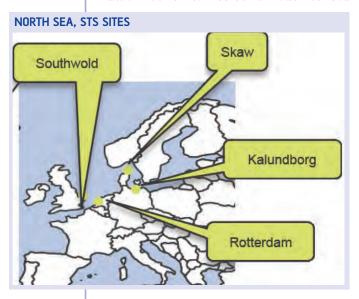


Port of Rotterdam Continuing to Invest in STS Infrastructure

Of relevance to the international fuel oil trade, the Port of Rotterdam (POR) is continuing to invest in infrastructure for ship-to-ship (STS) transfers. An STS infrastructure investment of 20 million euros will become operational by year-end 2015. The POR's fuel oil throughput in 2014 stood at 48 million mt, of which about 20 percent was handled via STS at the Port of Rotterdam's tank terminals and dolphins, according to a presentation by the Port of Rotterdam Authority's Danny Levenswaard at World Fuel Oil Summit in Athens on May 22, 2015. The summit was hosted by the Greece's Public Authority and organized by Axelrod Energy Projects.

Rotterdam has an estimated 55 percent of the 18-million-tons-a-year STS business in Northwest Europe. Large tankers carrying Russian fuel oil cannot be full laden at load



	Location	Max LOA
Maasvlakte2	90	350
Maasvlakte2	91	350
Europoort	78	140
Europoort	79	230
Europoort	80	380
Europoort	84	345

ports due to limited draft at Russian/Baltic ports and the Danish straits. The four key locations of STS in Northwest Europe are Southwold, England; Skaw, Denmark; Kalundborg, Denmark; and Rotterdam, the Netherlands. Of the four STS locations, only Rotterdam provides sheltered, in-port STS service, and is, hence, less susceptible to weather-related issues. Around 60 percent of incoming fuel oil at POR originates in Russia and the Baltic, and about 60 percent of outgoing fuel oil has Singapore as its destination.

When exiting the POR, about two-thirds of VLCCs buy additional fuel oil at last instance and perform STS before sailing East. POR's STS facilities, known as dolphins, consist of 50 meter poles which allow ships to moor in a safe and stable environment. Since the dolphins are situated inside the port, their locations are protected from strong winds, big waves and thus prevent delays that might be encountered when doing offshore STS. The accompanying table shows the location of dolphins in the POR. All of these POR dolphins can handle liquids as well as dry bulk.