime Agency, took place in 2013. 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. 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.

In this report the 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.

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 new passage line "Sundet Syd" in the southern end of the Sound was taken into use for this report as the previously used passage line "Drodgen" captured both the traffic from the north and the south including a lot of small ships and thus gave a misleading indication of the traffic intensity in the area.

A snapshot illustrating the spatial distribution of shipping activities in the Northern Baltic at a specific moment can be seen in **Figure 3** and in the Southern Baltic Sea in **Figure 4**. **Figure 5** shows spatial distribution of shipping traffic in the Baltic Sea based on AIS signals during one year (2011, monthly averages). 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 2013 decreased compared to the previous year (2012) with roughly 350 000 ship crossings in total in 2013 in the used passage lines. The decrease in 2013 as well as the previous decrease in 2009 and 2010, especially for cargo ships, is likely due to decreased shipping activity resulting from the economic recession. The same trend is shown for the AIS lines "Skaw" (**Figure 7**), where the ships enter and leave the Baltic Sea, and for the AIS line "Gulf of Finland" (**Figure 8**), which captures the oil transports to and from some of the biggest oil terminals in the Baltic Sea.

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.

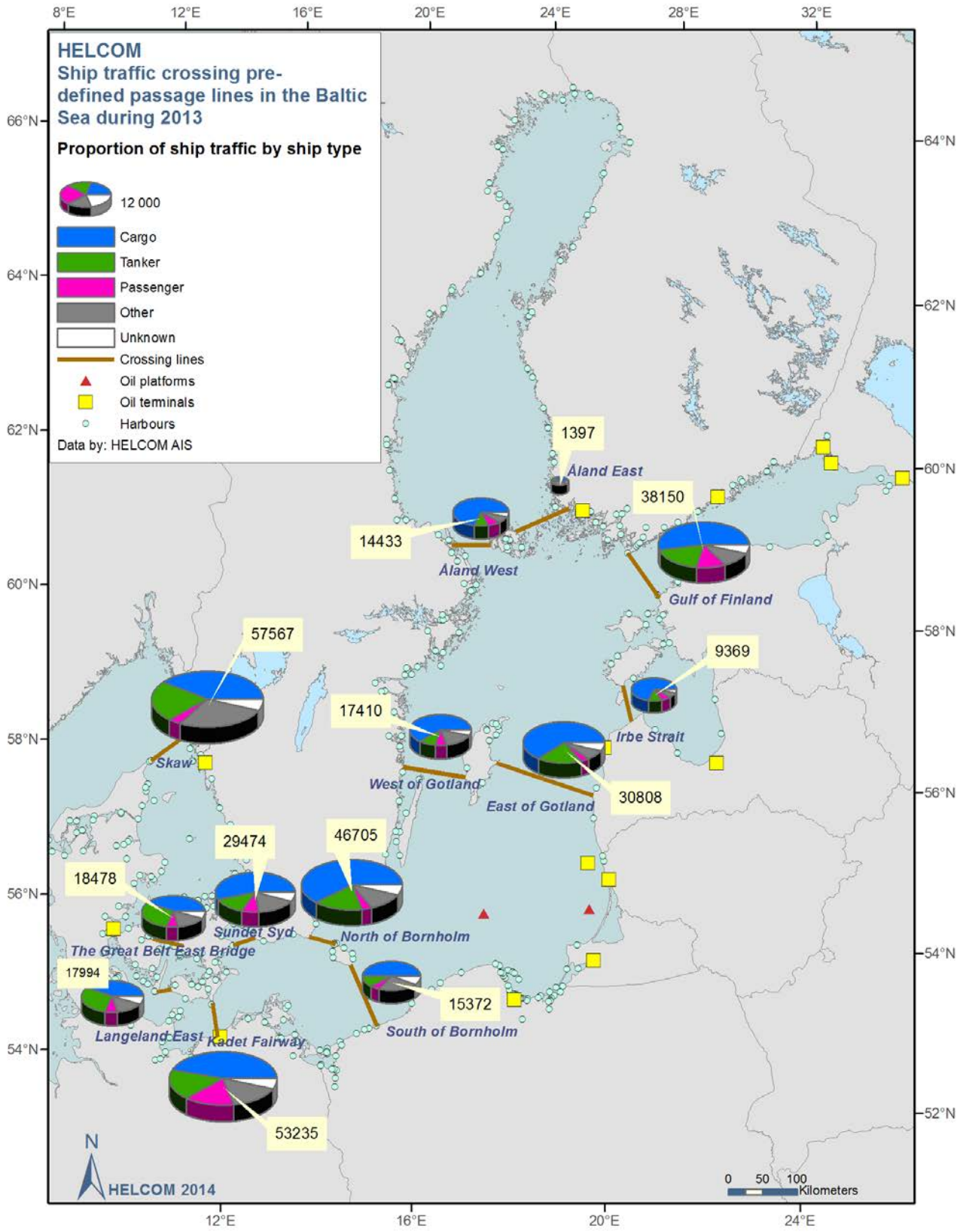

Figure 1. Number of ships crossing AIS fixed lines in the Baltic Sea in 2013 according to the type of the vessels.

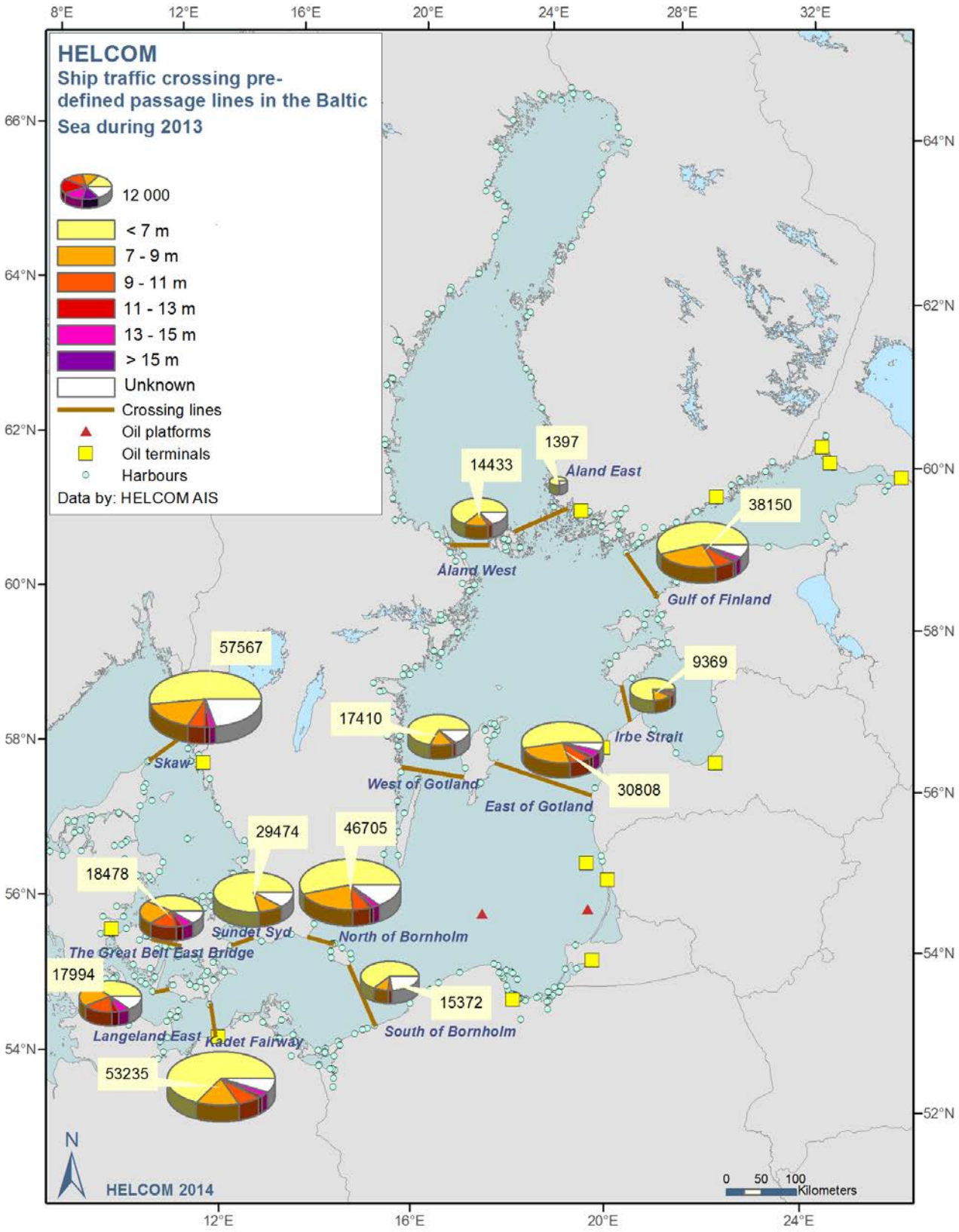

Figure 2 Number of ships crossing AIS fixed lines in the Baltic Sea in 2013 according to the draught.

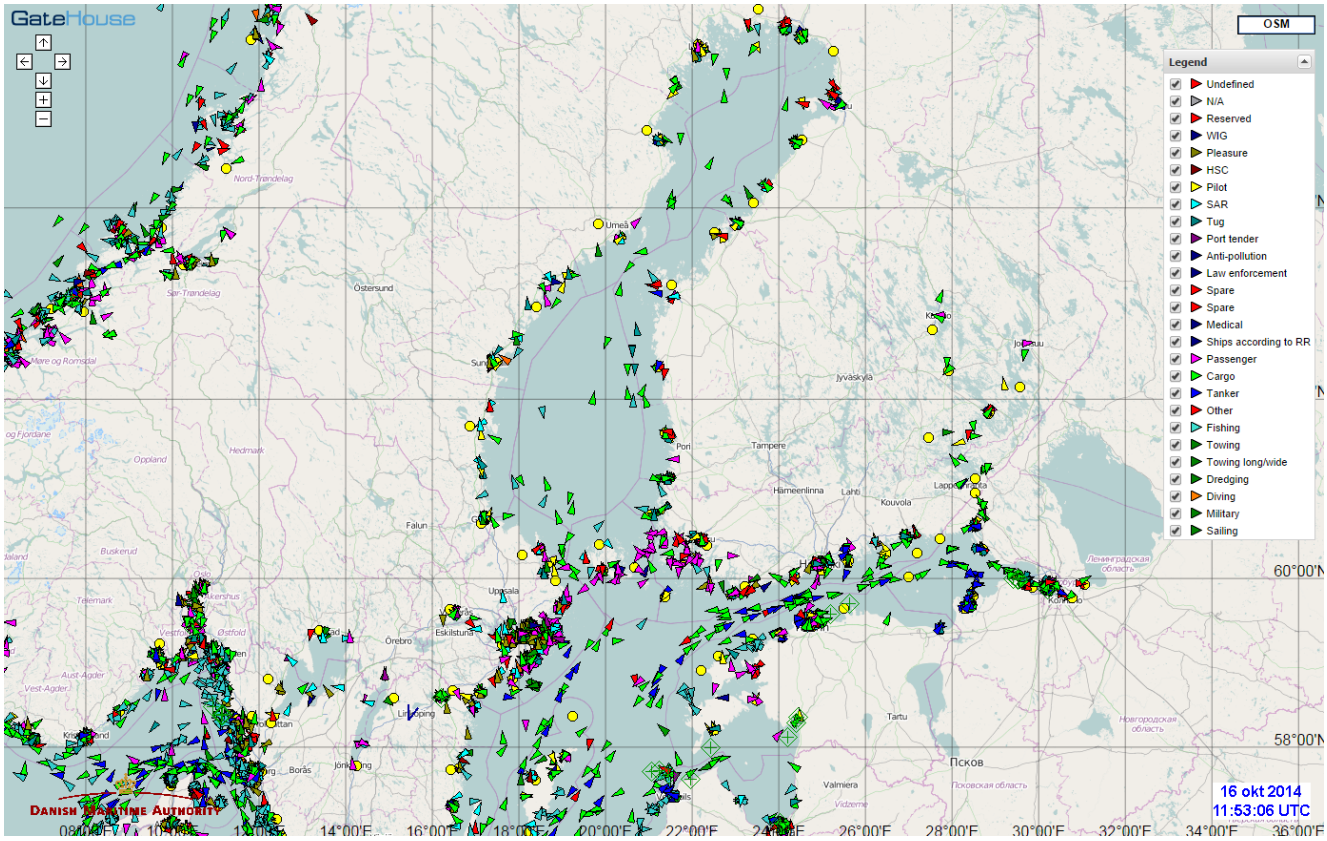

Figure 3 Snapshot of ship traffic in the Northern Baltic Sea on 16 October 2014. Note: the yellow dots illustrate AIS stations and the arrowheads depict different types of ships and direction of travel.

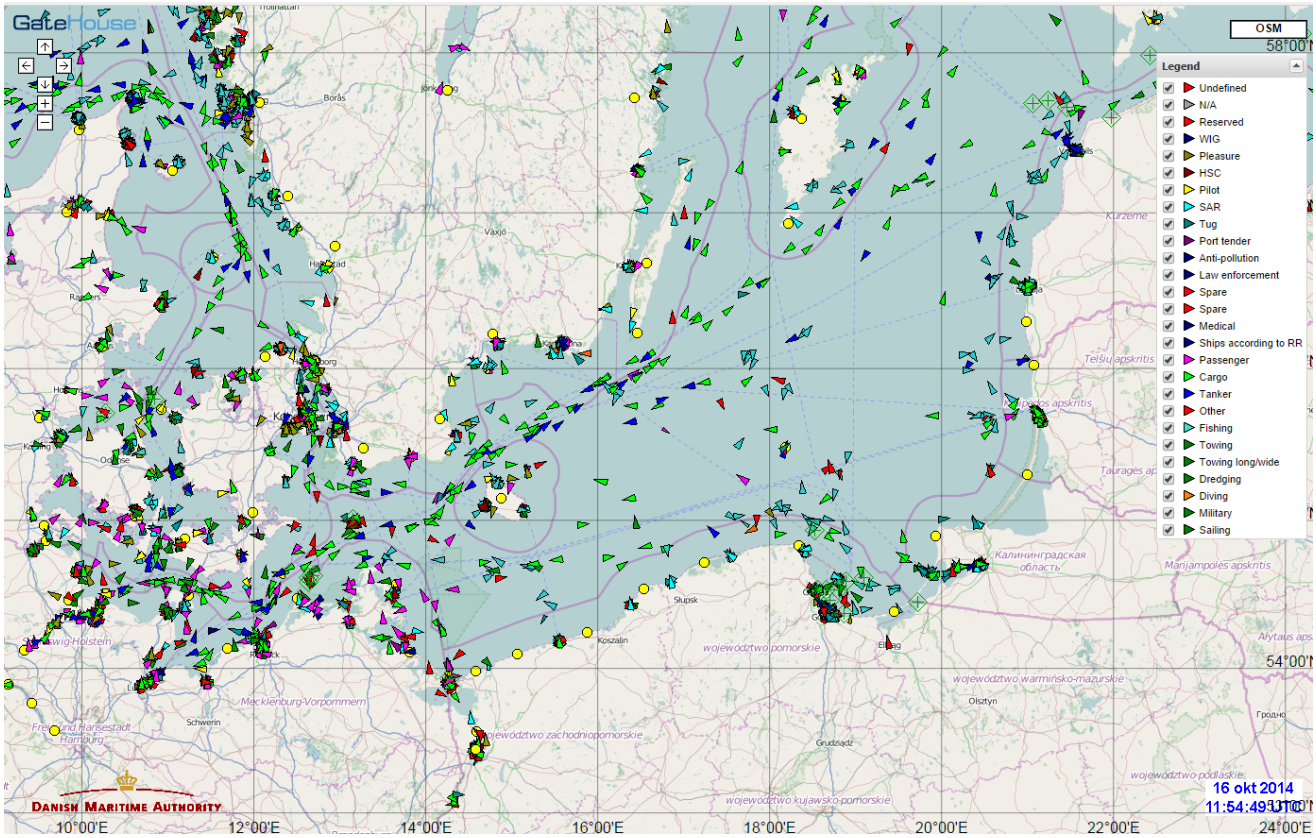

Figure 4 Snapshot of ship traffic in the Southern Baltic Sea on 16 October 2014. Note: the yellow dots illustrate AIS stations and the arrowheads depict different types of ships and direction of travel.

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 2013 according to the type of the vessels.

Location	Type of ship					
	Passenger	Cargo	Tanker	Other	Unknown	Total
Skaw	2394	24188	10523	17690	2772	57567
Great Belt East Bridge	1544	7961	4925	3079	969	18478
Sundet Syd	2806	16055	3778	5168	1667	29474
Langeland East	1590	7742	4799	2783	1080	17994
KadetFairway	10171	24556	7590	8600	2318	53235
North of Bornholm	1903	27875	9232	5434	2261	46705
South of Bornholm	920	7701	1468	4143	1140	15372
West of Gotland	1498	10502	1850	2835	725	17410
East of Gotland	1220	18926	7010	2149	1503	30808
Åland West	1231	10039	1608	980	575	14433
Åland East	13	593	105	591	95	1397
Gulf of Finland	5261	20113	7118	3975	1683	38150
Irbe Strait	778	6519	1187	532	353	9369
Total	**31329**	**182770**	**61193**	**57959**	**17141**	**350392**
Percentage of total	**9**	**52**	**17**	**17**	**5**	**100**

Table 2 Number of ships crossing AIS fixed lines in the Baltic Sea in 2013 according to the draught.

Location	Draught							
	<7 m	7-9 m	9-11 m	11-13 m	13-15 m	> 15	Unknown	Total
Skaw	29934	9087	3883	1106	1349	221	11987	57567
Great Belt East Bridge	7620	3545	3198	846	1233	106	1930	18478
Sundet Syd	23023	3461	4	1	0	9	2976	29474
Langeland East	6883	3522	3214	845	1279	100	2151	17994
KadetFairway	34483	9267	3996	833	1276	96	3284	53235
North of Bornholm	25318	10183	3417	698	1192	103	5794	46705
South of Bornholm	9607	1639	440	90	49	0	3547	15372
West of Gotland	11808	2836	429	29	51	2	2255	17410
East of Gotland	16259	7993	3055	579	1222	164	1536	30808
Åland West	9118	2607	495	25	59	2	2127	14433
Åland East	1041	51	7	0	0	0	298	1397
Gulf of Finland	20827	10091	3059	451	935	171	2616	38150
Irbe Strait	7123	1415	443	58	122	2	206	9369
Total	**203044**	**65697**	**25640**	**5561**	**8767**	**976**	**40707**	**350392**
Percentage of tot.	**58**	**19**	**7**	**2**	**3**	**0**	**12**	**100**

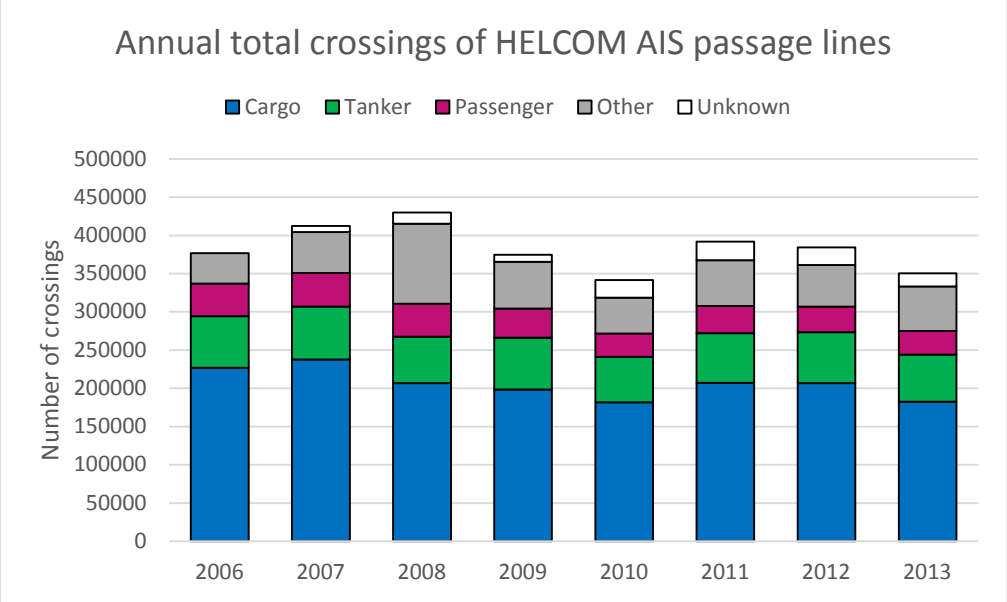

Figure 6 Number of ships crossing fixed AIS lines in the Baltic Sea during 2006 - 2013, shown here grouped by ship type**.**

Table 3 Total number of ships crossing all fixed HELCOM AIS lines in the Baltic Sea during 2006-2013.

Year	Passenger	Cargo	Tanker	Other	No info	Total
2006	42731	226855	67458	39627	0	376671
%	11	60	18	11	0	100
2007	43998	237740	69281	53225	8204	412448
%	11	58	17	13	2	100
2008	43060	206755	60746	104814	14689	430064
%	10	48	14	24	3	100
2009	37994	198427	68008	61014	9234	374677
%	10	53	18	16	2	100
2010	30471	181932	59409	46950	23028	342754
%	9	53	17	14	7	100
2011	35398	207273	64957	60123	23948	391699
%	9	53	17	15	6	100
2012	33193	207056	66524	54627	22959	384359
%	9	54	17	14	6	100
2013	31329	182770	61193	57959	17141	350392
%	9	52	17	17	5	100

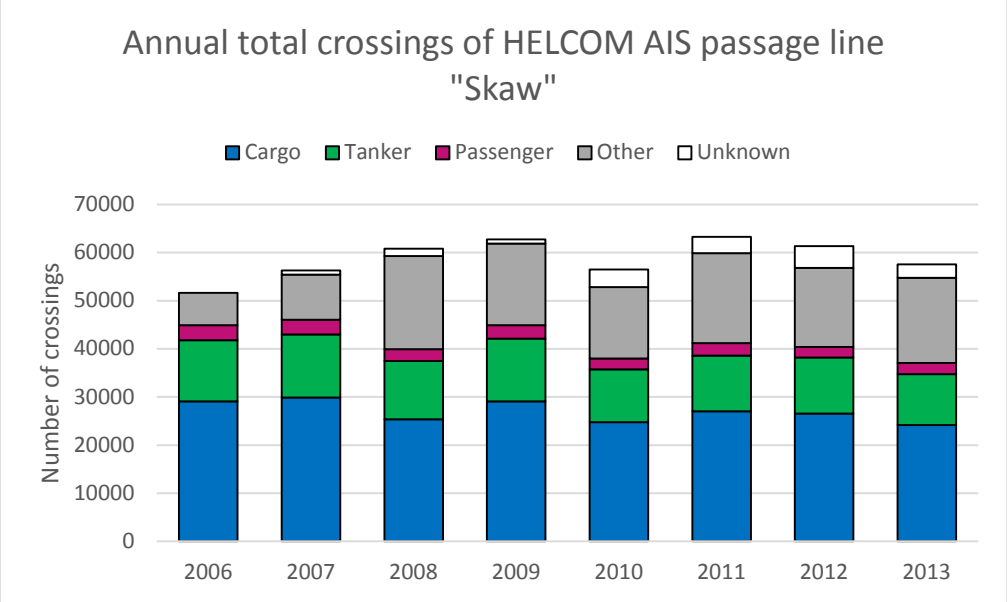

Figure 7 Number of ships crossing the fixed AIS line "Skaw" during 2006 – 2013, shown here grouped by ship type.

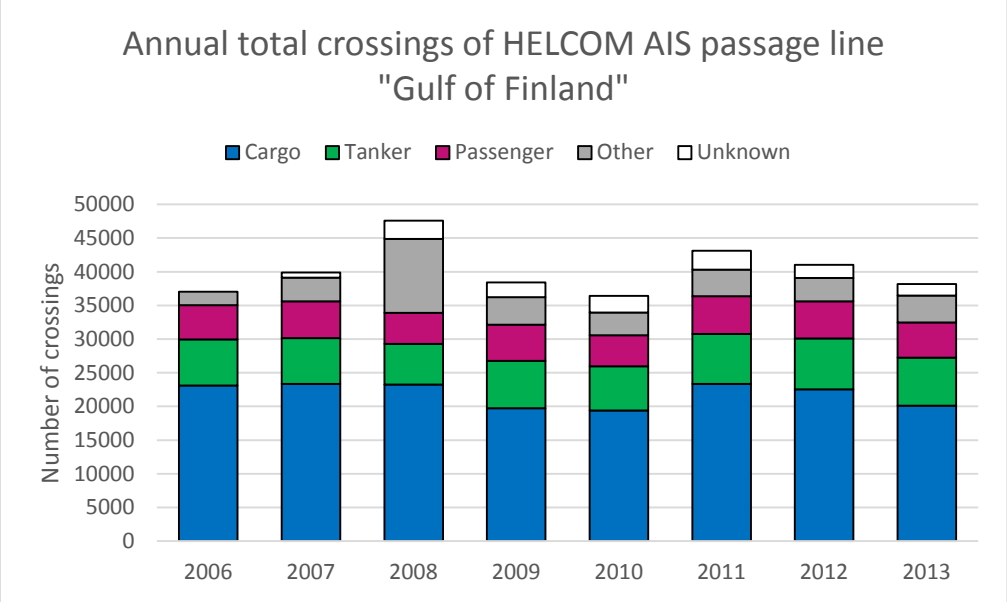

Figure 8 Number of ships crossing the fixed AIS line "Gulf of Finland" during 2006-2013, shown here grouped by ship type.

3 Overview of accidents in the Baltic Sea

According to the reports from the Contracting States 150 ship accidents occurred in the Baltic Sea area in 2013, which is the highest recorded number in the last ten years (**Figure 9**).[1] The number of accidents in the Baltic Sea has shown a slight increase in the last three years. Compared to 2010 the total number of accidents increased by 15% in 2014.

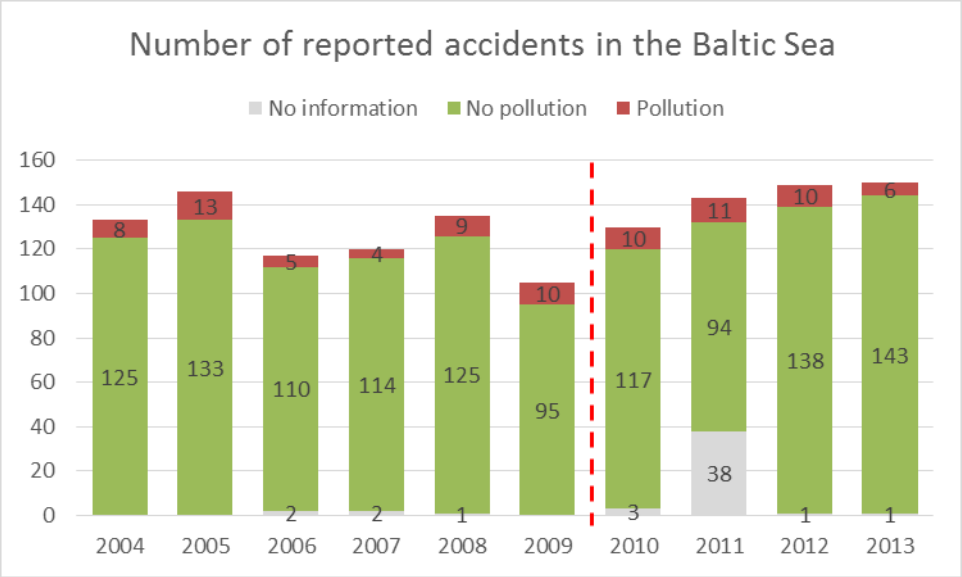

Figure 9

The spatial distribution of the reported accidents in 2013 is presented in **Figure 11**. 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 in 2013 occurred close to shore (26% in port and 19% in port approach) and 34% occurred in the open sea (**Figure 10)**. However for 21% of the accidents the location of was not specified.

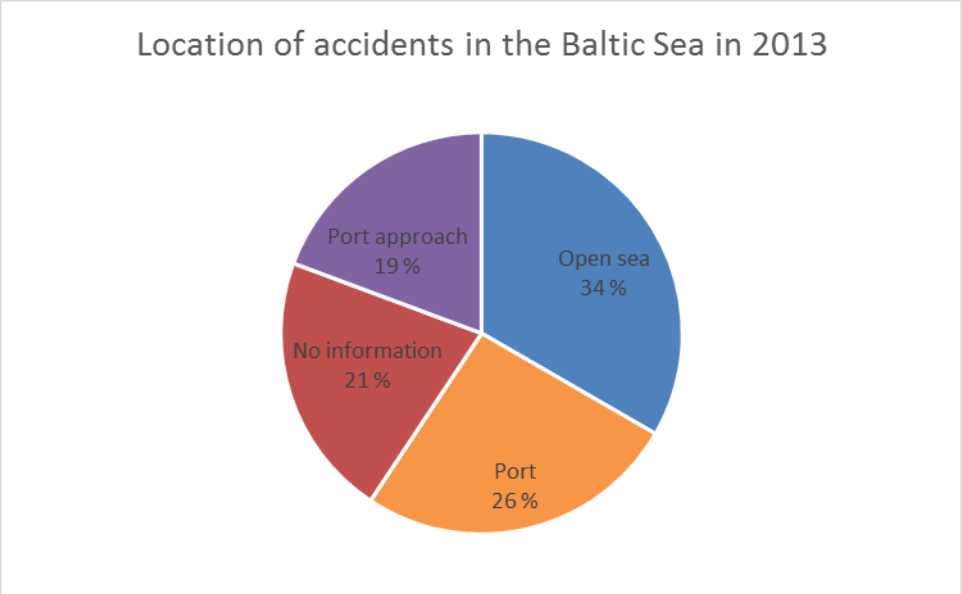

Figure 10

[1] 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).

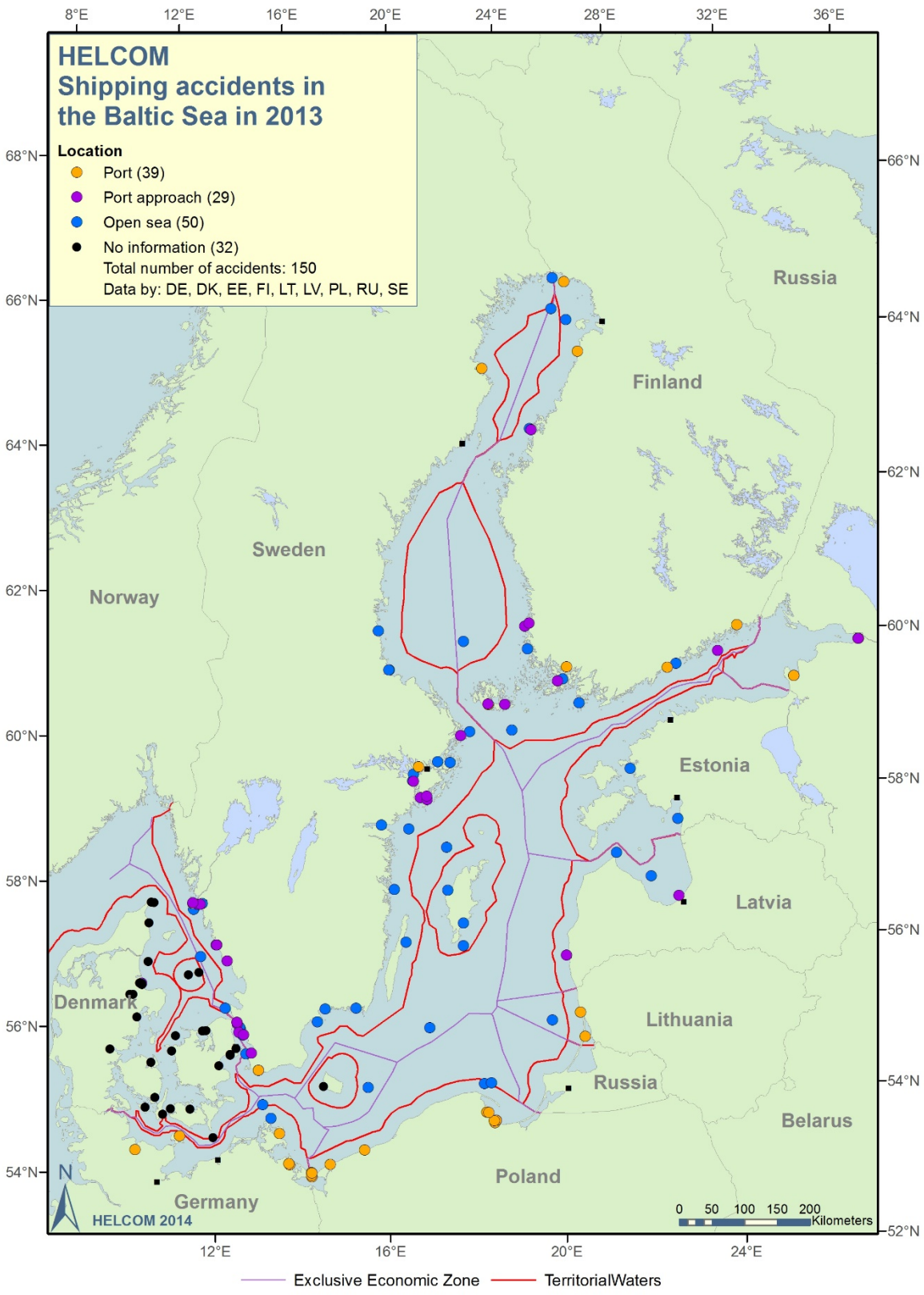
HELCOM
Shipping accidents in
the Baltic Sea in 2013
Location
Port (39)
Port approach (29)
Open sea (50)
No information (32)
Total number of accidents: 150
Data by: DE, DK, EE, FI, LT, LV, PL, RU, SE
8°E
12°E
16°E
20°E
24°E
28°E
32°E
36°E
68°N
66°N
64°N
62°N
60°N
58°N
56°N
54°N
52°N
Russia
Finland
Sweden
Norway
Estonia
Latvia
Lithuania
Denmark
Belarus
Poland
Germany
N
HELCOM 2014
0 50 100 150 200
Kilometers
Exclusive Economic Zone
TerritorialWaters

Figure 11

4 Types of accidents

Due to modification of the reporting format in 2012, the 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 (contacts 20% and collisions 18%) were the main type of accidents in 2013 accounting for 38% of the accidents in total (**Figure 12)**. Groundings or strandings (hereafter referred to only as groundings) accounted for 29% of the accidents in 2013. Also other types of accidents, like fires and explosions, damages to ships or equipment, accidents with life-saving appliances and capsizing in total made up one third of all accidents in 2013 while pollution accidents (accidental pollution events) accounted for 4% of the accidents.

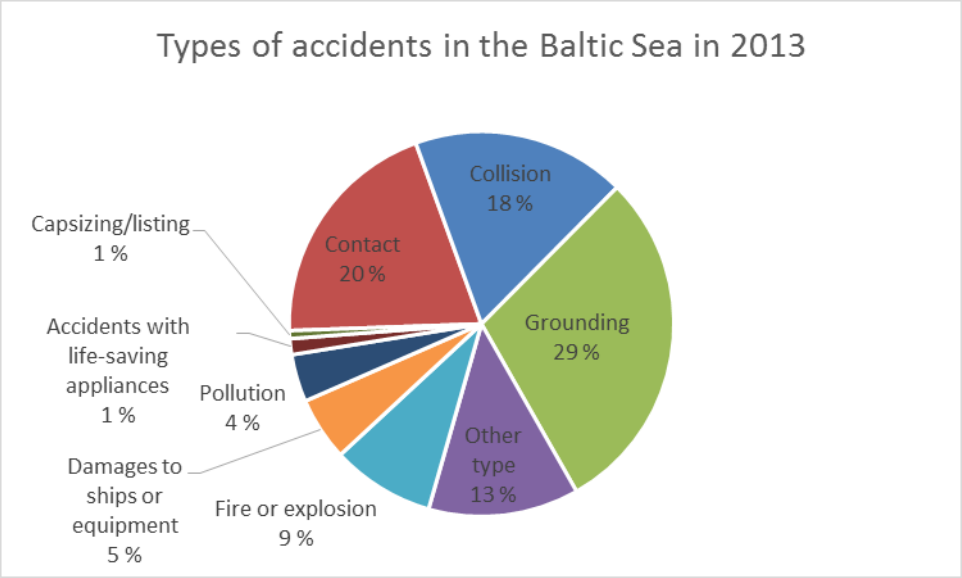

Figure 12

The share of groundings was lower in 2013 (29%) than the average share of groundings in 2004-2013 (36%) while the percentage were approximately the same for collisions (38% in 2013 and 35% in 2004-2013) and other types of accidents (29% in 2013 and 25% in 2004-2013) (**Figure 13**).

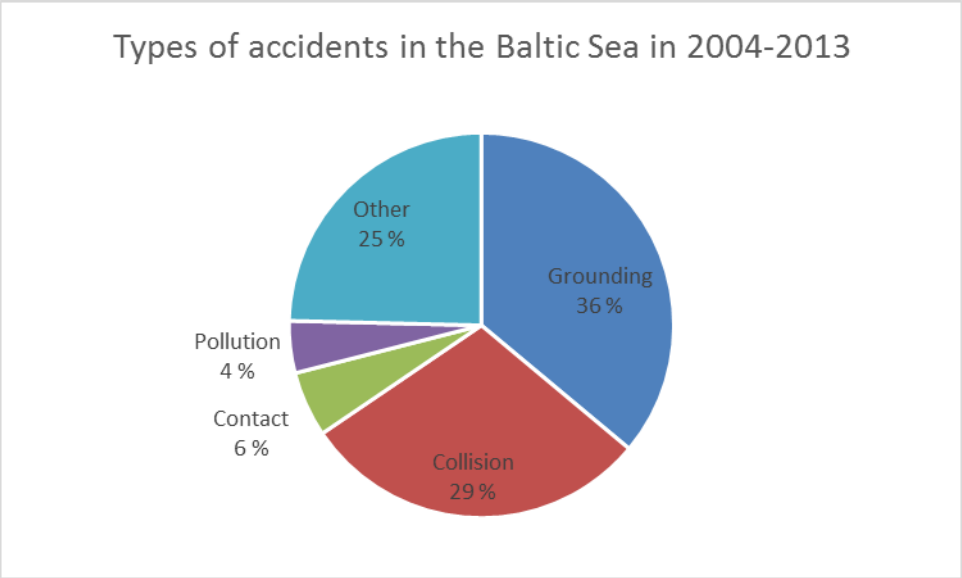

Figure 13

Spatial distribution of different types of reported accidents in the Baltic Sea in 2013 is presented in **Figure 14.**

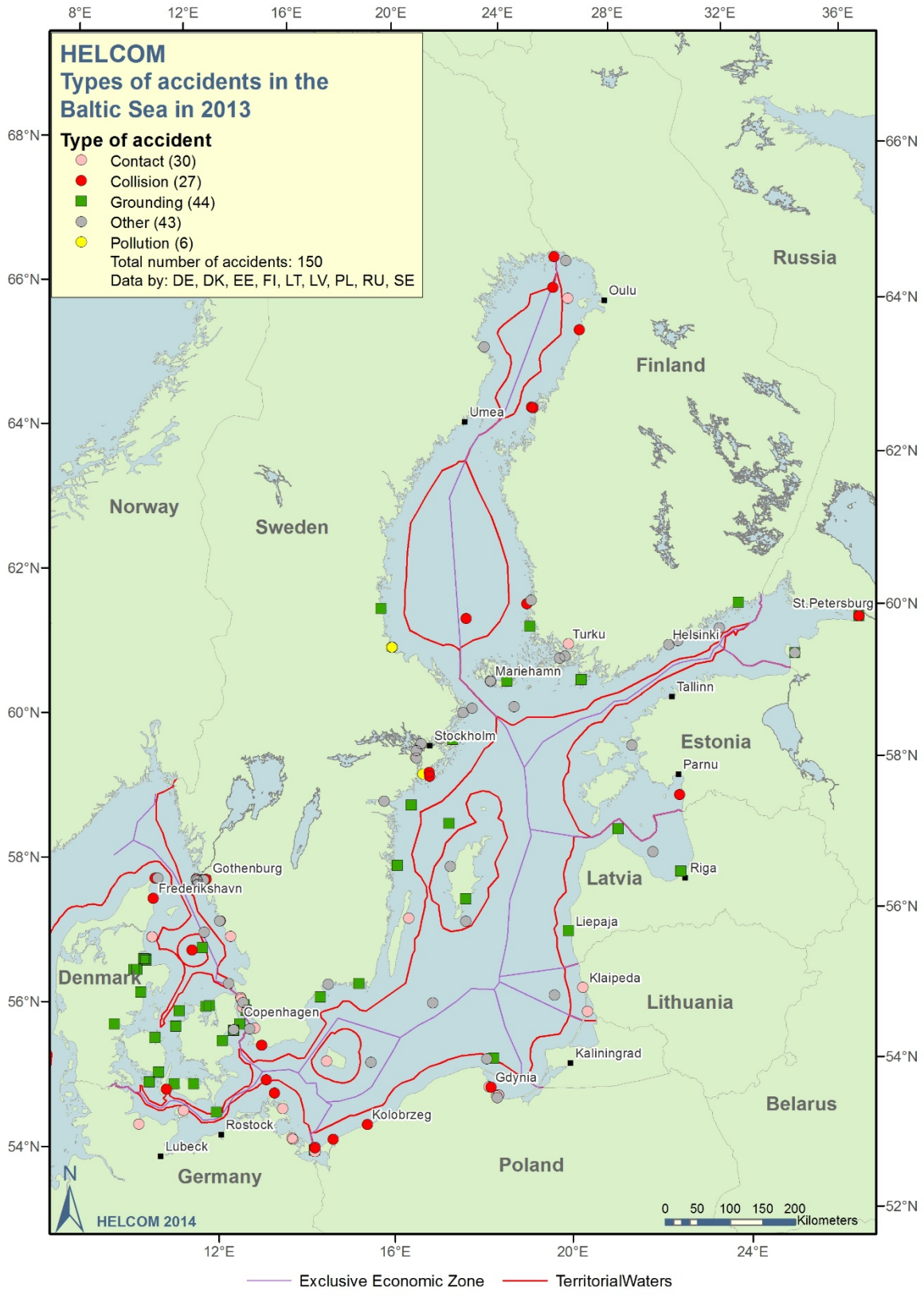

Figure 14

4.1 Collisions

Collisions have been the most common type of shipping accidents 2010 and 2011 while in 2006-2009 groundings were more common than collisions. In 2012 the share of collisions and groundings was equal. In 2013 collisions accounted for 38% (57 cases) of all accidents. (**Figure 15**).[2] This is an increase of 18% compared to 47 cases in 2012.

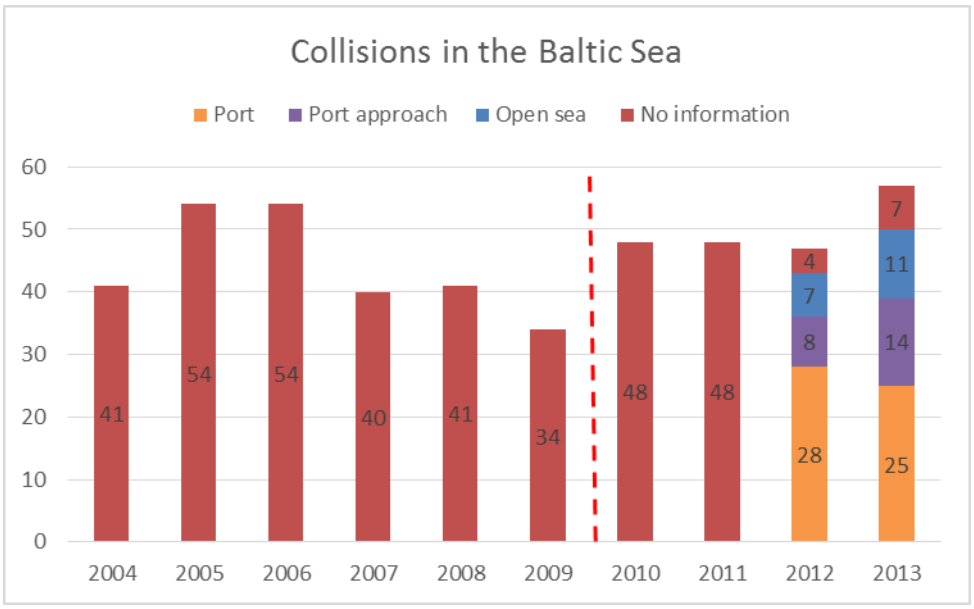

Figure 15

Collisions with vessels and collisions with objects accounted for an almost equal share of all collision accidents in 2013, 47% and 46% respectively. The collisions with objects corresponds to the number of accidents categorized as contact accidents (Figure 10). Collisions with vessel and object accounted for 7% of the accidents (**Figure 16**).

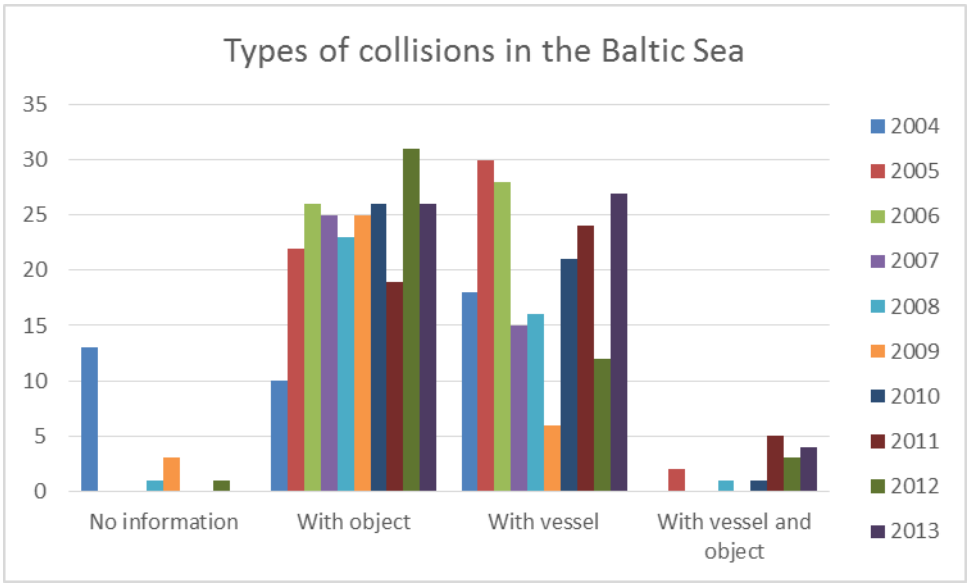

Figure 16

[2] 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).

Spatially, collisions in 2013 occurred mostly in near shore areas and the Danish Straits (**Figure 17**).

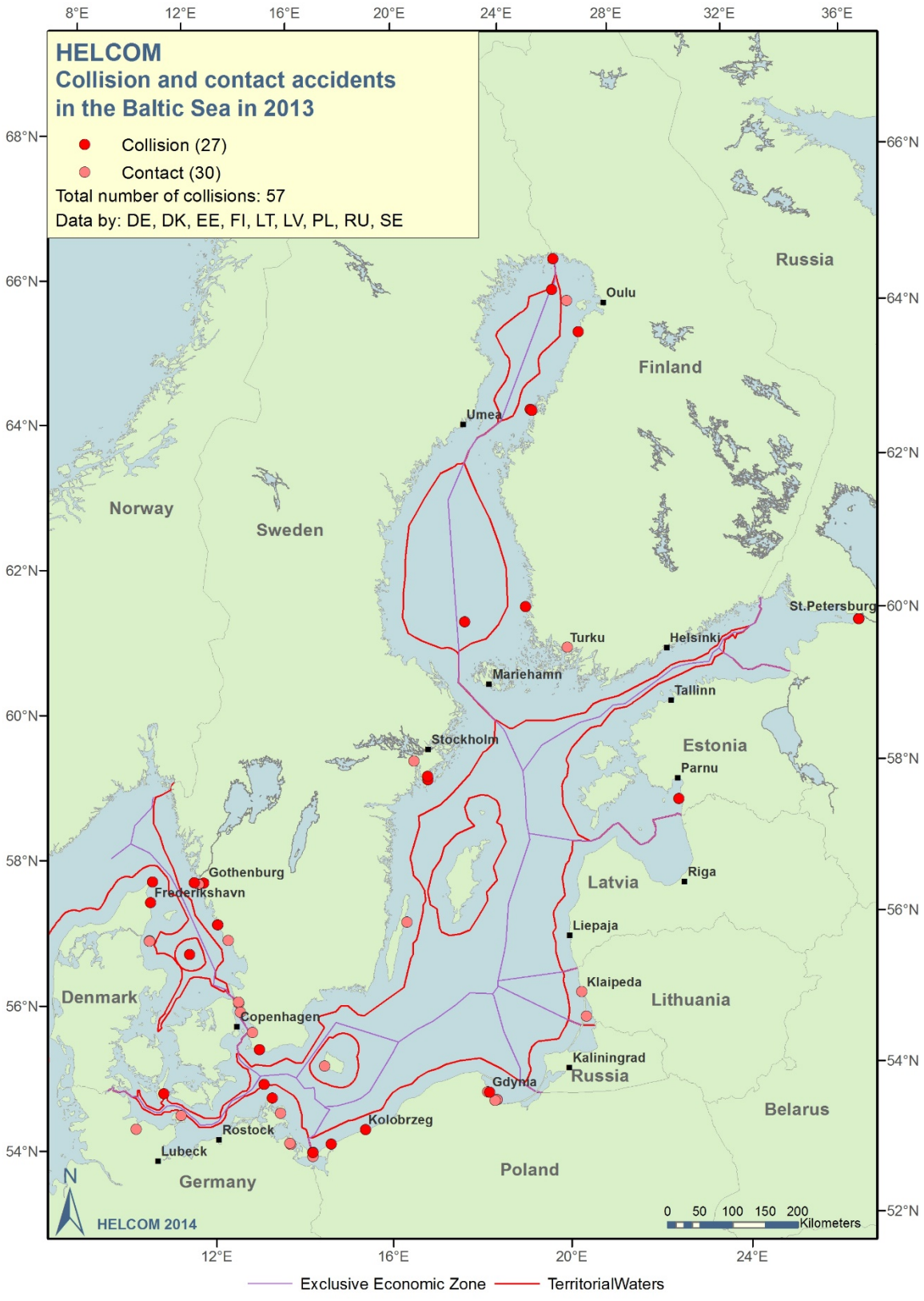

Figure 17

Also the map of collisions in 2004-2013 (**Figure 18**) 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.

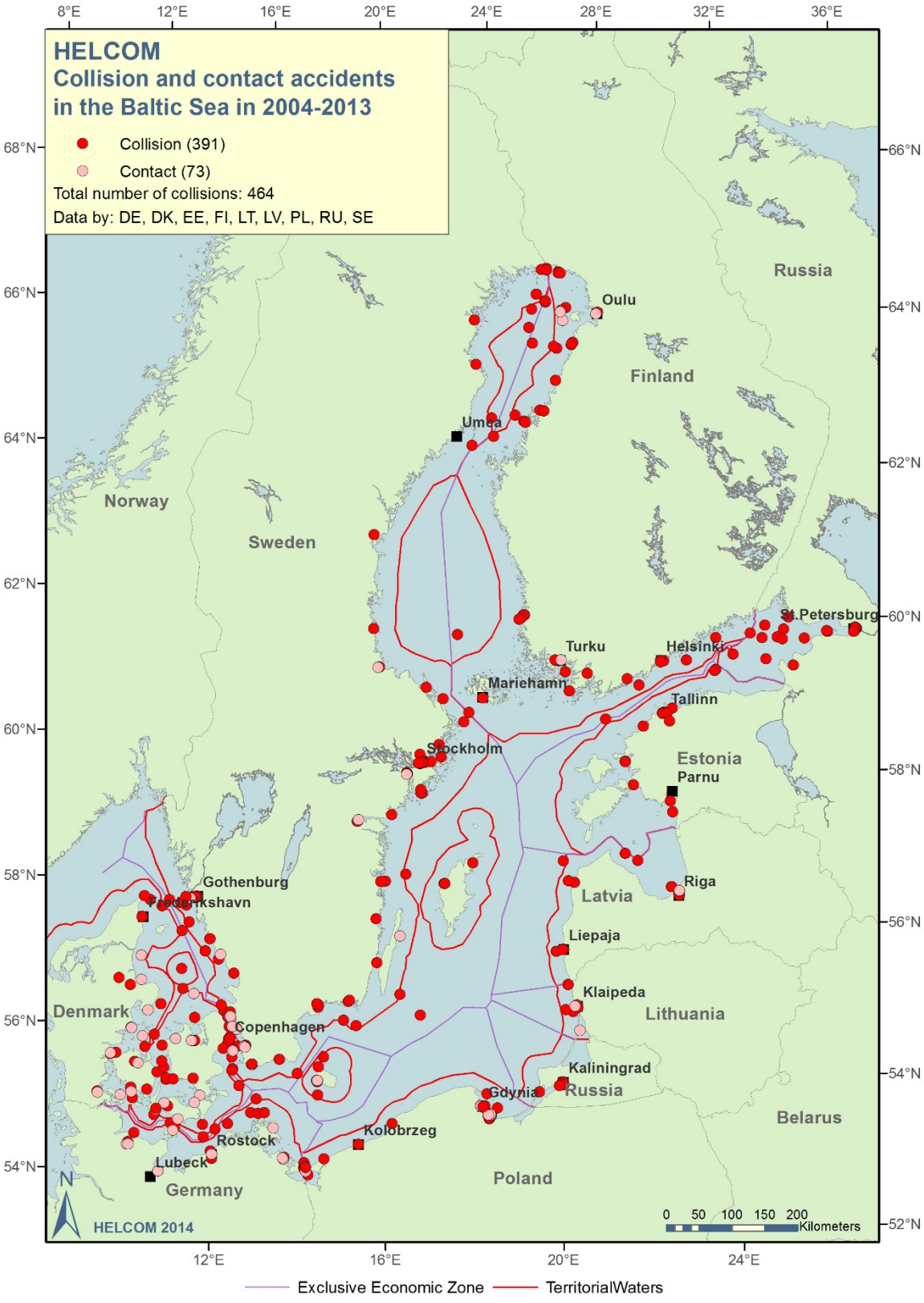

Figure 18

The southwestern Baltic Sea, including the Danish Straits has been one of the hot spots for collisions in the Baltic. In 2013 the number of collisions in the southwestern Baltic Sea stayed at the same level as in 2012 with 31 collisions, which accounts for 54% of all collisions in 2013. In the 2010 and 2011 the collisions in this area accounted for on average 36% of all collisions in the Baltic Sea. **Figure 19**[3] and **Figure 20** show the number and spatial distribution of collisions in the southwestern Baltic Sea in 2004-2013.

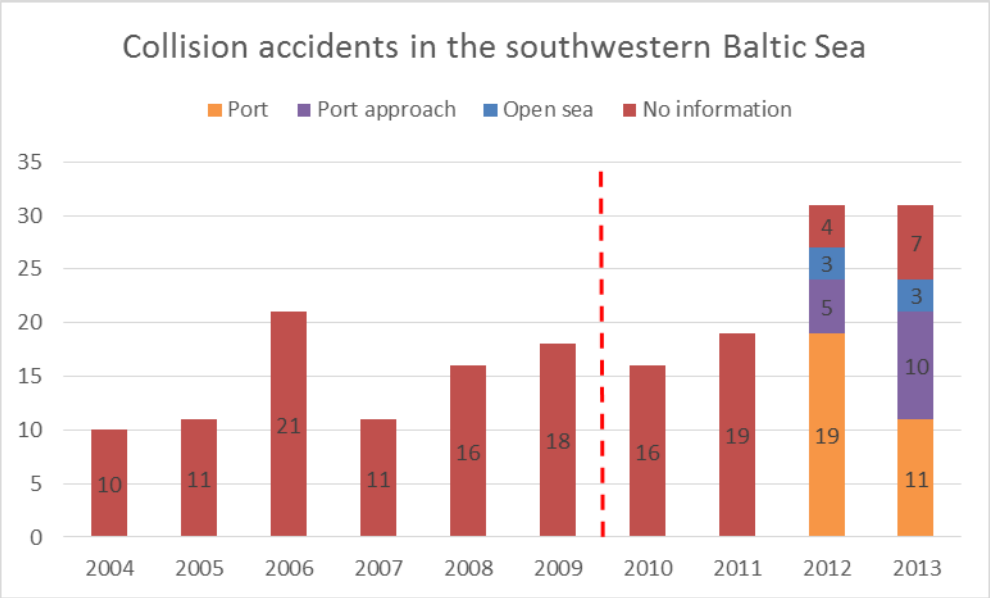

Figure 19

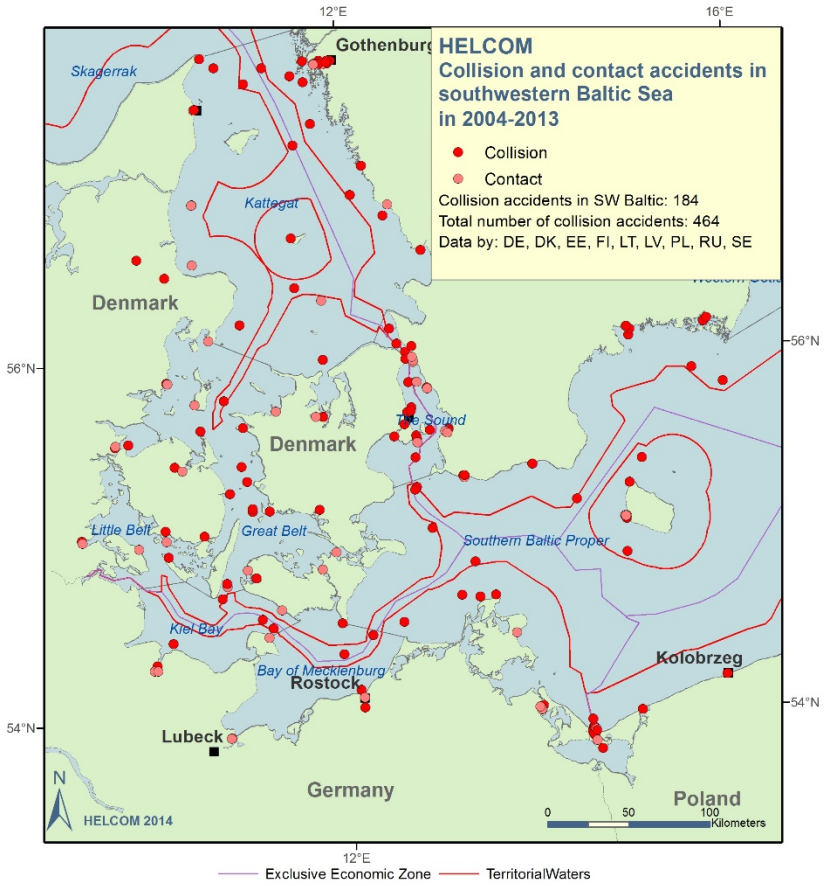

Figure 20

[3] 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 collisions in the Gulf of Finland has reduced considerably during the last ten years and in 2013 only three (5%) collisions were reported in the area. For the time period 2004-2013 on average 10% of all reported collisions took place in the Gulf of Finland. **Figure 21** and **Figure 22** show the number and spatial distribution of collisions in the Gulf of Finland.

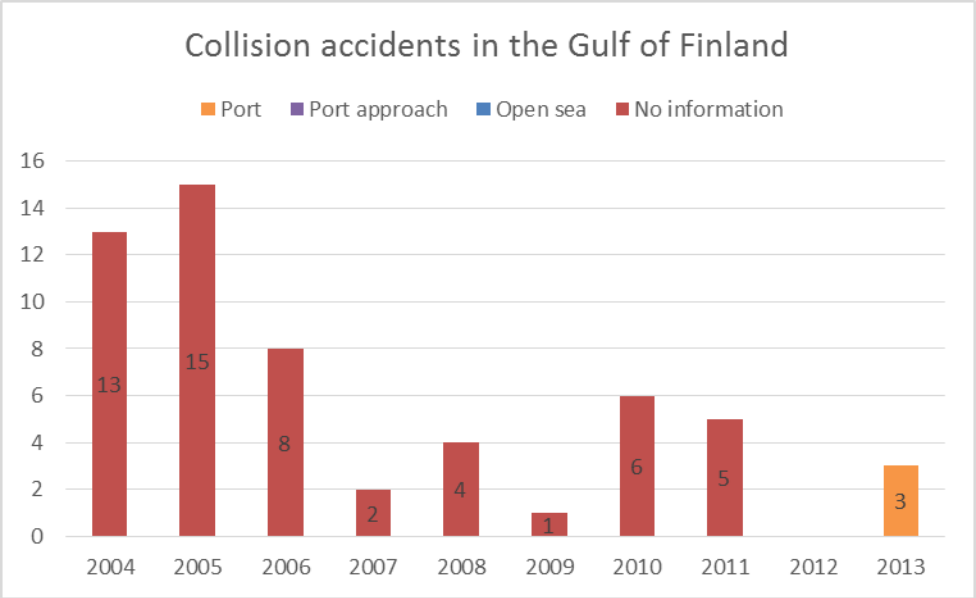

Figure 21

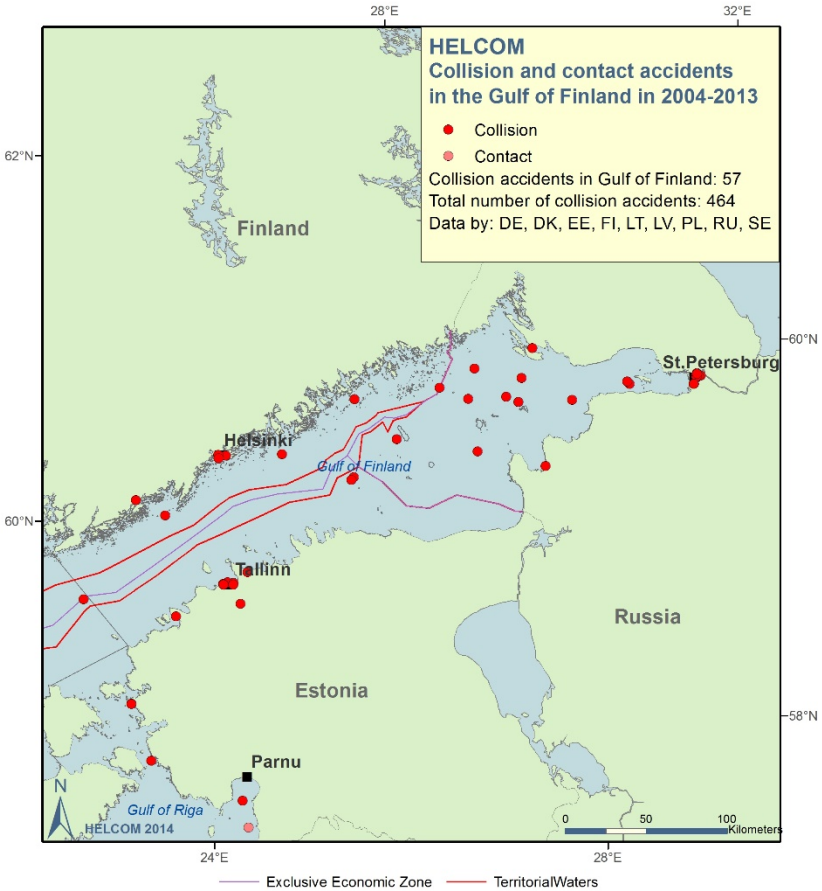

Figure 22

4.2 Groundings

In 2013, there were 44 reported groundings or strandings (hereafter referred to as groundings) in the Baltic Sea area accounting for 29% of the total number of reported accidents in 2013 (**Figure 23**).[4]

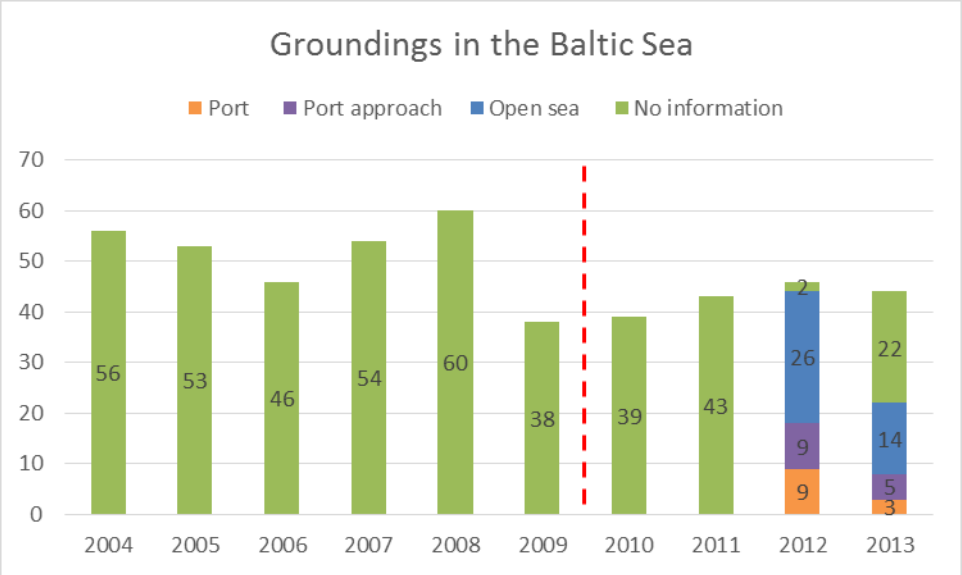

Figure 23

Figure 24 illustrates the presence or absence of a pilot on board vessels in cases of grounding accidents in 2013. In 7% of the groundings a pilot was on board the ship and in 2% of the cases the ship had an exemption certificate. In 32% of the cases no pilot was on board at the time of a grounding and in most cases (59%) information on the presence of a pilot was missing. In 2013, most reported groundings occurred with vessels having a draught of less than 7 meters (37%) (**Figure 25**). Small vessels are not covered by IMO's recommendations on the use of pilotage. Information on draught size for vessels involved in groundings in 2013 was missing in many cases. No ships involved in groundings were reported to have a draught over 15 m.

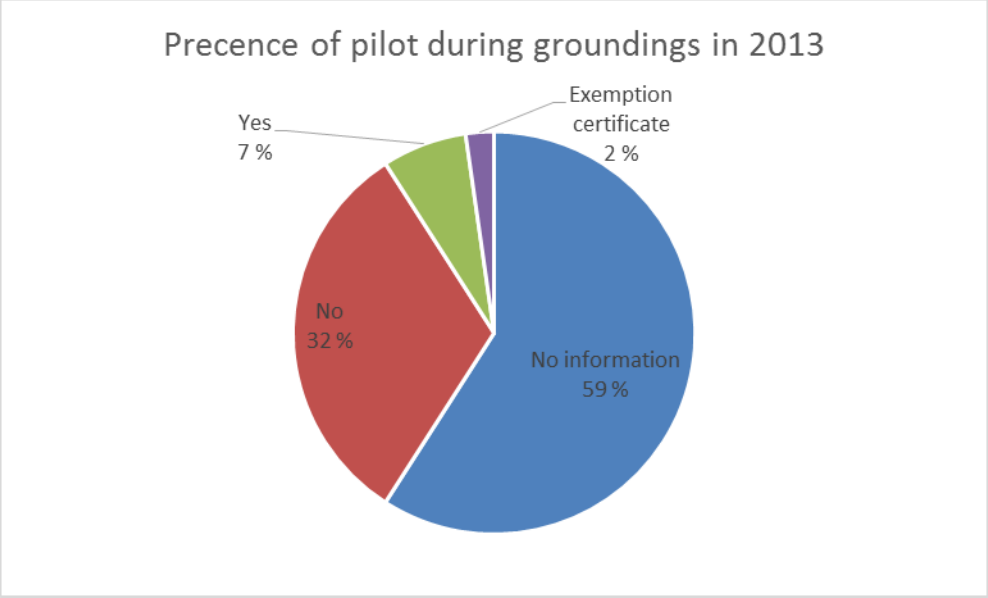

Figure 24

[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).

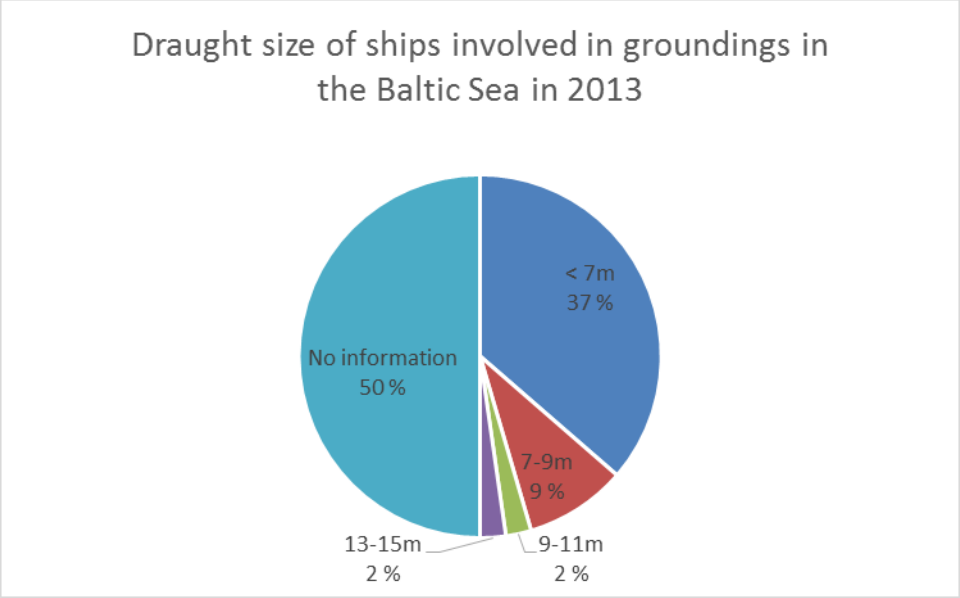
Draught size of ships involved in groundings in the Baltic Sea in 2013
< 7m
37 %
7-9m
9 %
9-11m
2 %
13-15m
2 %
No information
50 %

Figure 25

The map of reported groundings in 2013 (**Figure 26**) especially points to the Danish Straits and approaches to ports.

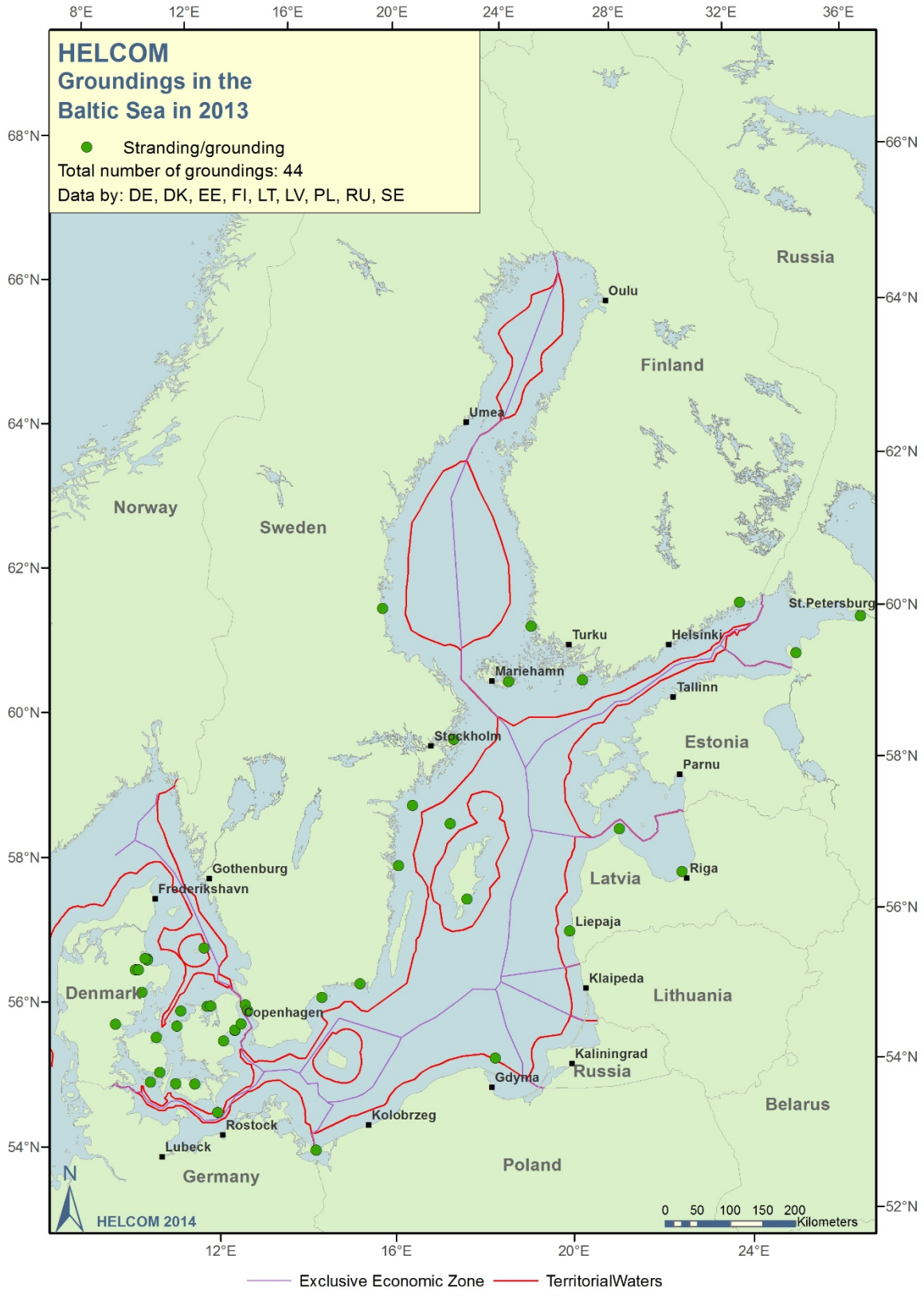

Figure 26

The map of the reported groundings in 2004-2013 (**Figure 27**) indicates that the areas of primary concern are the Danish Straits, Gulf of Finland, Åland/Archipelago Sea area, ports and near shore areas.

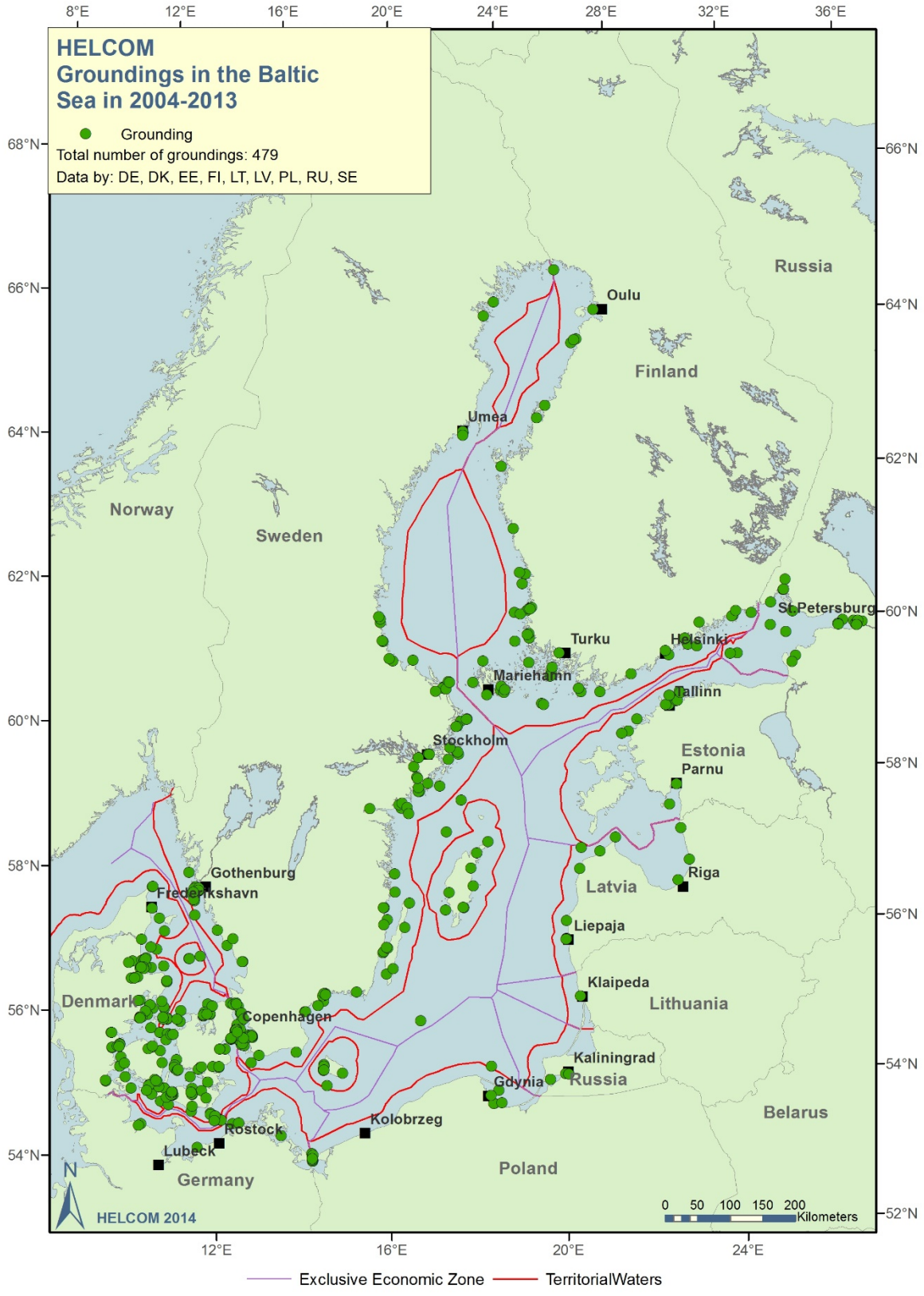

Figure 27

The southwestern Baltic Sea, including the Danish Straits, is the hot spot area for groundings in Baltic Sea, with 59% of the groundings in 2013 occurring in the area. **Figure 28**[5] and **Figure 29** show the number and spatial distribution of groundings in the southwestern Baltic Sea in 2004-2013.

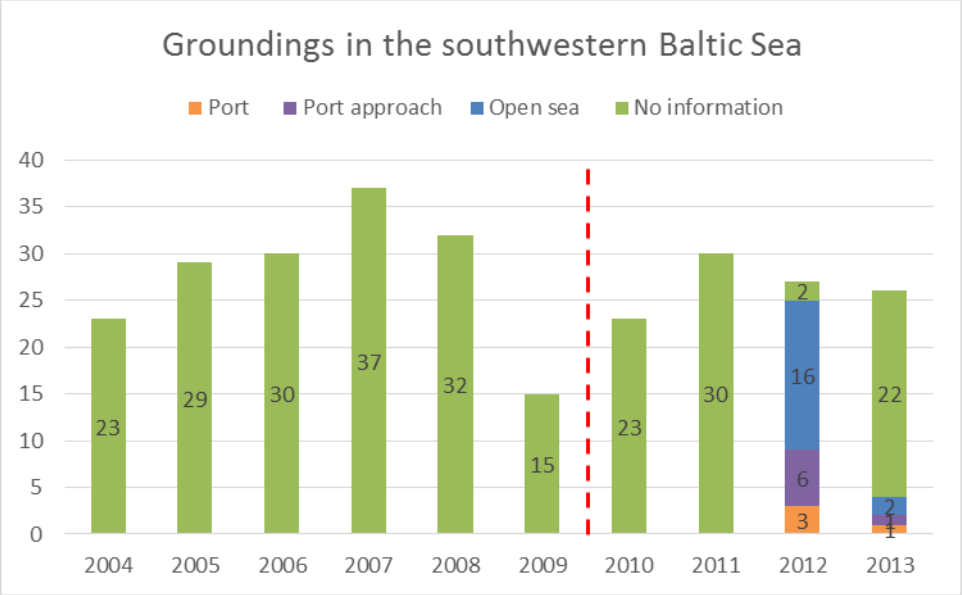

Figure 28

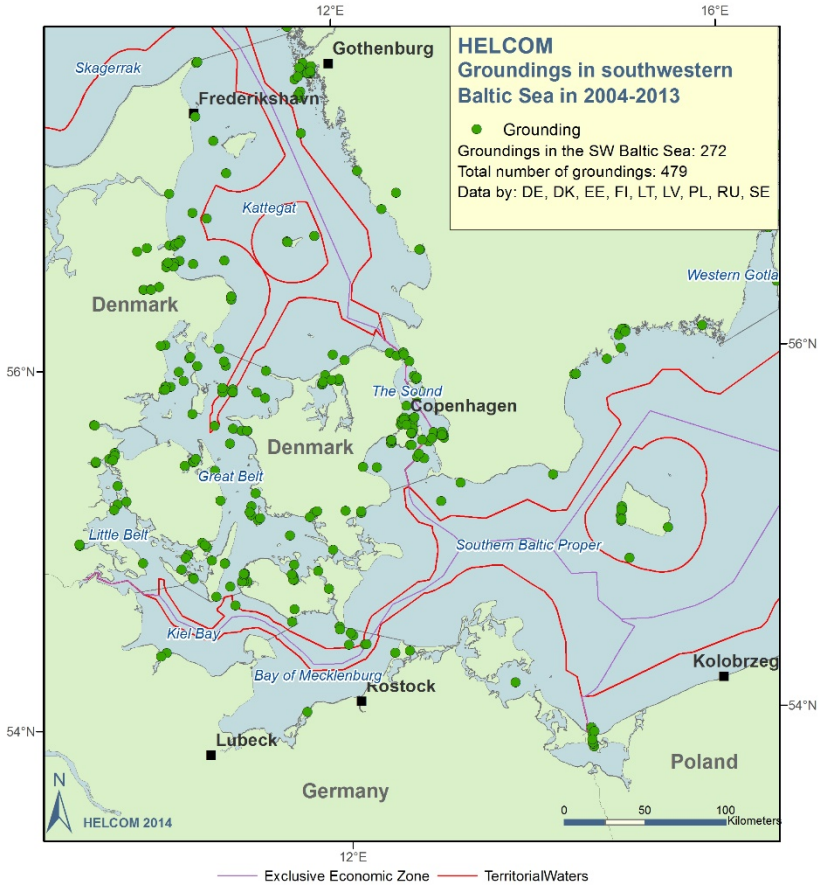

Figure 29

[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).

The number of the groundings in the Gulf of Finland has in past years been low with only a few groundings per year. Also in 2013 only three groundings were reported in the areas, accounting for 7% of all groundings in the Baltic Sea. The share is lower than the average of 12% in the years 2004-2013. **Figure 30** and **Figure 31** show the number and spatial distribution of groundings in the Gulf of Finland.

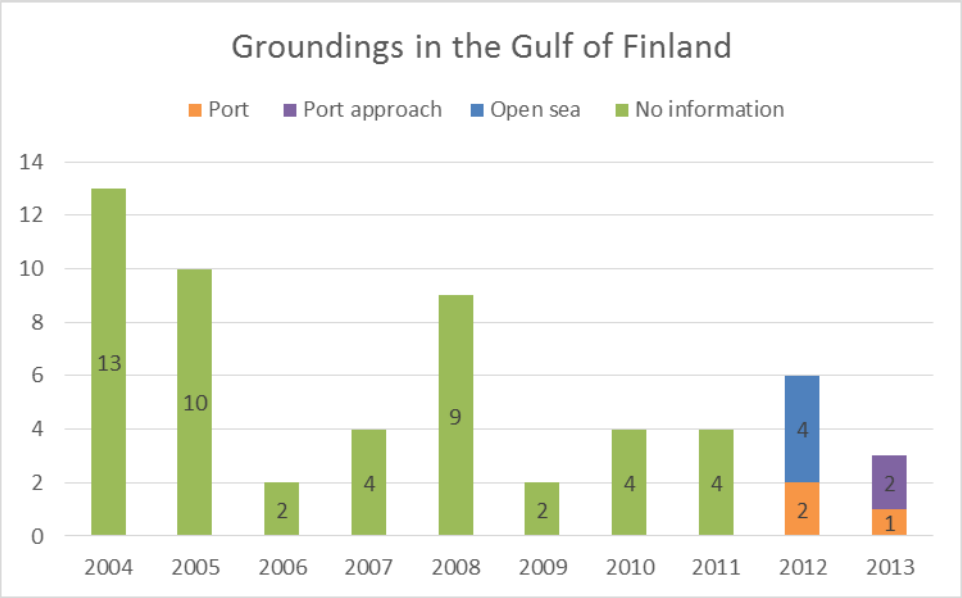

Figure 30

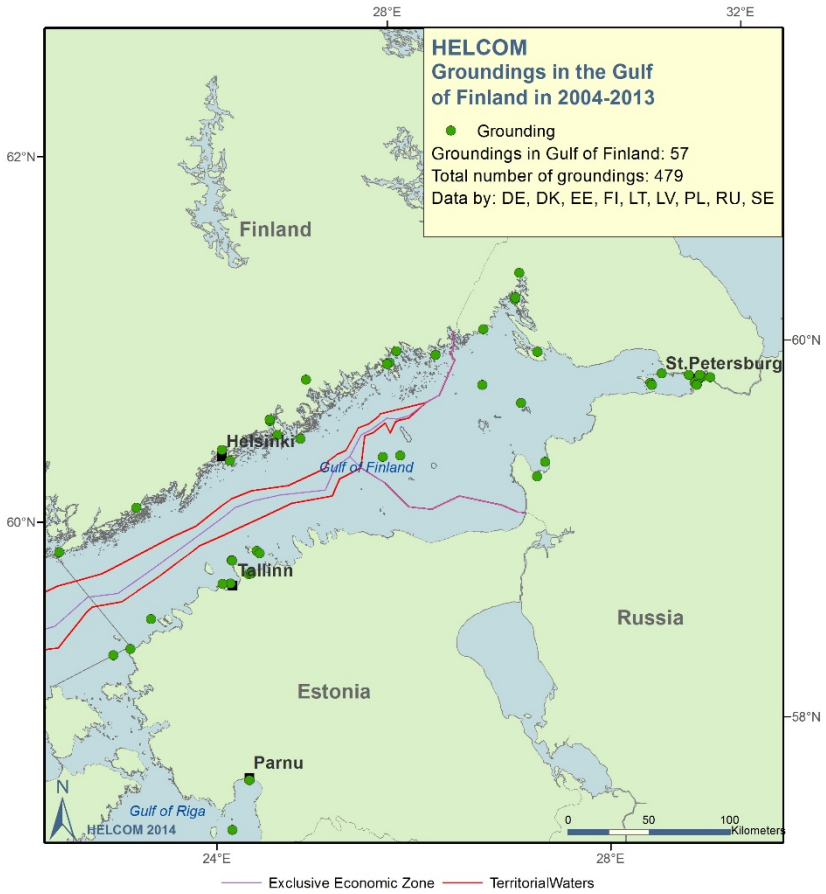

Figure 31

5 Types of vessels involved in the accidents

Cargo vessels were the most common type of ships involved in accidents in 2013 accounting for 49% of all vessels (**Figure 32**). Passenger vessels were involved in 25% of all reported accidents and tankers were involved in 10% of the accidents. Other types of vessels like ice breakers, barges, tugboats and research vessels were involved in 15% of all accidents in 2013.

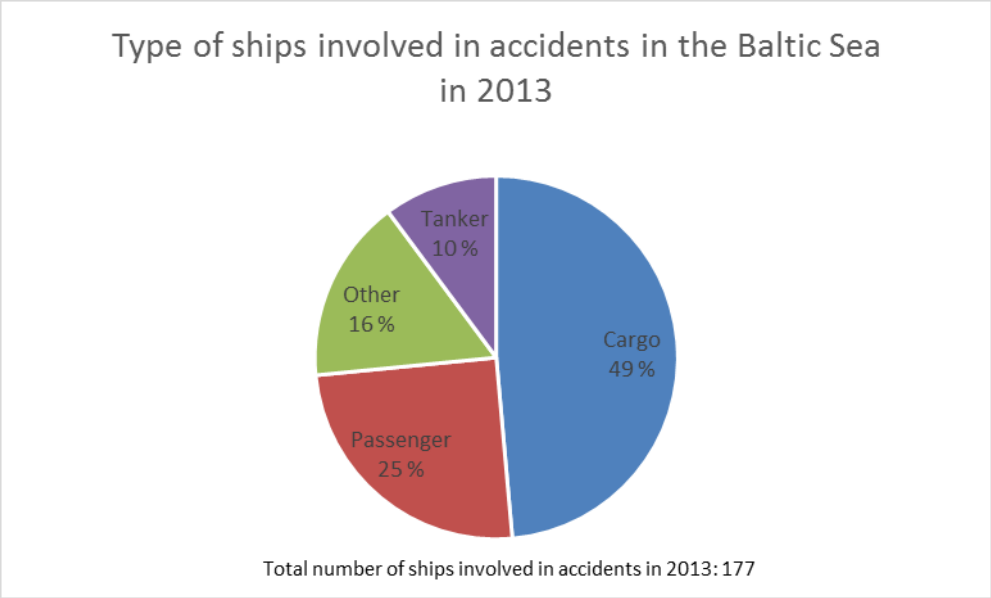

Figure 32

As tankers are the major issue of concern, a map on accidents involving tankers in 2004-2013 is presented in **Figure 33**. Of the 18 tankers involved in accidents in 2013, three were reported as single hulled, six were double hulled and two were reported as other. Data on hull type was not available for 31% of the accidents involving tankers.

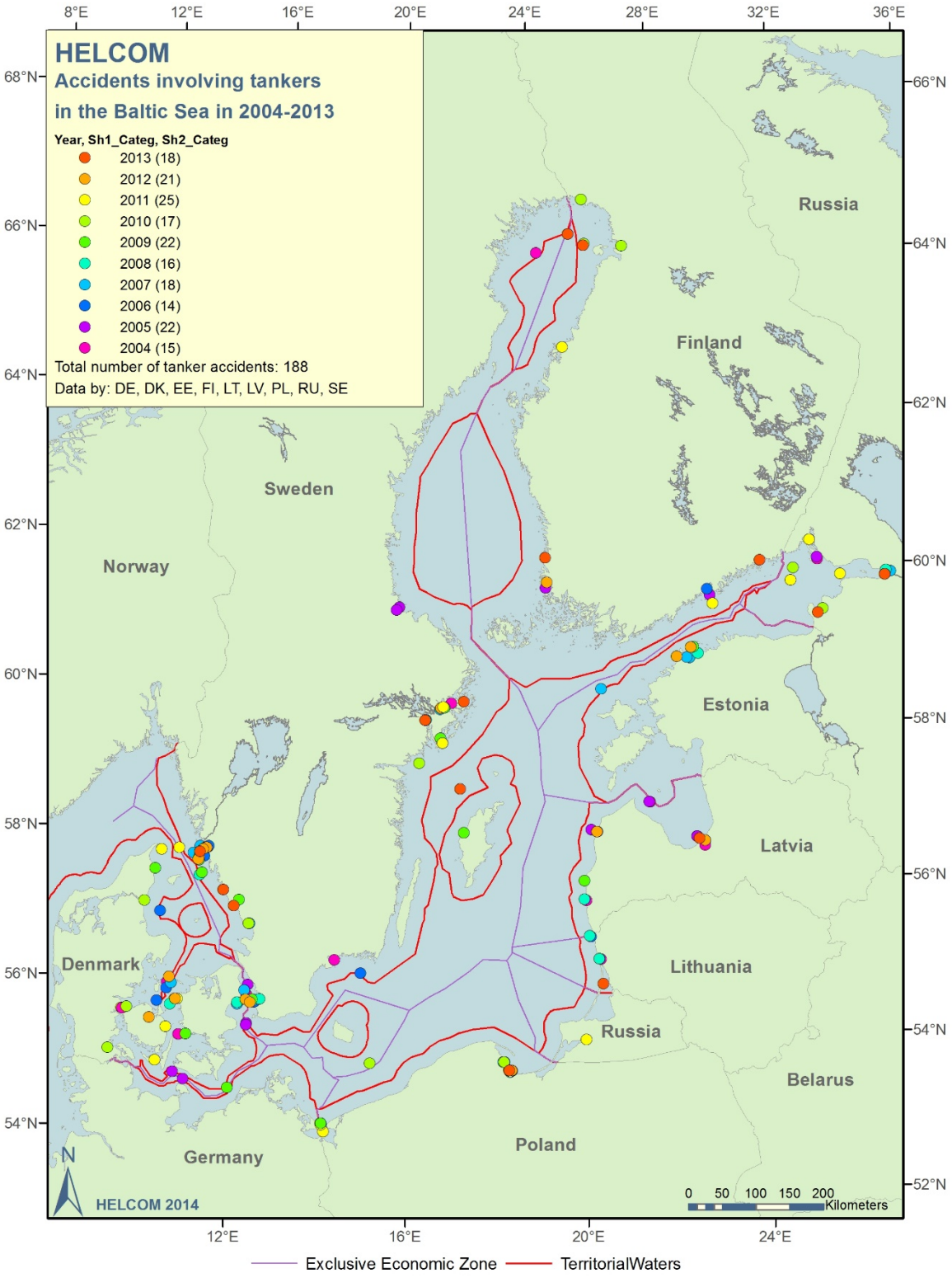

Figure 33

6 Causes of accidents

The main cause of accidents, accounting for 28% of all accidents in 2013, was human element as in many previous years. Technical failure accounted for 19%, 9% were due to external causes and 1% due to structural failure (**Figure 34**). In 2013 the cause of the accidents was reported as unknown for 43% of the accidents.

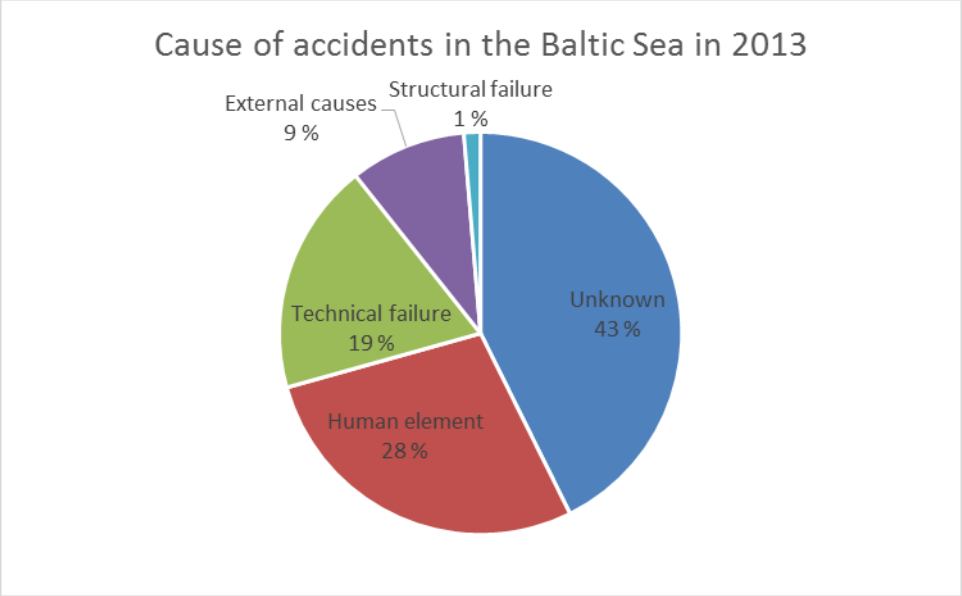

Figure 34

More detailed information on the dimensions of the human element has been collected since 2012. Most of the human element accidents in 2013, occurred due to a mistake (62%) or an unintentional action (slip, 16%). However, 17% of the accidents occurred due to an intentional decisions to act against a rule or plan (violation). (**Figure 35**).

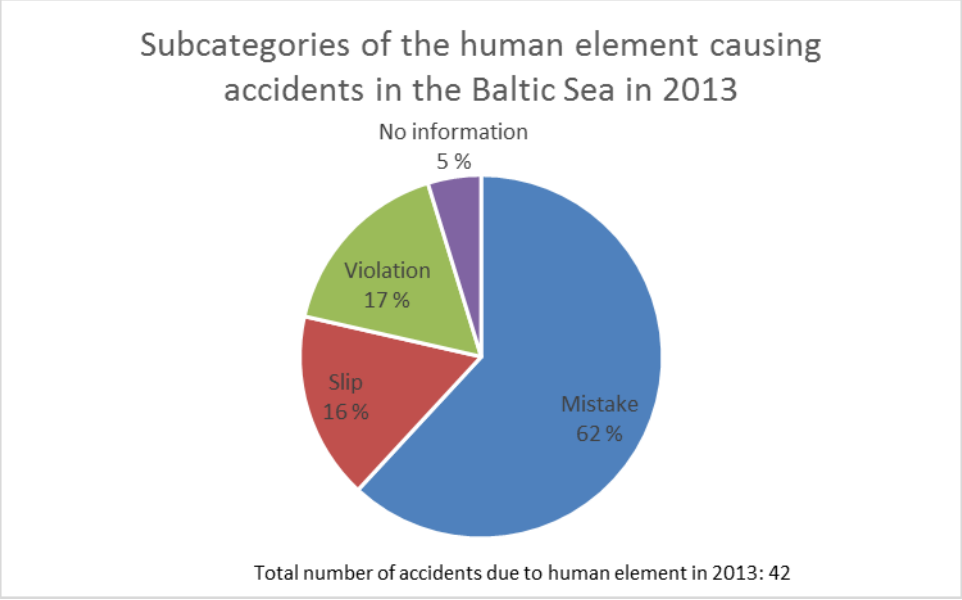

Figure 35

Spatial distribution of accidents with indication of the cause of the accidents in 2013 is presented in **Figure 36**.

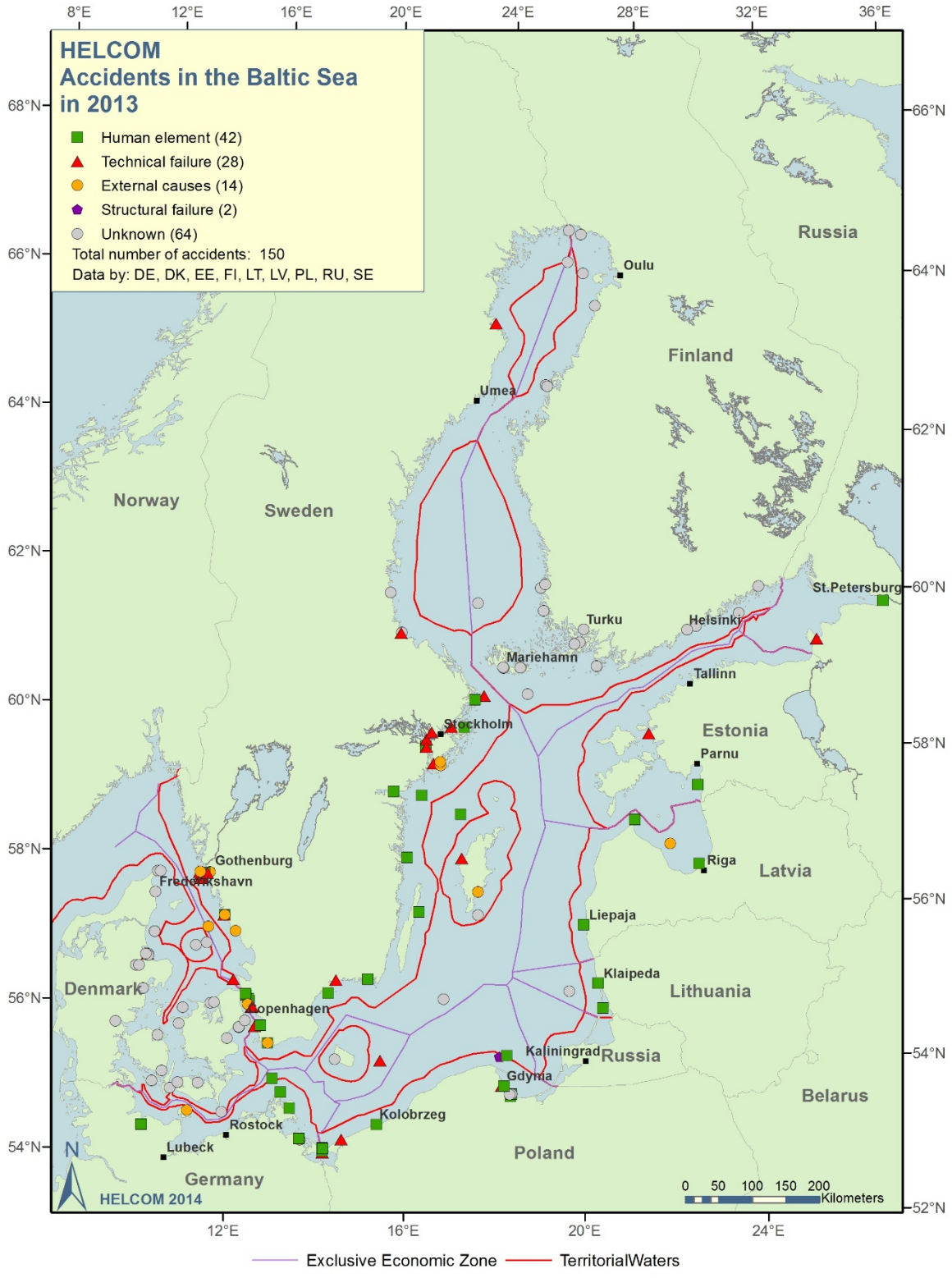

Figure 36

Of the reported accidents in 2013, 15 took place in ice conditions (**Figure 37**). Most of these accidents occurred in the northern parts of the Baltic Sea and two in Kattegat. It is however worth noting that information on ice conditions was missing for 37% of the reported accidents.

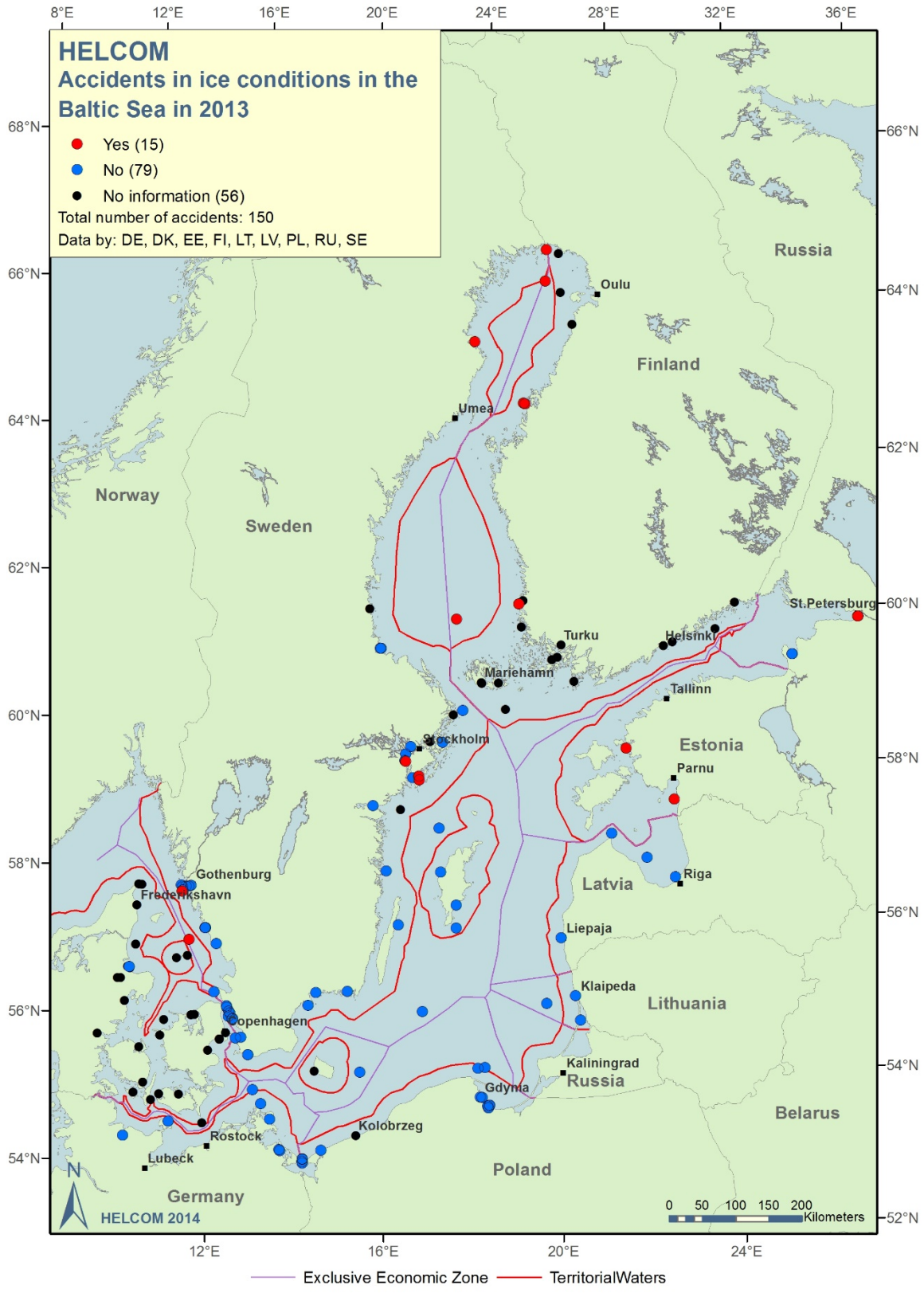

Figure 37

7 Accidents with pollution

According to the 2004-2013 data, 4,7% of the reported accidents ended up with some kind of pollution. In 2013 the percentage was 4%, with 6 out of the total 150 reported accidents resulting in pollution. The type of vessels involved in pollution accidents in 2013 were two cargo ships, tankers and other ships, respectively (**Figure 38**).

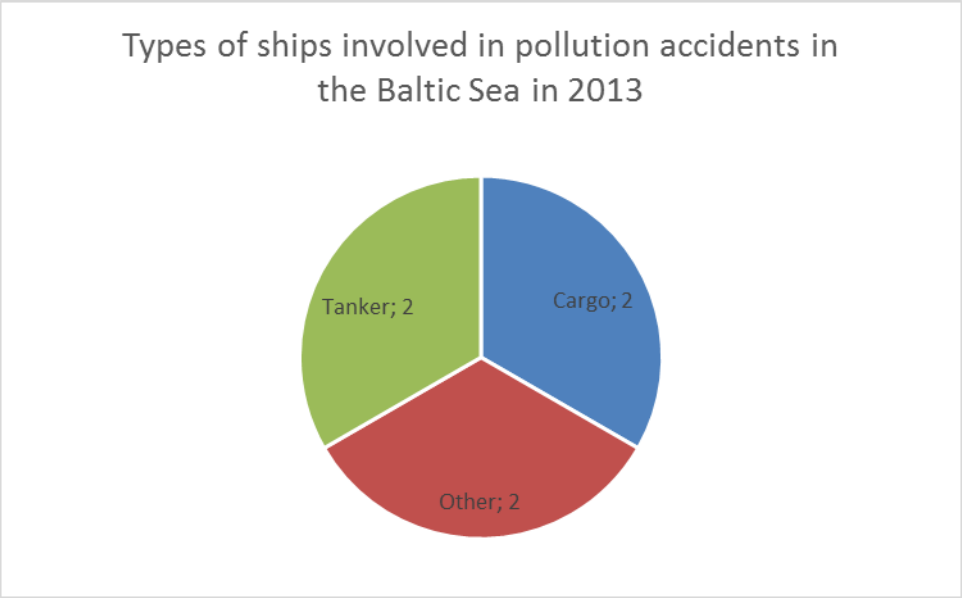

Figure 38

The main cause of the pollution accidents was human error but also technical failure leading to leakages played a part (**Figure 39**).

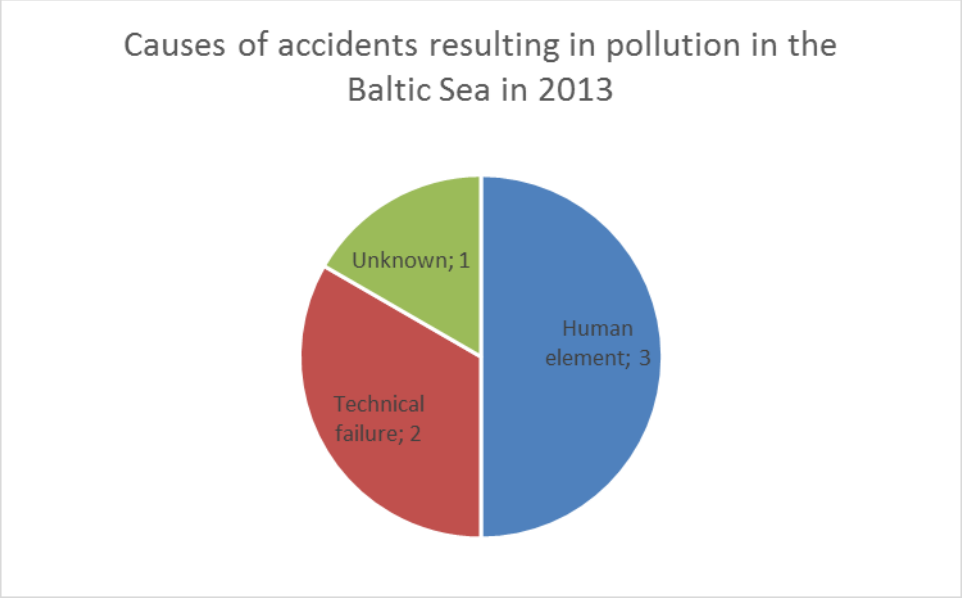

Figure 39

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 Working 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 2013 resulting in pollution is presented in **Figure 40** and some additional details of the pollution accidents are contained in **Table 4.**

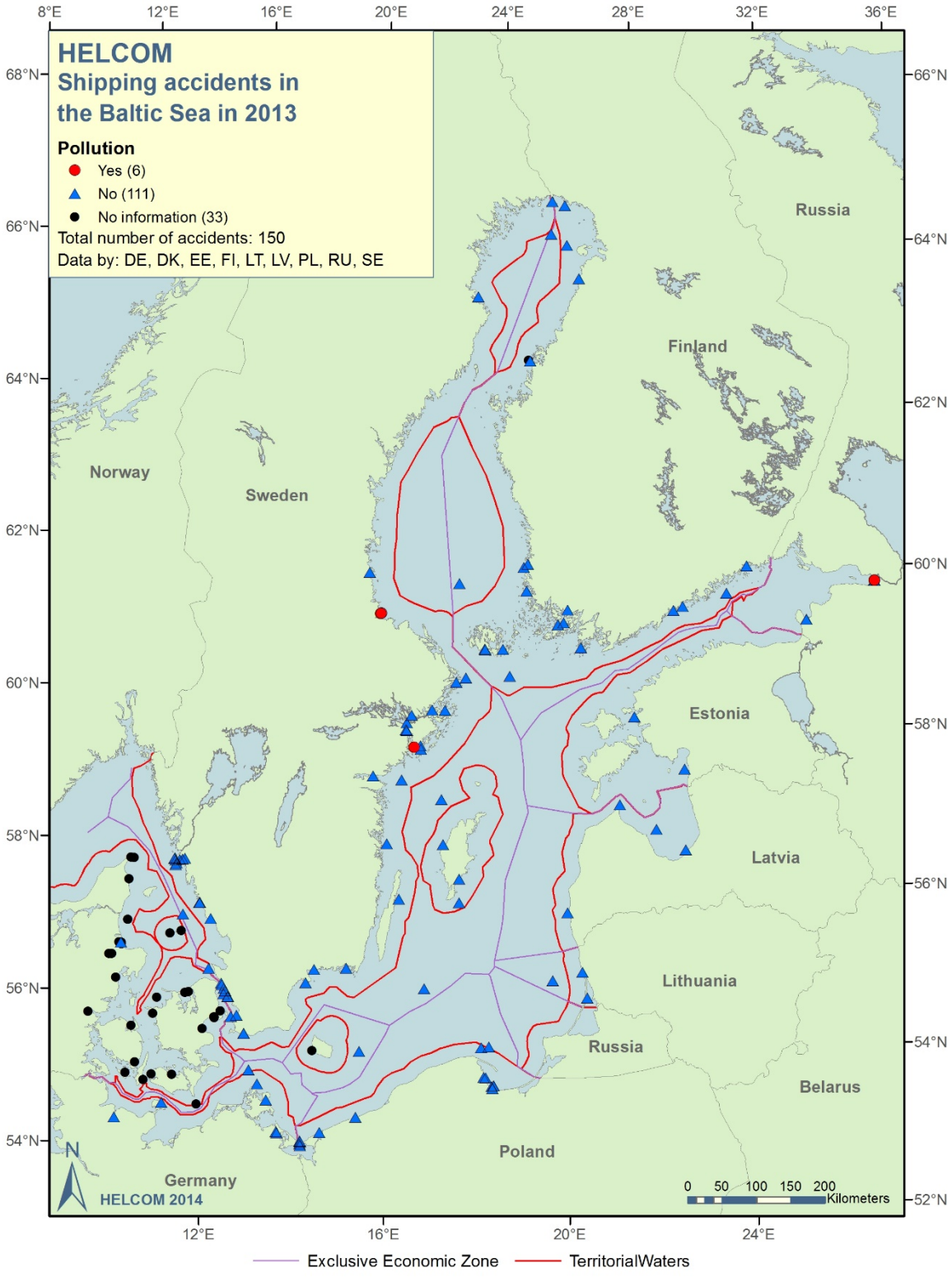

Figure 40

(Note that three pollution accidents took place near St Petersburg and three on the east coast of Sweden)

Table 4 Data on accidents resulting in pollution in 2013**.**

Country waters	Date	Latitude	Longitude	Ship type(s)	Ship size (gt)	Cargo	Type of accident	Cause of accident	Type of pollution
Russia	6.4.2013	59,9	30,25	Tanker	885	Mazut	Pollution	Human element	mazut
Russia	5.6.2013	59,9	30,25	Tanker	57248	Mazut	Pollution	Human element	n.i.
Sweden	13.6.2013	58,94	17,78	Cargo	2561	Bulk (ore, coal, grain etc.)	Pollution	Technical failure	diesel fuel
Sweden	12.10.2013	60,73	17,33	Other	499	Other/unknown	Pollution	Unknown	hydraulic oil
Russia	4.12.2013	59,9	30,25	Cargo	10381	Mazut	Pollution	Human element	n.i.
Sweden	15.12.2013	60,73	17,31	Other	1090	Ballast/empty	Pollution	Technical failure	hydraulic oil

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 1989-2013 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 Working 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 Working 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

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. The predefined entries should be used!

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) *Fill this in only if accident involved two ships, e.g. in case of a collision*	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) **"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 or contact*(collision and contact accidents only)*	Fixed answers; please choose from: **"With vessel"**, **"With vessel and object", "With 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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