The cost of low sulphur fuels is typically about 50% more than the cost of residual fuel, most commonly used by ships today when operating outside of ECAs that apply in North America and North West Europe, in which fuel with a sulphur content of 0.1% or less must be used.

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In April 2018, the IMO MEPC re-confirmed that this major regulatory change will definitely go ahead in 2020 as scheduled, despite continuing questions in some informed quarters as to whether sufficient quantities of compliant fuel will be available in every port worldwide.

The 2020 global sulphur cap is the requirement under amendments to Annex VI of the IMO MARPOL Convention, agreed in 2008, for all ships trading outside of sulphur Emission Control Areas (ECAs) to use fuel with a sulphur content not exceeding 0.5%. This is a reduction from the current permitted maximum of 3.5%.

This improvement in fuel quality will bring about huge benefits to human health in coastal areas not already protected by ECAs, where the majority of the world’s population lives, as well as reducing shipping’s impacts (albeit relatively small) on acidification of the ocean. This new IMO regime is fully supported by the global industry as represented by ICS. But the economic impacts of the resultant additional fuels costs are likely to be significant.

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differential between compliant low sulphur and the current cost of residual fuels could spike by as much as US $400 a tonne.

Following the implementation of the 0.1% sulphur requirements within ECAs in 2015, there was little evidence of deliberate non-compliance, and the few non-conformities identified were due largely to technical problems during the fuel switchover. However, implementation of the global cap – including ensuring uniform compliance in trades away from major shipping lanes – is likely to prove far more complicated, especially if compliant fuels are in short supply and there is indeed a significant price spike in 2020.

ICS has no reason to think that there will be anything other than full compliance by the vast majority of shipping companies. But in view of the huge sums of money involved, this has generated speculation about the potential for non-compliance and the possibility of unfair competition and market distortion.

In November 2017, in conjunction with other industry associations, ICS therefore made an important submission to IMO which proposed a ban on the carriage of non-compliant fuels when the global cap is implemented in January 2020. The intention is to help ensure that the IMO sulphur cap will indeed be successfully implemented worldwide, providing governments with a valuable additional tool to verify full compliance.

In theory, in the margins of the industry, a ship registered with a flag state that is not a party to MARPOL Annex VI and which trades to a port located in another non-party, could potentially have evaded compliance. But with the carriage ban proposed by the industry, any such ship can now be inspected for compliance as soon as it enters the majority of Port States which are signatories to the global cap. These Port States can then apply the IMO principle of ‘no more favourable treatment’, whereby compliance can still be checked even if the flag state has not yet ratified Annex VI. Data about any non-compliance will then be published by regional PSC authorities, exposing the vessel to further targeted inspections and reducing the ship’s ability to secure future charters.

This industry submission, which was also supported by a wide cross section of environmental NGOs, was considered by the IMO MEPC in April 2018. Encouragingly, the industry proposal was accepted in principle by IMO Member States, with a new amendment to MARPOL scheduled to be adopted for entry into force by March 2020.

As previously requested by the industry, IMO continues to consider other preparatory and transitional issues that need to be urgently addressed before January 2020. These include the use of Fuel Oil Non Availability Reports (FONAR) and the development of standards for the new 0.5% fuels that might be used to comply with the sulphur cap. Disappointingly, however, it seems that the International Organization for Standardization (ISO) is not expected to complete the development of these important standards until sometime after 2020.
Although it is impossible to predict with certainty what will happen in 2020, there seems to be growing consensus within the bunker industry that sufficient quantities of compliant fuels will probably be available, although they are likely to be expensive. While the industry is committed to full and immediate implementation, there could possibly be an initial period of ‘teething problems’ when compliant fuel might not always be available in every port until it can be shipped in from elsewhere.

This is more likely to be a problem for ships in tramp trades which call at many more port destinations which are not always known in advance. But if 0.5% sulphur fuel is not available in every port worldwide, ships will still be required to use other compliant fuels such as 0.1% distillate.

It is currently understood that perhaps about half of the low sulphur fuels that will be available in 2020 may have a sulphur content of 0.5% – many being blends of distillate and residual fuels – with the remainder being 0.1% fuels as currently used in Emission Control Areas. Although opinions differ, it is possible that the price differential between 0.5% and 0.1% fuel could in fact be relatively small.

Concerns have also been raised about fuels, including blends, which will be compliant with the 0.5% sulphur limit but which may differ in their composition from supplier to supplier and port to port, potentially leading to compatibility and mechanical problems. If the price differential with 0.5% fuels is indeed small, it has been suggested that some ship operators may initially elect to purchase 0.1% distillates even when slightly cheaper alternatives are available, especially if much of their trade takes place within ECAs and they wish to avoid fuel switchover problems. But this will not become fully clear until after 2020 when the true cost of compliant fuel is known.

Another factor in 2020 will be the take up of alternative compliance options which are permitted by MARPOL. However, except for blue chip operators, finance from banks for retrofitting existing ships is still in short supply. Even though 2020 is less than two years away, this may still be seen as involving too much risk for many lenders.

Although the use of LNG and exhaust gas cleaning systems (‘scrubbers’) is predicted to increase, especially after 2020, for the immediate future this will almost certainly only involve a small percentage of the fleet, with the vast majority of ships expected to comply in 2020 using fuel oil with a sulphur content of 0.5% or less.

Now that the 2020 date is fast approaching, ship operators, oil refiners and bunker suppliers must urgently prepare for implementation. The oil refining industry in particular will need to take important decisions to ensure that sufficient quantities of compliant fuel will indeed be produced well in advance of 1 January 2020. But governments need to monitor this carefully, since it may be in the refiners’ commercial interest to keep the supply of compliant fuel as tight as possible. It is important to remember that the IMO decision in 2016 to proceed in 2020 focused entirely on the likely availability of compliant fuel and took no account of the possible purchase price.
Key Issues

The Global Sulphur Cap is Coming

2020 Global Sulphur Cap

Implementation issues being addressed by IMO at the request of the shipping industry

1. Preparatory and transitional issues that may arise with the shift from the 3.5% sulphur limit to the new 0.5% limit

2. Impact on fuel and machinery systems resulting from the use of fuel oils with a 0.5% sulphur limit

3. Verification issues and control mechanisms and actions that are necessary to ensure compliance and consistent implementation

4. Development of a standard format (a standardised system) for reporting fuel oil non-availability that may be used to provide evidence if a ship is unable to obtain complaint fuel oil

5. Development of guidance to assist Member States and stakeholders in assessing the sulphur content of fuel oil delivered for use on board ship, based on the means available for verification that fuels supplied to ships meet the specified sulphur limit as stated on the bunker delivery note

6. Requesting ISO to consider the framework of ISO 8217 to maintain consistency between the relevant ISO standards on marine fuels and the implementation of the sulphur cap

7. Any consequential regulatory amendments and/or guidelines necessary to address emerging issues