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## UK ports aim to lure more shipping

**Keywords:** Brexit, UK port, EU regulation, British terminals, Ports Services Regulation, Associated British Ports



British ports could gain a competitive edge in tough shipping markets through **post-Brexit exclusion** from **planned EU regulation** of the sector, leading British port officials have said.

Last month's vote to leave the EU means that **British terminals** are set to escape the proposed **Ports Services Regulation** that critics have said would hit **UK ports** unfairly because most are privately funded, while many of their European counterparts receive financing from local authorities.

**The mooted EU-wide rules** cover port services such as piloting but also include port charges and exemptions for state aid, which would add to cost pressure on UK operators while eroding their ability to control prices.

"I am reassured that if there is one benefit [from Brexit]... the EU directive that was coming our way will fall away," **Mark Whitworth**, *chief executive of Peel Ports*, Britain's second-biggest operator in terms of cargo handled said.

"At the moment, we have a level playing field and no interference from government," he said.

A briefing paper prepared for Britain's parliament in January said 43 UK ports out of 319 in total in the EU would be affected by the EU regulations.

"Brexit does offer us the opportunity to say goodbye to a whole range of inappropriate and costly regulations," said **James Cooper**, *CEO of Associated British Ports (ABP)*.

**Peel Ports and ABP** said they are committed to various investment programmes despite Britain's impending EU exit.

**Peel Ports** has invested over £300m (€358m) in transforming Liverpool into a deep-water container terminal that can receive bigger ships, which **Mr Whitworth** said would formally open in October.

ABP has £1bn in investments planned over the next four to five years.

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*Source:* Irish Examiner

*Link:* <http://bit.ly/2bEpo8c>



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## Stena Line methanol project shortlisted for Global Freight Awards

**Keywords:** Stena Line, Global Freight Awards, Lloyds List, Environment Award, Product Innovation Award, Stena Methanol pilot project, EU, TEN-T, Motorways of the Sea, Methanex, Wärtsilä, Port of Kiel, Port of Gothenburg,

**Stena Line** has been shortlisted in two categories for this year's prestigious **Global Freight Awards** run in association with **Lloyds List**, the company said in its press release.

Europe's leading ferry company has been shortlisted in the **categories of Environment Award and Product Innovation Award** for the innovative work it is doing with methanol powered vessels. The winners will be announced at a gala dinner in **London on 3rd November**.

The main objective of the **Stena Methanol pilot project** is to develop a pragmatic, cost-effective and green alternative to comply with the **sulphur emission reduction targets** in designated **SECA** areas and later globally. The alternatives available for ship-owners to comply with these and other future regulations are limited so the interest in this initiative is significant across the world.

The **Stena methanol project** has received funding support from **EU's TEN-T, Motorways of the Sea initiative**, and is carried out in partnership with **Methanex, Wärtsilä, the Port of Kiel and the Port of Gothenburg**.

*Source:* Port News

*Link:* <http://bit.ly/2c37ss8>

## Game-changer for Baltic tanker trade

**Keywords:** LNG, green fuel, BalticSO2Solution, Terntank, Wärtsilä 5RT-flex50DF, Winterthur Gas & Diesel (WinGD), China State Shipbuilding Corporation (CSSC), NOx, CO2, Ternsund, TEN-T programme



LNG-fuelled two-stroke propulsion is central to a bid to create a more environmentally compatible, economically attractive transport model for the Baltic. David Tinsley writes.

Putting down a new marker for dual-fuel, two-stroke engine technology, the 15,000dwt oil/chemical products carrier **Ternsund** entered the **North European** distributive traffic during August. The Danish-registered vessel leads a series of four **LNG-fuelled tankers** ordered in China by **Terntank Rederi**. EU funding support was forthcoming for the **project's 'green' objectives and credentials**.

**Terntank** is a family-owned business based in **northern Denmark**, specialising in the coastal and shortsea oil and chemical tanker trades. The **construction programme** was implemented and shaped to **ensure viability and environmental compliance** in the highly competitive and heavily regulated areas in which the company operates.

The new **ship's Wärtsilä 5RT-flex50DF** installation is the **first dual-fuel, low-speed engine employing** the low-pressure **X-DF gas admission technology** developed by **Winterthur Gas & Diesel (WinGD)** of Switzerland. With the June 2016 transfer of **Wärtsilä's final 30% stake in WinGD**, the latter has become a wholly-owned subsidiary of **China State Shipbuilding Corporation (CSSC)**.

When the machinery is running in gas mode, the vessel is expected to yield negligible SOx and particle (PM) emissions, **85% less NOx** than under **IMO Tier II regulations**, and **25% less CO2** than those of a conventional diesel engine. By comparison with a similar-sized ship built around 2005, with a speed of 14 knots, the environmental performance is even more impressive, at **97% less NOx and 40% less CO2, and 99% less SOx and PM**.

## SECA COMPLIANCE

The negligible sulphur content of natural gas means that **Ternsund** can accordingly meet the 0.1% sulphur 'cap' applicable in **IMO-designated Sulphur Emission Control Areas (SECAs)**, within which she will predominantly trade. In gas-fuelled operation, the X-DF main engine also facilitates compliance with the Tier III restrictions on NO<sub>x</sub>, without necessitating additional exhaust after treatment measures. However, giving still greater dimension to the environmental strategy behind the design, **Ternsund** also houses a combined exhaust gas heat recovery and selective catalytic reduction (SCR) plant.

Furthermore, as **LNG has a 10-15% better energy value than marine gas oil (MGO)**, and in conjunction with an optimised underwater hull design, **Ternsund** offers a daily fuel consumption of some 15t or less per day, compared to 22t for existing ships of similar size. The adoption of a large-diameter propeller in conjunction with a two-stroke main engine means that only 65% of the maximum power output will be needed to reach a service speed of 14.5 knots.

**Terntank** ordered **Ternsund** and a sister vessel through **AVIC International Ship Development of Shanghai** in November 2013, and subsequently extended the deal by booking third and fourth new builds in April 2014.

The diverse Chinese group, whose interests include technical consultancy **Deltamarin**, assigned construction to **AVIC Dingheng Shipbuilding**, which has a high profile in specialised tanker production. Following her June 27 handover from the Dingheng yard on the Yangtse River, in Jiangsu province, **Ternsund** sailed to Singapore to load a cargo for discharge, and for its **first LNG bunkering**, in Rotterdam in early August. The vessel then commenced duties with Finnish charterer **North European Oil Trade (NEOT)**.

## EUROPEAN FUNDING

The fleet development programme was implemented under the auspices of **the BalticSO<sub>2</sub>lution project** and has qualified for partial EU funding in accordance with the **Trans-European Transport (TEN-T) initiative**.

**BalticSO<sub>2</sub>lution** is one of several endeavours encompassed by the EU co-sponsored collaboration platform known as **Zero Vision Tool (ZVT)**, an expression of the **European bid** to stimulate the transition from conventional marine fuels to cleaner-burning LNG. ZVT supports the development of more environmentally sustainable and energy efficient shipping in the Baltic, and the building of an LNG infrastructure.

**Ternsund** is based on **Rolls-Royce Marine's NVC 615CT design**, an **IMO Type 2 tanker** for chemical and petroleum products, featuring a slender hull form, vertical stem, and reduced bow flare and shoulders, in

keeping with the overall objective of lessening resistance and progress-impeding motions in all sea conditions.

Although the NVC 615CT type can be built with stainless steel tanks throughout, the ice-classed Ternsund was specified with the **MarineLine 784 cargo tank coating system from Advanced Polymer Coatings**. MarineLine's properties of high resistance, versatility, non-permeability and ease of cleaning confer the flexibility to handle and transport multifarious and diverse oil and petrochemical products and other liquids.

### TANK STIFFENING

The revenue-earning section is subdivided by transverse bulkheads and a centreline, longitudinal bulkhead into 14 tank compartments, served by seven deepwell pumps, and providing an overall load capacity of 16,800m<sup>3</sup>. The **LNG fuel tanks** are mounted side-by-side on the forward section of the weather deck, which is heavily 'ribbed' as a consequence of using external tank stiffening.

The Wärtsilä RT-flex50DF design of main engine offers a maximum continuous output at the R1 rating point of 1,440kW per cylinder, at 124rpm crankshaft speed. In the Ternsund application, the engine has been delivered at a rating of 1,170kW per cylinder, running at 102rpm. The installation thereby provides a maximum power concentration of 5,850kW.

The powering arrangements, in conjunction with the hydrodynamic attributes of the hull form and the efficiency of the propulsion train, enable the ship to make 14.5 knots at just 3,800kW output, allowing for a shaft generator load of 500kW. An LNG consumption rate of 15.5t per 24 hours is anticipated when operating in gas mode at 14.5 knots, falling to under 9t at 12 knots.

The LNG fuel storage tanks on deck have a combined capacity of some 630m<sup>3</sup>, making for an endurance of 6,600 nautical miles, and supplemented by 550m<sup>3</sup> of gas oil tankage underdeck.

Whereas high-pressure gas injection engines operate on the Diesel cycle, the low-pressure X-DF type works on the lean-burn Otto cycle when in gas mode. The requirement of the X-DF generation of machinery for only low pressure gas compression makes for greater simplicity and lower costs relative to alternative gas engine solutions, according to engine designer WinGD. High-pressure, electrically-driven compressors are not required. Moreover, the technology allows stable operation on gas across the entire load range, obviating any need to switch to diesel at low loads.

### TEST BED TRIALS

On the testbed, the 5RT-flex50DF was run continuously for several days in gas mode, and a series of automated fuel changeovers between diesel and gas were executed. When the ship was on sea trials, the engine was operated at a range of load points in both gas and diesel mode up to a high load level exploiting the sea margin of the Ternsund, with her hull in new condition, free of fouling.

The value of the prestigious shipbuilding project to China's maritime industrial sector, which now owns one of the world's three leading marques of two-stroke marine engine, has been all the greater for the production of the main engines for the Ternsund class at the Zhuhai factory of licensee Yuchai Marine Power Co.

The auxiliary outfit comprises three Mitsubishi MAS 850-S gensets, each rated at 790kWe and driven at 1,800rpm by V12 engines of the proprietary S12A2-MPTK type. In addition, Ternsund incorporates a variable frequency drive shaft PTO/PTI (power take-out/power take-in) generator that doubles as an efficient supplier of electrical energy at sea or alternatively as a source of emergency propulsion power.

System supplier WeTech Solutions selected a variable frequency drive, permanent magnet shaft generator from Finnish compatriot company The Switch for each of the four newbuilds. In PTO mode, the power available for the ship's electrical network is up to 780kW, while the shaft generator's maximum rated output in PTI operation is 1,000kW.

Terntank has a track record in environmentally-inspired technical strategy. Its 2003-built products carrier Ternvag was retrofitted with a selective catalytic reduction (SCR) plant at the request of Swedish oil company charterer Preem. The tanker was subsequently ranked "the most sustainable vessel arrival in Rotterdam in 2014", by virtue of her Environmental Ship Index (ESI) rating. ESI is an indication of environmental performance based on emissions of NOx, SOx and CO2.

Vessels awarded a high-score ESI are eligible for discounts of up to 10% on port charges in Rotterdam, and the discount is doubled if NOx is below a certain threshold.

## **ANTI-NOX HEAT RECOVERY**

The wherewithal for NOx exhaust gas treatment aboard the Ternvag is a plant designed and manufactured by the Gothenburg company GESAB, which has also supplied its post-combustion technology to the Ternsund. A combined unit for waste heat recovery and NOx reduction known as a Catamiser meets Tier III requirements.

In the Catamiser, the SCR unit is surrounded by spirally wound heating coils, achieving efficient waste heat recovery. The integrated plant is claimed to be a more cost effective, compact solution compared to the use of a separate SCR and economiser. The weight and space savings achieved are of added significance in a tanker of Ternsund's modest size.

Delivery of second-of-class Ternfjord was expected by the end of August. It is understood that Ternfjord is the subject of a timecharter agreement with ExxonMobil in Norway, primarily for petroleum products distribution from the Slagentangen refinery near Tonsberg to points along the Norwegian coast. The second pair of Terntank newbuilds at AVIC Dingheng is due in service by early 2017.

#### **BOX OUT: Seeking the BalticSO<sub>2</sub>Solution**

The overarching aim of the pilot project BalticSO<sub>2</sub>lution is to environmentally optimise the energy product supply chain in the Baltic Sea. A fundamental element in achieving the goal of an effective transport model is the evaluation and introduction of a low-emission, dual-fuel engine technology package suitable for both newbuild vessels and retrofit applications.

Ternsund is acting as the 'testbed' for the package, and will operate mainly between Sweden and Finland and calling at up to 21 ports and terminals. The project is expected to increase demand for LNG in the region and promote the development of LNG bunkering infrastructure. It is also intended to assist the shipping sector to meet the sulphur Emission Control Area (SECA) requirements which came into force in January 2015 and to contribute to achieving the 'modal shift' objective of the EU's Motorways of the Sea scheme in a Baltic context.

Co-sponsored by the EU to the tune of EUR 3.6m (US\$4m), the BalticSO<sub>2</sub>lution initiative has entailed cooperation between Terntank, Winterthur Gas & Diesel, energy and environmental consult Wega Enviro, and energy supplier NEOT. The latter has chartered Ternsund for coastwise and shortsea distributive shipments from the Gothenburg oil refinery of Finnish company St1.

The BalticSO<sub>2</sub>lution pilot project is an element of an EU collaboration platform known as the Zero Vision Tool (ZVT). Terntank and other participants in ZVT are pressing for more widespread European reductions in port and fairway dues to help offset the higher building costs entailed with the most environmentally sound, efficient ships. Another initiative under ZVT, relating to measures to establish an LNG bunkering network in the Skagerrak/Kattegat area and the Baltic Sea, has led to the development and ordering of an LNG bunkering vessel for southern Scandinavian waters.



Skangass, which is to supply LNG fuel to the NEOT-chartered tankers, is to long-term charter the 5,800m<sup>3</sup> newbuild bunker vessel under construction at the Royal Bodewes yard in the Netherlands.

*Source:* Motor Ship

*Link:* <http://bit.ly/2cbx17H>

## PM advisor Drula: Section 3 of Orastie-Sibiu highway to be completed in 2018

**Keywords:** Orastie-Sibiu highway, Catalin Drula, TEN-T, European Commission



Works on section 3 of the Orastie-Sibiu highway are to be completed in 2018, prime minister's advisor for transport infrastructure Catalin Drula announced on Wednesday.

Section 3 of the Orastie-Sibiu highway is expected to be completed in 2018, as it requires technical expertise to identify the things that are still required, as well as a corresponding project to address them. However, according to Drula, the section will be open and can be used starting this autumn.

"We consulted with experts and specialists on the causes on the situation there (...) and the unanimous opinion is that we are not dealing with deep-level landslides, but instead with problems caused by the fact that drainage and water collection works were left unfinished (or improperly conducted)," Drula wrote on his Facebook page.

"We are talking about massive works and about a timetable to rehabilitate all affected areas that can stretch up to 2018 (also taking into account the time needed to conduct the expertise and project in question)...In the meanwhile, the 22 km of highway would remain unused and the parallel national road would continue to cause deaths," Drula wrote.

According to Drula, data provided by the Pro Infrastructure Association shows that since the highway was closed, in September 2015, and up until now, on the parallel road there were 17 serious road accidents, which caused 7 deaths and injured 37.

In July, Minister of Transport Sorin Buse visited section 3 of the Orastie-Sibiu highway and confirmed that the section will be open to traffic in September 2016.

The Orastie-Sibiu highway part of the Trans-European Transport Network, is projected to have 82.07 kilometers. The European Commission has contributed with EUR 510 million from the Cohesion Fund. Sections 1 and 2, with a length of up to 44 kilometers, were open to traffic in 2013, while sections 3 and 4 were open



one year later. Section 3 is subject to a criminal investigation initiated after a portion of the road, in the vicinity of the Aciliu viaduct started showing deep cracks, which made it unsuitable to traffic.

*Source:* Business Review

*Link:* <http://bit.ly/2bXCII3>

## #China: Time to forge a Eurasian Digital Silk Road

**Keywords:** *China, European Union, European Commission, TEN-T, DG MOVE, “One Belt One Road”*

*2016 is only half way through and China continues to dominate the headlines. First, the bold initiative of establishing an eWTP proposed by giant e-commerce advocator Jack Ma, next, China’s presidency for this year G20, Chinese deals in European brands, from Syngenta to Kuka to Italian football leagues, more recently, the newly raised South China Sea dispute. There is yet another hot issue on the table, which has received much attention since it came into being in 2013, and that is China’s ‘One Belt, One Road’, or ‘OBOR’, sometimes referred to as the ‘New Silk Road’.*

International co-operation is facing several difficult challenges, of which the following global trends are a representation: anti-globalization, anti-integration and anti-trade. Take the example of Brexit, which was a clear manifestation against one of the EU’s basic principles: the free movement of people; look at the uncertain future of CETA (the Comprehensive Economic and Trade Agreement between EU and Canada), admittedly “the best and most progressive trade agreement” ever negotiated by the EU and now under threat in national Parliaments that need to ratify the agreement; look at the increasing terrorist threats and the general fear over immigration.

China’s OBOR initiative, aimed at deploying USD trillions of investments along the network of trade routes of the ancient Silk Road, looks like a refreshing and timely proposal in a time where each nation is looking to restore protectionist measures. OBOR promises to open a new economic relationship between Asia and Europe, where each side can gain from exploring new investment opportunities with the world’s second largest economy.

Although proposed by China as a counterweight to mega-regional trade agreements excluding China, such as TPP and TTIP, the new Silk Road is not an attempt to control the Eurasian continent. On the contrary, it is a flexible and inclusive project which welcomes everyone that would like to contribute to Asian infrastructure investments.

This was the general consensus from a two-day forum organized by the Foundation for World Wide Cooperation, led by former Italian Prime Minister and former European Commission President Romano Prodi in Venice on 10th-11th July.

Entitled “Along the Silk Roads”, the event gathered some high level representatives from the Italian government, the European Commission, the port authorities of Venice and Tianjin, as well as the some of the most reputable Chinese and European academics to discuss the challenges and the opportunities along the Silk Road.

**Romano Prodi** pointed out the open nature of China’s “**One Belt One Road**”, saying that, unlike TTP or TTIP, challenged by the changing economic and political interests involved, OBOR is more flexible and open to the contributions of all countries willing to take part in the construction of the project.

He referred “**One Belt One Road Initiative**” as the answer to the 21st century, “The US wants to dictate the rules of the 21st century trade. This is impossible. We are going into a society where fragmentation is increasing,” said Prodi, “The Chinese proposal to deepen its influence in Asia gives much more flexibility.”

“Benefits will be split along the road. This is not something imposed by China, it is not an imposed ideology”, added Prodi (to view his full speech, please click here).

Compared to the most significant investment project in history, the “**Marshall Plan**”, which amounted to 130 billion in current USD, “One Belt One Road” is a much vaster project. According to **The Economist**, there are 900 deals under way along the route, worth 890 billion USD, and China alone will invest a cumulative 4 trillion USD in countries along the road. ◦

According to **Alain Baron**, *Head of Unit for International Transport and Enlargement*, at the **European Commission’s Directorate-General for Mobility and Transport (DG MOVE)**, it is important that the Silk Road Initiative coordinates with the **EU Trans-European Transport Network (TEN-T)**.

He said that last year China and the EU signed an **MoU** on connectivity platform to guarantee that the transport market relies on sustainable development and a level playing field.

Source: EU Reporter

Link: <http://bit.ly/2bTfAZ9>

## Cyber code for ports offers best practice guidance to others ahead of new EU cyber laws, says expert

**Keywords:** *cyber security, ports, port systems, Institution of Engineering and Technology (IET), essential services, digital service providers*

The **code of practice on cybersecurity for ports and port systems** (62-page / 1.38MB PDF), published by the **Institution of Engineering and Technology (IET)** and endorsed by the UK government, can help organisations prepare for the **Network and Information Security (NIS) Directive**, due to take effect in 2018.

The code advises that port authorities conduct a cybersecurity assessment and use the findings to shape the creation of a cybersecurity plan. It stresses the importance of good governance of cyber risks, with important individual roles for senior figures, such as dedicated cybersecurity officers.

The code also highlights the importance of outlining measures for handling security breaches and incidents, including the development of suitable cyber incident response plans.

The recommendations taken together are not just relevant for port authorities. They offer a sound basis for all organisations that are likely to fall subject to the NIS Directive when it is implemented into national legislation over the next couple of years. These organisations include banks, suppliers of electricity and gas, airlines and health care providers, among others.

The Directive sets out measures designed to ensure critical IT systems in central sectors of the economy are secure. It will apply to operators of such **"essential services" and to "digital service providers"**.

The Directive will require those organisations to take appropriate and proportionate technical and organisational measures to manage cybersecurity risks to their operations and report some cyber incidents that affect the continuity of the services they provide without undue delay to designated authorities.

As the code of practice on cybersecurity for ports and port systems suggests, a cybersecurity assessment can help organisations **"identify vulnerabilities in physical structures, personnel protection systems and business processes that may lead to a security incident"**.

Organisations should use those assessments to firstly pinpoint "important assets and infrastructure" and identify the processes in which those assets and infrastructure are used, and then identify what risks arise as a result of the potential threats posed to those assets and infrastructure and the likelihood of those threats

materialising. An assessment of available countermeasures and their cost should also be undertaken and an overall decision should be taken as to what risk is acceptable should be made, according to the code.

As the code states, the outcomes from a cybersecurity assessment can help organisations put together a cybersecurity plan, complete with security-related policies and related organisational processes and detailed working procedures relevant to those processes. **Cybersecurity plans should be reviewed periodically and subject to monitoring and auditing.**

It is good practice for organisations to designate individuals within an organisation as having operational responsibility for cybersecurity. The code advises that this could be a cybersecurity officer in the organisation and that a dedicated security group could also be set up to consider relevant cybersecurity issues.

The code also supports the adoption of measures that can help organisations respond effectively to cyber incidents when breaches occur, including incident response plans, communication plans and risk assessment and mitigation and disaster recovery plans.

Cyber incident response plans will be vital tools for organisations that fall subject to the NIS Directive. They will help those organisations meet their new reporting obligations and to minimise the impact of any cyber incident that arises.

Those plans should entail the creation of an **internal network of specialists from multiple disciplines, from senior executives, CIOs, IT staff, general counsel and communication specialists, who should each have roles and responsibilities outlined in advance in the event an incident hits.** An external network of legal advisers and forensic IT experts, amongst others, can also help shape effective responses to incidents in line with regulatory duties.

It will be up to individual EU countries to determine which organisations qualify as operators of 'essential services' and therefore fall subject to the NIS Directive requirements. That process might not be concluded until late 2018, but organisations should not wait until then to prepare to comply.

Organisations should review the likelihood of being placed subject to the new cybersecurity framework and take account of useful guidance such as that produced by the IET as a useful starting point for compliance.

*Source: Out Low*

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Link: <http://bit.ly/2bEGwjm>

## “Gate Terminal” Expands to Include a Third Berth Especially for Small Vessels

**Keywords:** *Gate Terminal, LNG Terminal, Maasvlakte, vessels, North Sea, Baltic, LNG tanker, European Commission, TEN-T programme, Motorways of the Sea,*

**August 30, 2016 [Gate Terminal]** - Gate terminal and its shareholders Gasunie and Vopak are proud to announce that the LNG terminal at the Maasvlakte in Rotterdam has been expanded to include a third berth and special infrastructure for the loading of small LNG vessels.

These small LNG vessels will enable distribution to **LNG terminals in other North Sea and Baltic ports** where **large LNG tankers** are prohibited to deliver directly due to their draught

In conjunction with **LNG bunker vessels**, the new berth will in future also make it easier for ocean-going vessels to fill up with **LNG in Rotterdam**. As with other kinds of maritime fuel LNG can be pumped on board large ocean-going vessels using bunker vessels. These can now be loaded at **Gate terminal** which receives LNG from large **LNG tankers** arriving from several global origins. The use of **LNG as a maritime fuel** is being encouraged by the **European Union, the Dutch government and the Port of Rotterdam because of its more environmentally-friendly properties**.

The third berth is intended especially for small vessels. **Gate terminal** has two jetties where mainly large LNG tankers berth to unload their LNG cargo into the three 180,000 cbm storage tanks. The **cold LNG** (minus 160 °C) is pumped from these storage tanks along insulated pipelines to the new berth and, with the aid of two or three special loading arms, is loaded into the small seagoing vessels and bunker vessels. The system is fully enclosed, with vapour being collected and fed back to the terminal. At the new third berth small volumes of LNG, from 1,000 cbm up to 20,000 cbm, can be loaded, increasing to 40,000 cbm in the longer term. The LNG is loaded at a maximum speed of 1,000 cbm per hour and each year around 280 ships (including smaller ones) can be loaded.

Adjacent to Gate terminal, the Port of Rotterdam has developed the new, 255-metre long, 150-metre wide and 7.5-metre deep **Yukon Harbour**. The third berth of **Gate terminal** is built on this new quay wall and it can handle vessels of up to 180 meters in length. Moreover, the Port of Rotterdam is encouraging the use of LNG as a maritime fuel by giving discount on harbour dues.

As launching customer, Shell has reserved part of the capacity for the loading of small vessels including a bunker vessel that has been ordered. This combination will enable vessels in Rotterdam to be efficiently provided with LNG fuel in the near future. “

“Thanks to the collaboration with **Gasunie, Vopak, and Port of Rotterdam**, we are ready to supply Shell LNG Fuel to marine customers in northwest Europe, through dedicated and scalable infrastructure,” says **Lauran Wetemans, Shell’s General Manager Downstream LNG**. “We provide fuel options to meet the current and future needs of our marine and commercial road transport customers. For marine LNG fuel customers we leverage our experience as one of the world’s leading LNG player”.

**Ulco Vermeulen**, director **Participation & Business Development** and member of the **Executive Board of Gasunie** commented: Gate terminal adds again new functionality to the LNG supply chain by commissioning the new berth. The loading and distribution of smaller parcels will become more efficient. It will stimulate the use of LNG as maritime and road transport fuel tremendously. This supports the transport sector to improve its environmental performance greatly. Local European industries not connected to the gas grid will have easier access to LNG as clean fuel alternative.

**Frits Eulderink** COO and member of the Executive Board of **Vopak** commented: “Facilitating the LNG market with a safe and efficient infrastructure and operation wholly suits the long-term strategy of Vopak. The further extension of **Gate terminal** offers our customers much greater flexibility and efficiency and reinforces the terminal’s leading position in the LNG small-scale segment.” Rolf Brouwer

Managing Director Gate terminal commented: “The safe completion of the project without accidents or other incidents was possible thanks to the huge efforts of the Gate terminal project team, all staff and the numerous employees and subcontractors working for **Actemium, Chubb, Fabricom, Fluor, Future Pipe Industry, G+H, lemants, Kaefer, Mourik and PRS**. At the very height of the project, more than 300 people of ten different nationalities were working together towards a single objective: the safe and successful completion of the project. This resulted in a fantastic new berth and 400,000 accident-free hours worked, for which I would like to thank everyone involved”.

Both shareholders Gasunie and Vopak support the continued expansion of **Gate terminal as a platform for the distribution of LNG to users in shipping, industry and truck transport**. In addition, Gate terminal was again able to call upon the **European Investment Bank** for the funding of this project as well as four other banks. The project is key to facilitate LNG storage and to secure LNG supply in **Northwest European ports**, such as



**Gothenburg.** The maritime connection between Rotterdam and these ports is regarded as a part of the EU 'motorways of the sea' concept and has therefore been selected for co-financing under the European Union's TEN-T program.

*Source:* Tank Terminals

*Link:* <http://bit.ly/2bL5CID>