



2015

ANNUAL REPORT

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The Nordic Association of Marine Insurers

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Cefor in brief...

The Nordic Association of Marine Insurers (Cefor) represents marine insurers in the Nordic countries.

The members of Cefor engage in:

- hull and machinery insurance (ocean and coastal)
- protection and indemnity insurance
- cargo insurance
- loss of hire insurance
- legal defence
- war risks insurance
- offshore energy insurance
- builders' risks insurance

Our objective is to further enhance the lead Nordic hull market and promote the members' common interests on key issues for the marine insurance industry.

Our mission is to serve the interests of our Nordic members by promoting quality marine insurance through:

- comprehensive statistics,
- competence building,
- agreed all risks insurance conditions,
- a common public voice.

To this end, the Association shall endeavour to:

1. Make available to its members appropriate statistics from the Nordic Marine Insurance Statistics (NoMIS) database to support the activities of the individual members and the general objectives of the Association.
2. Contribute to the provision of educational programmes, securing adequate competence development and expertise among its members.
3. Facilitate continuous evolution of competitive Nordic marine insurance conditions in collaboration with customers, brokers, legal experts, trade associations and other relevant parties.
4. Influence the industry's framework conditions.

The Association shall not engage in independent economic activity, nor shall it promote practices that may in any way be detrimental to competition.

The 2015 Cefor year in review



The 2015 Cefor year in review

Creating certainty by avoiding gaps in cover and clarifying any issues of interpretation and practice is a main priority that was successfully achieved with Version 2016 of the Nordic Plan. With the inclusion of construction all risks clauses for mobile offshore units (MOUs), the Plan now offers all standard non-P&I marine and offshore insurances applicable to international owners.

A ONE-STOP SOLUTION

Version 2016

The new version of the Nordic Marine Insurance Plan was approved on 1 October, and subsequently published on www.nordicplan.org and uploaded to the Nordic Plan App. Translations into four Nordic languages, printed versions, guidance notes, and an introductory brochure became available towards the end of the year.

With the inclusion of clauses covering construction risks for mobile offshore units (MOUs), the Plan solution is now complete with a coordinated and comprehensive regime including all standard non-P&I marine and offshore insurances.

All amendments are agreed and drafted by a Committee

with strong Nordic shipowner participation, often supported by their Nordic brokers. This ensures a fair and balanced approach, focusing on the practical needs of the assured and avoiding any gaps or overlap in cover.

Experts from the Plan's Standing Revision Committee participated in a launch seminar for Version 2016 in October. The seminar was also webcasted and made available for on-demand viewing.

Coastal and fishing vessels clauses

The insurance conditions for commercial vessels smaller than 15 metres were revised and issued in November as Cefor Form 275.

EXECUTIVE SUMMARY

- Nordic Plan: complete and comprehensive marine insurance regime.
- Statistics: leading provider of up-to-date claims trends for ocean and coastal hull.
- Cefor Academy: competence building in high demand.
- Framework conditions: influencing current issues at an international level.

LEADING PROVIDER OF STATISTICS

Efforts are made continuously by Cefor and its members to further enhance the quality of the up-to-date claims trend data for ocean and coastal hull provided by the Association.

By the end of the year, all but one member had implemented a new improved reporting method for the Nordic Marine Insurance Statistics (NoMIS) database, and the last will transfer in 2016.

The technical database platform was modernized by migrating to a new management system, which will facilitate better integration with Excel reports. To enable more detailed claims trends analysis, a working group was formed to improve the reporting on more differentiated claims codes.

Specific NoMIS reports for ocean and coastal hull claims trends, including mid-year updates, were compiled and published on the Cefor website. The 2015 hull claims trends and more detailed information about the NoMIS database are presented in a separate section starting on page 10.

Cefor also fulfils a vital role on the International Union of Marine Insurance's (IUMI's) Facts and Figures Committee. In 2015, this included the Cefor actuary's traditional responsibility for compiling data and presenting the "Global Marine Insurance Report" at the annual IUMI Conference in Berlin.

BUILDING COMPETENCE

The marine insurance industry is highly specialised. Relevant, practical learning is offered by and for the industry through Cefor. The administration is the key facilitator, although it relies on its members for lecturers, examiners and other contributions to maintain the high quality training currently in high demand by the industry.

One-year programme recognized by market

The comprehensive Nordic Marine Insurance Education Programme is designed to give students a good general understanding of the many aspects of marine insurance. Six years after its inception in 2009, this Cefor Academy programme has become an integral part of the training for marine insurance professionals in the Nordic market. The certificate of

completion documents the student's understanding of relevant terms and conditions as well as the basic principles behind them. Experts from Cefor member companies, Nordic law firms and an average adjuster serve as lecturers during the six sessions.

The twenty-five new students accepted into the over-subscribed 2015-2016 programme represented brokers, insurers and their clients from five different nationalities. Twenty-six students from the 2014-2015 or previous programmes received their certificate of completion in 2015.

Practical guidance through Nordic Plan training courses

Cefor and the Scandinavian Marine Agency (SMA) offer two three-day training courses specifically targeting the latest version of the Nordic Marine Insurance Plan. Both courses are held on an as-needed basis.

Two courses were offered in the reporting year: the Nordic Plan training course was held in Oslo in October. The 30 students attending represented insurers, owners, brokers and the financial sector, with a broad geographic spread from Nordic and other markets.

The more specialised course focusing on the adjusting of hull & machinery claims took place in Oslo in January.

Targeting Arctic sailings

Cefor co-hosted two seminars on Arctic sailings in the reporting the year.

The first seminar was organised in April together with the Scandinavian Institute of Maritime Law and the Norwegian Shipowners' Association. The seminar was aimed at identifying the added risks and insurance challenges still present in Arctic waters, and provided background information for an academic study at the Institute.

The venue for the second seminar was the Nor-Shipping exhibition in Lillestrøm. During an Ocean Podium seminar, top insurance representatives and their clients in the Nordic market explored how to manage risk and obtain insurance in Arctic waters. Sanctions were targeted in another of these seminars, in which Cefor also participated as a partner.

INFLUENCING FRAMEWORK CONDITIONS

The overall objective of Cefor's framework-related activities is to promote legislation and industrial policies that are conducive to a sustainable and prosperous Nordic marine insurance market.

To operate efficiently and provide a level playing field, the international marine insurance and shipping industries depend upon a global regulatory framework. Cefor is a strong supporter of the international regulation of what is essentially a global industry, in contrast to regional or domestic regulation.

Norwegian taxation – Solvency II

In May, the Norwegian Ministry of Finance submitted a consultation document to stakeholders, introducing taxation of the insurance companies' reserves as part of the new Solvency II regime from 2016. The proposal was met with strong opposition from the industry. Cefor's response encouraged a closer dialogue with the industry on new rules that would rather support the competitiveness of Norwegian marine mutuals and insurance companies than have the opposite effect.

Due to the many concerns, the ministry announced in August that more time was needed for considerations and the matter was deferred. Consequently, there were no amendments to the taxation of reserves with effect from 2016.

Norwegian VAT on legal services abroad

In October, Cefor became involved in an ongoing dispute between the Norwegian tax authorities and one of its members regarding legal services incurred abroad, but paid for from Norway. The local tax office concluded that legal expenses are subject to VAT in Norway, although incurred on behalf of the assured, when the invoice is paid directly by the insurers and the communication has mainly taken place with the insurer. While originally considering the entire amount subject to VAT, the tax office has since reconsidered and is only maintaining the VAT claim on the company's share of the risk.

The VAT claim was appealed, but an appeals committee unfortunately rejected the appeal in December. As the outcome was considered of principal interest

to the market, Cefor had submitted a letter of support to the appeal. A decision will be made by May 2016 on whether or not the matter should be brought to court.

Nordic average adjuster legislation

In 2015, the Danish Government rescinded the Act relating to average adjusters. The title is no longer protected so anyone can use the title "dispachør". On the other hand, officially appointed average adjusters that qualify as legal counsels, may now take up such practice in the field of maritime law.

The Finnish Government issued a consultation paper on the office of average adjuster, recommending that the adjuster should be an independent office rather than a part of the court system. The matter is still under consideration and, following Professor Hannu Honka's retirement, the Government has in the meantime appointed Dr. Lauri Railas, Attorney-at-Law, as the new adjuster.

The Norwegian Ministry of Justice is currently also considering how to reform the average adjuster legislation.

The International Union of Marine Insurance (IUMI)

IUMI is registered as a non-governmental organisation with consultative status in the International Maritime Organization (IMO). It also represents the global marine insurance industry in the International Oil Pollution Compensation (IOPC) Fund's discussions. Through its IUMI membership, Cefor ensures that the interests of its members are looked after at the international level.

The IUMI Political Forum, currently chaired by Cefor's managing director, identifies and monitors framework-related issues of interest to the global marine insurance industry. It also proposes possible actions and IUMI positions wherever appropriate. A list of current issues is regularly agreed, updated and subsequently published on the IUMI website: www.iumi.com.

Polar Code

Cefor and experts from the Association's member companies have taken a leading role in the many ongoing discussions and conferences related to further development and regulation of the Arctic.

The mandatory Polar Code will enter into force 1 January

2017. While providing an important framework, the fact that levels of strengthening and capabilities are inadequately prescribed in the Polar Code remains a challenge. The required approval of the Polar Water Operational Manual proves only that the Manual is in place and not that its contents are satisfactory. Cefor continued to focus on this challenge in meetings with stakeholders. Class societies are currently discussing internally, and with flag states, how to interpret and follow-up with a further detailing of the requirements.

Discussions also continued on the lack of necessary infrastructure in polar waters. Furthermore, the IMO has invited information in preparation for its consideration of an instrument that will address non-Conventional vessels operating in these waters.

Places of Refuge (PoR)

Prompted by the “*MSC Flaminia*”, “*Stolt Valor*” and “*Maritime Maisie*” incidents, in 2013 IUMI started a campaign, together with the International Chamber of Shipping (ICS), the International Salvage Union (ISU), and the International Group of P&I Clubs (IG), urging governments to adopt the IMO places of refuge guidelines. In the reporting year, Cefor was involved through the IUMI Political Forum in the finalization of new EU operational guidelines that will be presented to the European Parliament and the IMO in 2016.

Container vessels

The increasing size of container vessels and recent incidents have raised insurers’ awareness of the risks related to these vessels. In June, IACS issued two new Unified Requirements dealing with the structural safety of container vessels. These were the result of a review carried out after the “*MOL Comfort*” casualty in 2013.

Cefor also addressed the challenges presented by insufficient firefighting capacity and the denial of port of refuge as experienced in the “*MSC Flaminia*” case in 2012 in discussions with class and others. The need for further improvements to combat container fires will only increase with larger vessels, but amendments via the IMO are unfortunately likely to take time.

Liquefaction

The sinking of “*Bulk Jupiter*” in January was a tragic reminder that liquefaction of cargo remains a serious

threat to lives and property at sea. Based on the investigation report from the Bahamas Maritime Authority, the IMO agreed in September to prepare a safety awareness circular on the transport of bauxite. Individual insurance companies also warned of these risks in memos to owners. Work continues within the IMO to amend the individual schedule for this cargo.

Maritime cyber security

Complex technologies, interconnectivity and the growing reliance on information technology and data within the marine and energy sectors increase their exposure to cyber related risks. Cefor met with industry experts to gain a better understanding of the risks involved and how to mitigate them. Through the IUMI, Cefor also gave input to and supported the voluntary industry guidelines on cyber security on board ships that are produced by BIMCO, CLIA, ICS, INTERTANKO and INTERCARGO.

Iran sanctions

Following a Joint Comprehensive Plan of Action (JCPOA) between Iran and the P5+1 in July, the US and European Union will provide Iran with phased sanctions relief upon verification that Iran has implemented key nuclear commitments. Verification of Iran’s compliance is expected in early 2016. Until further notice, all sanctions remained in effect with the exception of the sanctions relief provided for in the Joint Plan of Action from 2013 that was extended in July.

CEFOR FORUMS

A considerable part of Cefor’s activities takes place within the eight forums listed on p. 41. While each forum has its own area of responsibility and focus, additional value is generated from cross-forum consultation and co-ordination. This is a focus area for the Association, and the annual strategy meeting in August provided a good opportunity to take stock of important cross-forum topics.

A revision of the forum mandates was initiated in August with a view to completion by mid-2016.

To ensure compliance with all relevant competition law regulations within all Cefor forums, working groups and the Board, the Association’s competition law statement and guidelines are regularly discussed and promoted among all appointed officials.

The Cefor Marine Insurance Market 2015

MARKET SHARES, ALL SECTORS

Gross premium income, direct insurance 2015: USD 1,547.2 million

USD 1= EUR 0.9018	EUR mill.	USD mill.	%
Hull	590.8	655.2	42.3 %
P&I	699.7	775.9	50.1 %
Offshore energy	85.7	95.1	6.1 %
Cargo	19.1	21.2	1.4 %
Total	1,395.3	1,547.2	100.0 %

Hull ¹			
Gard	189.5	210.1	33.0 %
Norwegian Hull Club	148.6	164.8	25.9 %
Codan	42.1	46.7	7.3 %
The Swedish Club	51.0	56.6	8.9 %
HDI-Gerling	41.5	46.0	7.2 %
Alandia Insurance	34.0	37.7	5.9 %
If	35.7	39.6	6.2 %
Gjensidige ²	20.1	22.3	3.5 %
Møretrygd	7.9	8.8	1.4 %
Tromstrygd	3.3	3.7	0.6 %
Total	573.8	636.3	100.0 %
DNK (war risks)	17.0	18.9	

Offshore energy			
Gard	49.2	54.6	59.2 %
Norwegian Hull Club	26.6	29.5	32.0 %
The Swedish Club	6.6	7.3	7.9 %
If	0.8	0.8	0.9 %
Codan	0.01	0.01	0.01 %
Total	83.1	92.2	100.0 %
DNK (war risks)	2.6	2.9	

P&I			
Gard	589.1	653.2	84.2 %
The Swedish Club	99.3	110.1	14.2 %
Norwegian Hull Club ³	6.5	7.2	0.9 %
Other Cefor members ⁴	4.5	5.0	0.6 %
Total	699.4	775.5	100.0 %
DNK (war risks) ⁵	0.3	0.4	

Cargo⁶	19.1	21.2	
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¹ Hull, hull interest, freight interest, loss of hire, builders' risks, fishing (catch & gear)

² Includes coastal marine clubs

³ Charterer's Liability

⁴ Alandia Insurance, Møretrygd, Tromstrygd, Gjensidige, Codan

⁵ Cruise vessels only; for other vessel types, P&I coverage is included in hull war premium

⁶ Norwegian income Cefor members only

The Nordic Marine Insurance Statistics (NoMIS) 2015

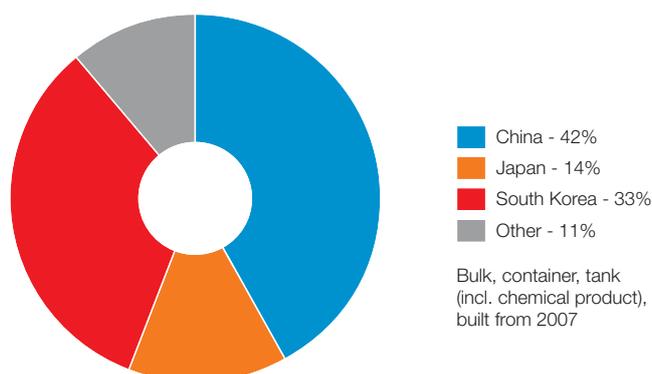


Spotlight on vessels built in Asia

WHO BUILDS THE VESSELS?

In the period 2007-2015, South Korea, Japan and China delivered the vast majority of crude, product and chemical tankers, as well as bulk and container vessels insured by members of Cefor. A particular feature of this period was the tremendous growth in newbuildings from Chinese yards and the corresponding growth in market share for China. In 2015, these three countries represented almost 90% of all vessels built after 2006 in these large segments, and yards in the rest of the world only 11%. For other ship types, the country of build is more balanced towards other countries.

I: Distribution of number of vessels by country of build, year of exposure 2015



QUALITY OF SHIPBUILDING COUNTRIES – STATISTICAL CONSIDERATIONS

The rapid growth in newbuildings from China – some of them from new yards – has caused insurers to question whether the quality of these vessels represents a higher risk. Cefor has so far been hesitant to publish statistics by factors such as builder, class, flag or engine maker, since the statistical characteristics of such segments might say more about the type of vessels and type of owner that dominates the segment than the segment as such. Even with the limited possibilities for drawing indisputable conclusions from the data, it is still interesting to use Cefor data to illustrate the country of build perspective. In order to ensure a like-for-like comparison, the analysis hereafter focuses on the tanker (including chemical/product), bulk and container segments.

CLAIMS FREQUENCY DEPENDING ON VESSEL TYPE AND SIZE

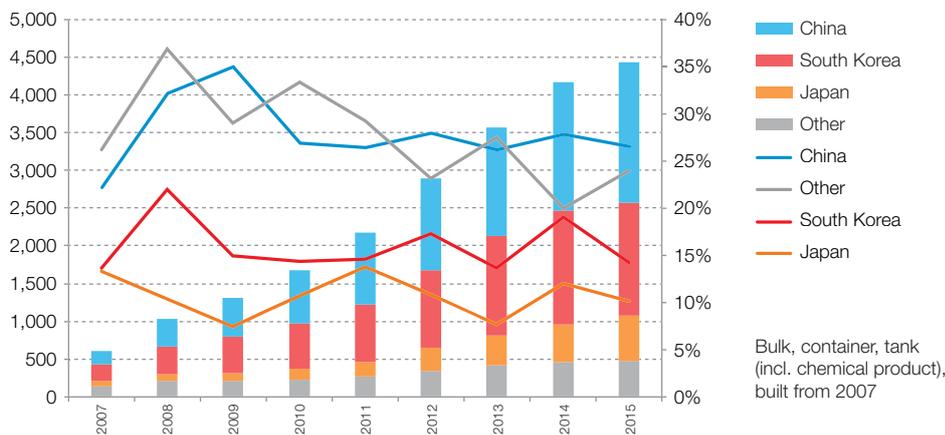
It is well known that different vessel types have different claims frequencies and that the claims frequency differs depending on size, deductible and age within a vessel type group. Age is not a major issue, since our analysis is limited to vessels built in 2007-2015, i.e. 0-8 year old vessels. The other characteristics are dealt with by splitting the analysis by type and size.

Bearing these limitations in mind, we are ready to present our findings, focusing in particular on Chinese built vessels in comparison with other Asian shipbuilding nations.

COMPARING ASIAN SHIPBUILDING NATIONS

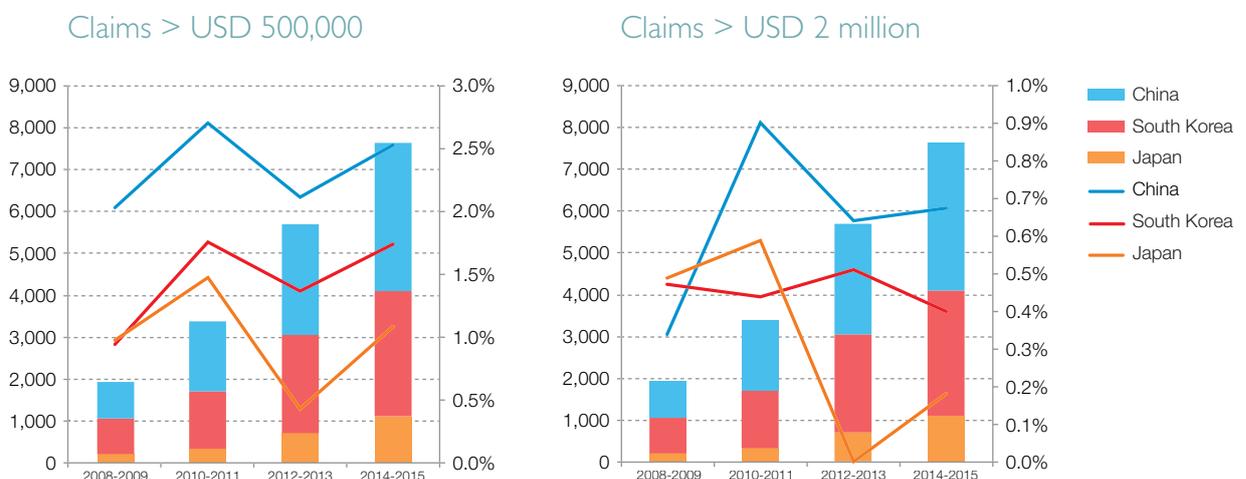
The first graph (graph 2) compares the claims frequency of three shipbuilding nations, without splitting the segment by type or size. It illustrates that the claims frequency has been 89% higher for vessels built in China and elsewhere in the world, compared to vessels built in Japan or South Korea. The difference between Japan and South Korea is mainly caused by the fact that very few container vessels are built in Japan, and that container vessels have a higher claims frequency than tankers and bulk carriers.

2: Number of vessels and claims frequency by country of build, by year of exposure



For claims in excess of USD 500,000, the frequency is 75% higher for Chinese than for Korean and Japanese built vessels combined. For claims in excess of USD 2 million, it is 52% higher (graphs 3 and 4).

3/4: Number of vessels and claims frequency by country of build



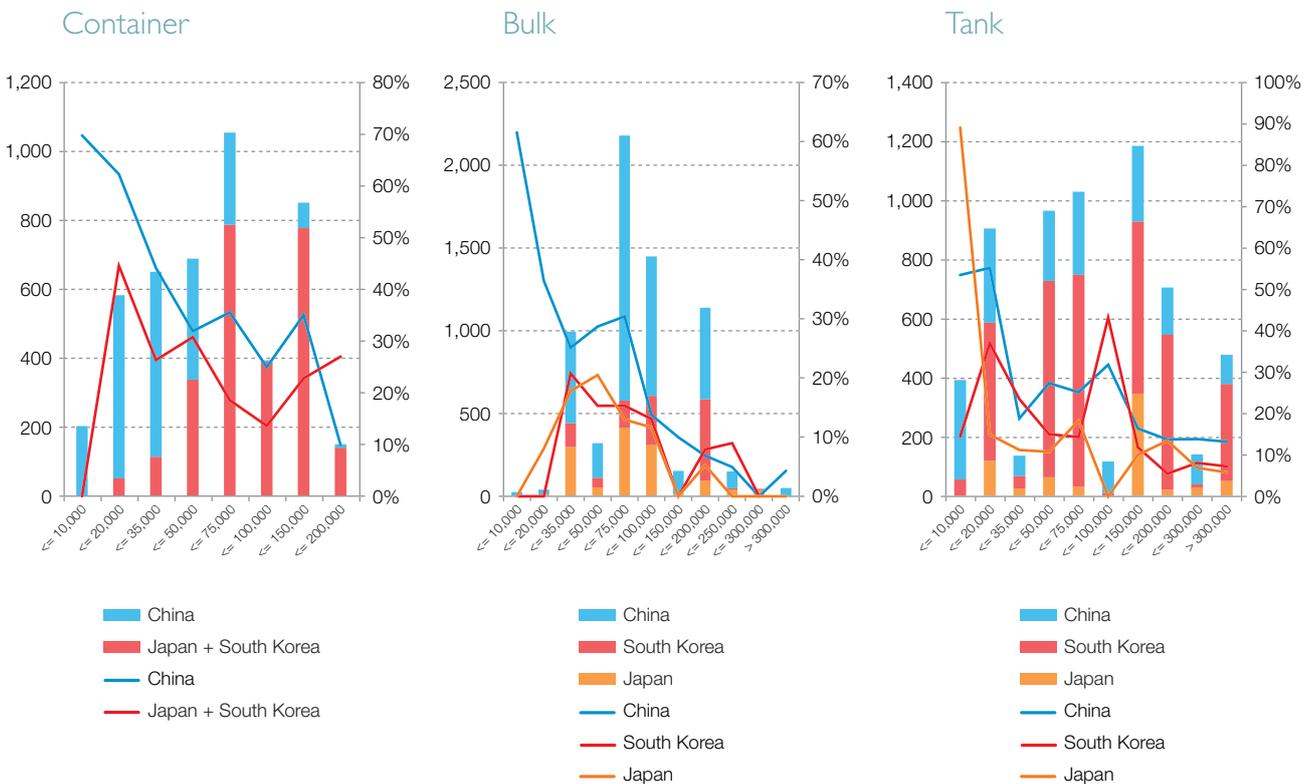
The frequency is particularly high in machinery claims on Chinese-built vessels (graph 5), but a similar pattern can also be observed for the other types of claims. Part of the reason is that Chinese yards deliver a higher number of smaller vessels than Korean and Japanese yards. Smaller vessels typically generate a higher claims frequency – except very small vessels, which are not part of this analysis (see ‘Coastal and Fishing vessels segment’ and ‘The Cefor NoMIS Ocean (Coastal) Hull report’ at www.cefor.no/statistics).

5: Machinery claims, by date of loss



The last series of graphs presented below splits the data by vessel type and size. The graphs show that the claims frequency is significantly higher for Chinese-built vessels in most of the segments they are represented in. Best performing are Chinese-built bulk vessels in excess of 75,000 DWT, where the frequency is in line with vessels built in South Korea and Japan. In the tanker segment, the high frequency is dominated by small claims, while the frequency of claims in excess of USD 500,000 is similar to that of South Korean and Japanese built vessels.

6/7/8: Number of vessels and claims frequency for selected vessel types by country of build



CONCLUSIONS/THE JOURNEY AHEAD

The statistics show that the frequencies of both machinery-related claims and non-machinery related claims were higher for the total number of tanker, bulker and container vessels built in China in 2007-2015 compared with similar types of vessel built in South Korea and Japan.

One should bear in mind that claims statistics are influenced by numerous factors, including vessel operational practices, maintenance standards, safety cultures, etc. Hence, we are not suggesting that the country of build is the only explanatory factor. Nevertheless, the observed differences are considerable and unlikely to be purely incidental.

The NoMIS database contains no details of the individual cases underlying the statistics. It is therefore not possible to share further insight on more specific claim characteristics of vessels built in China.

China has made major strides in modernising its shipbuilding industry in the past few years. The statistics of the past might therefore not be indicative of vessels built in the future. As outlined at the outset, we are not in a position to reach conclusions concerning the cause of the high claims frequency for vessels built in China. However, irrespective of the cause, it will be interesting to follow the performance of these vessels as they grow older.

Ocean hull trends



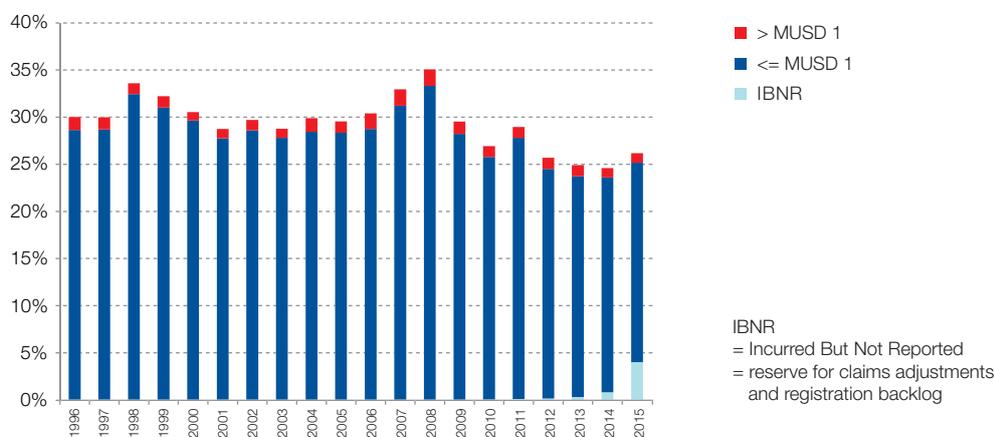
Ocean hull trends

NO SOFT MARKET FOR CLAIMS

If one could expect claim trends in 2016 to follow the same path as insurance rates, claim handlers could look forward to a calm year. However, judging by the latest 2015 Nordic Marine Insurance Statistics, the long-term low seems to have reached its floor in 2013–2014.

Over the past couple of years, the claims frequency has fallen from a peak of 35% to a long-term low of 25%. Possible explanations for this favourable development are higher deductibles, reduced vessel utilisation due to overcapacity, and slightly younger but bigger vessels. In addition, for most major currencies, the US currency has strengthened for the third year in a row, making it less expensive for insurers to settle claims. Although some of these parameters continue to affect the frequency favourably, the outlook is becoming cloudier. The claim cost per vessel, for partial claims as well as total losses, is on the rise. Without the recent strengthening of the USD, the 2015 figures would have been even worse.

9: Claims frequency, by date of loss



2015: MORE TOTAL LOSSES

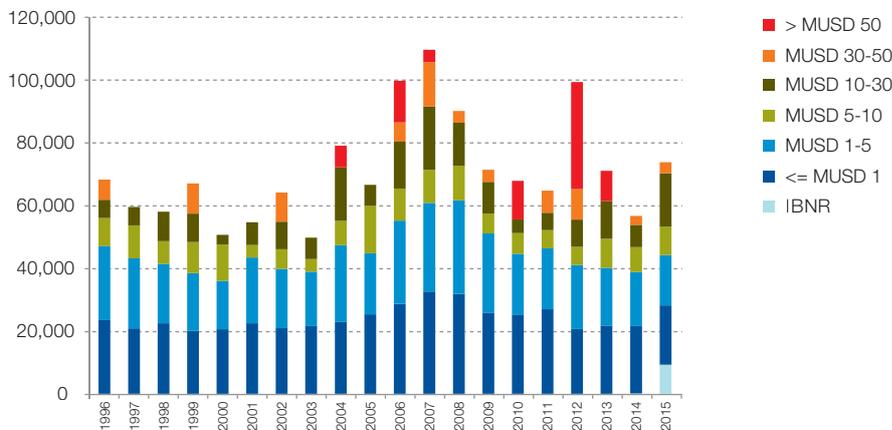
Graph 10 shows the claim cost per vessel. The upper line on this graph represents all claims, whereas the lower one disregards total losses. A quick look at the severity trend does not relieve pressure on 2015.

10: Ultimate partial and total claim cost per vessel (USD), by date of loss



The deviation between these curves reveals interesting stories. Each time the gap between both curves is big (e.g. in 2012), it is safe to assume that some very expensive total losses hit the portfolio. Excluding the total losses causes the lower curve to drop down from its upper counterpart, as is the case for 2015.

11: Claim per vessel (USD), by date of loss



CLAIMS > USD 10 MILLION DRIVEN BY TOTAL LOSSES

The interim review of 2015 indicates that circumstances were no longer as shiny as they were in 2014. When studying graph 11 and comparing with the previous year, 2014 almost seems like an exception: only a few claims over USD 10 million and even fewer over USD 30 million were registered. 2013, which saw two extremely costly partial claims over USD 60 million each, was only topped by 2012, probably rightly named “Year of the Titans” back then. No fewer than five total losses hit the book in 2012, including the “Costa Concordia” claim.

In 2015, the proportion of claims below USD 10 million was at an expected level compared to previous years. The exceptional absence of claims above USD 10 million that we saw in 2014 was swept away by thirteen claims that marked up the overall claim cost per vessel. Perhaps most disconcerting is the fact that seven of the thirteen claims above USD 10 million could be considered constructive or actual total losses¹. The increase in

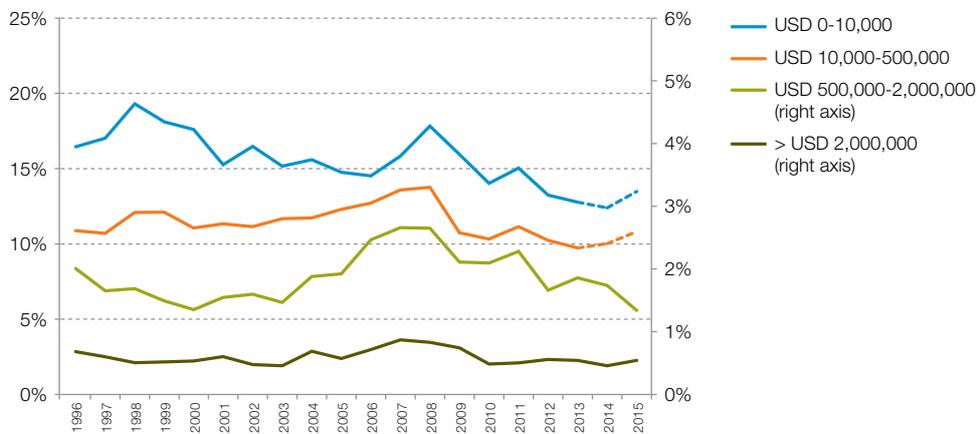
¹Total Loss (= Paid + Outstanding amount) => 75% of sum insured

total losses might be related to the reduced values of the vessels. This is supported by the fact that the frequency of partial losses in excess of 50% of the sum insured also increased, and that total losses for 2015 included claim types that are normally not associated with total losses (contact, machinery and heavy weather claims).

On a more positive note, 2015 marked the second consecutive year in which no claim above USD 50 million was incurred. In addition, the only partial claim in excess of USD 16 million related to a high-value supply/offshore vessel, which is not representative of the typical cargo-carrying bluewater merchant fleet.

Graph 12 completes the severity analysis by supporting claim frequencies by intervals of claim cost. Partial claims and claims between USD 10,000 and 0.5 million show a slight increase, whereas claims between USD 0.5 and 2 million show a minor improvement. For claims above USD 2 million, graph 12 together with the following section about total losses provide more insight.

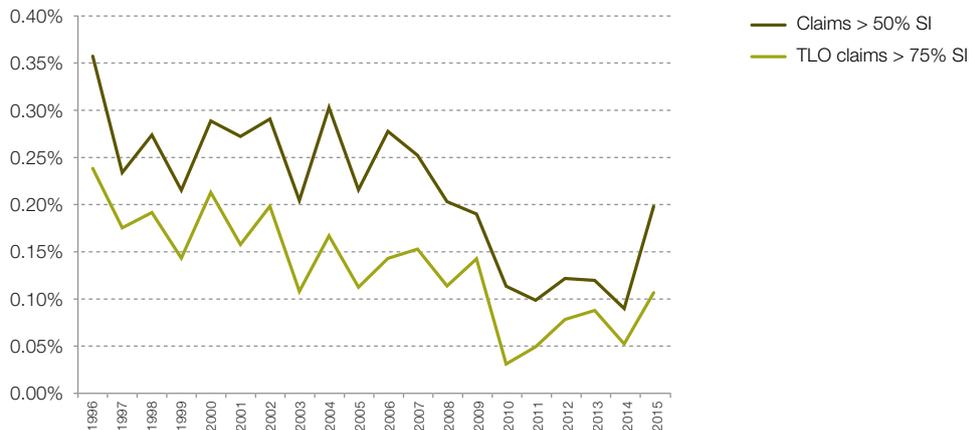
12: Claims frequency - by intervals of claim cost, by date of loss



TOTAL LOSS FREQUENCY UP / VALUE DECREASE CONTRIBUTES

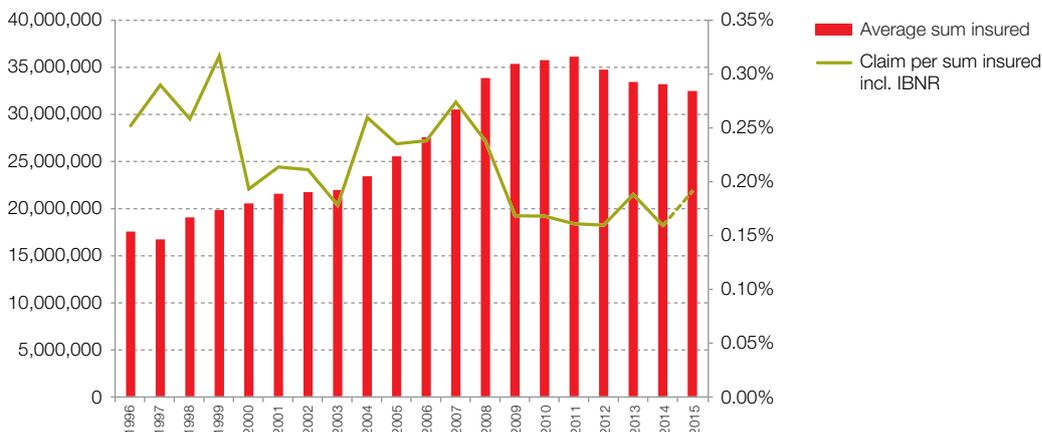
The 2015 claims story is not complete without a closer look at the total loss (TLO) frequency as well. For more than a decade, the trend for total losses has shown one tendency: downwards towards nil. In fact, a straight line through the data points from 1996 to 2010 in graph 13 would hit 0% in only a few years. However, recent years have brought reality back down to earth. Even the dip in 2014 made no sustainable impact, as the frequency was back at 0.1% in 2015. Hence, consolidation at a desirably low level of around 0.05% seems pie in the sky.

I3: Frequency of total losses and losses exceeding 50% of the sum insured, by date of loss



Not only did total loss frequency pick up again in 2015, but we can also see a potential for more constructive total losses in the future. Graph 14 illustrates the dilemma. Since 2010, the average sum insured - including new and renewed vessels - has decreased. On the other hand, the average (partial) claim has not fallen equally. As a result, the probability of a constructive total loss, i.e. a claim exceeding a certain percent of the insured value, has increased.

I4: Partial claim per sum insured and average sum insured, by date of loss



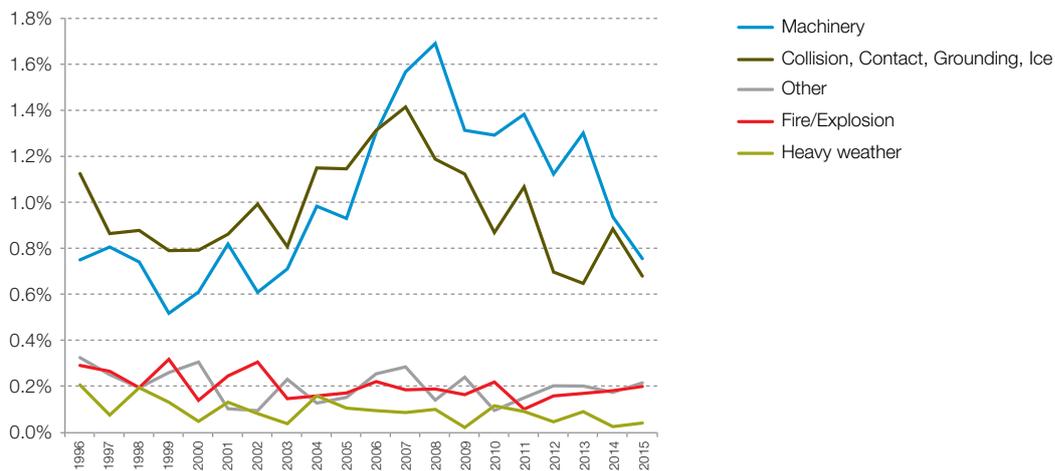
STILL FIRES...

Cefor reported in the 2014 Annual Report that the frequency of fires on RoRo and passenger vessels was on the rise. Unfortunately, this does not seem to have been enough to raise awareness and reduce the frequency of this happening. In 2015, costly fires and explosions even rose slightly, as graph 15 illustrates. Fires also contributed to the high number of total losses in 2015. Cefor statistics reveal that around half of the large claims and a quarter of the total losses stem from fires. Sadly, the most expensive claim in 2015, a total loss, occurred on a passenger vessel – exactly the kind of tonnage one least wishes to see on fire. In conclusion: fires are few in number, very costly, and continue to keep insurers busy.

...BUT COSTLY MACHINERY CLAIMS DOWN TO PRE-BOOM LEVEL

One notable trend is the one in expensive machinery claims. In 2007, the number of machinery claims in excess of USD 500,000 exceeded the number of navigational related claims for the first time. In the years thereafter, both frequencies have improved significantly, but the machinery frequency is still slightly higher than the navigational related frequency. While the indisputably appreciable decrease is a real improvement, one should not forget that the situation has only returned to the level seen before the shipping boom.

15: Claims frequency of claims > USD 500,000, by type of claim, by date of loss



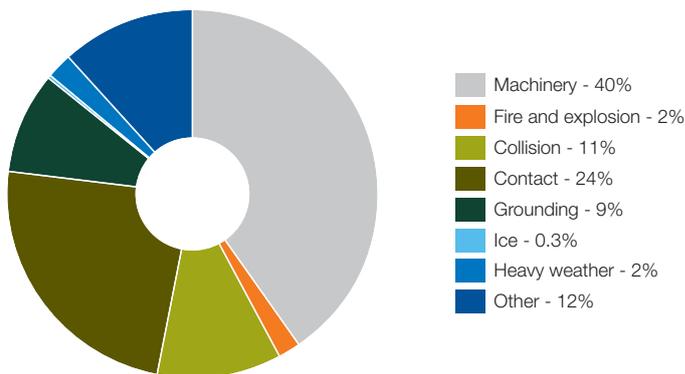
DISTRIBUTION OF CLAIMS BY TYPE OF CASUALTY

In terms of frequency, machinery claims are the most frequent individual claim type and account for 40% of all claims. The combined total of all nautical-related claims (grounding, collision, contact, and ice) account for 44% of the total number of claims, with contact claims showing the highest frequency.

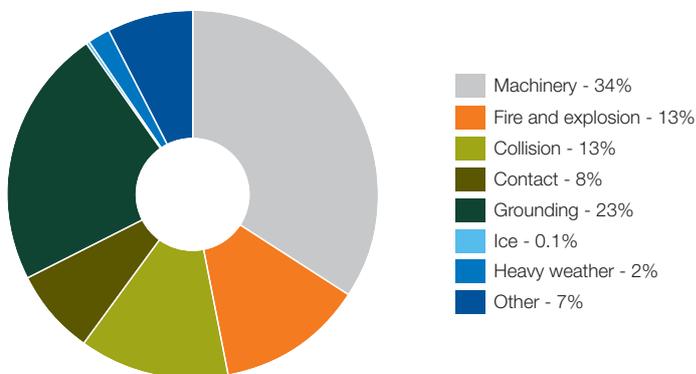
In terms of cost, the breakdown among claim types is more volatile. Since engine-related claims include a number of minor claims, their relative impact on cost is lower. Fire/explosions and groundings represent few but costly claims, and costly fire/explosion claims were again reported in 2015.

Distribution of claims by type of casualty, by date of loss

16a: Numbers (%), 2011-2015, by date of loss



16b: Costs (%), 2011-2015, by date of loss



DOLLAR (HOPEFULLY) HELPS TO KEEP CLAIM COSTS AT BAY

With a variety of currencies in the portfolio and claims not necessarily paid in the same currency as premiums, exchange rates become an important parameter. Therefore, the effect of the recent strengthening of the USD deserves further investigation. A significant proportion of insurers' claim costs and expenses are nominated in currencies other than USD (e.g. labour costs for ship repairs and regionally sourced spare parts are paid for in the repair yard's respective local currency). The latest period of USD appreciation has coincided with a period of reduced costs for raw materials such as steel and other metals used in ship repairs (measured in USD). This reduces repair costs and increases the value of a fixed USD deductible. Taking this benign economic framework into account, the 'moderate' increase in all frequency and severity indicators in 2015 should not be treated lightly. While the current appreciation of the USD plays out its positive effect in reducing the current claim costs, exchange rates are volatile, and there is a risk that we will see a reversed effect again in future.

2001-2012: THE FLEET BECOMES YOUNGER AND MORE EXPENSIVE...

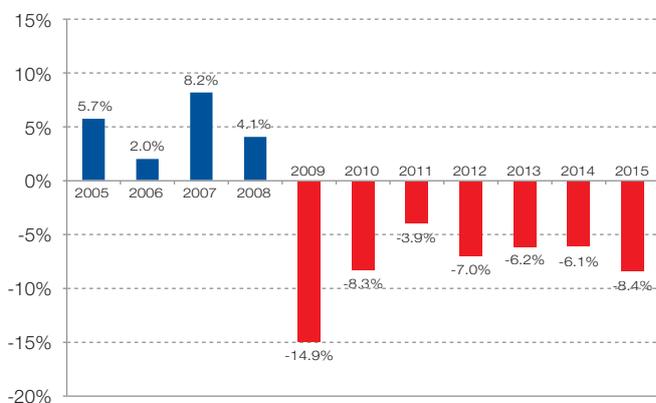
Over the years 2007 to 2009, an increasing number of new built vessels entered the portfolio. The outlook for seaborne trade was bright and capital poured into the market. Even after the shipping boom, the influx of newbuildings influenced the NoMIS portfolio: it dragged down the average age of a vessel from 14.1 in 2001 to 11.7 in 2012. Strongly correlated, the average sum insured constantly increased, eventually peaking in 2011.

...TODAY: INSURED VALUES DECREASE

In 2009, the situation started to change. Graph 17 illustrates the annual change in insured values looking at only renewed tonnage (thereby excluding newbuildings and new entries that drive up the average sum insured). Insured values plummeted significantly by 15% for the first time in years. In stable market conditions, a slight reduction in the sum insured per vessel due to the aging factor is expected, but 15% is not considered normal. One reason for the value reduction originates from the ship-owner, who assesses the value of his ships. Relevant factors in his assessment are the market value of the hull, mortgage value, value of the charter party and the cost of reconstructing the vessel. The latter is seldom explicitly considered or stated, but is highly relevant for the insurer carrying the cost of repair.

The partial claim cost as a percentage of the insured value, and accordingly the risk of a constructive total loss, increases if the insured value falls more than the repair cost. This is currently the case in the offshore energy segment and might also become an issue in the least profitable shipping segments. The values have fallen over the past seven years, but the drop in values in 2015 was the second largest in the period with 8.4%. One segment in particular seems to be contributing to that: supply/offshore vessels.

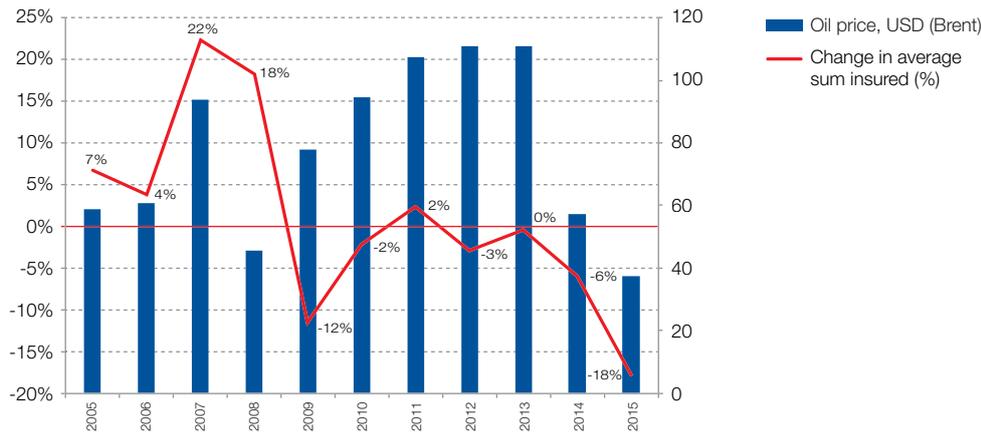
17: Average annual change in insured values on renewed vessels



OFFSHORE UNDER OIL PRICE PRESSURE

The world's energy sector is struggling with the low oil price. Layoffs in Norwegian oil majors² and lay-ups of rigs and supply/offshore vessels³ dominate both Nordic and international news. Consequently, this especially affects the market value of supply/offshore vessels, as their discounted net present value, one indicator for sum insured, decreases.⁴ In 2015, the drop in the average sum insured for renewed vessels was, at -17.8%, much heavier than for other vessel types. Graph 18 illustrates that the oil price (here per barrel (Brent oil) in USD) positively correlates to the sum insured. If OPEC's fuel deliveries continue and US shale gas production remains a supplier to the market, the oil price is likely to remain at a low level.

18: Change in average sum insured (supply/offshore) on renewal & oil price (Brent)



While further lay-ups and a significantly downscaled market value will not help with premium rates, it will on the other hand relieve insurers from liability. However, as we have shown above, claim costs have not fallen in line with the sum insured. The result of this interaction is greater potential for constructive total losses.

² <http://tinyurl.com/jp4x8o5>

³ <http://tinyurl.com/j5xowjz>

⁴ <http://tinyurl.com/hykswmt>

The NoMIS portfolio



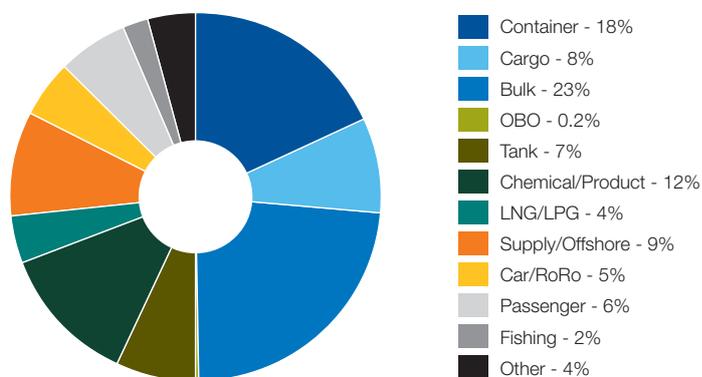
The NoMIS portfolio

Since 1985, leading members of Cefor have compiled and analysed statistical information relevant to their hull and machinery insurance portfolio. By the end of 2015, the Nordic Marine Insurance Statistics (NoMIS) database comprised 219,718 vessel years and 66,899 claims for vessels with a registered IMO number. Including small coastal vessels, the total number amounted to 362,104 registered vessel years and 86,124 claims. These figures encompass the underwriting years from 1985 to 2015. In 2015 alone, NoMIS members covered 12,723 vessels with a registered IMO number (25,156 including small coastal vessels).

PORTFOLIO CHARACTERISTICS

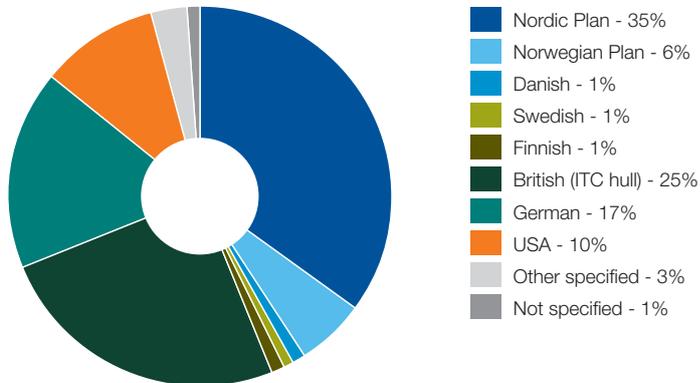
Cefor members underwrite a wide range of tonnage. Coastal hull vessels account for about half of all vessels registered in the NoMIS database. Due to the somewhat different characteristics of the ocean and coastal hull segments, Cefor issues separate statistics for international ocean-going vessels with an IMO number and for the Nordic coastal segment.

19: Distribution of the ocean hull portfolio by type of vessel, 2015



The Nordic Marine Insurance Plan received massive support from its introduction in 2013. Today it constitutes the most commonly used insurance conditions for the Cefor ocean fleet with a share of 35%. Other Nordic insurance conditions are used for another 9.2% of the fleet. Of the rest, 25% are insured on English, 17% on German, and 10% on US conditions (graph 20).

20: Distribution of the ocean hull portfolio by type of insurance conditions, 2015



For the coastal fleet, the picture is different. Since a major part of the coastal fleet consists of fishing vessels and local ferries in Nordic waters, more than 90% of the coastal fleet is insured on Nordic terms.

A comparison of the current Cefor fleet with the world merchant fleet indicates the following market participation:

Cefor share of World fleet (with registered IMO Number)¹:

	Year of build	Gross Tonnage				Grand Total
		1,000-3,999	4,000-6,999	7,000-10,000	>10,000	
Cefor share	2010 - 2015	11%	24%	24%	41%	32%
	2005 - 2009	13%	21%	33%	47%	34%
	2000 - 2004	16%	26%	31%	55%	41%
	1995 - 1999	14%	15%	23%	43%	29%
	1990 - 1994	9%	11%	11%	27%	15%
	1985 - 1989	5%	4%	13%	22%	9%
	<1985 or unknown	3%	3%	3%	12%	4%
World fleet	2010 - 2015	2,752	1,189	685	8,172	12,798
	2005 - 2009	2,995	1,241	1,159	6,056	11,451
	2000 - 2004	1,538	648	364	3,710	6,260
	1995 - 1999	1,640	842	380	2,649	5,511
	1990 - 1994	1,849	581	278	1,116	3,824
	1985 - 1989	1,936	500	165	694	3,295
	<1985 or unknown	7,314	1,546	518	1,328	10,706
Total Cefor share		8%	15%	23%	42%	25%
Total World fleet		20,024	6,547	3,549	23,725	53,845

As can be seen from the table, the Cefor members' participation is highest for the largest and youngest vessels. In the segment for vessels above 10,000 gross tons, NoMIS members write a share in 42% of the 23,725 vessels in the world fleet.

Cefor members also write a significant portfolio of Mobile Offshore Units. These are not included in the NoMIS database. The members participate in about half of the world fleet of Mobile Offshore Drilling units.

¹ "Cefor share" calculated as the number of vessels partly or wholly covered by Cefor members during the last two underwriting years, divided by the total number of ships with registered IMO number in the world fleet. World fleet numbers according to Lloyd's List Intelligence 'World Fleet Update' as of January 2016.

DATA

The article on p. 15 concerning global hull trends (or ocean hull trends), is based on vessels with a valid IMO number. The coastal hull trends (p. 30) are derived from vessels classified as 'fishing' and 'supply/offshore' and any other vessel up to 5,000 gross tons or 15 metres in length.

100% shares: All figures are adjusted to 100% of the vessel to provide as objective a picture of the claims trends as possible. The figures are thus independent of the share underwritten by one single insurer or the combined Nordic market share for the vessel.

Date of loss perspective (accident year): If not otherwise indicated, all claims graphs reflect the date-of-loss perspective, i.e. claims are grouped by the year in which the loss occurred, also called the accident year, as opposed to grouping claims by the underwriting year. The date-of-loss perspective allows a more up-to-date picture of recent claims trends and more exact estimation of the ultimate expected claims amount for the latest year.

IBNR² adjustments thus represent only the expected adjustment of outstanding claims reserves for claims incurred by 31 December, and no additional reserves for claims that will first incur in 2016, but that are attached to the 2015 underwriting year.

Exchange rates: All figures in this report have been converted to USD, with the exception of the coastal segment (article p. 30), in which figures have been converted to NOK. Paid claims have been converted into USD (NOK) at the exchange rate in the month of payment. Outstanding claims reserves have been converted at the December 2015 exchange rate.

NOMIS AND THE CEFOR STATISTICS FORUM

Nordic Marine Insurance Statistics (NoMIS) as presented in this report comprise data from:

Cefor member	Joined NoMIS in:	Data included for underwriting years:
Alandia Insurance	2012	2005 – 2015
Bluewater Insurance	2004	2002 – 2008 (run-off)
Codan	2005	2001 – 2015
Gard	Co-founder of NoMIS (then as Storebrand, Vesta)	1985 – 2015
Gjensidige – ocean	Co-founder of NoMIS	1985 – 2001 (run-off)
Gjensidige – coastal	2009	2000 – 2015
If	2008	1996 – 2015
NEMI	2004	2002 – 2009 (run-off)
Norwegian Hull Club	2003	1995 – 2015
The Swedish Club	2006	1995 – 2015
Tryg	2009	2003 – 2008 (run-off)
Zurich Protector Forsikring	Co-founder of NoMIS	1985 – 2002 (run-off)

Cefor members report data for the entire commercial fleet underwritten by their Nordic offices.

² IBNR = Incurred But Not Reported = reserve for claims adjustments and registration backlog.

FURTHER STATISTICS:

In addition to this report, Cefor published online ‘The 2015 Cefor NoMIS Ocean Hull Report’ and ‘The 2015 Cefor NoMIS Coastal Hull Report’, with breakdowns of claims trends by for example vessel type and age group. Half-yearly claims trend updates and other specialised analyses are also available at www.cefor.no/statistics.

STATISTICS FORUM 2015:

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Maria Wist Langmoen, If (Vice Chair – coastal hull)
Christian Irgens, Norwegian Hull Club
Lars Hyllested/Lars Lodoen Halsteinslid, Codan
Mathias Brunnsberg, Alandia Insurance
Mats Lindau, The Swedish Club
Kari Opsjøn, Gjensidige
Astrid Seltmann (Cefor Analyst & Forum Secretary)

Coastal and Fishing vessels segment



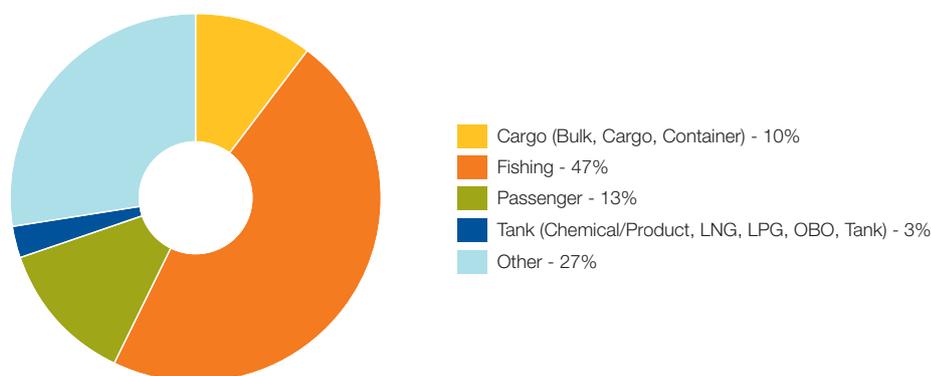
Coastal and Fishing vessels segment

Coastal hull statistics are a specific area of interest for NoMIS members, alongside the hull statistics for large ocean-going vessels. For statistical purposes, the coastal portfolio includes all vessels classified as fishing vessels and any other vessel up to 5,000 gross tons or up to 15 metres in length. Supply/offshore vessels are not included in this segment since these are part of the ocean hull statistics.

PORTFOLIO CHARACTERISTICS

A total of 136,571 vessel years and 27,179 claims were registered for the underwriting years 1985 to 2015 for the coastal segment. 11,759 vessels were covered in underwriting year 2015 alone. Of these, fishing vessels comprise the largest component with 5,591 vessels, representing 47% of all vessels in this portfolio. The bulk of the coastal segment originates from Gjensidige, If, Codan and Alandia, but all other NoMIS members also contribute to this portfolio.

21: Coastal portfolio - Distribution of vessels by type (%), year of exposure 2015



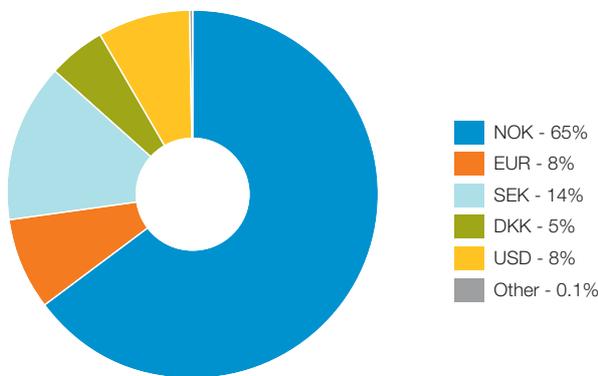
22: Coastal portfolio – Number of vessels by size of insured values, by underwriting year



Due to improvements in the reporting of small craft vessels, and in particular fishing vessels, the number of vessels with values below NOK 5 million increased substantially from 2010. In 2015, these low-value vessels represented 77% of the coastal segment (graph 22).

Contrary to the global nature of the ocean hull portfolio, the coastal segment is dominated by Nordic, particularly Norwegian, small craft business. In order to provide a realistic picture of the actual claims trends for this portfolio and eliminate distortions caused by exchange rate variations (graph 24), all graphs in the coastal section are shown in Norwegian kroner (NOK) instead of USD.

23: Distribution of coastal portfolio by currency, underwriting years 2011-2015



24: Index of exchange rates for Nordic currencies against USD



DISTRIBUTION OF CLAIMS BY TYPE OF CASUALTY

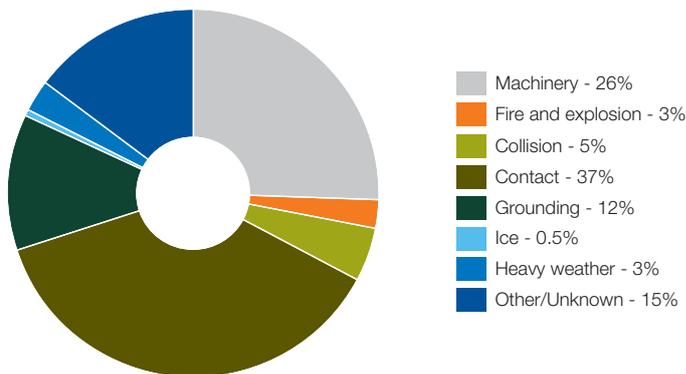
A high number of ‘high frequency – low severity’ contact claims is typical for the coastal fleet. This is mainly due to the high representation of fishing vessels that are liable to claims arising from their gear when fishing. However, despite representing 37% (47% for fishing vessels) of all claims, contact claims do not account for more than 12% (10% for fishing vessels) of the total claims cost.

Engine claims generally account for about 25% of all claims in terms of numbers, but a higher share of the total claims cost with over 30% of the total cost. This is mainly due to the high share of contact claims, which have far less impact on the cost. Groundings and fire/explosion claims usually follow the same pattern as the ocean hull fleet, with a relatively low frequency and a higher percentage of the cost.

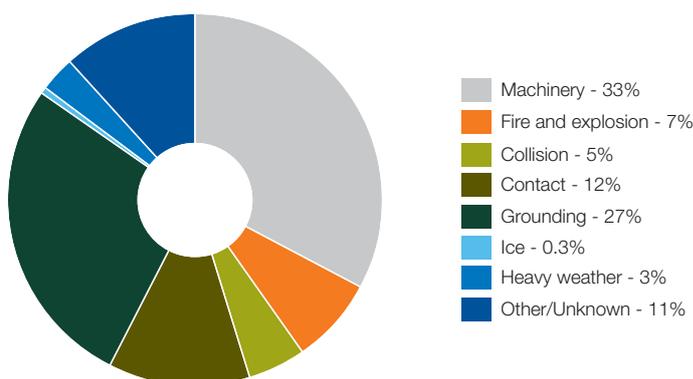
The typical major claim in the coastal portfolio does not exceed NOK 20 million. In this respect, 2014 was an exceptional year with one costly grounding claim for almost NOK 300 million. In 2015, no claim exceeded NOK 5 million.

Distribution of claims by type, coastal portfolio

25a: Numbers (%), 2011-2015, by date of loss



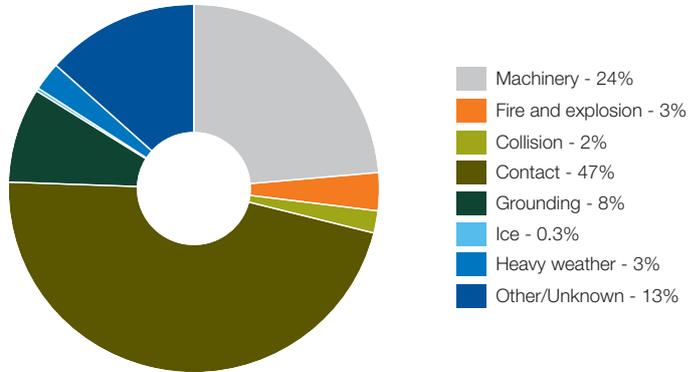
25b: Costs (%), 2011-2015, by date of loss



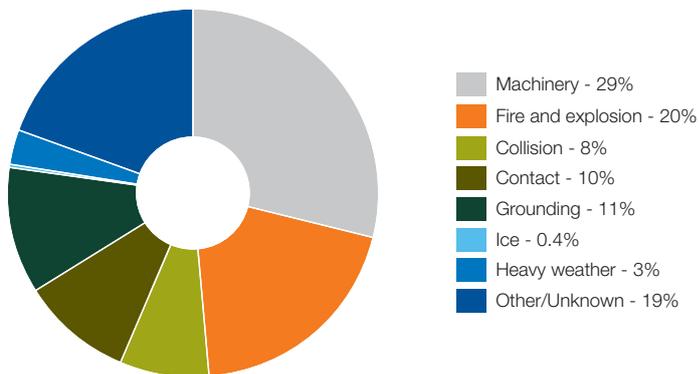
Looking specifically at fishing vessels (graph 26), fire/explosion combined with machinery damage accounted for about 50% of the claims cost.

Distribution of claims by type, fishing vessels

26a: Numbers (%), 2011-2015, by date of loss



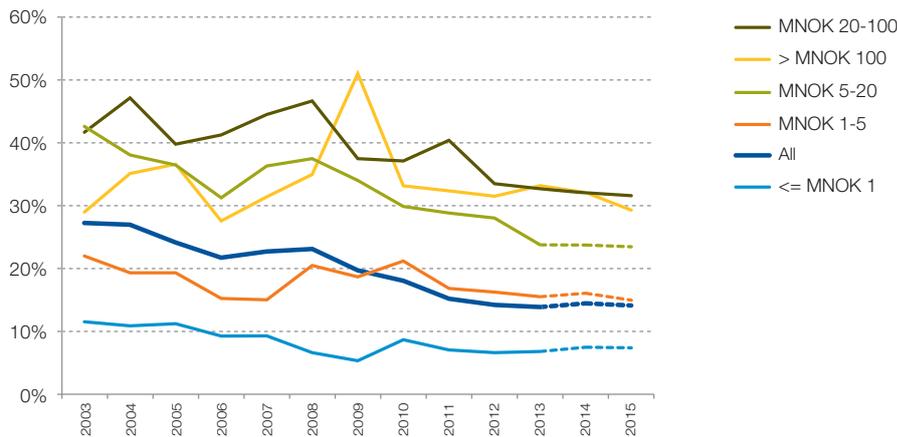
26b: Costs (%), 2011-2015, by date of loss



CLAIMS FREQUENCY: OVERALL POSITIVE TREND, STABLE FOR SMALL CRAFT

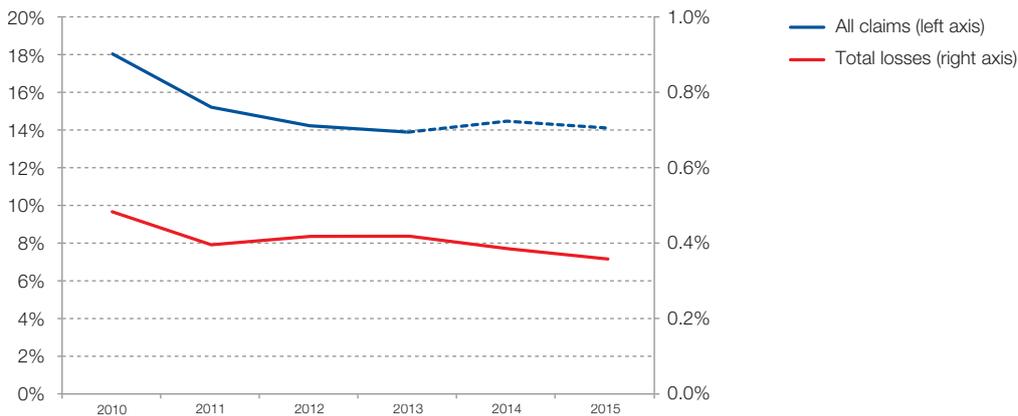
The overall claims frequency for this segment shows a long-term positive trend, decreasing from 27% in 2003 to a level of 14%, which has been relatively stable since 2012. The increased share of small coastal tonnage since 2010 contributes to the low claims frequency, which is rather typical for this segment (see graphs 27 and 28, and the extensive coastal hull report at www.cefor.no/statistics). The claims frequency for vessels with values below NOK 5 million is generally lower and more stable than for vessels with higher values. Another explanation for the overall downward trend is that the claims frequency for vessels with higher values decreased substantially during this period. Generally, a number of factors may have an impact on the claims frequency, such as deductibles, weather conditions, economic framework and portfolio-related factors such as vessel types and sizes.

27: Claims frequency per sum insured layer, incl. IBNR, by date of loss

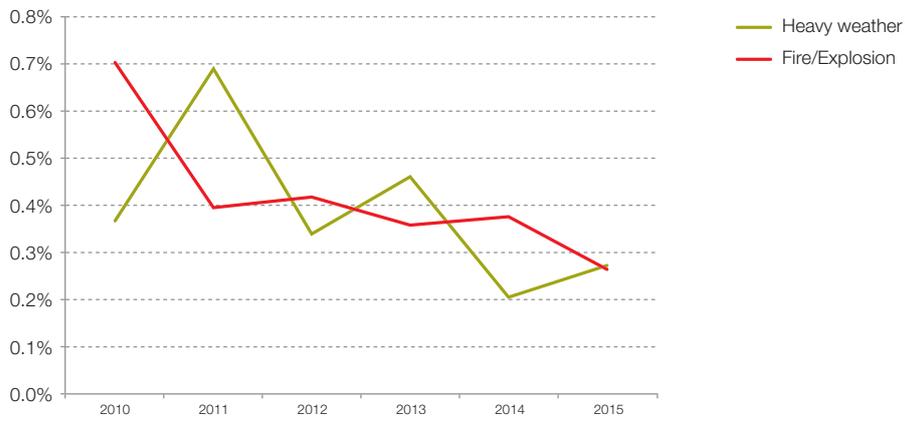
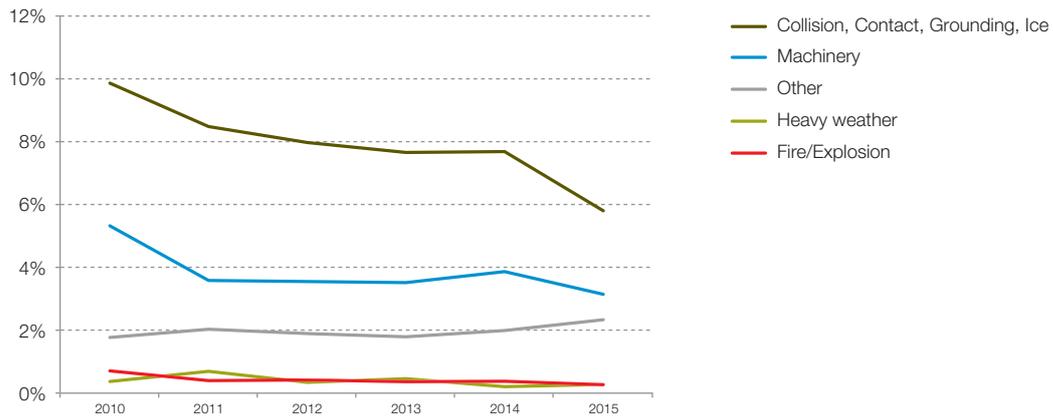


Unlike ocean hull, the total loss frequency for the coastal segment (graph 28) is quite stable and has even experienced a slightly positive trend in recent years. It is characteristic that the coastal portfolio has a substantially higher total loss frequency than the ocean hull portfolio.

28: Overall and total loss frequency, incl. IBNR, by date of loss



29/30: Claims frequency by type of casualty, by date of loss



The frequency by type of casualty has improved over time for all types of claims. This is also the case for fire/explosion claims, which have a different fire pattern than the ocean hull fleet.

CLAIM COST TREND

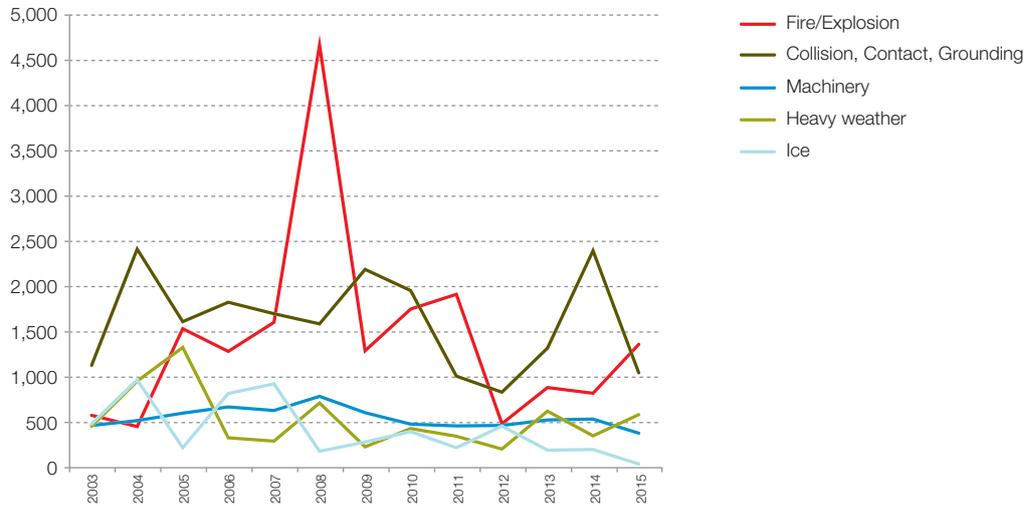
The decreasing claims frequency, partly caused by a larger number of smaller ships in the portfolio, has resulted in a positive trend for the overall claim cost per vessel since 2010. Although one costly grounding claim for almost NOK 300 million had a strong impact in 2014, this type of claim is not typical for the coastal segment. Excluding the exceptional 2014 claim, both the partial and the total claim cost per vessel have remained stable since 2012, and this trend continued in 2015.

31: Ultimate partial and total claim cost per vessel (NOK), by date of loss

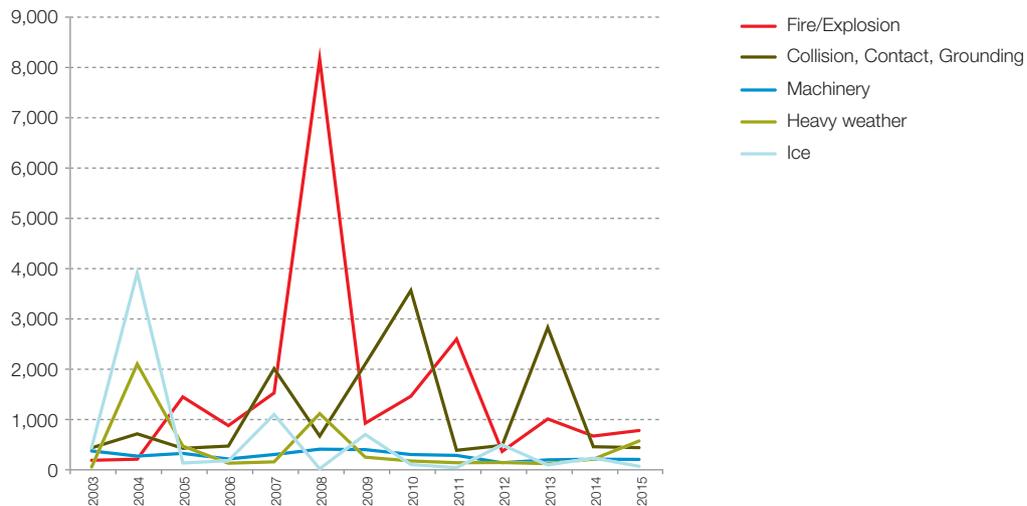


The average claim cost per type of casualty is far more volatile than the claim cost per vessel. Major claims can strongly influence the average cost in individual years, particularly for fire/explosions and nautical-related claims, especially groundings and collisions. The situation for machinery claims is more stable. Since a historic peak in 2008, the average claim cost related to machinery claims has decreased slightly.

32: Coastal portfolio: average claim cost per type of casualty (NOK 1,000), by date of loss



33: Fishing vessels: average claim cost per type of casualty (NOK 1,000), by date of loss



The average cost of machinery damage for fishing vessels is less than half the average cost for the total coastal portfolio. However, the impact of collisions and groundings on the average cost is stronger in the fishing vessel fleet than for the total coastal portfolio.

Claims trends need to be interpreted in relation to the characteristics of the underlying portfolio. This is especially true for the coastal portfolio because of the increased share of fishing vessels and small coastal vessels from 2010 onwards.

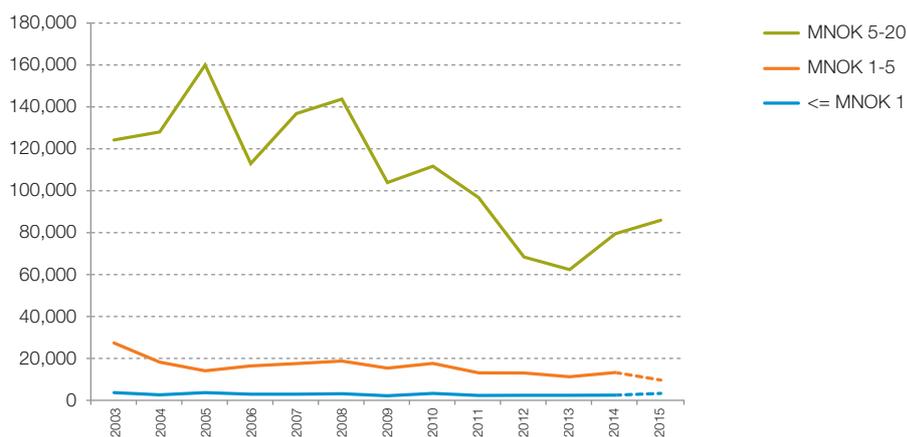
To illustrate this, graphs 34 and 35 show the partial claim cost per vessel split into sum insured layers. For vessels with insured values below NOK 5 million, the average repair cost has been quite stable over time. For vessels with higher insured values, the cost per vessel is far more volatile, which is especially true when including total losses in the claims cost. With relatively few high-value vessels in the coastal portfolio, single major claims such as the aforementioned grounding in 2014 strongly affect the total claim cost per vessel in the > NOK 100 million layer.

Regardless of such single major losses, the partial claim per vessel has shown a positive development for this segment since 2010, although the partial claim cost per vessel increases somewhat for ships with values between NOK 5 million and NOK 20 million.

34: Claim cost per vessel per sum insured layer (NOK)



35: Partial claim cost per vessel per sum insured layer (NOK)

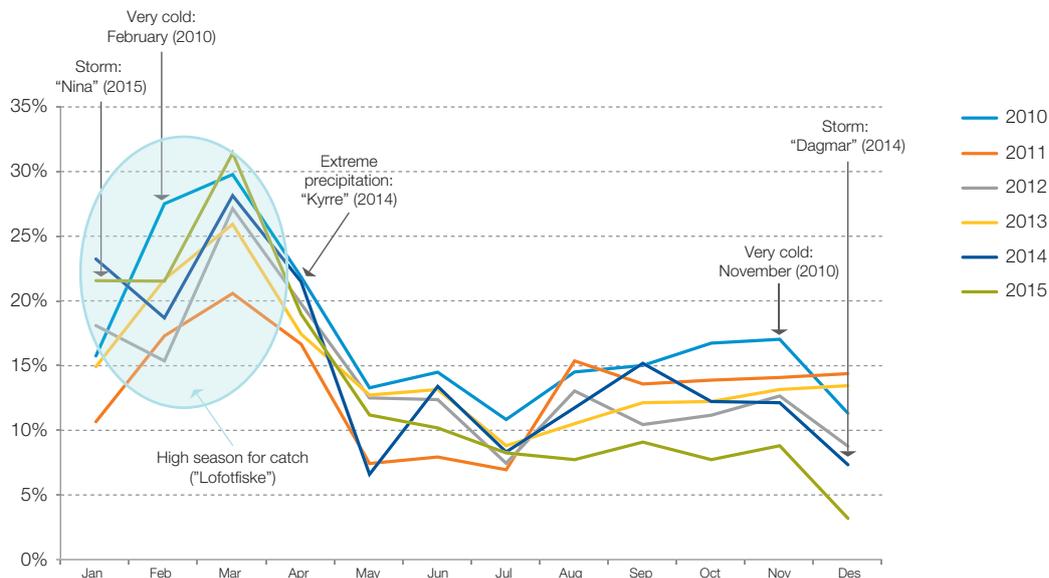


FISHING VESSELS WELL PREPARED FOR STORMS

As the major part of the coastal portfolio is Nordic small craft, investigating the degree to which extreme weather events have an impact on claims frequency and severity in this segment is of interest. Therefore, all registered claims for coastal fishing vessels were compared to the dates of extreme weather events/storms as registered by the Danish, Norwegian and Swedish meteorological institutes. The comparison only shows a minor increase in claims frequency during major storms, which may indicate that commercial coastal vessels monitor weather forecasts and prepare their vessels to avoid the potential damage caused by such extreme events.

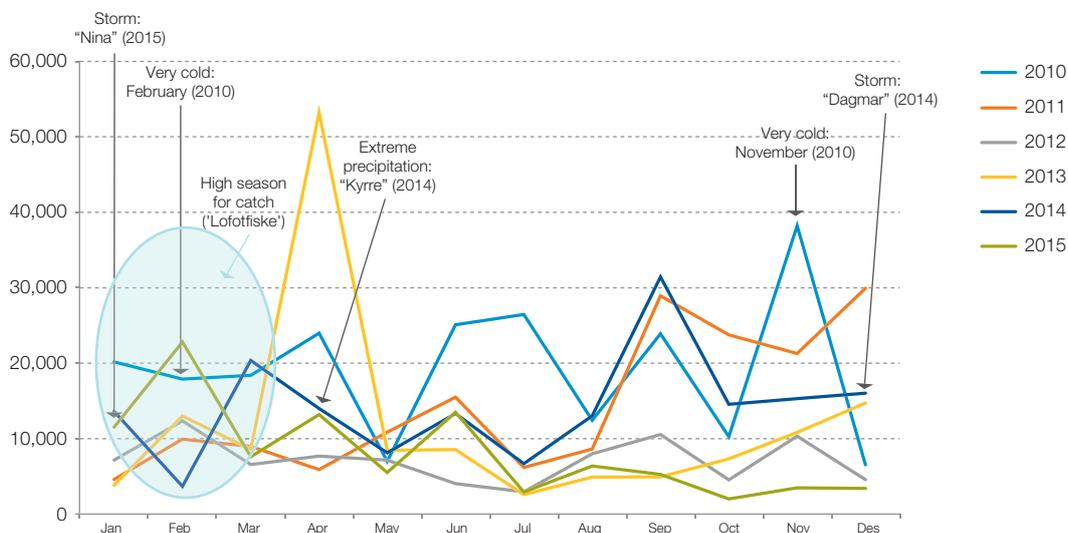
Apart from that, a feature typical for the coastal segment is a strong seasonal variation in the claims frequency. The claims frequency is highest in the first three months of the year, which not only corresponds with the most severe winter months in Nordic areas, but is also the most active season for fishing activities in Northern Norway.

36: Claims frequency per month of exposure, Fishing vessels



Despite the increased frequency of claims during the most active fishing season, this does not result in a higher partial cost per vessel in these months.

37: Partial claim cost per vessel (NOK), Fishing vessels



A more detailed report on coastal hull claims trends is available at www.cefor.no/statistics.

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The Forum discusses general matters relating to insurance for coastal and fishing vessels.

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The Forum discusses insurance matters relating to hull, loss of hire and builders' risks insurance for mobile offshore units and specialised offshore vessels.

Plan Revision Forum *Chair: Haakon Stang Lund, Norwegian Hull Club*

The Forum discusses and recommends amendments to the Nordic Marine Insurance Plan on behalf of Cefor, and gives advice about special clauses and their wording.

Statistics Forum *Chair: Veith Huesmann, Gard*

The Forum is responsible for the Nordic Marine Insurance Statistics (NoMIS). For more information, see p. 25 and articles from p. 10.

Technical Forum *Chair: Steinar Sivertsen, Norwegian Hull Club*

The Forum discusses technical and operational subjects and matters of general interest to the members, and issues proposals and expert recommendations where appropriate.

Underwriting Forum *Chair: David Bellamy, Norwegian Hull Club*

The Forum discusses underwriting matters pertaining to shipowners' hull, war and P&I insurance, and monitors maritime risks and prevailing market insurance practices with a view to achieving improvements for the common good of the marine insurance market and its ship operating clients.

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