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Finnlines to jumboize two ships...

The ro-ro vessels Finnbreeze and Finnsea will receive a lengthening midsection in September-December. Once jumboized, each of the two ro-ros will be 217.7 m long, offering 4,200 lane metres of cargo capacity, approx. 30% more than before. The company has already lengthened two of its Breezeclass ships, Finntide and Finnwave, whereas Finnsky and Finnsun will leave the Polish Remontowa, the Gdańsk-based shipyard carrying out the lengthening works, by end-May. During this year's edition of the Transport Week conference, that took place in early March in Gdańsk, the company was awarded the Baltic Trendsetters Club Certificate by the team of the Baltic Transport Journal for the lengthening project.



DFDS to take over U.N. Ro-Ro

The Danish shipping company will acquire the stanbul-based U.N. Ro-Ro for €950m, granted it gets approval from the Turkish, Austrian, German, and Italian competition authorities. The Turkish company, employing some 500 people, operates a fleet of 12 freighters (av. age of 11 years) across five routes in the Mediterranean - from Pendik, Ambarlı, and Mersin to Trieste, as well as between Pendik and Toulon, and Pendik and Bari. Last year, U.N. Ro-Ro's ships carried 202k cargo units. In addition, the company operates its own port facilities - in Pendik and Trieste (the Samer Seaports and Terminals and the Fruit Terminal Trieste). "With the acquisition of U.N. Ro-Ro, we are expanding into one of Europe's most attractive freight markets, which is operationally similar to northern Europe. This gives us opportunity, together with the existing strong management team, to leverage our network, fleet, experience and skills to develop the business further while supporting the growth of U.N. Ro-Ro's customers," Niels Smedegaard, CEO, DFDS, commented. Selçuk Boztepe, CEO, U.N. Ro-Ro, added, "We are excited to become part of DFDS' network and the development opportunities this brings to both our customers and employees. I am confident that the industry know-how, combined network capabilities, and the financial strength of our new shareholder will allow U.N. Ro-Ro to enhance the competitiveness of Turkish exporters and international logistics companies." Meanwhile, DFDS has contracted the Chinese Guangzhou Shipyard for DKK2.5b (€340m) to construct two ferries for service across the Baltic. Once completed in Q1 and Q3 2021, each of the 230 m-long and 31 m-wide ro-pax will add 4.5k lane metres of cargo capacity and room for 600 passengers to DFDS' network in the Baltic. The company hasn't yet decided on which service(s) the new units will be deployed.

...and so will its parent company

Fincantieri's shipyard in Palermo has been entrusted with the modernization of Grimaldi Lines' two ro-paxes, Cruise Roma and Cruise Barcelona. The vessels will be jumboized with the use of 29 m-long inserts. The mid-bodies will be constructed in 2018, while the completion of the lengthening process is scheduled for summer 2019. Once enlarged, each of the ferries will be 254 m long (currently 225 m), offering room for 3.5k passengers (3.0k), 3.7k lane metres of cargo capacity (3.0k), and a car deck 3.0k m2 big (2.4k m2). In addition, Cruise Roma and Cruise Barcelona will be equipped with scrubbers to comply with the stricter 0.5% sulphur cap due go into effect in 2020 as well as with batteries, which will be used during turnaround port operations to avoid the use of diesel-powered generators. The two ferries currently serve the route linking the ports of Civitavecchia, Porto Torres, and Barcelona.

Port of Hull's new STSes come online

The two £10.5m worth ship-to-shore cranes, manufactured by Liebherr in its plant in Ireland and delivered fully-built in February, have served their first ship. On 23 March, Thea II arrived in Hull from the Port of Amsterdam. The new 50 m-high gantries helped her to discharge and load 180 containers. "After taking around a year to construct and even longer to plan, seeing these colossal cranes up and running ahead of schedule is a highly-anticipated moment," Simon Bird, ABP Humber Director, said. He added, "These huge pieces of kit will be part of Hull's skyline for at least 20 years serving around 10,000 vessels in their lifetime." Most recently, Samskip kicked off a new sea container service between Hull and Amsterdam with three weekly sailings. After expanding the terminal, the Port of Hull, a member of the Associated British Ports (ABP), can handle up to 400k containers/year.

MLT Helsinki buys a STS from **Konecranes**

Multi-Link Terminals, operating a container handling facility in the Vuosaari Harbour, will receive in 2019 what's said to be the biggest widespan ship-to-shore (STS) crane ever made by Konecranes. The single-lift spreader machinery will have a railspan of 48 m, a lifting height of 31 m, and an out- and backreach of 40 m and 20 m, respectively. In addition, extra features, such as ship profiling, container positioning, and remote controlling, will be added to MLT's new STS.

HHLA takes over Muuga CT

Hamburger Hafen und Logistik (HHLA) has acquired the Estonian terminal operator Transiidikeskuse together with control over the Muuga Container Terminal. The 600k TEU of annual handling capacity facility in Muuga offers four 12.5-14.5m-deep quays with a total length of 1,094 m. There are 404 reefer plugs on the site. The 38 ha-big terminal is equipped with three ship-to-shore cranes, one rail-mounted and six rubber-tyred gantries, nine reachstackers, and 11 shuttle carriers. Apart from containerised freight, also wheeled cargo (ro-ro), breakbulk, and dry bulk goods are handled at the terminal.



Green Cargo and Yilport launch a new (ultra-short) rail service

The companies have entered into a three-year contract during which Green Cargo will operate a shuttle train between Granudden and Yilport's container terminal in the Swedish Port of Gävle. The service kicked off in mid-February and currently runs seven times per week, transporting containers loaded with export paper products. "With these shuttle trains, we're proving that it is possible to compete with road transports even on distances that are 14 km long only, given that all has been efficiently designed," Lennart Westring, responsible for sales at Green Cargo, said.

Two new rail services connecting **Koper to Munich**

Adria Kombi and Kombiverkehr have both set up new links between the Port of Koper and the Munich-Riem terminal, Adria Kombi's service was launched on 6 March and offers three weekly departures in both directions. Kombiverkehr followed suit on 9 April, its trainsets also running three times per week to and fro. In the case of the latter, the new service replaced the former Munich-Riem-Ljubljana/Koper, shortening the journey time by one day.

Piraeus III arrives

COSCO's ship Xin Guang Hua has delivered the Piraeus III floating dock to the Port of Piraeus' Ship Repair Zone of Perama. The dock has a lifting capacity of 22kt which will make it possible to serve Panamax ships up to 240 m in length and 80 m in width. Piraeus III is to become operational once associated works are completed, including dredging, installation of mooring buoys, and setting up the electromechanical infrastructure.

Bremerhaven to revamp the Columbus Quay

The Senate of the State of Bremen has approved the reconstruction of the cruise quay in question. Bremenports, a port authority, will now draw up a detailed plan for modernising the Columbus Quay, which was built in the years 1924-26 and is not fit to serve modern cruise vessels. Recently, the quay was used as a supplementary berth for cargo handling and shipbuilding-related operations, such as final outfitting of passenger ships. The construction phase of the €78.7m-worth project is scheduled to set off in early 2021, to be completed three years later. Last year, Bremenhaven's cruise traffic totalled 84 calls (+15 over 2016) with 166k (+68.5% year-on-year) guests on-board the vessels. This year, the port is to receive 112 calls and serve about 235k cruise passengers.

Zeebrugge port's overseas partnership

The Belgian seaport and the Québec Port Authority (QPA) have signed an agreement aimed at developing commercial ties between them. Specifically, the ports will jointly target issues related to the container traffic and finished vehicle logistics, as well as exchange best practices regarding sustainable port management and city-port relations. "This agreement with the Port of Zeebrugge marks a new era for the Port of Québec and the start of a rewarding commercial collaboration, in particular in the booming field of containers. The similarities between the Port of Québec and the Port of Zeebrugge are conducive to forging a beneficial partnership," Mario Girard, President and CEO, QPA, said. Joachim Coens, Chairman and CEO, the Zeebrugge port, added, "The port of Zeebrugge is pleased with the signing of the partnership agreement with the Port of Québec. The purpose of this agreement is to exchange expertise and experiences as well as staff and experts in different fields. Another objective is to develop goods flows between Zeebrugge and Québec in the car, container and food sectors."

MedPort Tangier gears up with STSes

What's said to be the world's largest ship-to-shore (STS) cranes have arrived at the MedPort Tangier, a container handling facility set to join the APM Terminals family in 2019. Each of the weighing 2.5t double trolley remote-controlled STSes is 144 m tall when boomed up. The 72 m outreach with twin-lift/tandem lift capability will make it possible to serve container ships of 22k+ TEU capacity. "These cranes use digital technology to ensure the most efficiency during their movements. This will help us to deliver increased productivity throughout the process from lifting a container box off the ship, until it is delivered to its stack in the yard, and vice-versa," Dennis Olesen, Managing Director, APM Terminals MedPort Tangier, said, Keith Svendsen, Chief Operating Officer, APM Terminals, added, "Maersk Line commissioned APM Terminals to build and operate APM Terminals MedPort Tangier so we are designing it around the customer by integrating operational excellence, the most modern cargo handling equipment and an ideal location for connecting global supply chains. This creates the necessary port capacity for the future. Equally important, this port creates another wave of future investment momentum in Morocco as a business and trade centre."



P&O Ferries to move to a new berth in Tilbury

The ferry company has reached an agreement with Forth Ports to move to a purpose-built £150m river berth on the Thames at Forth's Port of Tilbury. According to a joint press release, the new facility will treble P&O's freight capacity to 600k cargo units/year by 2020. The new terminal is awaiting its planning permission. An application for a development consent order for Tilbury2 was submitted to the Planning Inspectorate in October 2017. Tilbury2 intends to build on a 152 acre site, which was part of the former Tilbury Power Station, and will include a new deep water jetty in the river Thames. "The river berth will enable us to cut our crossing time by one hour to seven hours, meaning that our customers will be discharged an hour earlier at 5am, enabling them to bypass the morning rush hour on the M25. The punctuality and reliability of the guay to guay service will be further enhanced by no longer having to negotiate a lock to exit the port," Janette Bell, Chief Executive, P&O Ferries, said. Charles Hammond, Group Chief Executive, Forth Ports, added, "As we prepare for the examination of our development consent order for Tilbury2, this new long-term partnership with P&O Ferries provides a strong economic and market underpinning of our intended development plans to grow UK trade and create further employment opportunities within Tilbury."



Newport to have a new warehouse

Work is underway on a £4.5m project to provide additional warehousing at Associated British Ports' (ABP) Newport to accommodate growth seen in agriculture-related cargo volumes. Once commissioned at North Side, South Dock, the 21 Shed will provide 70k sq ft of covered storage facilities. Last year, the Welsh Port of Newport handled 14% more bulk fertilizer imports than in 2016 as well as 54% year-on-year more animal feed imports. ABP recently invested in Newport's agribulk capacities, including £3.3m in new cranes in 2015, and £2.3m in a 3.5k sq ft warehouse and weighbridge facilities a year later. "Agribulk cargo volumes have been increasing steadily at Newport for several years. In order to support this, we have been proactive in our approach to investments for port customers to ensure that their businesses as well as the local farmers, feed mills, and other industries they support, can continue to benefit from ABP's services for many years to come," Ralph Windeatt, Port Manager for Newport, said.

Antwerp to extend its LNG bunkering services

Fluxys, a Brussels-based supplier of gas, has taken over the concession to operate at the guay 526-528 in the Port of Antwerp. The company, which already offers truck-to-ship bunkering in the Antwerp port, will install at the guay a permanent liquefied natural gas (LNG) bunkering infrastructure to be used to gas-fill barges and smaller seagoing vessels. The facility will be ready by end-2019 and will also feature an LNG truck filling station, set up in collaboration with G&V Energy Group. Meanwhile, Antwerp is working together with the ports of Amsterdam, Rotterdam, Zeebrugge, Bremen, Le Havre, and Marseille on the LNG Accreditation Audit Tool, the aim of which is to make the accreditation process for providing LNG bunkering more standardised.

Felixstowe's new STSes



Hutchison Port, a Hong Kong-based operator of the container terminal in the Port of Felixstowe, has taken delivery of two remote controlled ship-toshore (STS) gantry cranes. The new machinery, the 32nd and 33rd gantry to be deployed at Felixstowe, is capable of working vessels with containers stowed 11-high and 24-wide on deck. Instead of being in a cab 50 m above the quay, the STSes' drivers will be located in a nearby operations centre. "These new cranes are the latest acquisition in our ongoing investment programme to provide the best equipment, infrastructure and systems for our customers. They will further enhance our capability to work multiple mega-vessels simultaneously," Clemence Cheng, CEO, the Port of Felixstowe, and Executive Director, Hutchison Ports, said. He added, "Remote control quay cranes have been pioneered at other Hutchison Ports terminals. Their introduction at Felixstowe will improve the working

conditions of the drivers, enhance safety and benefit communications within operational teams." Besides the new equipment, the port is creating an additional 18k TEU of container storage capacity, upgrading its terminal operating system, raising the height of 10 STS cranes on the Trinity Terminal, and it has eight additional yard cranes on order for delivery in early 2019.

North-West European CO₂ coalition

The Port of Rotterdam is calling on the Dutch government to form a coalition with countries in NW Europe to set a joint CO2 price in order to encourage greener transport & logistics. "A price in the range of 50-70 euros per ton of CO2 will stimulate companies to invest in solutions that we really need in order to realise the targets of the Paris Climate Agreement," Allard Castelein, CEO, the Port of Rotterdam Authority (PRA), said. He added, "As a transit country, the Netherlands is closely linked to the countries that surround it. A North-West European coalition would guarantee a level playing field for the industry (...).The Government is currently focusing on the reduction of greenhouse gases. In order to switch to a new energy system, as a Government you also need an integral vision and a corresponding industrial policy for the new economy, the future industrial landscape and the type of R&D required to achieve that. I also think that this is an important task for the Government. So: international pricing, national stimulation." The Rotterdam/Moerdijk port industrial area faces the challenge of reducing CO2 by 20mt/year as of 2030 (-49% compared to 1990). According to a study commissioned by the PRA and produced by the Wuppertal Institute, marine and inland transport with Rotterdam as the destination or departure point is responsible for emissions of around 25mt of CO2/year

(out of which 21.5mt is attributable to the marine sector). To ensure that this sector also complies with the Paris Climate Agreement, emissions will have to be reduced by 95% by 2050. The first half of this target (up to 50%) can be achieved by efficiency measures, but the remainder will require the deployment of different fuels. As its own initiative, the Rotterdam port will launch a €5.0m scheme to promote climate-friendly maritime shipping, e.g., supporting vessel owners and charterers that experiment with low/zerocarbon fuels. In addition, the port will also offer 100% discount on inland port charges for vessel owners that comply with the platinum certificate of Green Award, a Rotterdam-based foundation promoting eco-friendly shipping (the certificate in question is granted to those sailing on electricity or fuel cells for at least 50% of the time or for three hours a day). The discount will also apply to the users of the NextLogic platform, a planning tool developed to optimise handling of inland container shipping that takes place in the port.



Zamakona Yards to build two ships for RAL

The Nuuk-based Royal Arctic Line has entrusted the Bilbao-located shipyard with the construction of two container ships. The vessels are set for delivery by 2020. The two will replace Pajuttat and the chartered Vestlandia in serving northwest Greenland. The concept design of the newbuildings will be provided by the Norwegian Havyard.

3i Group sells Scandlines, but re-buys stake

The ferry operator has been sold for €1.7b to the infrastructure funds First State Investment (FSI) and Hermes Investment Management (HIM). At the same time, the 3i Group has decided to reinvest, in conjunction with FSI, in Scandlines by acquiring 35% of its shares. As a result, FSI holds a 50.1% stake, while HIM 14.9%. The 3i Group has also disclosed that it made net cash profit of €347m from selling Scandlines. Initially, the 3i Group, together with funds they're managing, acquired a 40% stake in Scandlines back in 2007. They increased their share up to 50% in 2010 and took full ownership at the end of 2013. Meanwhile, FSI bought from Scandlines and Stena Line the Helsingborg-Helsingør service, which since that time has been trading under the Scandlines H-H brand (in a co-op with Scandlines). Currently, Scandlines operates across two ro-pax routes in the south of the Baltic Sea: Gedser-Rostock and Rødby-Puttgarden. The company also owns Danish harbours in Gedser and Rødby.

Gothenburg has two new terminals



First, the operations of the Arken Combi Terminal (ACT) have been officially inaugurated at the Port of Gothenburg, where the new facility rests next to the container and ro-ro terminals. The 65k m2-big terminal is expected to handle over 100k trailers a year. Already today, the ACT is taking care of seven trains per day, i.e., two more than its predecessor – the now-closed terminal at Gullbergsvass.



Part of the old terminal will be converted into urban areas, whereas the Swedish Transport Administration, with the help of the Gothenburg port, will set up the West Rail 8.0 km-long double-track rail link on the remaining premises. Second, after eight months or work, at a cost of SEK14m (approx. €1.36m), the Port of Gothenburg has opened the refurbished America Cruise Terminal at the Stigbergskajen in Masthugget. The terminal is able to receive ships up to 225 m in length and 45 m in width. As such, out of the 43 cruise calls scheduled for this year, 23 will take place at the new facility (other vessels will continue to berth in the outer port area). The 193 m-long AlDAcara was the first ship to call in the new America Cruise Terminal on 13 April. The Port of Gothenburg says that it will serve around 60k guest in total this year. According to estimations, these passengers will purchase goods and services in the city worth some SEK30m (approx. €2.92m).

DCT orders Kalmar's RTGs

The Deepwater Container Terminal Gdańsk has purchased five fully electric rubber-tyred gantry cranes (RTGs) from the Finnish Kalmar. Each of the cable-reel Zero Emission RTGs, scheduled for delivery in early 2019, will be able to lift up to 45t. The machines will have a number of additional features, including a machine-vision-based anti-sway system with an extended camera system to assist the operator, Kalmar SmartRail automated gantry steering solution, Kalmar SmartFleet process automation solution, and Kalmar SmartProfile spreader anti-collision system. The deal also includes the supply of spare parts. Once deployed, DCT's RTG fleet will grow to 40 cranes, of which seven will be Kalmar machines.

Viking Grace to sail on wind

Viking Line's LNG-run cruise ferry is the world's first passenger ship to be equipped with a rotor sail thanks to which she'll be able to use wind as an auxiliary source of power for propulsion. The sail, developed by the Finnish Norsepower, is 24 m high and has 4.0 m in diameter. The machinery takes advantage of the so-called Magnus effect - as the rotor is spinning, the passing air flows with a lower pressure on one side than on the opposite; the propulsion force created by this pressure difference drives the vessel forward. The operations of the rotor sail are automated - the system will shut down in response to disadvantageous changes in the wind's direction or force. According to Viking Line and Norsepower, using the rotor sail means emitting as much as 900t of CO2 less per year. The ferry line's newbuild, currently under construction in China and scheduled to set sail in 2020, will have two rotors mounted on her. "This is a great day for us. As an Åland shipping company, we rely on the sea for our livelihood so it's of prime importance for us to promote the well-being of the marine sea. We want to pioneer the use of solutions that reduce the environmental load. Based in Finland, Norsepower has developed a world-class mechanical rotor sail solution that will reduce fuel consumption. We are proud of the fact that our Viking Grace will be the first passenger ship in the world to benefit from this innovative solution," Jan Hanses, CEO, Viking Line, said. Tuomas Riski, CEO, Norsepower, added, "For Norsepower, it's an honour to be able to make the M/S Viking Grace even more environmentallyfriendly by means of our novel rotor sail technology. The last traditional windiammers in the world were owned and operated by shipping companies based in Åland, so it's fitting that Åland-based Viking Line should be a forerunner in launching modern auxiliary sail technology. Viking Line and Norsepower's organisations have collaborated in an excellent manner in retrofitting the rotor sail solution on the Viking Grace, and the completion of this project is a great moment for all those involved.



All over the world – HaminaKotka

The Port of HaminaKotka is a versatile Finnish seaport serving trade and industry. The location of HaminaKotka at the logistics hub makes the port truly unique – it opens up connections to all parts of the world. Welcome to the Port of HaminaKotka! haminakotka.com





THE PORT OF THESSALONIKI:

15.58mt handled in 2017 (+10.5% yoy)

General cargo marked the biggest uptick last year, going up by 15.9% over 2016 and totalling 4.68mt.

The Port of Thessaloniki's volumes

	2017	Yoy						
Liquids	Liquids							
Oil products	4,078.2kt	+8.75%						
Crude oil	3,350.1kt	+10.8%						
Gaseous/liquefied/compressed petroleum products & natural gas	258.8kt	-11.85%						
Chemicals	22.9kt	+110%						
Total	7,710.0kt	+8.9%						
General ca	rgo							
Containerised	4,061.1kt	+17.4%						
Other	528.4kt	+1.7%						
Wheeled (ro-ro)	93.7kt	+49.4%						
Total	4,683.1kt	+15.9%						
Dry bulk	(
Ores, cement, lime & plasters	2,159.0kt	+10.7%						
Coal & lignite	321.0kt	-2.2%						
Foodstuff, fodder & oil seeds	212.4kt	+40.6%						
Chemicals	150.1kt	-15.5%						
Other	126.7kt	+18.4%						
Grains	121.6kt	-45.3%						
Total	3,189.5kt	+7.0%						
GRAND TOTAL	15,580.1kt	+10.5%						
Container tr	affic							
No. of containers	273,550	+18.7%						
TEU	401,473	+16.6%						
Passenger to	Passenger traffic							
Ferry	47,939	-5.3%						
Cruise	2,424	-86.7%						
Total	50,363	-26.8%						

THE PORT OF KOPER:

23.37mt handled in 2017 (+6.2% yoy)

The turnover of containerised goods rose the most in 2017 – by 9.6% year-on-year to a total of 9.07mt.

The Port of Koper's volumes

	2017	Yoy					
Containerised	9,071.4kt	+9.6%					
Dry bulk	7,917.5kt	+6.0%					
Liquids	3,876.5kt	+7.9%					
Other general cargo	1,377.7kt	-10.1%					
Vehicles	1,123.8kt	-1.4%					
Total	23,367.0kt	+6.2%					
Containe	Container traffic						
TEU	911,528	+7.9%					
Finished vehi	icle logistics						
Cars	741,253	-1.0%					
Pax traffic							
Passengers	72,175	-8.6%					

THE PORT OF GENOA:

2,622,187 TEU handled in 2017 (+14.1% yoy)

Measured in tonnes, the Italian port's containerised freight traffic rose by 15.4% year-on-year to over 25.83mt in 2017. In total, the Port of Genoa handled 55.16mt last year, more by 8.6% yoy on the 2016 result. General cargo advanced by 12.5% yoy to 35.54mt (including, apart from containers, 9.72mt of wheeled and breakbulk, which rose by 5.5% yoy to 9.72mt). Liquids came in second with 15.23mt (+4.5% yoy), followed by 3.41mt of dry bulk (-6.6% yoy), and 0.98mt of bunkers and supplies (+1.3% yoy). Genoa's passenger traffic decreased last year – by 3.4% yoy to just over 3.0m travellers. Ferry traffic lost 0.7% yoy down to 2.08m, while the cruise segment marked a downtick by 9.1% yoy to 925.2k travellers. Genoa is part of the Western Ligurian Sea Port Authority, also comprising the harbours in Vado Ligure, Savona, and Pra'.

FINNLINES:

709k ro-ro cargo units carried in 2017 (+12.7% yoy)

On the other hand, the company transported less non-unitised freight last year – down by 20.5% year-on-year to 1,281kt. However, Finnlines' fleet carried more commercial vehicles in 2017 – up by 23.5% yoy to 147k. Also, more passengers (incl. truck drivers) boarded the company's ships – by 2.8% over 2016.

TALLINK:

90,687 ro-ro cargo units carried in Q1 2018 (+8.2% yoy)

However, fewer passengers boarded the company's ferries in the reported period – down by 0.5% year-on-year to slightly over 1.93m.

Tallink's volumes

	Q1 2018	Yoy
	Ro-ro cargo units	
Estonia-Finland	58,379	+12.9%
Finland-Sweden	16,145	-15.6%
Estonia-Sweden	12,258	+15.9%
Latvia-Sweden	3,908	+62.6%
Total	90,687	+8.2%
	Passengers	
Estonia-Finland	1,025,036	+1.3%
Finland-Sweden	522,945	-9.9%
Estonia-Sweden	227,279	+5.7%
Latvia-Sweden	155,189	+16.8%
Total	1,930,449	-0.5%
	Pax cars	
Estonia-Finland	174,110	+3.1%
Finland-Sweden	18,219	-16.3%
Latvia-Sweden	15,545	+20.9%
Estonia-Sweden	14,496	+4.2%
Total	222,370	+2.3%

HAPAG-LLOYD:

9.8m TEU carried in 2017 (+28.9% yoy)

The increase is chiefly a result of a merger with the United Arab Shipping Company (UASC), which was completed in May 2017. "The successful merger with UASC has significantly strengthened our competitive position. We also benefitted from improved freight rates and a positive development of the worldwide container transport volume," Rolf Habben Jansen, Chief Executive Officer, Hapag-Lloyd, said. He added, "The market environment remains challenging, but as we see some of the fundamentals improving gradually over the upcoming period, we remain cautiously optimistic. Going forward, our customers will benefit from further improved services and new digital products."

THE PORT OF CONSTANTZA:

58.38mt handled in 2017 (-1.8% yoy)

The handlings of dry bulk, the main commodity traded in the Romanian port, went down last year by 1% year-on-year, totalling 34.85mt.

The Port of Constantza's volumes

	2017	Yoy
Dry bulk	34,854.0kt	-1.0%
Liquids	13,354.3kt	-2.3%
Containerised	6,524.1kt	-5.4%
Other general cargo	3,646.8kt	-0.8%
Total	58,379.1kt	-1.8%
Containe	er traffic	
No. of containers	413,253	-4.9%
TEU	696,438	-2.1%

DFDS SEAWAYS:

37,782k lane metres filled in 2017 (+/-0% yoy)

At the same time, the company's ferries served nearly 5.35m passengers, up by 0.4% on the 2016 result.

DFDS' volumes

Area	2017	Yoy					
Sea shipp	Sea shipping division						
English Channel	19,073k lm 3,465k passengers	-6.2% +0.1%					
North Sea	12,611k lm	+7.1%					
Baltic Sea	4,559k lm 205k passengers	+12.6% -1.9%					
France & the Mediterranean	950k lm 39k passengers	-5.3% -4.0%					
Passenger	589k lm	-7.1%					
(Copenhagen-Oslo & Amsterdam-Newcastle)	1,341k passengers	+2.6%					
Total	37,782k lm 5,349k passengers	+/-0% +0.4%					
Logistic	s division						
Continent	228.7k cargo units	+2.6%					
UK & Ireland	184.6k cargo units	+2.7%					
Nordic	135.2k cargo units 400.4kt	+13.2% -6.3%					
Total	548.5k cargo units 400.4kt	+5.0% -6.3%					

THE PORT OF HIRTSHALS:

142k ro-ro cargo units handled in 2017 (+1.9% yoy)

In total, the Danish port's 2017 freight traffic amounted to 1.9mt, more by 6% over the result from 2016.

KOMBIVERKEHR:

78,991 trucks consignments shipped between inland Germany and Kiel-Lübeck-Rostock in 2017 (+3.3% yoy)

In total, however, the German company rail carried less containers, swap bodies, and trailers in 2017 – down by 2.8% year-on-year to 958,299 truck consignments (equivalent of 1.9m TEU). International traffic, excluding the Baltic Sea, noted a drop by 4.9% yoy to 671,719 trucks consignments dispatched on railways. On the other hand, the company carried more cargo units within Germany across the de.NETdirekt+ network, noting here an increase by 2.3% over 2016, up to 207,589 truck consignments overall. According to Kombiverkehr, by preferring rail over road services, the company's clients relieved the environment of 1.1mt of CO2 last year, more or less the same volume as in 2016.

THE PORTS OF STOCKHOLM:

59,901 TEU handled in 2017 (+11% yoy)

Apart from the new container handling record, the three Swedish ports within the Ports of Stockholm authority also recorded a new all-time high in cargo turnover, making 9.7mt in 2017 (+7.8% year-on-year). Out of the total, ro-ro & ferry traffic accounted for 6.9mt (+4.5% yoy). In addition, the ports noted a new record in passenger traffic, which rose by 2.6% yoy last year to 12m ferry & cruise travellers.

THE PORT OF BILBAO:

34.2mt handled in 2017 (+7.2% yoy)

The Spanish port's container traffic rose in 2017 as well – by 1.4% year-on-year to a total of 604,870 TEUs. On the other hand, Bilbao's passenger traffic noted a downtick last year – by 2% yoy to 186,546 passengers, of which 102,872 came on-board ferries while the remaining 83,674 were brought by cruise ships.

RAIL CONTAINER TRAFFIC IN RUSSIA:

1.0m TEU carried in Q1 2018 (+12.6% yoy)

Domestic shipments totalled 430k TEU (+3.5% year-on-year), followed by 274.8k TEU made in export (+16.7% yoy), 198.3k TEU in import (+21.6% yoy), and 100.6k TEU in transit traffic (+30.1% yoy). Out of the total number, laden containers amounted to 663.9k TEU/9.4mt, 14.8% and 12.4% yoy, respectively, over Q1 2016. The laden traffic included 114k TEU loaded with chemicals & soda (+7.3% yoy), 81.1k TEU with timber (+43.2% yoy), 75.6k TEU with paper (+8% yoy), 59.3k TEU with industrial goods (+15.3% yoy), 58.8k TEU with fabricated metal products (+22.6% yoy), 51k TEU with cars (+33.5% yoy), 46k TEU with machines, machine tools, and engines (+26.7% yoy), 27.3k TEU with non-ferrous metals (+7.5% yoy), 27.4k TEU with ferrous metals (+23.8% yoy), 19k TEU with miscellaneous goods (+1.5% yoy), 17.7k TEU with construction materials (+6.8% yoy), and 14.7k TEU with chemical & mineral fertilizers (-13.1% yoy). Overall, Q1 2018 rail freight traffic in Russia amounted to 315.7mt (+3.5% yoy). Transport performance rose as well – up by 4.6% yoy to 636.2bt-km (excl. empty wagon runs).

THE PORT OF DUBLIN:

36.42mt handled in 2017 (+4.3% yoy)

With 30.08mt (+4.4% year-on-year) handled last year, unitised freight continues to dominate Dublin's port traffic.

The Port of Dublin's volumes

	2017	Yoy	
Wheeled (ro-ro)	23,412kt	+4.1%	
Containerised	6,673kt	+5.4%	
Liquids	4,281kt	+6.6%	
Dry bulk	2,034kt	-1.0%	
Beak-bulk	22.0kt	-52.8%	
Total	36,422kt	+4.3%	
Detailed unitised freight traffic			
Ro-ro cargo units	992,062	+5.0%	
TEU	698,348	+5.2%	
Finished vehicle logistics (commercial vehicles, new cars)	99,383	-4.6%	
Pax traffic	,		
Total, of which	1,990,561	+3.6%	
Ferry	1,846,553	+1.8%	
Cruise	144,008	+34.3%	
Pax cars	514,908	+1.9%	

THE PORT OF TRIESTE:

61.95mt handled in 2017 (+4.6% yoy)

General cargo rose the most last year – by 14.1% year-on-year to a total of 16.56mt. At the same time, the Italian port handled 43.75mt of liquids (+2.3% yoy) and 1.64mt of dry bulk (-16.8% yoy). Trieste's 2017 container traffic increased by 26.7% on the 2016 result, amounting to 616,156 TEU (incl. 547,582 laden twenty-foot boxes, more by 25.3% yoy).





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Uniformity with financial and environmental balance

by Ewa Kochańska

According to the latest *Annual Report* prepared by the European Sea Ports Organisation (ESPO) for the year 2016-2017, the big issues for Europe's port industry included fiscal regulation, where ESPO believes more financial independence and better investment in port infrastructure are needed; the practical ramifications of Brexit, especially in the area of trade (although 2017 saw little change there); and the on-going issue of environmental protection and the effects of the port industry on surrounding ecosystems.

ESPO is against the lack of opportunity for ports to establish their own financial strategy. The EU would like to see less reliance from ports on public funding yet it won't allow port authorities to take charge of their own financial situation.

he matters of increasing bureaucracy and the need for conformity in transportation procedures among all EU Member States as well as determining where that uniformity is useful or even possible are also highlighted in the paper. Furthermore, ESPO calls for a "global and urgent response to the problem of CO₂ emissions in the shipping sector," at the same time emphasizing that ports cannot be held responsible, financially and otherwise, for the shortcomings of the shipping sector in the area of environmental responsibility.

Port governance

Several regulatory changes took place in 2017 that affect the ports of the European Union. A new EU regulation, establishing rules for financial transparency of ports, will go into effect on 24 March 2019. ESPO supports some measures in the new law, such as flexibility in the organization

of port services and more transparency in how public funds are allocated. Additionally, the regulation limits bureaucracy when dealing with complaints and didn't increase the scope of the Directive in the matters of concession contracts, all of which ESPO supports.

However, the Organisation is against the lack of opportunity for ports to establish their own financial strategy. The EU would like to see less reliance from ports on public funding yet it won't allow port authorities to take charge of their own financial situation. ESPO plans to continue the conversation with the European Commission (EC) about the new regulation ahead of the March 2019 implementation date.

Another law concerning ports, adopted by the EU on 17 March 2017, extended the scope of the General Block Exemption Regulation (GBER) to cover the port industry. This regulation aims to eliminate unnecessary bureaucracy in cases of "non-problematic state aid" for port infrastructure by exempting ports from notification to the EC. Also of significance for European ports, on 27 July 2017, the EC officially required Belgium and France to end corporate tax exemptions for their sea and inland ports in compliance with the EU state aid rules.

Finally, the EC has pushed for more ecofriendly technologies, including environmental port charging. A study published by the Commission on 27 June 2017 suggests that a voluntary character of incorporating environmentally-conscious technologies has not been effective. ESPO has always supported more ecologically mindful practices in ports, but it believes that final decisions on this subject should be industrydriven without EU's direct regulation.

Intermodal, logistics, and industry

Last year, ESPO has continued following the implementation of the 2013 legislative framework on the Trans-European Transport Network (TEN-T) and its funding instrument – the Connecting Europe Facility (CEF). On 8 February 2017, the European Commission released €1.0b in funds for transportation projects in the EU under the year's first CEF Transport Blending MAP Call for Proposals. The goal was to maximize private involvement in the distribution

of CEF funds and the call had two due dates: mid-July 2017 and 12 April 2018. Once all the funds are allocated, about 95% of the entire 2014-2020 CEF transport budget will be used.

In preparations for the post-2020 EU budget, ESPO re-launched its "More EU Money for Transport, The Best Investment plan for Europe" campaign, with the support of 30 transport organizations. In order to get ready for CEF II, the EC has been evaluating the current Facility. To be more effective, in December 2016 the Commission launched a public consultation in which ESPO participated. In addition to giving some suggestions for a better selection process, ESPO's main points included the need for more budget, the importance of foreseeing a grants component, the need for a better definition and implementation of the "EU added value," and the necessity for a long-term vision.

To further assist the Commission in preparation for CEF II, ESPO commissioned a study on infrastructure priorities as well as financing solutions in European ports post-2020. ESPO hopes the study will illustrate the diversity of needs among the ports in Europe and how effective and sustainable an investment in these ports can be. Additionally, the study will help counter-argue some of the conclusions

reached in the 2016 special report authored by the European Court of Auditors (ECA) and which bears a meaningful title Maritime transport in the EU: in troubled waters – much ineffective and unsustainable investment. While ESPO supports the auditing process, this audit covered only 19 ports in five EU Member States and that raises concerns that the report has actually reviewed Regional and Cohesion funds.

Additionally, in spring of 2016, the Commission delegated a study on best TEN-T maritime transport implementation methods. ESPO is monitoring the developments of the study, which received a deadline extension to mid-2018. The study is set to prioritize the "untapped potential" of the ports in the TEN-T network.

Also related to infrastructure needs, on 13 September 2017 the Commission published a proposal to create a framework for monitoring foreign direct investments (FDI) coming into the European Union. The Commission's concerns are for "public order and security" as well as protection of Europe's interests. Because FDIs play an important role in European ports, ESPO is attentively following the proposal's developments.

Trade facilitation, customs, and security

The Organisation's Trade Facilitation Committee has once again taken up the



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ESPO believes that IMO needs to specify the CO, targets to decrease shipping emissions, submit short-term and long-term reduction goals to the stocktake process of the Paris Agreement in 2018, and by 2023 come up with some clear-cut measures and targets to reduce CO, emissions.

Reporting Formalities Directive (RFD), which had been under a so-called REFIT (the European Commission's Regulatory Fitness and Performance programme) evaluation since 2016. The RFD is a Directive that reports formalities related to the arrival and departure of ships at EU's ports. Its initial goal was to ease the burden of administrative procedures with the "single window environment" across all EU Member States.

ESPO, along with other stakeholders and the Commission, has concerns that the RFD is not efficient and perhaps making things more difficult. In the Roadmap for Maritime Trade Facilitation, ESPO underscored that electronic reporting must be done through a uniform system; the ships arriving at ports should report "the same data elements" in each port and using the same format, with additional information required only in special circumstances. The stakeholders along with ESPO were able to contribute to the "inception impact assessment" of the RFD, launched by the Commission in August 2017, where ESPO laid out the conditions needed for a successful implementation of a single window environment in Europe's ports. ESPO is also continuing to contribute to the eManifest pilot project which is supposed to demonstrate in real life how reporting to a single window can help harmonise and consolidate the processing of cargo data for maritime and customs purposes.

Likewise, ESPO has been active in the Digital Transport and Logistics Forum (DTLF). The DTLF, set up by the Commission in June 2015, is a group of experts who bring together stakeholders from public and private sector within the transport and logistics industries to create a common vision on transport digitisation. The forum identifies transport challenges and provides the Commission with recommendations and implementation ideas. Additionally, the Trade Facilitation Committee has continued to monitor the implementation of the amended International Convention for the Safety of Life at Sea (SO-LAS) - the SOLAS Container Weight

ESPO's sustainability report 2017

his report provides a snapshot concerning the progress made by European seaports in the field of environmental performance. Data from a total of 91 ports from 21 countries were submitted using the EcoPorts self-diagnosis method (SDM), a checklist used for analysing environmental risks and determining environmental priorities for policy implementation and regulation compliance. The inputs were then categorised according to four indicators: environmental management, environmental monitoring, top environmental priorities, and services to shipping.

Table 1 provides a ranking of the 10 PORTOPIA indicators which provide information about environmental policies and concerns for port authorities in Europe.

of an environmental monitoring program is another factor that's consistently growing, with a 10pp change in the last four years and 7pp since 2016.

The index for measuring environmental management (EMI) was developed on the basis of these 10 factors, and is considered to be especially effective in measuring the potential and the ability to deliver the needed environmental mandates. Consequently, the EMI for the ports sector in 2013 was 7.25, in 2016 – 7.72, and in 2017 – 8.08.

Also of significance is that at least 64 out of the 91 European ports are EMS-certified to an internationally recognised standard (Fig. 3). This illustrates a positive trend in ports being interested in seeking environmental credentials and

Tab. 1. Environmental management indicators

Indicators	2013	2016	2017	2017-2013 [pp]
Existence of an Environmental Management System (EMS)	54 %	70%	70%	+16
Existence of an Environmental Policy	90%	92%	97%	+7
Environmental Policy makes reference to ESPO's guideline documents	38%	34%	35%	-3
Existence of inventory of relevant environmental legislation	90%	90%	93%	+3
Existence of an inventory of Significant Environmental Aspects	84%	89%	93%	+9
Definition of objectives and targets for environmental improvement	84%	89%	93%	+9
Existence of an environmental training programme for port employees	66%	55%	68%	+2
Existence of an environmental monitoring programme	79%	82%	89%	+10
Environmental responsibilities of key personnel and documented	71%	85%	86%	+15
Publication of publicly available environmental report	62%	66%	68%	+6

Source for all tables and figures: ESPO's sustainability report 2017

One of the most encouraging indicators is that almost all the participating countries have an environmental policy. Next best indicators, at 93% each for year 2017, are in inventory of relevant environmental legislation, inventory of Significant Environmental Aspects (SEA), and definition of objectives and targets for environmental improvement. Also notable are biggest changes since 2013, and that's in existence of an Environmental Management System (EMS) which grew by 16 percentage points (pp) and the documentation of environmental responsibilities of key personnel which grew by 15pp. The existence

being open and transparent about their environmental policies.

Environmental monitoring is a category of indicators that measures to what extend do European ports monitor important environmental factors (Tab. 2).

As table 2 illustrates, some factors have seen an immense improvement, such as waste management with improvement of 21pp, water quality with 19pp, air quality with 17pp, and energy consumption with 15pp. The rapid progress in monitoring of those factors is offset by comparatively little attention being paid to terrestrial habitats with -1pp, carbon footprint with

Verification Regulation, which requires shippers to report the full weight of laden containers prior to loading them.

Lastly, a major issue for EU ports. which rely so strongly on trade, has been Brexit (read more on pgs. 30-31). After the leave vote in Britain in June of 2016, ESPO created a Brexit-specific working group within the Trade Facilitation Committee. The debate between Brussels and London pertaining to trade is a hot-button issue for most global trading partners, with Britain seeking a free trade agreement in as many economic sectors as possible and the EU thus far unwilling to show its cards. The uncertainty of these trade deals threatens financial stability in both the EU and the UK.

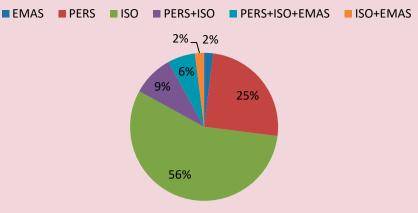
Sustainable development

In 2017, ESPO celebrated the 20th anniversary of the EcoPorts network. This first European environmental initiative in the port sector grew from just seven ports in 1997 to around 100 members from 22 countries by 2017. Recently, two especially important changes were made in the EcoPorts network. First, the Self Diagnosis Method (SDM) was upgraded to more effectively deal with climate change. Second, the Port Environmental Review System (PERS) got an update with changes made to ISO 1400:2015.

Also last year, ESPO called for the EU to put more pressure on the International Maritime Organization (IMO) to take action concerning the fulfilment of the Paris Agreement on climate change, which requires countries to make immediate policy adjustments ensuring that the global temperature does not increase above 2°C (the rise should fall below 1.5°C if at all possible). ESPO believes that IMO needs to specify the CO₂ targets to decrease shipping emissions, submit short-term and long-term reduction goals to the stocktake process of the Paris Agreement in 2018, and by 2023 come up with some clear-cut measures and targets to reduce CO2 emissions. Due to environmental concerns, the European Parliament included CO₂ emissions from shipping in the EU Emission Trading Scheme (ETS) and created a maritime climate fund in February 2017.

During the past year, the European Sustainable Shipping Forum (ESSF) created a new subgroup on Air Emissions from Ships. ESPO participated in the International Association of Ports and Harbors delegation in the IMO Marine Environmental Protection Committee (MEPC 71) where IMO agreed on

Fig. 1. EMS certificates held by European ports



Tab. 2. Environmental monitoring

Indicators	2013	2016	2017	2017/2016 [pp]
Waste	67%	79%	88%	+21
Energy consumption	65%	73%	80%	+15
Water quality	56%	70%	75%	+19
Water consumption	58%	62%	71%	+13
Air quality	52%	56%	69%	+17
Sediment quality	56%	63%	65%	+9
Noise	52%	57%	64%	+12
Carbon footprint	48%	47%	49%	+1
Soil quality	42%	44%	48%	+6
Marine ecosystems	35%	36%	44%	+9
Terrestrial habitats	38%	30%	37%	-1

just +1pp improvement, and soil and sediment quality at just 6pp and 9pp change respectively.

The top 10 environmental priorities for port authorities (Tab. 3) are listed starting with year 1996. This is especially helpful to ESPO when working on their annual agenda

because it highlights top environmental priorities in the port sector.

Perhaps the most noticeable change in the top environmental priorities is the new addition of climate change. Air quality, energy consumption, and noise have remained atop the priority list, while water

Tab. 3. Top 10 environmental priorities for the European port sector in 1996-2017

No.	1996	2004	2009	2013	2016	2017
1	Port development: water	Garbage/port waste	Noise	Air quality	Air quality	Air quality
2	Water quality	Dredging: operations	Air quality	Garbage/port waste	Energy consumption	Energy consumption
3	Dredging: disposal	Dredging: disposal	Garbage/port waste	Energy consumption	Noise	Noise
4	Dredging: operations	Dust	Dredging: operations	Noise	Relationship with local community	Water quality
5	Dust	Noise	Dredging: disposal	Ship waste	Garbage/port waste	Dredging: operations
6	Port development: land	Air quality	Relationship with local community	Relationship with local community	Ship waste	Garbage/port waste
7	Contaminated land	Hazardous goods	Energy consumption	Dredging: operations	Port development: land	Port development: land
8	Habitat loss/ degradation	Bunkering	Dust	Dust	Water quality	Relationship with local community
9	Traffic volume	Port development: land	Port development: water	Port development: land	Dust	Ship waste
10	Industrial effluent	Ship discharge (bilge)	Port development: land	Water quality	Dredging: operations	Climate change

a strategy to reduce greenhouse gas emissions from ships. In turn, MEPC 72 is set to work to approve the strategy and submit it to the stocktaking process of the Paris Agreement later in 2018. ESPO supports IMO's 2020 deadline for 0.5% sulphur cap, which aligns with the EU 0.1% Sulphur Directive which has already been in place across the Baltic and North Seas as well as in the English Channel since 2015. This is in addition to the Nitrogen Emission Control Area (NECA) that IMO committed to implementing in the above mentioned areas of northern Europe.

Emergency marine affairs, safety & security, and social dialogue

The accommodation of "ships in distress" in Europe is of growing concern for port authorities. ESPO continues to be active in the Places of Refuge initiative; however, it believes that the cost of accommodating such vessels incurred by the ports is a problem that needs addressing at the EU level. When a ship is diverted to a port, just accepting it and addressing issues related to human life and the environment are often not enough - the port also has to assist with vessel transport and repairs. As a result. the full cost of being a port of refuge is much greater than it is currently understood at the EU level.

Additionally, ESPO, along with other cruise stakeholders, contributed a joint response to the recommendations put forward by the Commission on ship and port security. The Organisation has also monitored throughout the year developments concerning the Port Reception Facilities Directive and participated in the GreenPort Cruise Conference on 10 October 2017 where issues relating to the environmental agenda of cruise ports were discussed.

The European Union's Social Dialogue Committee (SDC) has been active in bringing port and sea transport

Tab. 4. Share of port respondents offering OPS and/or LNG facilities, and having differentiate dues for "green" vessels at their ports in 2016-2017

Indicator	2016 [out of 61 respondents]	2017 [out of 91 respondents]
Is OPS available at one or more of the berths?	53%	48%
High voltage	20%	19%
Low voltage	47%	40%
Is LNG bunkering available in the port today?	22%	22%
Does the port offer differentiate dues for "green" vessels	62%	51%

quality jumped up few spots since 2016. Garbage/port waste as well as ship waste moved down on the list, but as was seen in environmental monitoring, the issue of waste is not being ignored.

The services to shipping category includes three factors determining the steps taken by ports to include more environmentally friendly shipping practices. Key services in this area include provision of onshore power supply (OPS) and liquefied natural gas (LNG) facilities (Tab. 4) as well as breaks in port charges for using eco-friendly vessels (the so-called "green charging"). The EcoPorts SDM checklist was updated to ensure the data in those three areas can be monitored. It should be noted that the current data includes a much bigger number of ports, which increased from 61 in 2016 to 91 in 2017, so the results

might appear to be stagnant or decreasing when they're actually increasing.

The sustainability report underscores the importance of the OPS highlow voltage differences. Realistically, with few exceptions, it's the high voltage OPS that is needed to accommodate the commercial sea vessels (low voltage are used with inland, domestic, and auxiliary vessels). So the 48% answer is a bit too optimistic and the 19% of high voltage providers better illustrate OPS servicing, which is roughly one in five ports. The data also illustrate that awarding green vessels with fee reduction is already accepted by over half of ports, something that's strongly promoted by ESPO's Green Guide towards excellence in port environmental management and sustainability.

workers and employers together to discuss issues related to employment conditions as well as productivity and competitiveness in the industry. Furthermore, the SDC is continuing work on "the changing face of ports: socio-economic impact of market-based and technological developments on EU ports" study. The study, in which ESPO has participated, measures the potential consequences of increasing the size of vessels on dock labour.

PORTOPIA

The Economic Analysis and Statistics Committee focused on the PORTOPIA

project in 2017, which came to an official end on 9 November 2017 in Brussels. The PORTOPIA's aim was to create a port management system for the European ports concentrating on data digitalisation. ESPO has lobbied to continue the PORTOPIA platform, considering the positive outcomes of this initiative. Additionally, the committee has worked to develop a standardised method for reporting modal split data, which is very helpful in meeting environmental goals and completing the TEN-T.

ESPO Award and the annual conference

Each year, the Organisation awards a port for best societal integration and in 2017 that award went to Guadeloupe Ports Caraibes for the contest themed "Art and Cultural Involvement of the port." The award was given out on 8 November 2017 in Brussels at the Award Ceremony and Port Night.

ESPO's annual conference for 2017 took place in Barcelona, 1-2 June. The theme was "Ports in a changing climate. a changing world," and the conference covered issues related to climate change, trade, globalisation, and geopolitics. The 2018 conference will take place in Rotterdam on 31 May-1 June under the "Investing in the Port of Tomorrow" banner.













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Waste-to-resource

by Vincent Favier, Chief Executive, Ecoslops



the ambition of Paris-based Ecoslops is to establish itself as a major player in the treatment of hydrocarbon residue in a manner that fits the principles of the circular and sustainable economy. To achieve this, the company is implementing an innovative technology that allows optimised treatment of these residues into new fuels and light bitumen. For more info please visit ecoslops.com/en

The World Ports Sustainability Program (WPSP) was launched in Antwerp in March of this year. This initiative aims at enhancing and coordinating future sustainability efforts of ports worldwide, as well as looking forward to fostering international cooperation with partners in the supply chain in support of the Sustainable Development Goals of the United Nations. WPSP members pledged to focus on five key areas: the development of robust infrastructure; climate and energy with the emphasis on initiatives that contribute to achieving the objective of the Paris Agreement on climate change; societal integration; safety and security; and ethical policies.

Environmental pollution is a global problem requiring global solutions coming from all sectors of the maritime industry. Ecoslops is working with its shipping, energy, and commercial partners to provide a sustainable solution for slops disposal by recycling waste into useful, commercial products.

itigating the negative impact of their operations on the quality of air, water, and land, as well as the local community, has been a long-standing challenge for harbours. In its most recent environmental survey from October 2017, the European Sea Ports Organisation (ESPO) ranked port waste and ship waste among its top 10 environmental concerns (read more about ESPO's findings on pgs. 15-17).

Scale of the issue

Ship waste includes the hydrocarbonrich sludges produced in engine rooms, bilge waters, oily ballast water, and waters from cleaning the cargo holds of tankers (so-called cargo slops). How much each vessel produces depends on the nature of its operations, the size of the ship, its maintenance, and age, as well as various other factors. Millions of tonnes of maritime hydrocarbon residue is created each year, accounting for an estimated 1%-2% of annual maritime bunker volumes.

All of this waste needs to be disposed of in line with IMO and EU regulations. Although many shipowners dispose of their slops in accordance with MARPOL Convention 73/78 and European Directive 59/2000 regulations, the United Nations Environment Programme (UNEP) estimates that in European waters alone, at least 3,000 incidents occur each year in which slops are deliberately dumped, causing significant ecological and social harm. Indeed, illegal discharge in the world is anticipated to amount to 1.0mt per year.

Reception and treatment facilities for slops vary from port to port, with the initial aim of removing the oil from the water to produce an effluent which meets discharge standards. Treatment methods include gravity separation, physical or chemical separation, as well as biological



or chemical treatments. The oily residues can then be treated or disposed of at or away from the port.

Don't throw it out, use it!

Ecoslops has developed a pioneering technology, the Petroleum Residue Recycling (P2R). Using this method slops are sustainably treated through a microrefining process, in order to regenerate the waste into valuable fuels and light bitumen, which can be then sold back for use in different markets – also by the shipping industry.

After the water and sediment are removed, the slops are sent to the vacuum distillation column, where they are heated to 400°C. Under vacuum conditions, the hydrocarbons are vaporised and at the end of the distillation process several fuels are produced, including light fuel, distillates, and intermediate fuel oil. Due to the vacuum distillation process, Ecoslops is able to regenerate the heaviest part of sludges into light bitumen, which provides a new supply route to the construction and waterproofing industries.

This model developed by Ecoslops in line with the principles of the circular economy - enables slops to be disposed of sustainably as well as regenerated into useful commercial products, with benefits for all levels of the slop's supply and disposal chain. The infrastructure challenges of slops' disposal are removed for ports, regenerating the waste product rather than burning it. This has a positive ecoimpact as it reduces pollution generated by the port community. It also helps ports to improve their sustainability profile by enhancing their competitiveness as well as reputation in the eyes of their customers and wider stakeholders.

Shipowners and operators benefit from the reassurance that their waste is treated appropriately and at a lower cost. In addition, they can improve their brand and reputation from the sustainable disposal and regeneration of their waste products. The recovered product is purchased from slops' collectors at a fair

price, providing commercial benefits as well as alleviating the pressures on storage capacity. This also results in a decrease in the fees slop collectors charge to shipowners, as they once again have a valuable output for their slops. Industrial consumers receive high quality commercial products for their needs. Adapting recycled material boosts their own corporate responsibility and reputation.

Options for different size ports

Ecoslops' first refinery was opened in the Portugese Port of Sinès, where the company also has a 15-year concession for the exclusive rights to collect slops from major shipowners (such as MSC) as well as waste waters within the port. The unit has proven its industrial efficiency by recycling and upcycling over 98% of the hydrocarbon residue collected and is now on course to reach its target of having a 30kt/year regenerating capacity. The plant can treat high- and low-flash waste as well as waste from oil depots and tanking or oil pipelines.

The implementation of an agreement with the energy company Galp was yet another significant achievement from September 2017. A dedicated pipeline connects the Ecoslops and Galp refineries at Sinès and is expected to deliver up to 10kt annually. According to an agreement with Total at La Mede-Marseilles, a 30kt - capacity unit should be operational by early 2019. This plant will also produce naphtha, fuel oil, and gasoil. The Amsterdam, Rotterdam, and Antwerp zone will be served by a 60kt/year unit, due to begin its operations in 2020, that will be located on the site of the Antwerp Terminal & Processing Company (ATPC, a subsidiary of the Dutch VITOL Group) in the Port of Antwerp.

Among the significant developments outside Europe, a Letter of Intent has been signed with SSCO, a subsidiary of the Egyptian General Petroleum Corporation (EGPC), and a Memorandum of Understanding with the Suez Canal

Economic Zone. Currently, a feasibility study is underway. Potential developments in Colombia and Singapore are being investigated, too.

Moreover, as a result of market feedback and continuous R&D, Ecoslops is planning the development of a mobile mini-unit with a capacity of 4.0-8.0kt/ year. The mini-P2R will produce the same end product, but requires less land and operational resource. Designed to fit the same footprint as a 20' or 40' container, the unit will require twoto-four staff to man, will feature simpler controls, and will run on a batch basis. The technology will be operated under license, with Ecoslops being responsible for installation and maintenance. As such, the mini-P2R will be an efficient and affordable option for many small and medium ports which may lack the space for setting up refining and recycling facilities either within or outside the port. Projects are under discussion in Oman, Indian Ocean, some Caribbean islands, and North Africa.

Sustainable slops solution

The development and implementation of new technology are transforming all areas of the shipping industry and in particular its impact on the environment, including slops disposal. As the global shipping industry's tonnage increases in volume – and the difficulties facing slops disposal continues – the need for a sustainable solution in each port becomes ever more pressing.

Environmental pollution is a global problem requiring global solutions coming from all sectors of the maritime industry. Ecoslops is working with its shipping, energy, and commercial partners to provide a sustainable solution for slops disposal by recycling waste into useful, commercial products.

Minimising the environmental impact of ports and harbours by eliminating the need to burn waste, sustainable slops disposal will help in achieving the UN's ambitious Sustainable Development Goals.



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Sea Traffic Management project redefines the possibilities of a digital future

by J. A. Giménez, L. Calabria, G. Ferrús, J.M. Lara, N. Alonso, J. Arjona, P. Albert, Valenciaport Foundation



the Valenciaport Foundation for Research, Promotion and Commercial Studies of the Valencian region, an initiative of the Port Authority of Valencia, is a non-profit private foundation created in April of 2004 as a research, training and cooperation centre for the transport and logistics sector, especially in port and sea transport activities. The main objective of the Valenciaport Foundation is to improve internationalisation of the companies in the Valencia region. The foundation is currently working on projects in over 20 countries in Europe, Far East and Latin America. For more info please click www.fundacion.valenciaport.com The Sea Traffic Management (STM) Validation project is a widescale European initiative focused on implementing new digital information exchange services for the shipping and port industries. STM comprises the third stage of this action that was initially defined during the previous projects MONALISA and MONALISA 2.0, all of which are co-funded by the EU within the Trans-European Transport Network (TEN-T).

he aim of the STM initiative is to push the maritime industry towards more collaborative and digitalised operational environments, enabling the transition of the sector to the so-called Industry 4.0 paradigm, where digital and real-time connectivity are the drivers for increasing efficiency, safety, and sustainability. STM is inspired by the aviation sector, where this evolution has demonstrated significant and measurable benefits.

Collaboration, communication, and collective planning

STM is a concept for sharing secure, relevant, and timely maritime information between authorised service providers and users, enabled by a common framework

and standards for information and access management, and interoperable services. To achieve this, STM relies on four pillars: Port Collaborative Decision Making (PortCDM), Voyage Management (VM), Flow Management (FM), and Maritime Connectivity Platform (MCP).

The overall goal of PortCDM is to support just-in-time operations within ports and in relation to other actors, coordinated by an efficient and collaborative port. It is a way not only to establish a common view of all available information but also to use this information as a tool to create common situational awareness and to support the involved actors in making efficient collective decisions. PortCDM relies on continuous interactions among

the maritime actors involved in a port call.

The VM part, in turn, concentrates on strategic, tactical, and operational decisions about the vovage such as planned and executed routes of a certain ship and its relation to nearby vessels in a given position. VM focuses on the initial planning phase of a sea voyage and the ability to monitor the execution of that plan. It supports improved route planning, route exchange, and route optimization before and during the maritime voyage. Especially in this phase, VM connects ships and adds intelligent processes and new tools enabling all stakeholders to increase their situational awareness within the voyage, providing faster, more secure, and transparent exchange of information.

The FM component supports the optimal coordination of multiple vessels in congested geographical areas. FM will support both VTS control and ships in optimising overall traffic flow through areas of dense traffic or those with particular navigational challenges. FM's objective is to improve the overall flow of sea traffic through better information sharing and coordination. VM builds common situational awareness and enhances decision-making by providing information and advice about traffic and safety.

Lastly, the MCP provides a framework for the harmonization of data formats and

Fig. 1. STM implementation and deployment strategy



standards for information management and operational services. It will support collaborative decision-making processes using efficient and end-user applications to exploit the power of shared information within STM Operational Services.

The project will demonstrate and validate the abovementioned target concepts by deploying large-scale testbeds in both the Baltic and Mediterranean Seas involving 300 ships, 13 ports, and five traffic control shore centres. Moreover, STM will demonstrate its benefits by taking advantage of

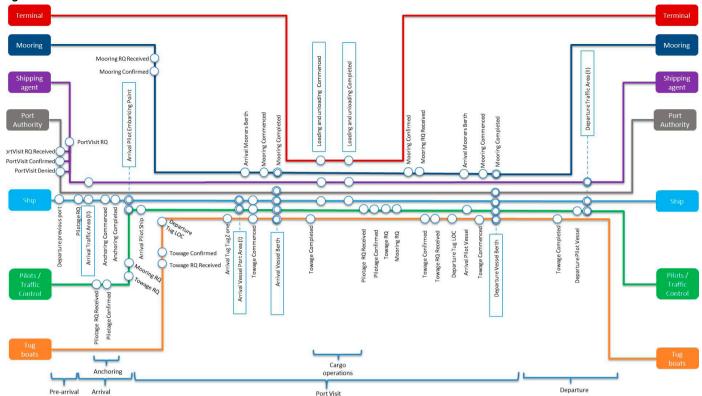
the European Maritime Simulator Network (EMSN), a comprehensive network of ship bridge simulators, which will perform specific exercises to assess operational, safety and human factor aspects in a controlled environment.

Common framework

The STM concept becomes a reality through a set of standards and services that facilitate the information exchange among authorised users in a secure and real-time way. This is possible by establishing



Fig. 2. PortCDM states characterization



a common framework that confers standards for the exchange of information and access management to a set of interoperable services. These services include the route optimisation, ship to ship route exchange, shore-based navigational assistance, and enhanced monitoring.

Another of STM services, Route Optimisation, will provide continuous adjustment of routes according to cost, safety, and environmental parameters. Better route optimisation will lead to a reduction in fuel consumption as well as in the emissions of greenhouse gases (GHG) and other pollutants, along with an improvement in efficiency and cost-effectiveness. Betteroptimised routes will also have a greater predictability, improving the planning of port services and the overall predictability of the maritime transport system.

The Ship to Ship Route Exchange service will enable particular route segments to be exchanged with nearby ships and with shore services to improve situational awareness and reduce accidents. The ability to exchange routes is one of the cornerstones of STM and an enabler for several other operational services.

The Shore-based Navigational Assistance is a real-time monitoring service that will support on-board navigation, add a new tool to existing navigational services, and serve as an alternative to deep-sea piloting, thereby reducing the cost of a voyage. It will also improve voyage safety, especially in confined, sensitive, or densely

trafficked areas. Navigation in sensitive areas can also decrease due to better support from operators with local knowledge.

The Enhanced Monitoring service will be improved by adding route information and more detailed services than present VTS; shore centres will be able to detect if a planned schedule is not kept or if ship deviates from a planned route. Shore centres can monitor whether ships are following their planned route and foresee possible dangerous situations, suggesting route modification (geographic and/or speed) due to traffic or other impeding conditions.

Situational awareness

Sea traffic begins and ends at a port, therefore, in order to reach STM performance targets, integration with ports is necessary. Inspired by a similar concept used for collaborative decision making within and between airports (known as AirportCDM), PortCDM is a way to not only establish a common view of all available information but also to use this information as a tool to create a common situational awareness as well as to support the involved actors in making efficient collective decisions. This will result in better planning of arrival and departure times and improve how a port interacts with a ship to optimise its port call.

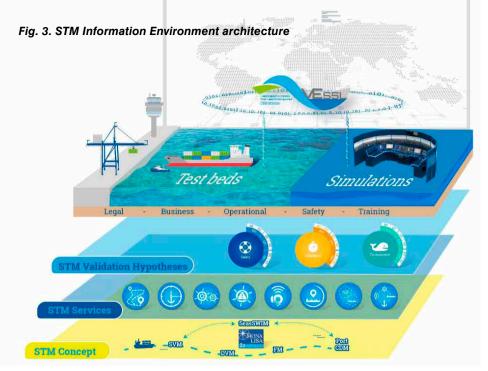
To enable just-in-time operations, the various actors, who are engaged in sea transport-related activities, need to contribute to the creation of common situational awareness. This is achieved by capturing

and drawing on information from different sources in a standardised way. Common situational awareness will maximise utilisation of port facilities and resources and optimise the use of energy (fuel/bunker) in steaming between two ports.

PortCDM relies on continuous interactions between the maritime actors involved in a port call – within a port and between a port and the stakeholders who deal with it such as ships, shipping companies, ship operators, ship agents, towage companies, pilot organisations, and terminals – who all need to coordinate closely in order to be efficient.

PortCDM helps to visualise specific stages of a trip to enable different operators to act in such a way that a port call (arrival, at berth, cargo operations, and departure) can be performed on a justin-time basis. The overall principle is that involved actors should be able to trust the prediction of when a certain state will be reached and that their performance will thus be just-in-time (not too early, not too late) and at optimal capacity.

PortCDM has three goals: to synchronise ship arrival, departure, and port readiness, enabling green steaming in the latter stage of a voyage; to optimise the use of port resources and ship turn-around time; and to provide the information necessary to facilitate just-in-time operations. To achieve these goals and benefits, all actors involved in a port call need to share information about various states and degrees



of readiness for a particular ship's arrival. Estimated time of arrival (ETA), projections of when certain states of readiness will be reached, commitments related to certain states, and changes to these states over time are all crucial information needed for PortCDM success.

The ability to predict accurately when various operations should occur in a particular port call is difficult because of the numerous actors involved and the overall lack of situational awareness. PortCDM will address deficiencies such as lack of information harmonisation, information redundancy, insufficient information reliability, poor predictability, administrative burden, and waiting times.

PortCDM is predicated on the assumption that communication about an upcoming port approach is made as soon as it is known and that changes are communicated as early as possible. A port can only optimise its operations if it receives realtime information about the status of the activities and transports that affect them and gets updates on any changes. This means that the same measures function both as coordination mechanisms for optimising port operations (and creating readiness for managing necessary activities) and as a means for enabling collaboration/optimisation between different activities.

The expected benefits

The implementation of STM will contribute to safety, operational efficiency, and environmental sustainability of the maritime transport industry. In the attempt to prove this statement, the Valenciaport Foundation is leading the analysis and evaluation actions of the data collected

from the testbeds in order to facilitate the validation of the STM services, through the quantification of the benefits associated.

Accordingly, the Information Environment has been created which includes the different methodologies used for the collection, processing, and analysis of certain kind of variables in the shipping industry and the certainty that what should happen will finally happen, made the use of hypotheses as a tool to facilitate the research process essential, regardless of being proven right or wrong.

Not only as a consequence of the lack of initial measurements within the maritime industry but also as a result of the variety of business models to be applied for each stakeholder involved, the creation of the Valenciaport European Short Sea Shipping Lines (VESSL) Database has been required. This tool features information about all the regular lines that call at any core and/or comprehensive port of the TEN-T in the European Union, including the Norwegian ports incorporated in the STM validation project.

The objective of VESSL is to enable the economic evaluation of the results found through the processing of STM test beds data. VESSL will also provide the base to quantify, at a macro level, the potential values of the reduction in port call and navigation times as well as fuel consumption and consequently GHG emissions.

As a result, the mentioned indicators will be calculated during the evaluation phase and its consequences will be examined both for the society and for the



the information collected. Therefore, data flows will feed the analysis through a combination of several databases constituting a smart repository, which will provide some of the analyses in terms of efficiency, safety and environmental sustainability that will contribute to the validation of STM.

In the process of connecting the research phase with the validation phase, a hypotheses model has been defined with the aim of setting the initial questions from empirical concerns and then to find the right tools to validate the model. In the case of STM, the initial lack of measurements for environment in Europe. The results will provide criteria for the shipping and port actors to make decisions regarding their business models on the adaptation towards the digital future of this strategic sector.





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How to hire – and keep – the best

by **Jari Hämäläinen**, *Director, Terminal Automation, Kalmar*, and **Maaria Nuutinen**, *Vice President in Business, Innovation and Foresight, VTT (Technical Research Centre of Finland)*

A superior user experience (UX) is relevant not only for the relationship between companies and customers, but also between companies and employees. In fact, it is a key factor in attracting and retaining the top professionals that today's companies need to succeed and thrive. Ports and terminals are not immune to these changes either, and solution providers can help the industry to keep up with the transformation required by the future workforce.



almar is a Finnish originated company, providing cargo handling solutions and services to ports, terminals, distribution centres, and heavy industry. Its equipment portfolio includes straddle and shuttle carriers, terminal tractors, yard cranes, ship-to-shore cranes, reachstackers, empty container handlers, and forklift trucks. The Navis terminal operating systems (TOS), Bromma spreaders, and Siwertell bulk handling systems are provided as part of the Kalmar business area. At the end of 2017, Kalmar had more than 5,700 employees in 30 countries. For more info please go to www.kalmarglobal.com

he concept of UX an create significant added value for companies designing products and services, or even enable radically new business and revenue models – all without adding much to the financial overheads involved. UX can be conceptualized in many ways, but the definition we adopted was that UX at work is the way a person feels about using a product, service, or system in a work context, and how this shapes the image of oneself as a professional.

Let's think about the previous sentence for a second. Traditionally the work environment in ports and terminals has been physically straining with noisy equipment and shift work. Could UX design actually be relevant for us as employers, too?

Wow-quality experience

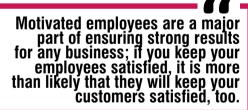
The young professionals currently beginning their careers are the first generation that has grown up since childhood to expect

a wow-quality experience from their devices and services. In the real world, the consumer votes with their wallet and buys whichever phone, tablet, or computer they like best. In the workplace, the procurement department usually procures a set of standardized tools that meet a predefined specification at the most competitive price. But what does this mean for the UX of the employee? In any field, the best talents have the luxury of choosing between multiple prospective employers. How can we ever hope to attract them, if we are not able to provide them with the best tools – and, more importantly – a great workplace experience?

Here is where digitization of port operations can help. Automation enables working from the comfort of an office with advanced features and cutting edge technology. Remote controlling and computer gaming have similar aspects to them that are appealing to many and can provide the wow-effect future port workers are looking for in their jobs.



Technical Research Centre of Finland is one of the leading research and technology organizations in Europe. It provides expert research and knowledge services for domestic and international customers and partners. With over 75 years' experience, the centre supports its clients growth with top-level research and sciencebased results. VTT develops new smart technologies, profitable solutions and innovation services, cooperating with the customers to produce technology for business and society. VTT is part of Finland's innovation system and operates under the mandate of the Ministry of Employment and the Economy. For more info please click www.vttresearch.com





No more jobs for life

This is not just theoretical speculation. The entire concept of employment has been undergoing a gradual but radical shift over the last few years. Traditional lifelong careers in the service of a single employer have become a historical curiosity for today's young professionals. Digitalization and the convergence of mobile and online technologies are transforming business models in every field, along with the ways we work, lead our teams, and interact with our customers. The UX is always at the very core of these developments.

Even in relatively traditional fields such as port operations and industry, the younger generation is accustomed to using modern online tools and smart devices, so we need to be able to offer them the same experience no matter what their field of work is. Physical labour, traditional working methods and outdated, painful-to-use business software simply does not cut it anymore.

We also need to remember that as employers, we are competing not just with the players in our own field, but with other industries as well. If you think this is not relevant for your company, you may be in some trouble without realizing it. Top talents are always a scarce resource, and the choice between taking a job at a container terminal or a high-profile consulting firm could

hinge on how well the employer succeeds in creating a high-quality work experience for their people. Are they providing the best tools for the job? Are they actively involving their staff in designing not only the products and services they sell, but also their own work? Are employees given genuine agency to manage the changes that they face together with their employers?

Motivated employees perform better

Great UX in the workplace helps create drive in everyday tasks, streamlines collaboration, and makes learning faster. And it tells a lot about how people are valued in the company. Motivated employees are a major part of ensuring strong results for any business; if you keep your employees satisfied, it is more than likely that they will keep your customers satisfied, too.

Just as a wow-quality UX can't be tacked onto a product at the last moment, striving towards a superior employee experience needs to be a central part of a company's culture, if it is to have any hope of attracting and keeping the best talents in the industry, and getting the full benefit of what they can offer. Can we make it feel great to come to work at this company every day? Many companies clearly succeed in this, so why couldn't we - and you?









Position of the European Sea Ports Organisation on Brexit

The European Sea Ports Organisation (ESPO) welcomes the start of the second phase of the Brexit negotiations, in particular the negotiations on a transition period and the scoping of the future relationship between the European Union and the United Kingdom.

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EUROPEAN SEA PORTS ORGANISATION
ROTTERDAM | 31 MAY - 1 JUNE

he European Sea Ports Organisation (ESPO) represents the port authorities, port associations and port administrations of the seaports of 23 Member States of the European Union and Norway at political level. ESPO has also observer members in Iceland and Israel. ESPO is the principal interface between the European seaport authorities and the European institutions. In addition to representing the interests of European ports, ESPO is a knowledge network which brings together professionals from the port sector and national port organizations. ESPO was created in 1993. The position paper on Brexit was originally published on 6 March 2018. For more details please visit www.espo.be

ransport facilitates trade, helps the economy move and enables growth. In this context, ESPO calls on the Brexit negotiators to prioritise transport and more in particular maritime transport in the second phase of the Brexit negotiations. Around half of UK exports and imports are to and from the European Union. Vice versa for a number of EU-27 Member States trade with the UK constitutes a considerable part of their overall trade. Most of these imports and exports between the EU-27 and the UK are transported by sea and consequently pass through ports. It is therefore of paramount importance to consider the impact of potential post-Brexit scenarios on the ports, the transport and logistics chain in any decision-making process.

Ensuring the free flow of goods in ports

Today, goods traded between the EU-27, the UK and the rest of the world run smoothly through many continental ports. Some depend largely on EU-UK trade, while others flourish as deep-sea gateways, but all rely heavily on the principle of free flows of goods and in some cases passengers. Much of the EU-UK trade is transported by vehicles and trailers on roll-on roll-off carriers and by containers on short sea ships. The Customs Union and Single Market allow this roll-on/

roll-off vehicle traffic to call at a port without prior reservation, avoiding any congestion on the access roads to the ports and enabling businesses to rely upon just-in-time logistics. However, ports realise that this process will not be possible to apply once the UK is no longer member of the European Union. ESPO therefore calls on the negotiators on both sides to set short-sea fluidity for roll-on/roll-off and short sea services between the UK and EU-27 as a central objective.

As from the moment the UK leaves the Customs Union and the Single Market, border procedures (such as customs, veterinary and phytosanitary controls) that apply to third countries risk turning ports into bottlenecks and seriously disrupting the flexibility and reliability of long established supply chains: the vast amount of goods that are traded between the EU-27 and UK could be held up in ports and on the access routes to ports. ultimately leading to congestion in or around those ports. ESPO therefore calls upon the Brexit negotiators, on both sides, to seriously consider the financial, operational and spatial consequences of the reintroduction of border controls in ports and its wide implications for the logistics industries and communities around port terminals, during their negotiations and decision making on the future relationship between the EU-27 and the UK.



Enabling communication between UK and EU-27 Member State border authorities

Digital solutions and streamlined EU-UK border inspection procedures could reduce the impact of reintroduced border controls, but these will take time and coordination to be implemented. In order to effectively prepare for the reintroduction of border controls, ESPO believes that border authorities of the UK and EU-27 Member States should already be able to discuss and coordinate on the operational level, without interfering with the political level. Such talks should however only aim at preparing the ground for the different possible Brexit scenarios and should not lead to bilateral deals.

A sufficiently long transition period

ESPO welcomes the Council's decision of 29 January 2018, which allows the Commission to start negotiating on a transition period with the UK. ESPO calls on the Brexit negotiators to provide as soon as possible clarity on the duration and modalities of the transition period and to ensure sufficient time to allow ports and the broader logistics chain to prepare for the consequences of the UK leaving the European Union.

Investments to make affected ports "Brexitproof"

Ports that depend largely on EU-UK trade have organised themselves on the principle of the free flow of goods. The

reintroduction of border controls could require ports to reorganise the layout of their terminals. This may require ports to make investments in order to accommodate the increase of border inspections, to avoid congestion and to facilitate as much as possible the smooth flow of goods in the port in the future. Furthermore, as the UK will be leaving the Customs Union, goods transported between the UK and the EU will change status, from Union goods to non-Union goods. This change of status means that the amount of formalities which will have to be declared to border inspection authorities will greatly increase. Investing in the development of innovative IT solutions as well as additional workforce could be a solution to cope with this increase of administrative burden.

ESPO therefore calls upon the Commission to consider the costs of making ports that depend on EU-UK trade "Brexit-proof", in the preparations of the new Multiannual Financial Framework.

Cooperation between stakeholders

Trade to and from the UK involves a whole array of stakeholders (including shippers, freight forwarders, shipowners, terminal operators and SME's) allowing the supply chains to function efficiently. In order to minimise the impact of Brexit on the supply chain, ESPO calls upon

Ports that depend largely on EU-UK trade have organised themselves on the principle of the free flow of goods. The reintroduction of border controls could require ports to reorganise the layout of their terminals. This may require ports to make investments in order to accommodate the increase of border inspections, to avoid congestion and to facilitate as much as possible the smooth flow of goods in the port in the future.

stakeholders to work together in order to ensure that goods can continue to flow smoothly through ports.

Awareness raising campaign to inform shippers and operators

Some shippers and operators are exclusively trading with EU Member States. For them, Brexit will have important consequences since they do not have the administrative and logistic services nor the experience to export to countries outside the Customs Union. These companies should be informed and advised at an early stage to enable them to prepare for the likely increase in customs declarations and procedures to comply with border control requirements.

Importance of a trade deal

EU Member States export to each other without paying tariffs or duties. However, the UK's intention to leave the Customs Union, risks re-installing tariffs on goods traded between the EU-27 and the UK. Unless the Brexit negotiators will be able to negotiate an appropriate trade agreement, trade between the UK and the EU-27 would become subject to World Trade Organisation (WTO) rules on tariffs. In accordance with these WTO rules, the UK will then be able to set its own tariffs on goods imported from the EU, and vice versa UK goods would be subject to the common external tariff of the EU-271. Introducing tariffs will make goods traded between the UK and EU-27 more expensive, which might lead to a decline in the overall demand for those goods. This in turn could have a negative impact on the industry located within ports as well as the overall traffic of ports that heavily rely on EU-UK trade. ESPO therefore believes an appropriate EU-UK trade agreement, which preserves trade and economic growth, is an important condition of a successful Brexit.

For example, possible WTO duties could amount to 10% for passenger cars, 12-25% for orange juice, 10% for other drinks (including water) or 8% for carpets.



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Passengers and guns only

by Marek Błuś



The shipbuilding figures for 2016 look good, maybe even better than many would initially expect. European shipyards delivered last year a total of 2.5 million Gross Tonnage (GT) units, more by 58% year-on-year. As a result, the continent's contribution to the global output rose to 4% for the first time since 2011. The order books look promising, too. At the end of 2016, Europe had 6.6% and 11% of all the orders worldwide, measured in GT and Compensated Gross Tonnage (CGT), respectively.

evertheless, it would be far too premature to uncork a bottle of champagne to celebrate a victory – or at least sing the praises for an end to a protracted crisis haunting the industry ever since the Far East economies decided to go full swing with ship construction. As a matter of fact, Europe's rise in the overall share is the effect of the shipbuilding standstill taking place now in Asia. Moreover, the growth enjoyed by our continent's yards is both very selective when it comes to geography, the years we compare together, and the ship types which pull the output – either up or down (Tab. 1).

Two-lane road?

So, what we're witnessing isn't either a renaissance of the sector or its breakdown. The shipbuilding industry is riding these

days on two tracks. First, Europe is benefiting from an unprecedented increase in the number of cruise ship orders. However, this may be a short-lived and one-shot phenomenon with the current orders set to be consumed till 2024. All in all, it may be a risky bet to specialise one's plant in the production of only one type of vessels, given the demand may run dry, and/ or that competitors, including from the Far East, will pick up the challenge in order to slice their portion of this it seems exclusive and lucrative cake. For instance, the three German Baltic vards, taken over not long ago by the Kuala Lumpur-based Genting Group, will deliver their first seagoing cruise ship no sooner than in 2020. Then again, the low demand for cargo ships, the Asian shipyards having today almost a monopoly on building them, may as well come

Tab. 1. European shipbuilding countries' performance in 2008 and in 2015-2016 [thou. Gross Tonnage]

No	Country	2008	2015	2016	2016/15	2016/2008
1	Romania	454	387	795	+105%	+75.1%
2	Italy	643	219	421	+92.2%	-34.5%
3	Germany	1,047	389	420	+8.0%	-59.9%
4	France	230	4.0	228	x57	-0.9%
5	The Netherlands	473	160	191	+19.4%	-59.6%
6	Norway	339	166	182	+9.6%	-46.3%
7	Finland	310	111	106	-4.5%	-65.8%
8	Spain	240	38	69	+81.6%	-71.3%
9	Russia	90	47	59	+25.5%	-34.4%
10	Croatia	609	73	45	-38.4%	-92.6%
11	Poland	545	17	31	+82.4%	-94.3%
12	Denmark	565	7	10	+42.9%	-98.2%
13	Greece	-	4.0	6.0	+50.0%	_
14	United Kingdom	1.0	3.0	4.0	+33.3%	+300%
15	Bulgaria	36	3.0	2.0	-33.3%	-94.4%
	Total	5,961 ²	1,630 ²	2,569	+57.6%	-56.9%

Tab. 2. European shipbuilding countries 2015-2016 order books [thou. Gross Tonnage at the end of each year]

	_	-		
No	Country	2015	2016	2016/2015
1	Germany	1,860	2,684	+44.3%
2	Italy	1,985	2,090	+5.3%
3	Finland	879	1,155	+31.4%
4	Romania	1,700	1,109	-34.8%
5	France	730	988	+35.3%
6	Croatia	717	794	+10.7%
7	Spain	718	771	+7.4%
8	The Netherlands	405	412	+1.7%
9	Russia	319	325	+1.9%
10	Norway	330	165	-50.0%
11	Poland	80	70	-12.5%
12	UK	32	41	+28.1%
13	Greece	2.0	13	+550%
14	Denmark	20	8.0	-60.0%
15	Bulgaria	5.0	4.0	-20.0%
16	Estonia	1.0	1.0	+/-0.0%
	Total	9.783	10.630	+8.7%













¹ Statistic based on location of contracting/outfitting shipyards 2 The total for 2008 also includes Portugal (GT 16 thou.); for 2015 – Estonia (GT 2.0 thou.) Sources for Tabs. 1-2: CESA (2008); SEA Europe; and national and associations' statistics corrected by own research



to a long awaited halt and start noting some upticks. This owning to a rise in seaborne trade but maybe chiefly thanks to the new environmental regulations, since European shipyards have presumably an upper hand over their Asian counterparts in delivering more sophisticated newbuilds.

As for the other track, namely the shipbuilding "break" in the Far East, it is worth noting that in 2016 the western shores of the Pacific Ocean delivered GT 63 million. i.e. 94.5% of the world's total of 66.9 million (67.6 million in 2015). Interestingly, with GT 25.3 million South Korea surpassed China (GT 22.3 million) which was the top shipbuilding nation since 2010. Japan landed on the third spot (GT 13.2 million), followed by the fourth and last "millionaire", Philippines (GT 1.2 million), as well as Taiwan and Vietnam (both GT 0.5 million). At the end of 2016, the total order book of these six countries amounted to GT 147 million short of some GT 40 million vs. 2015, but still accounting for approximately 91% of the global GT 162 million order book.

Two leaders

In 2016, Romania (GT 0.8 million) became the leading shipbuilding nation in Europe, doubling its output year-on-year and welding almost twice as much steel as the 2nd and 3rd placed Italy and Germany. Interestingly, the growth had nothing to do with the cruise business. Daewoo Mangalia Heavy Industry (DMHI) delivered three dry bulkers (each with 180 thou. deadweight), five crude oil carriers (114 thou. dwt), and two 9,300 TEU container vessels. This largest European may seem like the Last of the Mohicans, but the focus it puts on cargo ships shouldn't come as a surprise as the plant is run by Asian shipbuilding capital from South Korea.

Constructing cruise vessels as well as workboats of different kinds are the two

Tab. 3. Vessels over GT 100 built by Baltic shipyards in 2016

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Name	Flag	GT	Shipyard	Type
Avalon Sea	Canada	5,733	Remontowa	PSV, icebreaking
Beinur	Denmark	2,600	Karstensens ¹	Trawler
Berlin	Germany	22,319	P&S Werften ²	Ferry
Copenhagen	Denmark (DIS)	22,319	P&S Werften ²	Ferry
Electra	Sweden	200	Baltic Workboats	Research
Ivalo Arctica	Denmark	1,194	Remontowa	General cargo
King Cross	UK	2,935	Karstensens ¹	Trawler
Mein Schiff 5	Malta	99,526	Meyer Turku	Passenger (cruise)
Minik Arctica	Denmark	1,194	Remontowa	General cargo
Novorossiysk	Russia	11,720	Vyborg	Icebreaker
Oceanograf	Poland	750	Nauta	Research
Polaris	Finland	9,333	Arctech	Icebreaker
Ruth	Denmark	3,720	Karstensens ¹	Trawler
Salish Orca	Canada	8,728	Remontowa	Ferry
Searoad Mersey II	Australia	25,409	FSG	Ro-ro
Siem Aimery	Norway (NIS)	8,530	Remontowa	Cable layer
Siem Helix 1	Bahamas	22,728	FSG	Well-stimulation
Siem Helix 2	Bahamas	22,728	FSG	Well-stimulation
Siem Thima	Norway (NIS)	4,768	Remontowa	PSV
Vestliner	Norway	1,352	Pella Shipyard	Trawler
Wind Force III	Malta	111	Baltic Workboats	Offshore supply
Zhibek Zholy	Kazakhstan ³	5,686	Nevsky Plant	General cargo
		Total	283,583	
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¹ Hull delivered by Nauta plant in Gdańsk; ² Hulls only, outfitting took place in FAYARD; ³ Reflagged to Russia in mid-2017









other legs on which the continent's industry stands (each adding over GT 100 thousand). The expected rise of cruise ships tonnage by 60%, up to GT 1.0 million, includes the Harmony of the Seas (GT 226,963), delivered by STX France, the biggest passenger vessel ever built. The production in Germany, Italy, France,

and Finland is dominated by cruise ships, while Norway and the Netherlands focus more on workboats, such as offshore, service, fishing, etc. While the former is flourishing these days, the latter is in deep trouble because of a rapid decline in orders from the oil and gas industry (Tab. 2). It is true that Norwegian shipyards delivered 11 large offshore vessels in 2016, but at the same time they did not gain any new orders from this sector. In fact, at the beginning of this year vards in Norway had no offshore orders for delivery post-2019 (but in Asia the offshore orders situation is the same). As a consequence. Norwegian shipbuilders have shifted their attention to the cruise business, having won nine orders for the socalled "expedition" vessels. Nevertheless, the demand for small cruise ship will most probably be met sooner rather than later.

Divided into two

The situation in the Baltic Sea region is similar. The number of delivered GT grew by 54% yoy to GT 283.6 thousand (Tab. 3). However impressive, we must remember that 2015 was the weakest year in the Baltic's port-war history (GT 184.3 thousand). Anyways, 2016 completions comprised 19 seagoing ships of over GT 1,000, along with three below that number but above GT 100. Out of these, eight earn their living by carrying passengers and/or cargo, six and four by serving the offshore and fishing industries, respectively, and four deal with ice and science being on a state payroll. The bad news here is that the offshore and governmental orders are too scarce to support a continuous growth of the whole sector. Additionally, building fishing vessels is a niche market which can be effectively covered by two-to-three small plants only. The bigger yards, on their side, follow the cruise path, also having room for constructing ferries (though Baltic ship-owners are more and more willing to place their ro-ro and ro-pax orders in China).

All of this means that after 2020 Baltic shipyards will be divided into two main groups. Six plants (four in Germany and two in Finland) will be making both seagoing and river cruise ships. The Baltic German cluster includes three yards united under Genting's new brand MV Werften, as well as Meyer's Neptun Yard in Rostock which is specialised in river cruise vessels (six units completed in 2016). In Finland, Meyer Turku (cruise ships, along with cruise ferries like Tallink's Megastar) will be joined by Arctech, which is close to winning its first cruise contract. The second group will survive thanks to military orders. Besides German, Russian, and Swedish plants (all having been involved in military production for a very long time). it will include two new entrants - Rauma Marine Constructions (four corvettes for the Finnish Navy) and Remontowa Shipbuilding (six tugs for the Polish Navy). Summing up, this century's first and third decades will be like oil and water.

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