

Report on ship accidents in the Baltic Sea area for the year 2004

Introduction

Data on ship accidents in the Baltic Sea area has been collected since 2000 according to the agreed reporting format. In 2004 a new reporting format was developed and agreed to be used for the reporting of accidents for the year 2004. It was also agreed that the Secretariat will take over the collection of annual information and development of the map on ship accidents as well as prepare the annual report on ship accidents in a way which would facilitate discussions and conclusions on prevention and response to accidents.

All Contracting States have provided their data for 2004. The complete data reported on ships accidents for 2004 is contained in **Annex 1**.

Total accidents

According to the reports from the Contracting States there were 121 ship accidents in the HELCOM area in 2004.

As can be seen from **Figure 1** the total number of accidents has increased significantly in 2004 compared to 2000-2003.

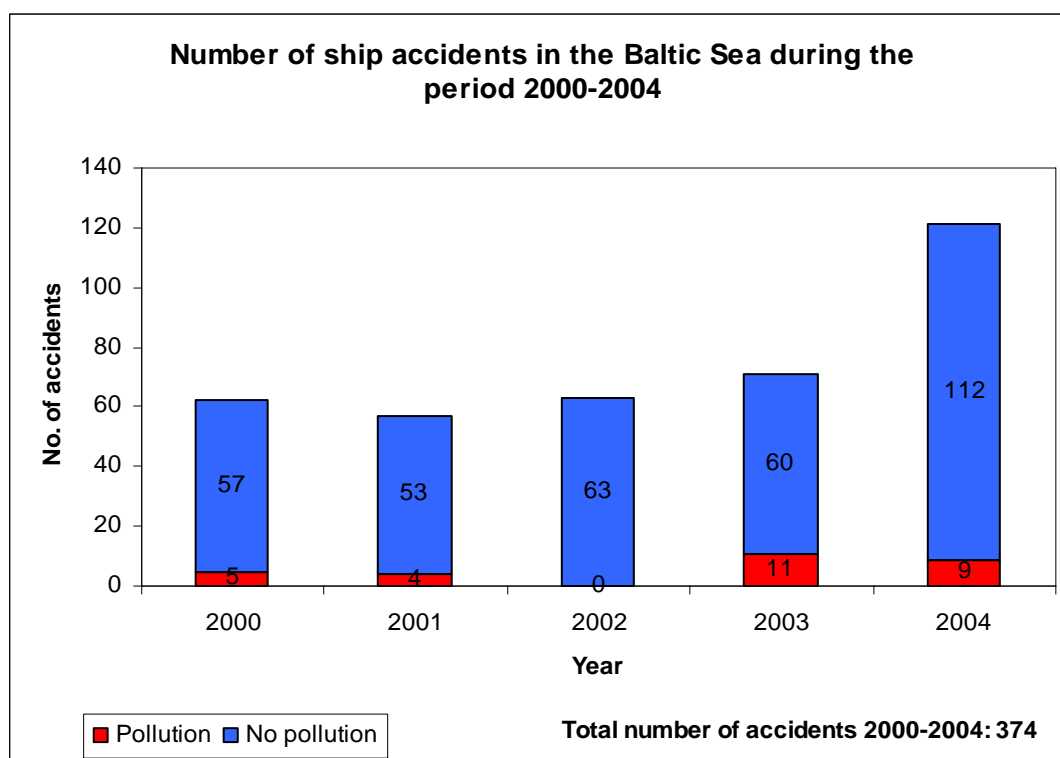


Figure 1

The spatial distribution of the reported accidents in 2004 can be seen in **Figure 2**.

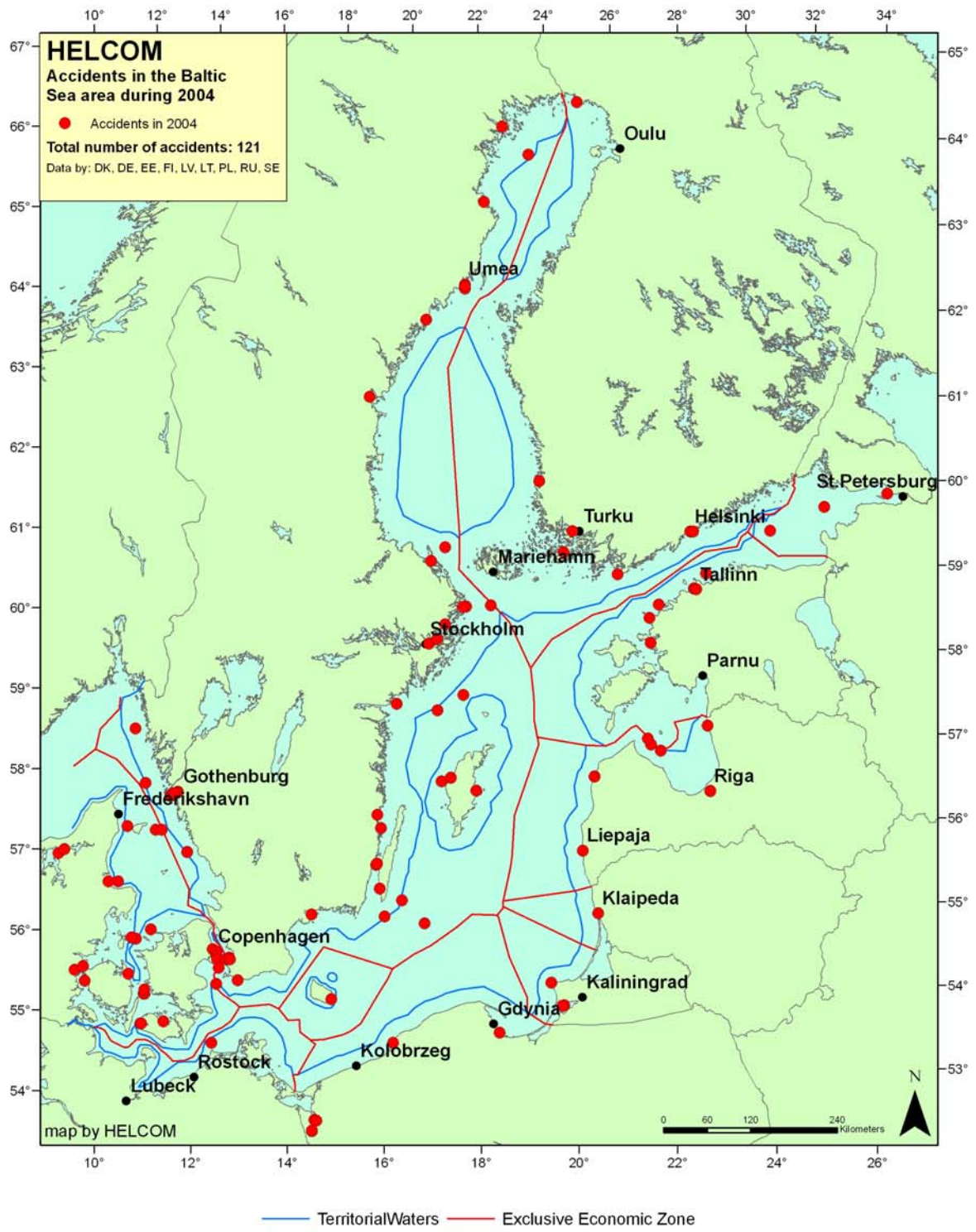


Figure 2

Looking into the types of accidents in the Baltic Sea area (**Figure 3**) it can be noticed that groundings (41%) and collisions (27%) constitute the most significant part of the reported events. The 2004 accidents' typology corresponds very well with the data from the whole period of 2000-2004 (**Figure 4**); thus, it can be stated that groundings and collisions are the most common types of accidents observed in the Baltic Sea area and requiring further actions.

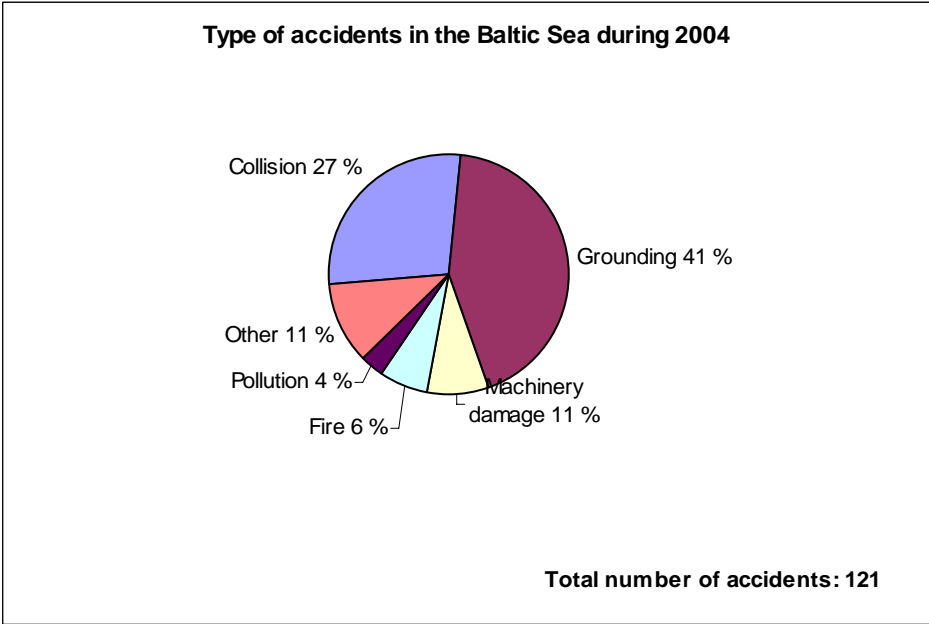


Figure 3

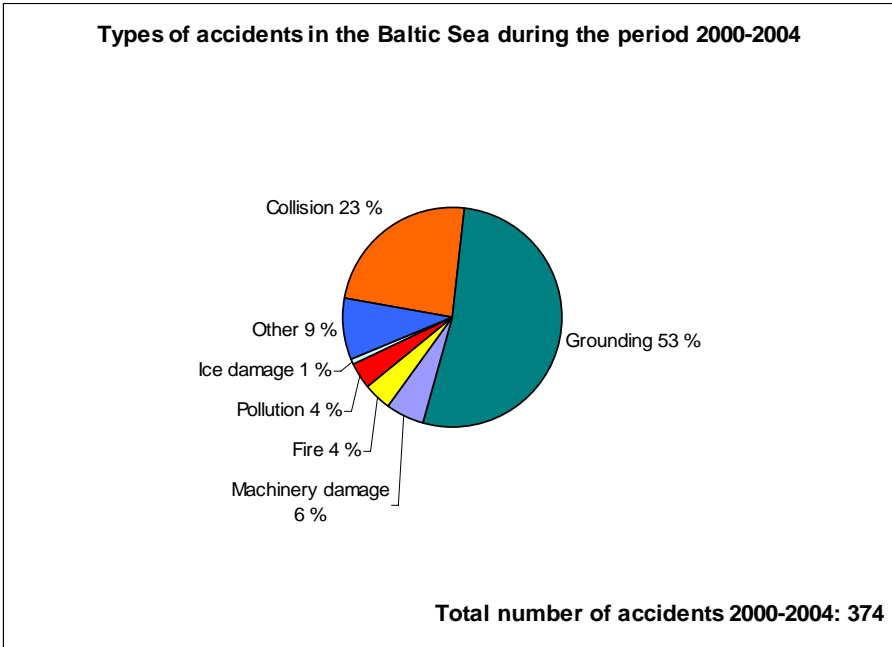


Figure 4

Types of vessels involved in the accidents

As can be seen from **Figure 5** cargo vessels, ferries and tankers are the main groups of vessels involved in accidents.

Figure 6 illustrates the composition of the vessels which have been entering the Baltic during July-September 2005. The differences in composition of the vessels entering the Baltic and those involved in accidents are understandable as the internal Baltic Sea traffic is not reflected in Figure 6. There is no clear indication that some types of vessels tend to be involved in accidents more frequently than others and therefore, require more attention. This aspect can be explored more carefully when data on the structure of the whole Baltic Sea shipping is available.

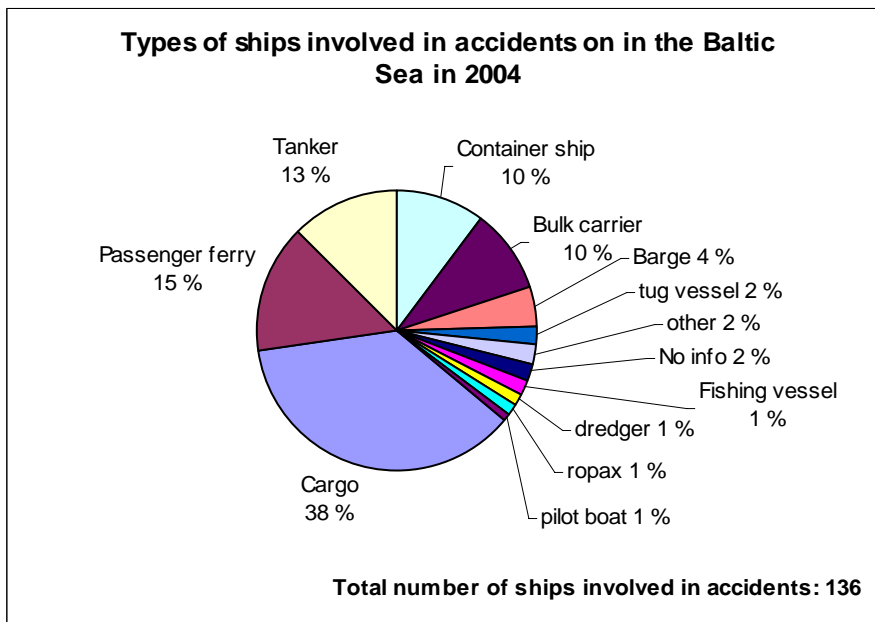


Figure 5

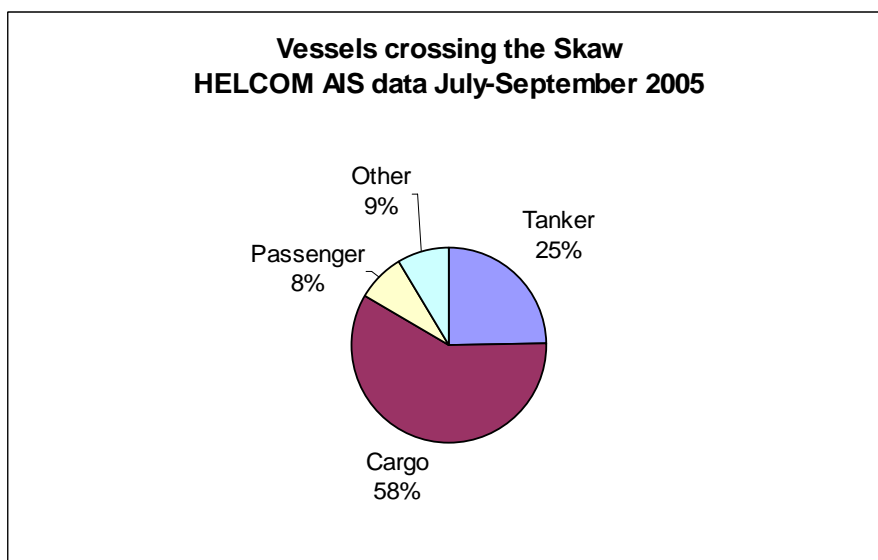


Figure 6

As tankers are often the issue of high concern the map on tanker accidents in 2000-2004 (**Figure 7**) is also presented here.

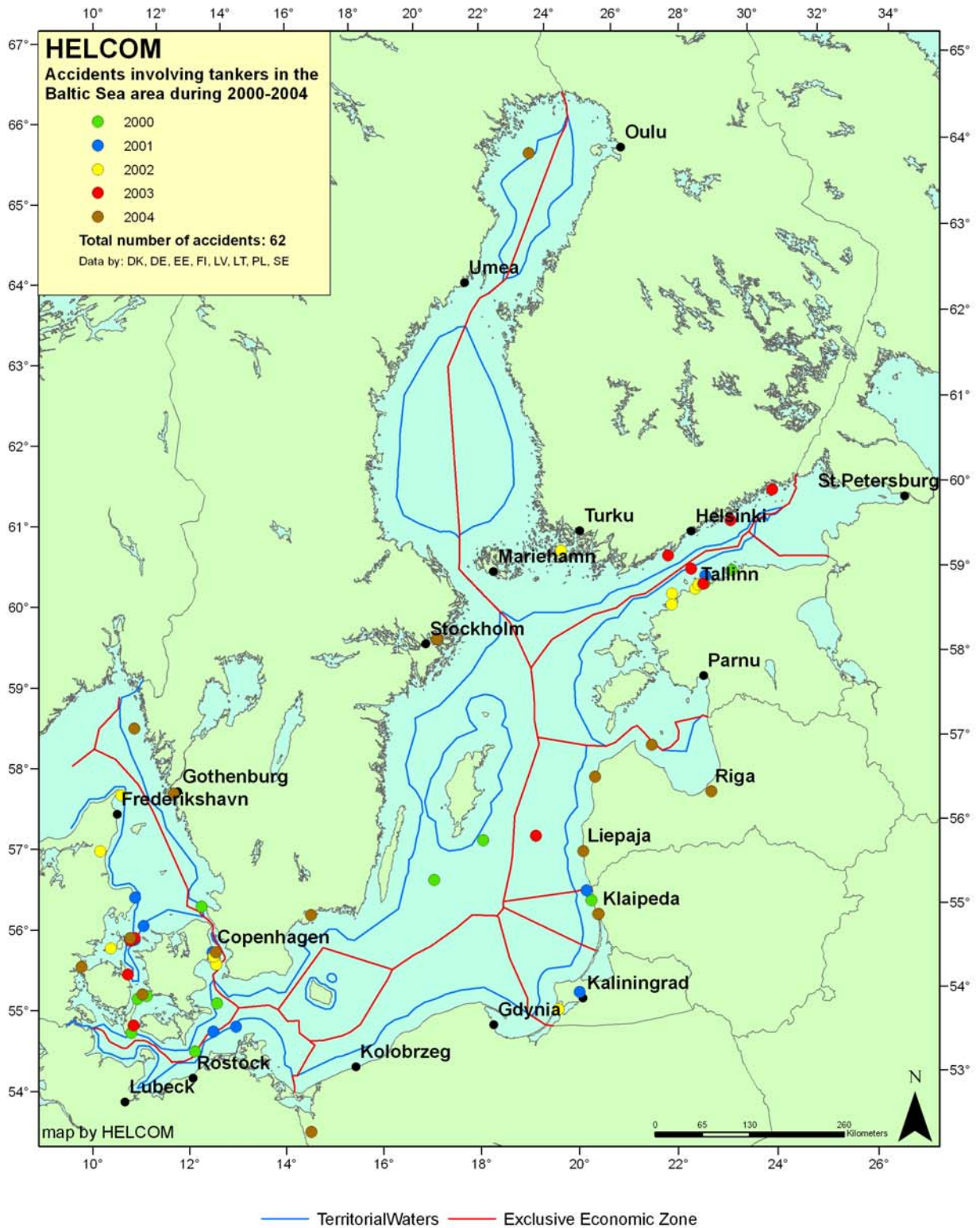


Figure 7

Causes of accidents

The main reason for an accident to happen is human factor (39 %), followed by technical failure (20 %) according to the reports of the Contracting States (**Figure 8**).

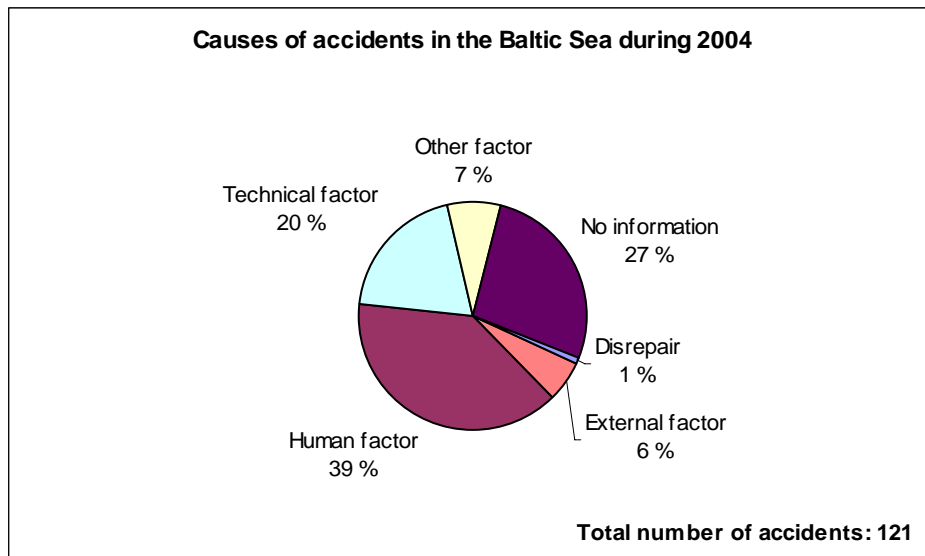


Figure 8

Human factor seems to be the main cause (50%) also in accidents causing pollution (**Figure 9**).

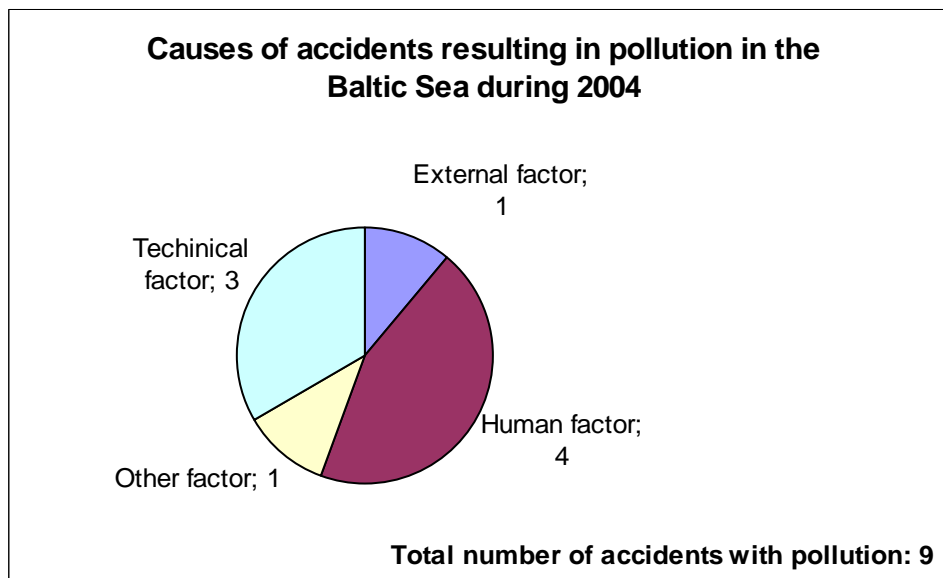


Figure 9

Groundings

Accounting for more than 41 % of the total number of accidents in 2004, groundings are the main type of accidents in the Baltic. This situation is not unique in 2004 but can be followed through the years 2000-2004 as well (52%). Some growth trend could be identified in the total number of groundings in the Baltic (**Figure 10**) but the increase in 2004 might be related to the same reasons as the growth in the total number of reported accidents.

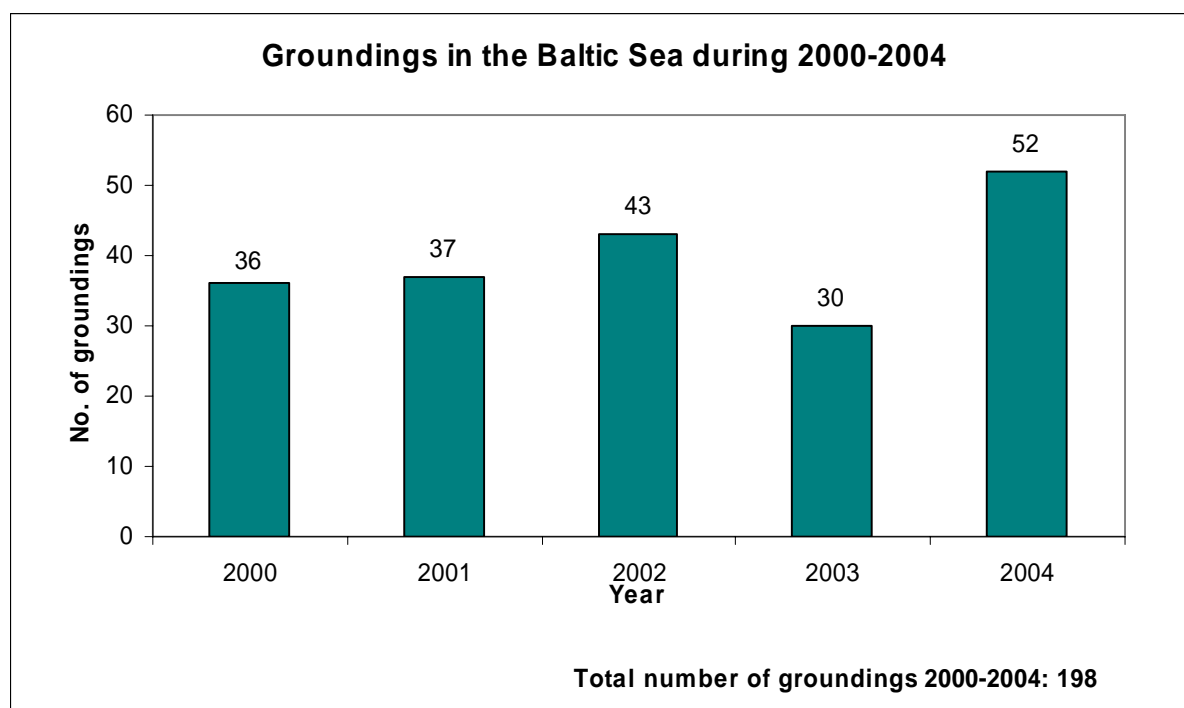


Figure 10

The map of the reported groundings in 2000-2004 (**Figure 11**) clearly indicates the areas of primary concern:

- Danish straits
- Gulf of Finland, especially the Estonian coast
- Åland archipelago area
- Swedish coast of the Baltic Proper
- Ports

The other areas where groundings have occurred deserve attention of the relevant states as well.

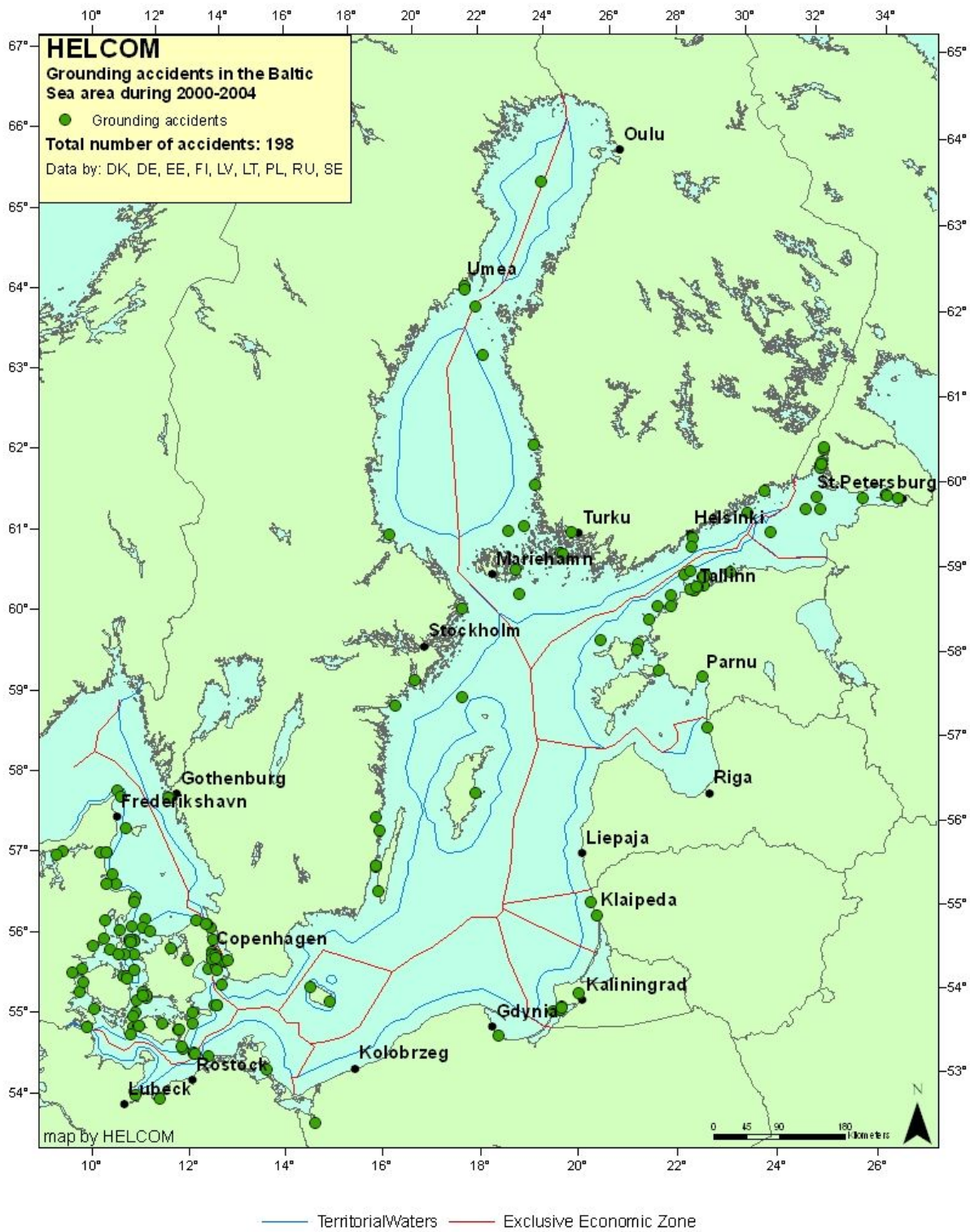


Figure 11

Groundings in the Danish straits and adjacent area (**Figure 12**) account for a half of all groundings registered in 2000-2004. Moreover, the statistics do not show any decrease in the number of groundings in the area in recent years (**Figure 13**).

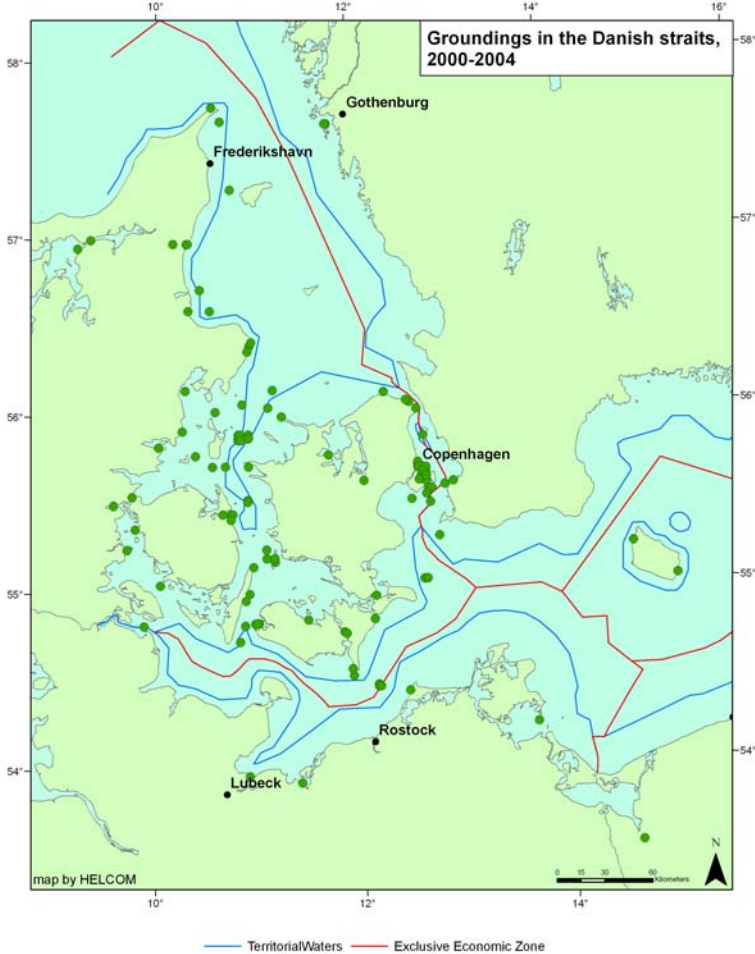


Figure 12

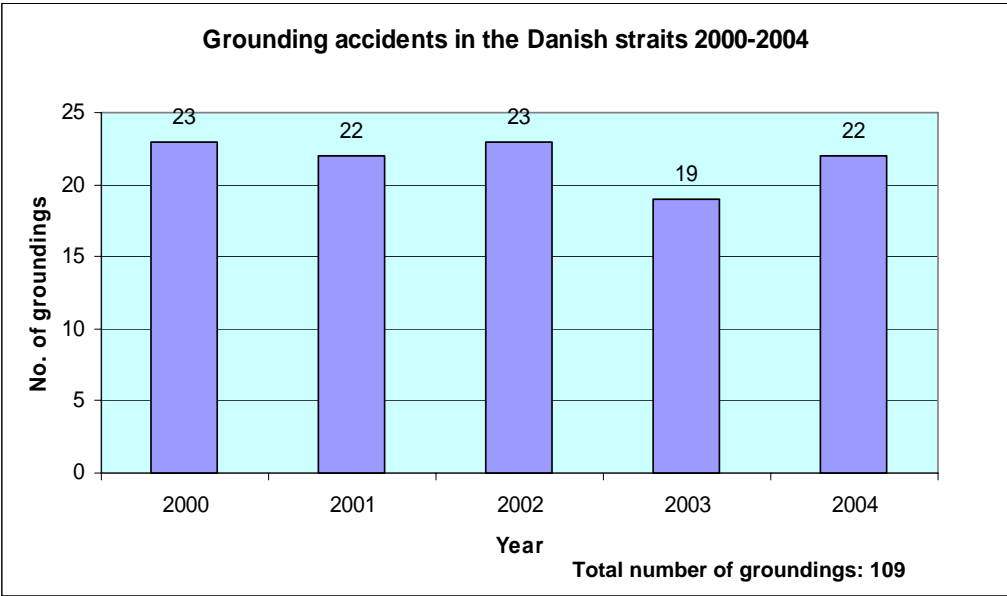


Figure 13

At the same time the number of groundings in the Gulf of Finland area (**Figure 14**) shows a decrease during last years (**Figure 15**) despite the growth of the oil export through the area. It could be discussed whether this has happened due to trilateral Finnish-Estonian-Russian measures.

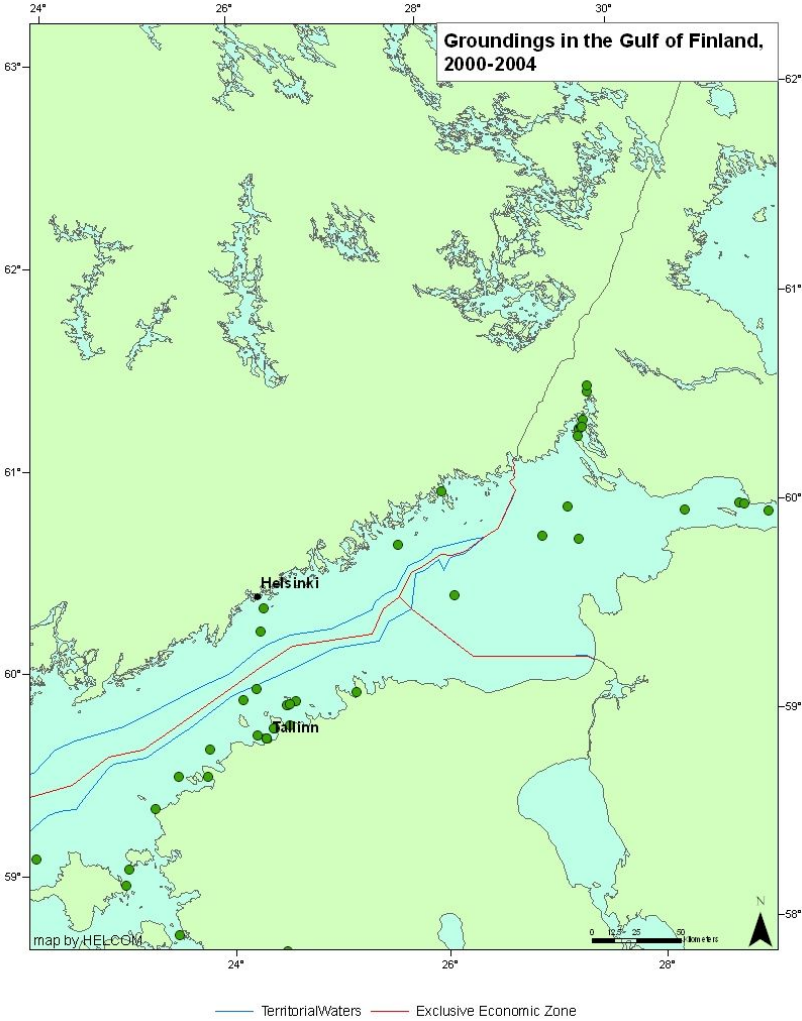


Figure 14



Figure 15

Comparison of the draught of the vessels involved in grounding with the draught of the vessels passing Bornholm (**Figures 16 and 17**) indicate a possible trend to more frequent grounding of deep draught vessels but firm conclusions cannot be made at this stage due to two main reasons:

- missing information on 50 % of grounding cases
- composition of vessels passing Bornholm (as well as the time period) do not necessarily reflect the composition of the whole Baltic Sea shipping.

Therefore, a deeper look into the issue is needed in order to identify the vessels of primary interest to anti-grounding measures.

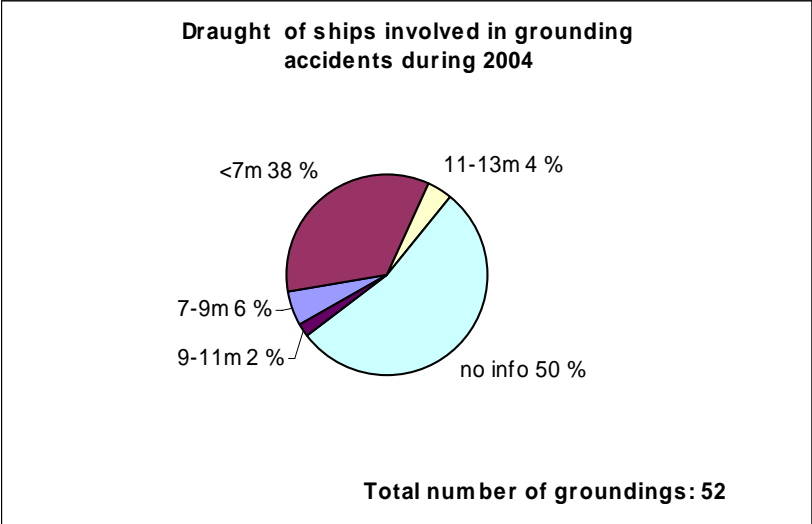


Figure 16

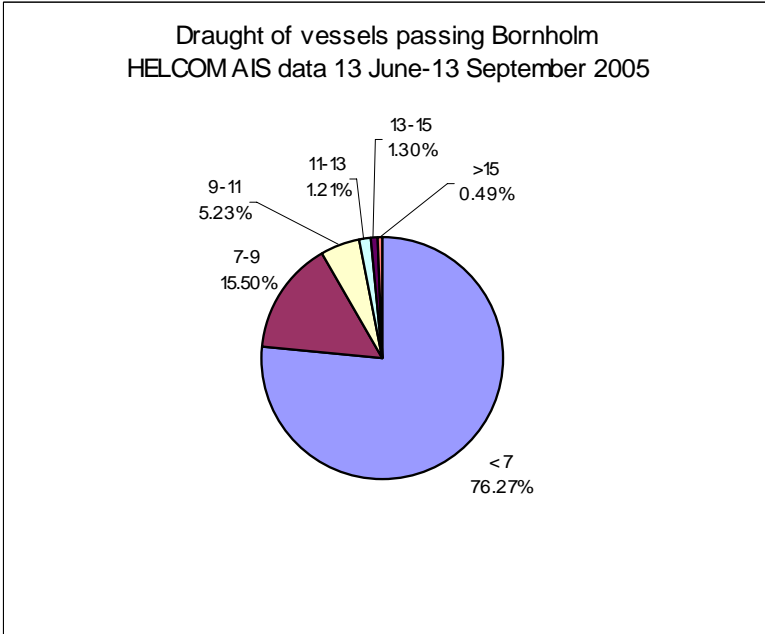


Figure 17

The problems with reporting are also preventing a deeper analysis of the relation between groundings and the presence of pilot onboard (**Figure 18**). Having in mind that groundings most often take place in the Danish straits, where pilotage for certain ships is recommended, the issue clearly deserves a deeper analysis.

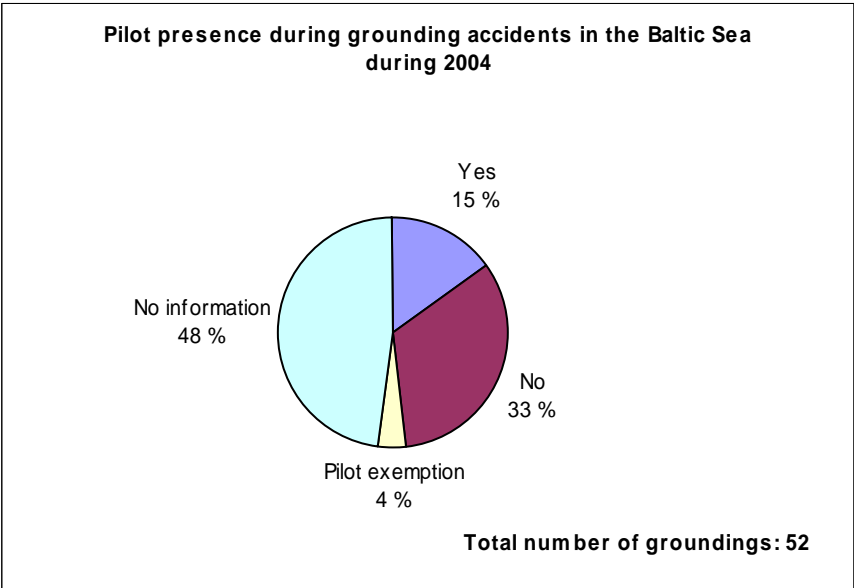


Figure 18

Collisions

Amounting to 35 cases or 41 % of all accidents in 2004 and 87 cases (23%) in 2000-2004, respectively, collisions are the second most frequent type of shipping accident in the Baltic. Moreover, the number of collisions has been increasing significantly during last years. (**Figure 19**).

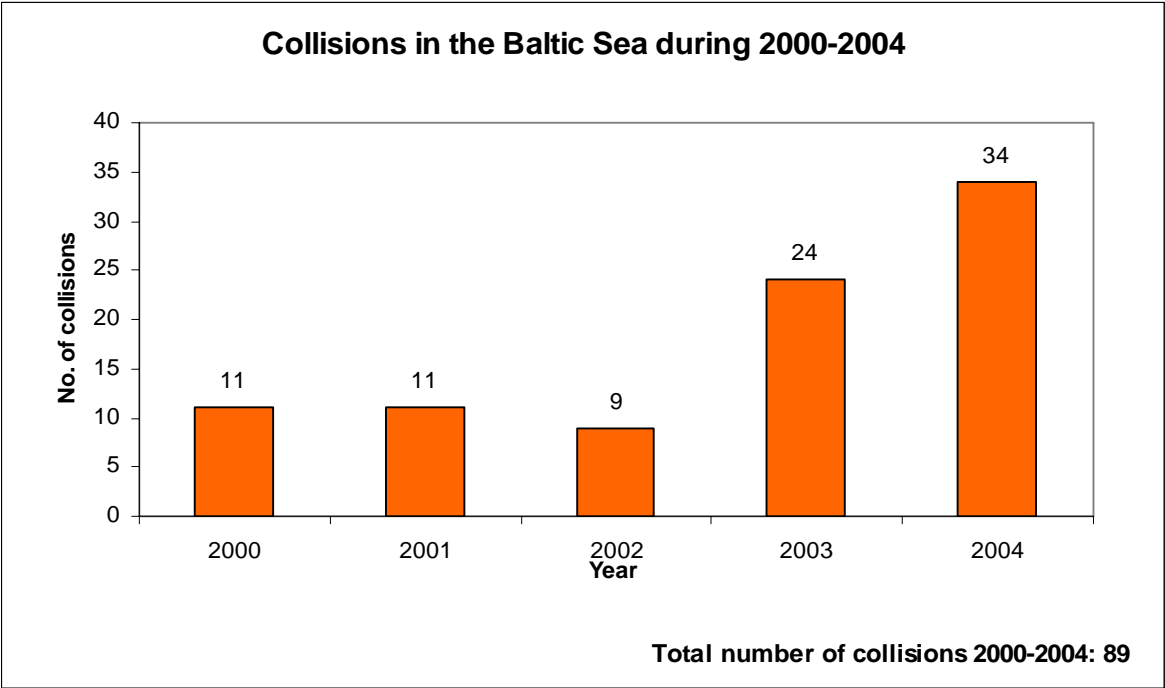


Figure 19

Spatially collisions are not so clearly accumulated in few areas as groundings but the Danish straits and the Gulf of Finland can be clearly identified as areas having the highest risk for ships to collide (**Figure 20**) and some trend of growth in the number of collisions in these areas can be identified. (**Figures 21-24**).

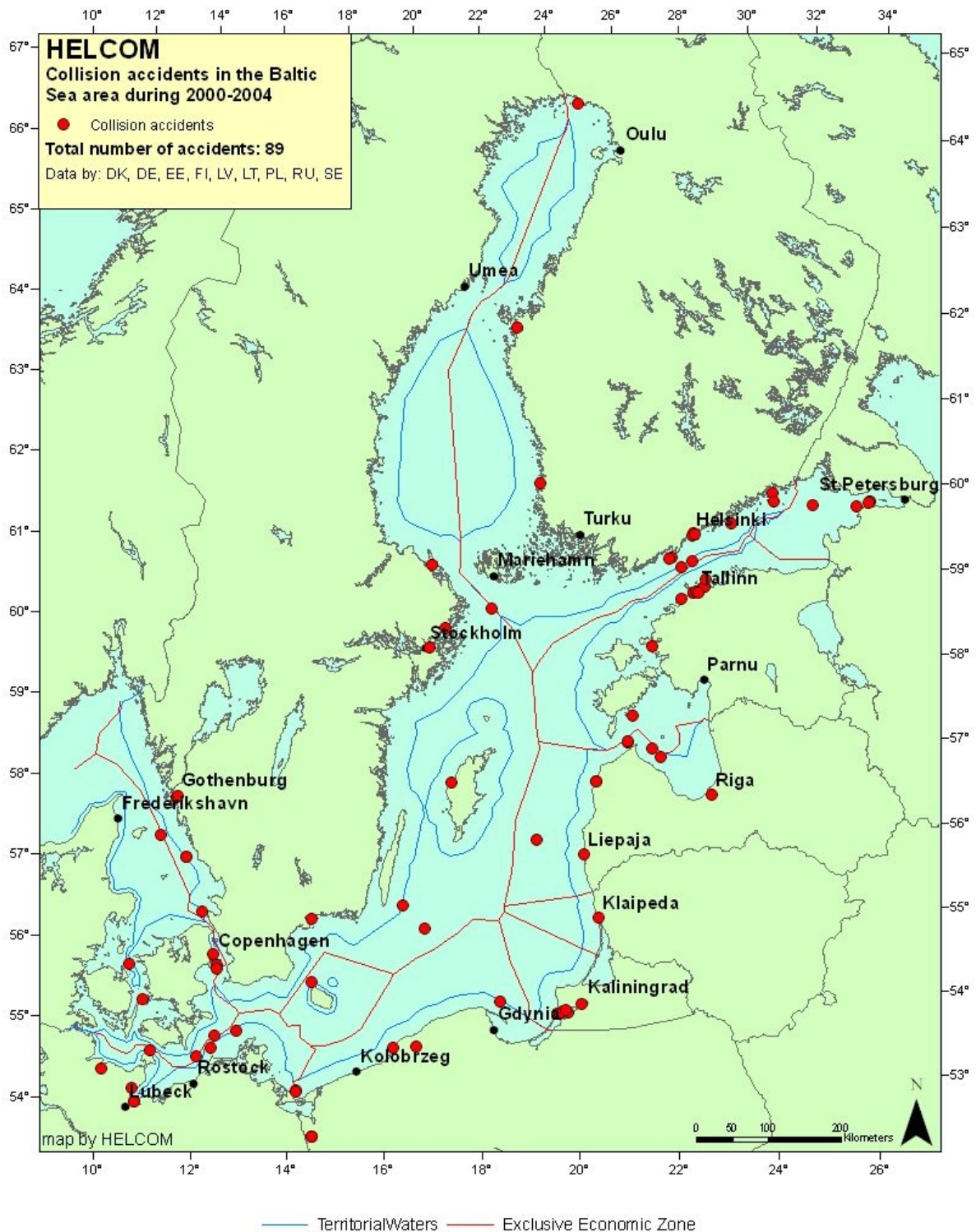


Figure 20

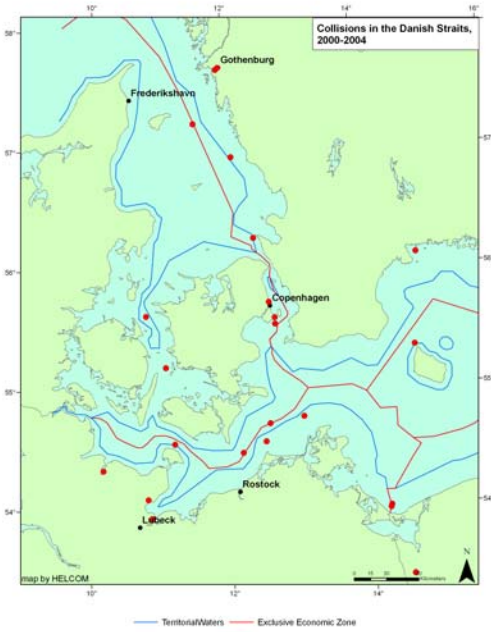


Figure 21

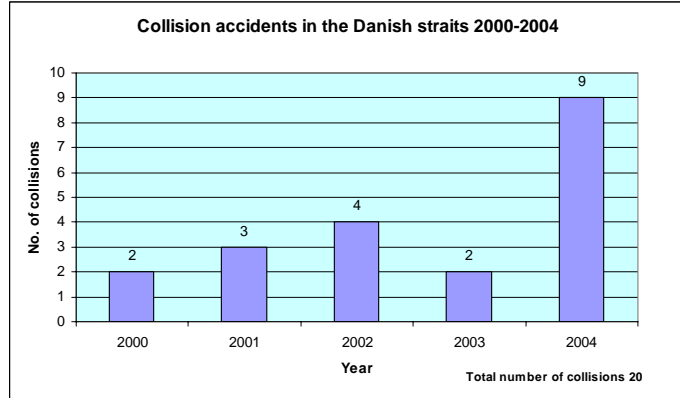


Figure 22

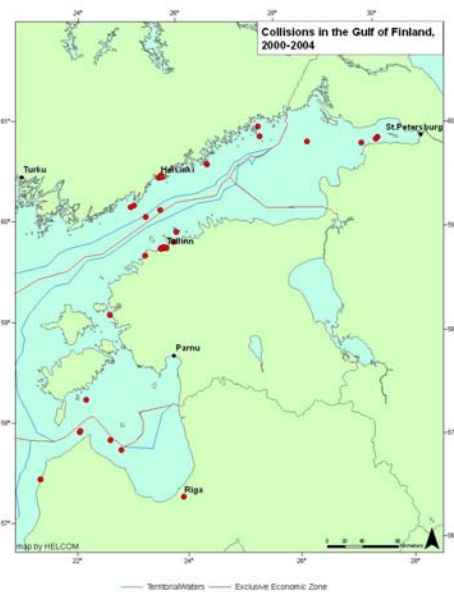


Figure 23



Figure 24

Since July 2005 HELCOM AIS has been able to provide additional information for the analysis of each individual collision case by respective Contracting States and the findings of such investigations would be useful to be discussed during HELCOM MARITIME meetings with a view to identify the possible need and possibilities of HELCOM actions in this area.

Accidents with machinery damage

Machinery damage is the third most frequent type of accident in the Baltic Sea area during 2004. The number of reported machinery damage cases has increased more than three times in 2004 compared to 2003 (*Figure 25*) and the reasons for that remain to be discussed.

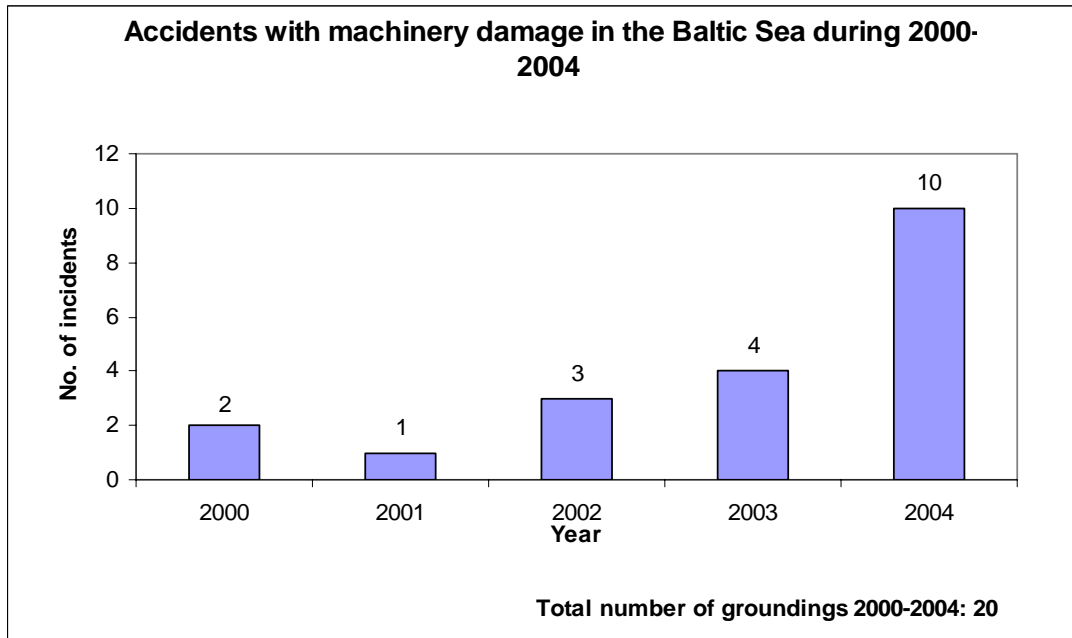


Figure 25

Accidents with pollution

Accidents with pollution traditionally get more attention of the competent authorities and media. According to the 2000-2004 data, 8-9 % of the reported accidents end up with some kind of pollution (*Figures 26 and 27*).

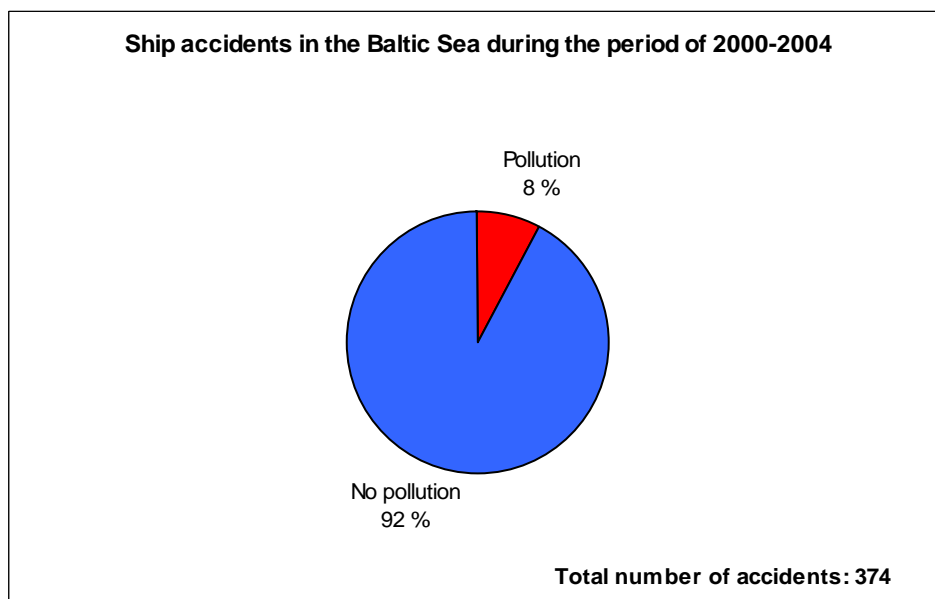


Figure 26

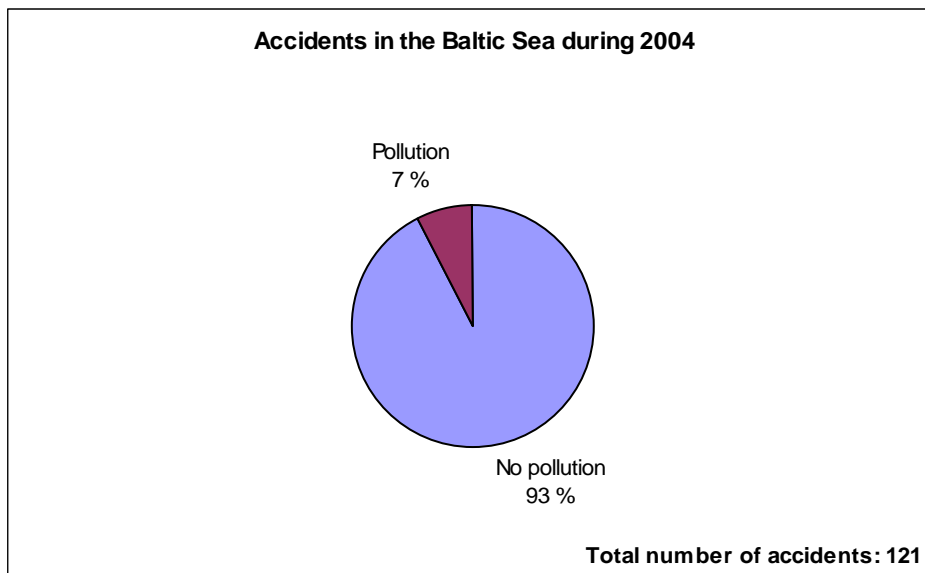


Figure 27

The spatial distribution of the accidents in 2004 causing pollution can be seen in **Figure 28**.

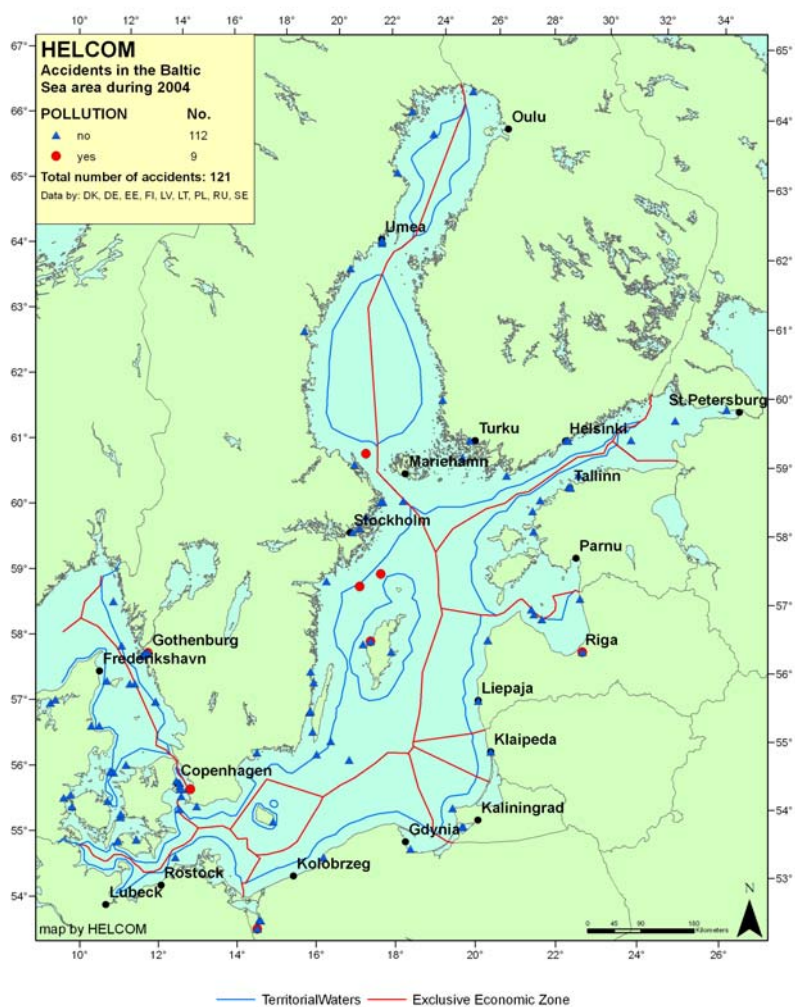


Figure 28

Annex 1

Country	Date	Time	Position	Lat.	Long.	Ship	Ship type	Size GT	Size DWT	Draft M	Cargo	Type of accident	Cause	Aggravating circumstance	Pilot onboard	Offence	Damage	Need of assistance	Type of pollution	Pollution
Denmark	12.8.2004	21.39		54,83	11,00	Stroomba NK, IMO: 9133537, NL	general cargo	1682				grounding	ni							
Denmark	08.12.2004	17.33		54,83	11,02	Line, int. ship reg.:7508271, NO	general cargo	2973				grounding	ni							
Denmark	5.6.2004	3.32		54,85	11,50	San Remo, IMO: 6507983, VC	general cargo	1283				grounding	ni							
Denmark	19.3.2004	10.49		55,03	15,13	Berzupe, IMO: ni, ni	ni	ni				grounding	ni							
Denmark	24.10.2004	20.21		55,20	11,08	Bergitta, IMO: 9197715, int. and Msc Eyra, IMO: 8201648, P	crude oil tanker and container ship	56207 and 21586		ni		collision	ni							
Denmark	09.7.2004	00.34		55,20	11,10	Petimata OT TMS, IMO: 7813016, BG	bulk carrier	23363				grounding	ni							
Denmark	09.12.2004	8.16		55,25	11,10	Mastrogi orgis, IMO: 7915656, PA	bulk carrier	41643				grounding	ni							
Denmark	15.11.2004	13.30		55,37	9,80	Tvillingen, IMO: ni, DK	barge	less than 20				grounding	ni							
Denmark	17.11.2004	7.32		55,45	10,76	Alfono, IMO: 7622053, CY	refrigerated cargo	10338				grounding	ni							
Denmark	15.6.2004	4.45		55,50	9,58	Roger, IMO: ni, ni	ni	ni				grounding	ni							
Denmark	13.10.2004	00.06		55,55	9,77	Luzon Spint, IMO: 9017082, BS	crude oil tanker	57448				grounding	ni							
Denmark	13.4.2004	20.57		55,65	12,70	Wani Pride, IMO: 9252931, GI	general cargo	2061				grounding	ni							
Denmark	17.1.2004	1.02		55,70	12,70	Razna, IMO: 8129632, LR	oil product tanker	5154				grounding	ni							
Denmark	11.5.2004	22.37		55,73	12,62	Katrine Krog, IMO: 6922779, DK and Ladoga 11, IMO: 761460	general cargo and general cargo	1055 and 1588		ni		collision	ni							
Denmark	30.8.2004	18.32		55,88	10,93	Saint Nicholas, IMO: 8316261, MT	bulk carrier	22009				grounding	ni							
Denmark	11.7.2004	2.31		55,90	10,85	Stadiong Racht, IMO: 9202508, NL	general cargo	16639				grounding	ni							
Denmark	30.9.2004	12.08		55,90	10,83	Fotini Lady, IMO: 9267132, LR	crude oil tanker	42058				grounding	ni							
Denmark	23.4.2004	20.05		56,00	11,27	Tokkarosh, IMO: ni, ni	ni	ni				grounding	ni							
Denmark	08.2.2004	9.46		56,60	10,55	Katharina D, IMO: 9006265, AG	general cargo	2450				grounding	ni							
Denmark	11.5.2004	8.35		56,60	10,33	Nyffjell, IMO: 7517533, BS	general cargo	1896				grounding	ni							
Denmark	04.10.2004	16.08		56,95	9,20	Volgobal T 149, IMO: 8866981, RU	general cargo	2457				grounding	ni							
Denmark	02.11.2004	12.58		57,00	9,33	Clarity, IMO: 8012815, VC	general cargo	986				grounding	ni							
Denmark	28.8.2004	11.53		57,23	11,42	Inge Birthe	fishing vessel					loss	ni							
Denmark	23.11.2004	9.41		57,23	11,55	Ileksa, IMO: 9149938, MT and Cepheus, IMO: 9292943, UK	general cargo and container ship	4955 and 6454		ni		collision	ni							
Denmark	07.7.2004	1.20		57,28	10,77	Sarah, int. ship register, NO	general cargo	2390				grounding	ni							
Estonia	29.09.2004			54,57	12,51	Kurkse, ESEU, EE	general cargo	2658		4.9	container	collision	human factor	absent	no	operation of the ship	minor hull damages	no		
Estonia	16.11.2004			58,91	23,42	St. Ola, ESUD, EE	passenger ferry	4833		4.1	passangers, cars	collision	external factor	hard winds	no	weather restrictions	minor hull damages	no		
Estonia	21.05.2004			59,22	23,51	Adriane, OUXX6, DK	general cargo	1371		3.45	peatmoss	grounding	human factor	heavy waves	yes	operation of the ship	minor hull, prop. blade damages	towing		
Estonia	13.06.2004			59,36	23,79	Celtic Spirit, C6TD2, BS	general cargo	2978		6.41	sawn timber	grounding	human factor	fatigue	no	operation of the ship	serious hull dam, underwat part	towing		
Estonia	11.10.2004			59,45	24,77	Tallink Autoexpress, ESGN, EE	passenger ro-ro cargo	4859		2.5	passangers, cars	collision	human factor	whirlpool, caused by propeller	no	operation of the ship	minor hull damages	no		

Denmark	12.8.2004	21.39		54.83	11.00	Stroomba NK, IMO: 9133537, NL	general cargo	1682				grounding	ni							
Estonia	25.01.2004			59.46	24.72	Ability, LAOY5, NO	general cargo	2822		6.52	coal in bulk	grounding	human factor	icing	yes	max draft	no damage	no		
Estonia	02.01.2004			59.47	24.72	Salmona, LYOS, LT	general cargo	1044		3.1	ballast	collision	external factor	hard winds	yes	weather restriction	minor hull damages	no		
Estonia	09.11.2004			59.61	25.08	MSC Lieselotte, HPDX, PA	container ship	21586		9.5	container	grounding	human factor	absent	yes	operation of the ship	hull damaged	towing		
Estonia	17.07.2004			60.16	24.93	Lembitu, ESEZ, EE	ro-ro container carrier	7606		4.9	container	collision	technical factor	tension and stress	no	operation of the ship	hull and quay struct damaged	no		
Finland	12.11.2004	18.00		55.60	12.70	OIXX, FI	general cargo	5627			general	collision ship	technical		no		dents	no		
Finland	09.11.2004	11.00		59.82	22.96	SZLQ, GR	passenger ferry	30285			passangers	lifeboat	technical		no		Injury	no		
Finland	23.01.2004	10.00		60.16	25.00	OJHP, FI	passenger ferry	35495			passangers	collision ship	human factor	alcohol, fog	yes		dents	no		
Finland	05.11.2004	23.00		60.21	21.74	OJLB, FI	ro-ro container carrier	13145			general	grounding	human factor		no		sunk	lightering, salvage		
Finland	20.01.2004	15.00		60.45	22.05	OJKA, FI	ropax	29841			passangers	grounding	external factor		no		leakage	no		
Finland	05.10.2004	6.00		61.13	21.45	V2OC, DE	general cargo	10481			general	collision quay	human factor		yes		dents	no		
Finland	20.01.2004	22.00		65.67	24.53	UHCK, RU	general cargo	10133			general	collision quay	human factor		yes		dents	no		
Latvia	10.05.2004			55.87	17.31	Astrida, LV and Vladimir, CY	fishing vessel and ro-ro	73 and 15893		n and 7.1	no/ballast	collision	human factor	no	no/no	colreg	total loss/minor damages	ni/no		
Latvia	23.04.2004		Liepaja	56.52	21.02	Bonita, SE and Gina-R, AG	tanker ship and dry cargo	3475 and 1773		6.2 and 4.2	gas oil/soya flour	collision	technical factor	no	yes/no	operation of the ship	hull forward part/hull port side	no/no		
Latvia	12.05.2004		Riga	56.97	24.10	Fure star, SE	tanker ship	9382		6.90	oil	pollution	human factor	no	no	operation of the ship	no	no	IFO overflow	0.1m³
Latvia	15.12.2004		Riga	56.97	24.10	Pilot-2, LV and Sabina, FI	pilot boat and dry cargo	80 and 863		1.8 and 4.2	ni/no	collision	human factor	no	ni/yes	colreg	minor damages/hull port side	no/no		
Latvia	11.12.2004		Ventspils	57.40	21.55	Turid Knutsen, NO	tanker ship	15687		6.60	no	contact with jetty	human factor	no	yes	operation of the ship	jetty	no		
Latvia	19.12.2004		Ventspils	57.40	21.55	Dzelma, LV and Ventspils, LV	pump dredge and tug boat	1435 and 305		3.6. and 4.8	no/no	collision	external factor	hard wind, heavy waves	no/no	force majeure	minor damages/hull port side	towing/no		
Latvia	17.04.2004			57.58	23.16	Multi coaster, RU	dry cargo	721		3.20	timber	dangerous stability	technical factor	no	no	deficiency of the ship	no	no		
Latvia	05.03.2004			57.67	22.97	Casandra, FI and Visten, AN	dry cargo and tanker ship	1197 and 4059		5.0 and 6.5	no	collision	human factor	no	no/no	operation of the ship	minor damages/hull aft part	no/no		
Latvia	12.03.2004			57.75	22.93	MSC Malin, PA	dry cargo	21586		9.80	containers	fire onboard	technical factor	no	no	deficiency of the ship	engine room	no		
Latvia	24.01.2004			57.77	24.34	Badan, SE	tug boat	1229		4.40	no	grounding	human factor	no	no	colreg	hull bottom	no		
Lithuania	06.05.2004		Port of K	55.72	21.13	7369091, MT	oil tanker	19171		11.35	urea/ammonium/nitrate solution	fire	technical factor		no	maintenance of equipment	steam boiler in E.R. damaged by	extinguishing of fire by shore fire fightin		
Poland	02.03.2004		Port of S	53.42	14.53	MV Malbork II, MT	bulk carrier	4200		6.00	ballast	damage of gangway	external factor	other vessel passing too fast	no	speed limits	gangway damage	no		
Poland	15.05.2004		Port of S	53.42	14.53	MV Tai Huahai, CN	bulk carrier	47377		8.00	coal	lifeboat fall down	other cause	damage of the hook	no	deficiency of the ship	two persons injured	hospital		
Poland	13.07.2004		Port of S	53.42	14.53	MT Bernice, NL	oil tanker	1262		5.20	loaded	contact with harbour porpoise	human factor	no	yes	no	small hole starboard side	no		
Poland	04.07.2004		Port of S	53.42	14.53	MV West wind, AG	container ship	4700		5.30	containers	collision with motor yacht	human factor	no	yes	colreg	small damage on hull side	no		
Poland	26.08.2004		Port of S	53.42	14.53	MV LoreD, AG	bulk carrier	1127		5.50	ballast	fire	human factor	no	no	no	hull paint was burned	assistance of fire department	leakage of gas oil	
Poland	31.08.2004		Port of S	53.42	14.53	MV LoreD, AG	bulk carrier	1127		5.50	ballast	fire	human factor	no	no	no	electric wire burned	assistance of fire department		

