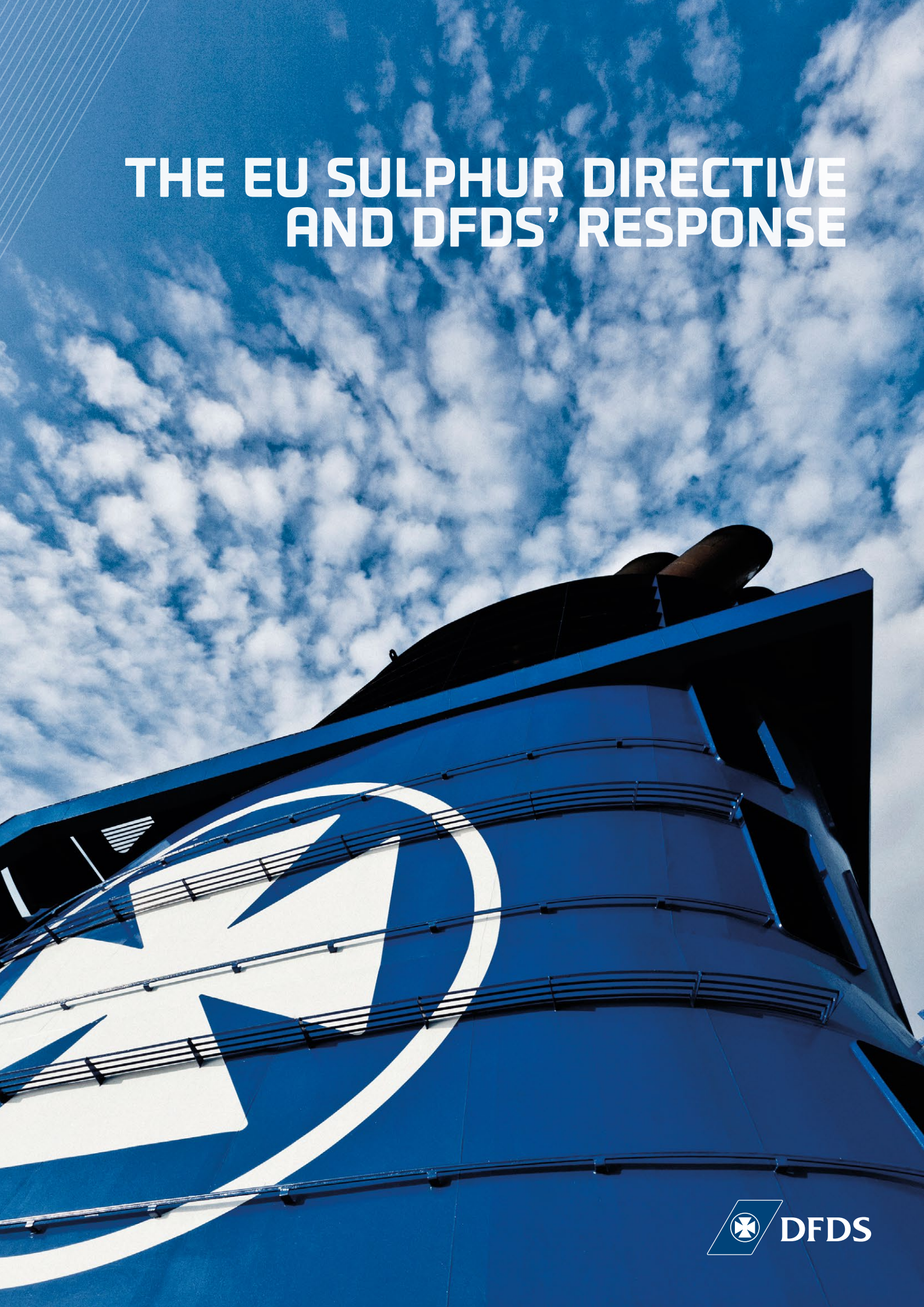
THE EU SULPHUR DIRECTIVE AND DFDS' RESPONSE



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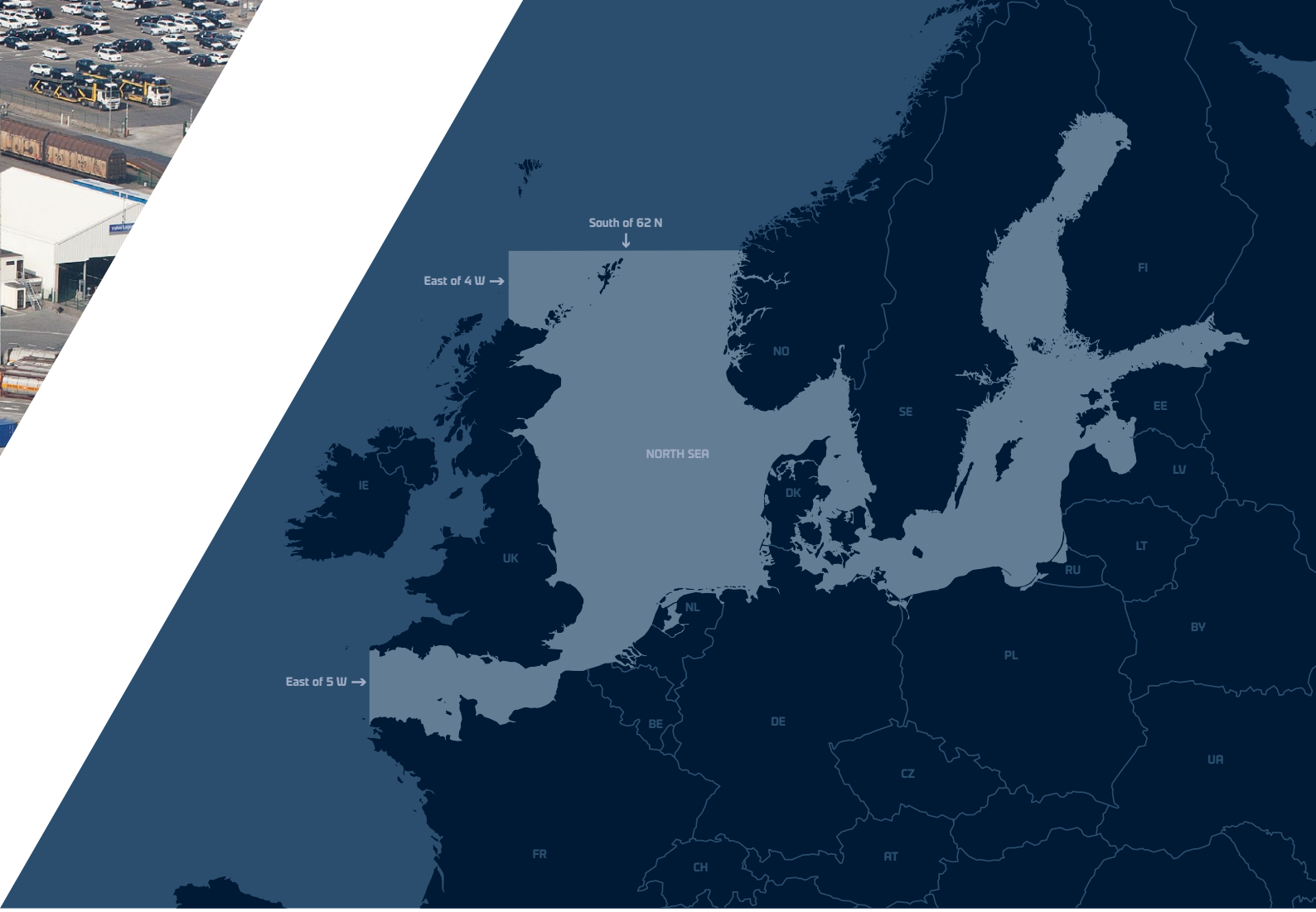
WHAT IS SULPHUR DIOXIDE?

Sulphur dioxide (SO2) is produced by burning fossil fuels and is a major air pollutant, it's toxic to plants, it's a main cause of acid rain and it can cause breathing difficulties. Since shore based industries have succeeded in reducing its SO2 emissions, ships have now become a major source of this pollutant in the EU. In order to reduce the impact of this pollutant, the International Maritime Organization and the European Union have been actively introducing legislation over the last few years.



NEW RULES ON 1 JANUARY 2015

On 1 January 2015, the EU Sulphur Directive 2012/33/EU will bring about a major reduction in sulphur dioxide emission from ships, and that will heavily impact shipping in northern Europe. The Directive will require ships sailing in the English Channel, the North Sea and the Baltic Sea (the North European emission control area) to use bunker oil with a maximum 0.1% sulphur or apply alternative methods in order to achieve the same effect.

WE WELCOME GREEN INITIATIVES

WHAT WILL BE THE CONSEQUENCES?

The fuel with 0.1% sulphur content is the marine gas oil (MGO), which is significantly more expensive than heavy fuel oil (HFO) with 1% sulphur, which is currently allowed and commonly used inside the North European ECA. As a result, fuel prices will increase and so will the costs of shipping. It has been estimated that ships trading within this area consume around 13,000,000 tons of HFO per year. Switching this to 0.1% MGO would mean an extra cost of about EUR 3 billion per year. It is entirely up to the shipping industry to cover this extra cost.

Some studies predict that it will become more interesting for a lorry to drive extra kilometres instead of selecting the sea. This could lead to a modal back shift where a portion of sea freight moves to the already busy roads in Europe. As a consequence, society may see further congestion on roads, environmental side-effects, potential closure of shipping routes and a loss of jobs.

For these reasons, shipping companies have been working hard to find solutions to this challenge.

WHAT POTENTIAL SOLUTIONS ARE OUT THERE?

The new rules will come into effect in 2015 and there will be no exemptions. There are basically three ways to comply with the new legislation:

1. Switch to the MGO fuel
2. Change to liquefied natural gas (LNG).
3. Invest in scrubbers that remove sulphur from the exhaust gases from ships.

All three options will lead to significant cost increases for shipping companies. Legislation for their use is still not fully in place and there is a significant lead time for such major conversions to existing vessels.

WE WELCOME POTENTIAL SOLUTIONS

HOW WILL DFDS RESPOND?

DFDS has been a leader in preparing for the new rules based on an early decision to invest in the scrubber technology. DFDS has been testing the world's first large scrubber on freight ship FICARIA SEAWAYS since 2009 and the results are promising as the technology achieved promising results and often better than when using MGO. DFDS is now investing up to EUR 100 million to retrofit a number of vessels with scrubbers.

By selecting scrubbers, DFDS will be able to continue using heavy fuel oil, while still meeting the environmental and legislative standards by cleaning the exhaust gases. This combination has a better overall environmental impact compared to using low-sulphur fuel, because the central production of MGO requires more energy than the cleansing of the exhaust gases through scrubbers.

Increase in fuel costs

↓

Increase in customer prices

↓

Modal shift to the already congested EU roads

↓

More road km driven
Reduced shipping activity

↓

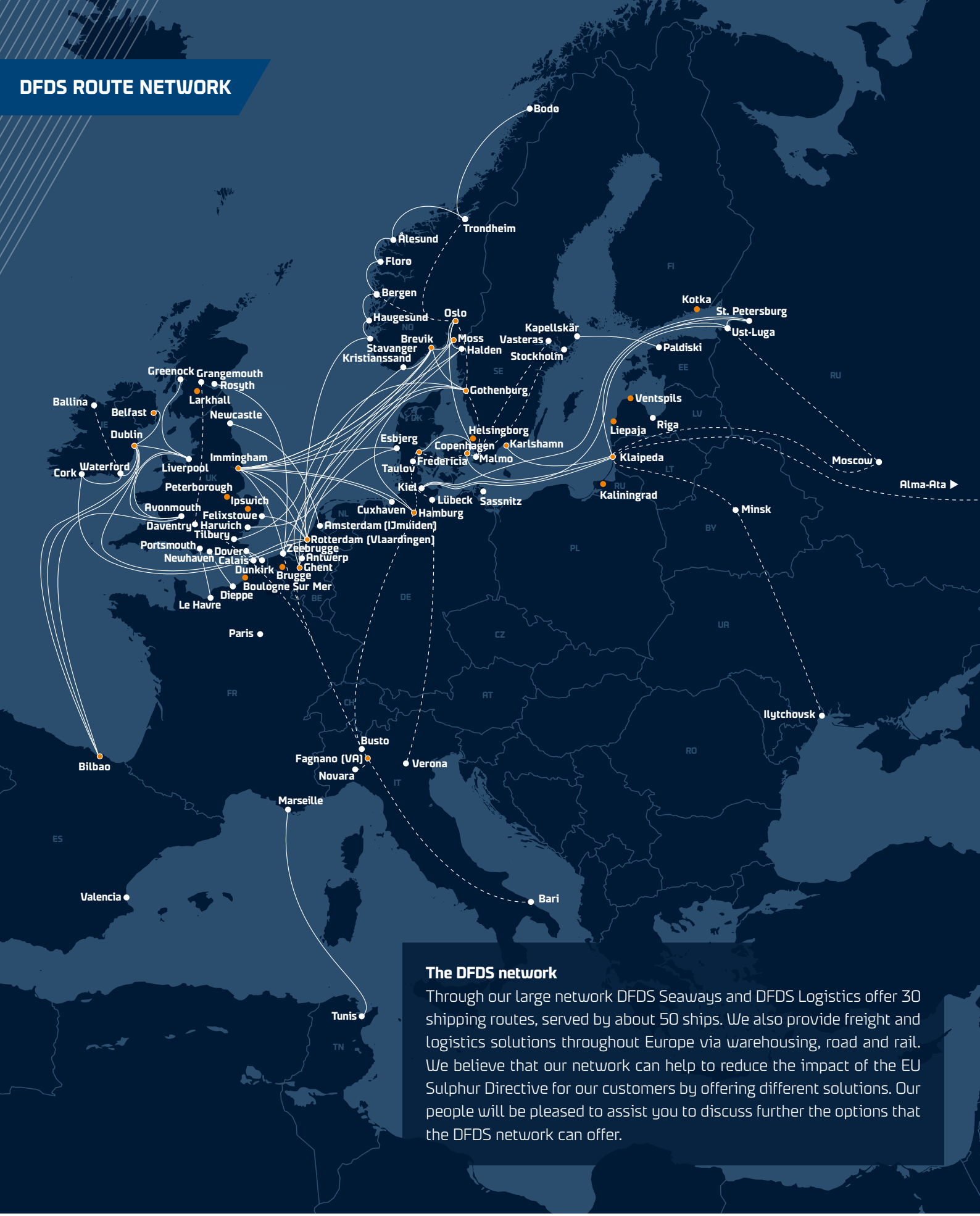
Shipping routes may close
Loss af employment
Environmental impacts

The scrubber technology is an approved solution in order to comply with the EU Sulphur Directive. However, not all ships can accommodate such an installation. It has to be adapted to every single ship as it is not a one-size-fits-all solution. Furthermore, a scrubber will increase operating costs as it is a heavy investment of EUR 4-7 million per vessel and operating it consumes chemicals. Furthermore, there will be a slight loss of energy, increasing bunkers consumption by 1-2%. So, unfortunately there are still many things to be decided and our challenge is to adapt to this changing environment.

> Society and shipping companies have a common interest in improving the environment, while simultaneously ensuring that sea transport doesn't become unnecessarily expensive, which could lead to an increase in cargo being transported on already congested roads.
> We have to work together in order to ensure the development of long-term solutions, including clear and appropriate rules for the use of scrubbers and rules that provide companies with a secure basis for deciding on investments.

CEO, Niels Smedegaard

DFDS ROUTE NETWORK



The DFDS network

Through our large network DFDS Seaways and DFDS Logistics offer 30 shipping routes, served by about 50 ships. We also provide freight and logistics solutions throughout Europe via warehousing, road and rail. We believe that our network can help to reduce the impact of the EU Sulphur Directive for our customers by offering different solutions. Our people will be pleased to assist you to discuss further the options that the DFDS network can offer.

Please contact your local DFDS representative for further information about the upcoming EU sulphur rules or send an e-mail to DFDS' Environment & Sustainability Director, Poul Woodall, who will be pleased to assist you further (poul.woodall@dfds.com).

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