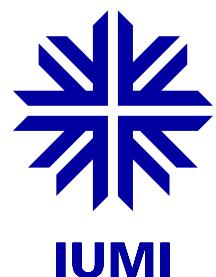


IMO 2020 after 18 months: How has it panned out?

28th July 2021



Extensive preparation beforehand meant that the impact of the introduction of lower sulphur limits in fuel in January 2020 (known as "IMO 2020") had been "much less brutal than was expected", according to Ole Wikborg, Director at Norwegian Hull Club, who was writing in broker Gallagher's [Marine Hull & Machinery and War Risks Market Report for July 2021](#).

Wikborg said that, some 18 months after its implementation, one might expect that tangible effects to be evident to the ships themselves – their machinery in particular – and that the claims record of the Marine insurers would signal any financial consequence.

Ahead of January 2020, ship owners and operators had consulted engine makers, classification societies and governmental bodies. Almost everyone who would potentially be ready to share their view did – showing a full palette of opinions. "More than anything, the industry-wide awareness stemming from the extensive preparations has resulted in limited harm to shipping and Marine insurers caused by the IMO 2020 regulations", said Wikborg.

That was not however not to say that there had been no consequences at all.

On January 1st 2020 there were two uncertain issues related to the supply side:

- would there be sufficient supply of quality low Sulphur fuel oil where and when needed?
- would the price-per-ton difference between the two major types of fuel oil (HSFO and VLSFO) justify the investments made by many ship owners in exhaust cleaning scrubbers?

Wikborg observed that, although buyers of bunker oil (and their charterers) might have a myriad of individual experiences, the overall general impression was that supply had been sufficient and more than satisfied the demand.

This being the case, the price gap between the main types of fuel, HSFO utilized by the scrubber-fitted vessels and VLSFO used by the non-scrubber vessels complying with the regulations, shrank. This meant that the bunker price advantage of the scrubber-fitted vessels was not initially as apparent as the pre-January 1st 2020 investment calculations had indicated.

However, as demand for transportation services increased significantly during the latter part of 2020 and the first months of 2021, the price gap had widened to favour scrubber-fitted ships. Wikborg noted that the debate on open and closed scrubbers continued. These might cause "a few unexpected headaches to ship owners operating open scrubber-fitted ships".



The shipping industry and its insurers had cautioned about the design and operational long-term challenges facing vessels with scrubbers. Added to the list of warnings were breakdowns of and associated with the scrubber tower (also known as 'the Christmas Tree'), such as failure of the nozzles, supporting brackets and foundations due to vibrations.

In addition, it was expected that there would be extensive corrosion to the lower part of the scrubber tower, the washing water pipes and around the underwater discharge outlets. It was too early to tell what was the scrubber claims frequency and the costs to insurance so far, "as corrosion may take some time to develop". However Wikborg said that a few examples of severe corrosion had already been discovered, despite the relative short history of scrubbers.

In marine insurance terms, corrosion is most often classified as 'wear and tear' claims. However, the consequences of 'wear and tear' breakdowns might easily qualify for the 'sudden and accidental' category required to be recoverable under an insurance policy.

Wikborg cited one example of a marine insurance portfolio of approximately 12,000 Marine units, of much diversity, which had registered 450 units (3.75%) being fitted with scrubbers. A total of seven claims represented. a claims frequency for scrubber-fitted units of 1.56%, out of which only one claim settlement exceeded the deductible. "This is far from an alarming figure, but, as stated above, the claims picture may become less alluring when the 'wear and tear' element of corrosion starts taking its toll with the increasing age of the scrubbers", said Wikborg.

Although not alarming in numbers but in consequence, some severe engine room water leaks had occurred because of pipe and automation failures. Also, owners have reported operational issues with the scrubbers' sensors, but this had yet to lead to a noticeable number of insurance claims, said Wikborg.

Other predicted consequences were more directly related to the fuel itself and the necessity to make proper preparations prior to receiving the new fuel. With many suppliers around the world, the quality of the fuel, even with identical specifications, was certain to vary. Proper emptying of the fuel tanks followed by thorough cleaning was important to ensure there were no side-effects emanating from adhering to the IMO 2020 fuel regulations. As a rule of thumb, mixing of fuels should be avoided, said Wikborg.

The complexity of cleaning bunker tanks varied immensely, depending on the type of vessel and her trade. Cleaning of fuel tanks might have become the most critical factor in relation to insurance claims, said Wikborg. Poorly planned and executed cleaning operations might result in cast fines and other abrasive particles inflicting extraordinary wear to engine liners and pistons, which might lead to engine breakdowns and machinery claims.

After the teething problems of the first months of 2020 relating to badly cleaned tanks, the situation improved, with a lower incident rate.

The fuel treatment plant itself was also subject to exposure when the type of fuel changed, as the plant might need to be adjusted to the relevant fuel specification. Such specifications included variations in viscosity and heating (or cooling) requirements. A purifier that was not optimized for

the properties of the delivered fuel would also "not brighten the picture", said Wikborg, noting that it was "evident that the fuel filters must be of the correct type and properly installed, cleaned and maintained to warrant that the fuel supplied to the engines is of the highest possible standard".

Another challenge observed was cylinder lubrication of two-stroke engines. Reduced Sulphur calls for a cylinder oil of different specification to keep cylinder bore polishing ('scuffing') under control. Any absence of adequate inspection procedures, coupled with a lack of competence to assess, had led to serious cylinder liner damages, which had proved to become extremely critical to the ship owners affected because of a stretched delivery time for new liners.

The overall picture for Hull & Machinery insurance claims was that the IMO 2020 had resulted in fewer incidents and claims than many anticipated. However, there had been some cases leading to severe damage, resulting in a high cost of repair, considerable downtime, and loss of income.

Spare parts were not always readily available, and the increased problems associated with the Covid-19 pandemic had not improved anything for those who suffered spare parts supply challenges, Wikborg said.

Post IMO 2020 enactment the Marine insurance community had been informed of several operational hurdles and smaller occurrences. They have been inconvenient, but have not found their way to the claim adjusters' desks. The few serious incidents reported suggested a link to bad preparations or lack of operational follow-up. Similarly, Marine insurers involved in charterer's liability insurance had not found that there was an adverse development in the number of cases arising from contractual bunker disputes, as the number seemed to be in line with the number of incidents reported for the years prior to the implementation of IMO 2020.

Sludging, along with fuel stability, compatibility, and any effect of fuel's 'storage life', were frequently reported issues triggering charterer's liability claims and "did not represent anything new" to the charterer's liability insurance market, said Wikborg.

There was always the potentially long-term effect to a vessel's machinery caused by bad fuel supplied by the charterers, but it was not yet apparent that any unusual claim pattern was emerging because of the IMO 2020 fuel regulations.

Wikborg concluded that the marine insurance providers had fared much better than they themselves expected when it came to claims levels following IMO 2020.

This article is kindly supplied by [Insurance Marine News](#). If you would like a complimentary trial to the daily Insurance Marine News e-bulletin please email grant.attwell@insurancemarinenews.com.