



The Nordic Marine
Insurance Statistics
(NoMIS) 2014

FIRE!

Although Cefor statistics suggest 2014 was yet another benign year for the Cefor market, the overall statistics hide disturbing facts. When it comes to fires on RoRo and Passenger vessels, business as usual might not be good enough.

The past six years have been benign in terms of claims frequency and, with a few costly exceptions, claims severity. Last year we commented that fires seemed less affected by the shipping boom and the “financial crisis recovery”. This year we explore this non-improving claim type further.

Fire frequency

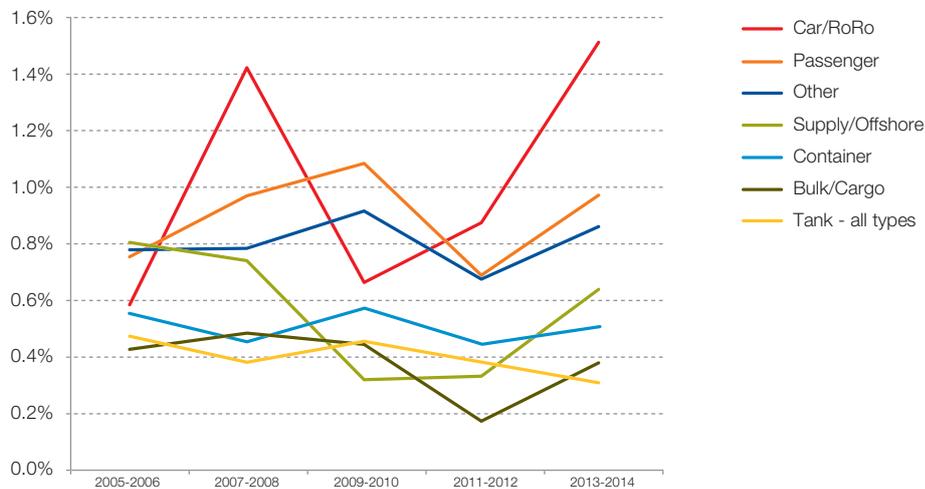
Graphs 1, 2 and 3 illustrate the overall fire frequency and the frequency of fires in excess of USD 500,000. The first graph shows there is no improvement in the number of fires in excess of USD 500,000, and the short-term favourable trend in the total fire frequency has been broken by events of the past two years.

1: Fire/Explosion claims frequency, by date of loss

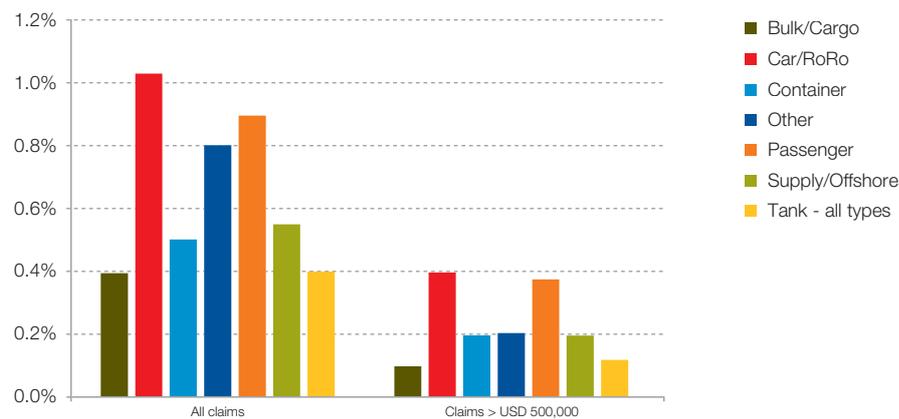


Graphs 2 and 3 illustrate that the frequency of fires in the Car/RoRo, Passenger and “Other”¹ vessel segments is twice the frequency of fires on most other vessel types. In terms of claims in excess of USD 500,000, the poor performance of the Car/RoRo and Passenger segments is even more striking. Almost 1% of these vessels experience fires per year.

2: Fire/Explosion claims frequency by vessel type group



3: Fire/Explosion claims frequency, years 2005-2014



As subgroups, Car carriers, RoRo, Passenger RoRo and Cruise vessels all contribute to the high frequency. A further split by size or age reveals no clear pattern, and even large modern tonnage has a high frequency.

Cause

The NoMIS database splits fires in accommodation, cargo, engine and miscellaneous. In general, about half of the fires are engine-related, but this differs somewhat between vessel types. On Passenger vessels, more than half of the fires are engine-related, while cargo fires are the most frequent type on Car/RoRo vessels. In order to draw any firm conclusions as to the cause of the higher claim frequencies for the Car/RoRo and Passenger segments, it is necessary to look at each separate case in more detail. This task is currently outside the scope of the Cefor co-operation.

¹ The high frequency of fires in the “other” segment is caused by specialised tonnage in the offshore energy, construction and research segments, and small vessels like tenders, yachts etc.

A possible explanation for the engine related fires on Passenger vessels could be the engine room layout and use of more complex engines in this vessel segment. Furthermore, the high frequency of cargo fires on Car/RoRo vessels could be related to the fire risk of cars in general, as well as challenges with detecting, locating and extinguishing fires on these vessels. According to car insurance statistics², there are 1.2 fires per 1,000 cars per year (excluding fires with external causes). If this had been representative of cars in transit, a car carrier with 5,000 cars would experience 6 car fires per year and a Passenger RoRo vessel with 500 cars would experience a car fire every second year. The risk of fire in a car in transit is probably (very much) lower than the risk of fire in a car in operation. However, the calculation illustrates that the sum of a large number of negligible risks could add up to a significant risk.

Compared to other vessel types, Car/RoRo and Passenger vessels have more than twice as many port calls as most other types of vessels. This results in a high turnover of passengers and cars. Furthermore, the RoRo segment, together with the Container segment are characterised by carrying a much more diversified (and sometimes even undeclared) cargo than other segments. Even though there have also been costly fires on container vessels, the fire frequency on these vessels does not deviate significantly from other vessel types.

It should be noted that the possible explanations as to the causes as per above are based on speculation and further investigation would be needed to establish the facts.

² Car insurance statistics as compiled by Finance Norway