New rules on maritime fuel: a short guide to the impact on YOU

Imminent environmental legislation will limit fuel sulphur emissions from all ships operating in three major areas of northern Europe. The cost implications will impact on ferry companies, their freight customers and road transport operations. Here we explain the background

The legislation

In force from 1 January 2015, the EU Sulphur Directive 2012/33/EU requires a drastic cut in sulphur emissions from all vessels operating in the Baltic Sea, the North Sea and the English Channel. In these so-called Sulphur Emission Control Areas (SECA's), ships must use fuel with a maximum of just 0.1% sulphur content – down from the current 1% limit – or adopt alternative solutions that achieve an equivalent effect.

Why is this?

Ships are a prime source of sulphur dioxide (SO_2), which is produced by burning fossil fuels containing sulphur. SO_2 is a major air pollutant that is toxic to humans, plants and animals as well as being the main cause of acid rain. Recognising this, the International Maritime Organization and the European Union have been working on the legislation for several years.

Compliance options

Ship operators have three basic options to comply with the new legislation, but each raises problems:

Use fuel with 0.1% sulphur content

Marine gas oil (MGO) meets the limit. But:

- MGO is about 50% dearer than the Heavy Fuel Oil (HFO) with 1% sulphur that is currently allowed and commonly used in the SECA's
- There is widespread concern that future demand for MGO will outstrip supply, so the price will rise even further
- Longer term, it is expected that refinery output will change to support increased demand for low sulphur fuel - leading to lower supply and higher prices for other fuels such as diesel

Use alternative fuels

LNG and methanol are among the alternative fuels that meet the 0.1% limit. But this option is only viable for newbuild ships – retrofit conversions to existing ships are uneconomically expensive

Use abatement technology

Ships could continue to use HFO by using equipment known as scrubbers to dilute exhaust gas sulphur emissions to the 0.1% limit. But scrubber units are very expensive, heavy and fill a lot of space, making them uneconomic for retrofitting older and/or smaller ships

Whatever the solution adopted by ferry operators, the commercial result will be the same. They will face an increase in operating costs that, more than likely, will be passed on in full to their freight and passenger customers.

Further consequences

The ferry industry is a highly competitive and low margin shipping sector, so the problems may go well beyond higher operating costs and price increases to customers. Several major ferry operators are conducting feasibility studies on the viability of continuing to run certain services within the SECA's. This could result in route closures – notably on long distance and/or low volume trades - and reduced frequency on marginal routes.

The effect on road transport

Maritime emissions limits, higher ferry prices, route closures and reduced sailing frequencies will have a detrimental effect on the entire road transport sector - and that's despite common agreement that there will be a modal shift from sea to road as overland options become relatively cheaper than multimodal routes. Here's why:

- road mileage could increase in order to access the least expensive ferry crossing (mainly short distance) and/or due to changes in the ferry network and sailing frequencies
- increased congestion on the main EU highways as well as the roads to key ferry ports
- as a result, pressure on transport lead-times and service reliability will increase
- last but not least, the foreseen rise in diesel fuel prices - due to lower refinery production – will trigger higher road transport operating costs not only in areas surrounding SECA's but also throughout Europe. In an era of tiny margins at best, these cost increases will have to be passed on to customers

In conclusion

It's clear that the new EU legislation on maritime sulphur emissions will have a knock-on effect far beyond shipping companies. The full impact and cost implications for the transport sector and its customers cannot be quantified until the ferry sector confirms its revised price structure and network capabilities. We will, of course, not only keep you informed but also work closely with you to continue providing the optimum solutions for your requirements.

For further information about the upcoming EU sulphur rules, you can contact your local P&O Ferrymasters representative or send an email to enquiries@pofm.com.

Compliance Solutions Summary

Use low sulphur fuel

- Expensive (+50%)
- Limited availability
- Expected future price increases

Install Scrubbers

- Expensive technology
- High installation costs
- Only viable for younger and new vessels

Use alternative fuel (LNG)

- Expensive technology
- Only viable for new vessels
- Lack of current LNG infrastructure

Whatever the solution,
the result is the same;
Increased Operating Costs*

*Additional costs will be charged to the customer according to a "user pay" principle.