



# Newsletter

July 15<sup>th</sup> 2018

*Link road, rail, sea!*

Council Of Intermodal Shipping Consultants

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**July 15<sup>th</sup> 2018**

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## C.I.S.C.O. NEWS

### C.I.S.CO. AT THE 6<sup>TH</sup> GLOBAL RAIL FREIGHT CONFERENCE

The chairman of BIC (Bureau International des Containers) and secretary general of C.I.S.Co. Mr. Giordano Bruno Guerrini participated in the 6<sup>th</sup> *Global Rail Freight Conference*, held in Genoa from June 26<sup>th</sup> to 28<sup>th</sup> last.

His speech, during the 7<sup>th</sup> session about "Integrity of the Logistics Chain", illustrated BIC and its activities.

After a description of its characteristics:

- non-governmental organization established in 1933
- over 2,100 members of more than 120 countries
- active in the promotion of safety and security, standardization and efficiency
- Official NGO Observer status at IMO, World Customs Organization, UNECE and the European Union
- based in Paris
- 23 national registration bodies

Chairman Guerrini indicated the four pillars of the BIC databases, which help make the industry safer, more secure, more efficient and digitalization-ready: BIC Codes ( 1969), Locodes (2001), ACEP (2013) and BoxTech (2016).



Mr. Guerrini pointed out that with no common Locodes language inefficiencies prevail, including wasted time, data re-entry, systems reprogramming, depot changes and new depots, e-mail and phone calls, uncertainty and more.

This system (or lack thereof) is also not future-ready!

The Chairman of BIC then illustrated the ongoing growth of the BoxTech database, ending with an illustration of the safety and security of goods wins: asset register of containers, instant apps, CSC electronic plate, seamless intermodal operations, combine code and location, geolocalization.

## PORTS AND TERMINALS

### BRITISH PORTS ASSOCIATION CALLS FOR BORDER CONTINUITY AHEAD OF BREXIT WHITE PAPER

As the UK Cabinet prepares for an away day' at Chequers this week, the British Ports Association (BPA) has urged Ministers to agree a proposal that will ensure goods continue to flow uninterrupted between UK and EU ports post-Brexit.

Commenting on the Government's forthcoming revised customs 'blueprint'



proposals the BPA's Chief Executive, Richard Ballantyne, said: "We are eagerly awaiting the outcome of the Cabinet discussions and forthcoming Brexit White Paper.

The UK's post-Brexit customs relationship with the EU will dictate how almost half of our trade is

handled at the border.

For the UK's Roll-on Roll-off ferry ports, which facilitate the majority of this traffic, the implications are particularly significant as the process for enabling tens of thousands of HGVs each day to pass through UK and European ports has still yet to be agreed.

For this sector new frontier checks could have a major impact on UK ports as well as add additional delays and costs for UK trade."

The BPA has been pressing for the continued free flow of goods through UK and EU ports post Brexit.

This is especially critical at Roll-on Roll-off ferry ports, where goods on HGVs and trailers are currently driven on and off the ships and through port virtually uninterrupted.

These ports facilitate a variety of trades including consumer goods, perishable cargoes and 'just in time' freight.

The BPA and partners in the transport sector have previously welcomed the aims outlined in the Government's Customs Partnership proposal to preserve border fluidity, but this proposal could be complicated to manage and is not popular with some politicians.

Any form of customs or other regulatory checks has the potential to disrupt these important supply chains.

If there are to be border checks, the BPA has argued that they should be carried out away from port bottlenecks.

Ballantyne continued: "Any long-term border arrangements will need to cover not only customs but other issues such as environmental health standards for products of animal or plant origin.

Checks on food and organic cargoes could potentially be required once the UK leaves the Customs Union and the Single Market.

Also time will be a critical factor as whatever arrangement it is vital there is time for ports to adapt to avoid disruption.

There has been talk of IT solutions for some customs procedures which could help overcome many of the problems.

However without a deal, decisions will need to be taken as to how information is collected and indeed how many of the physical cargo inspections carried by staff at border for varying reasons, are undertaken.

The simple answer is that in the interest of trade these activities should take place away from ports.

Furthermore the freight and logistics will need time to prepare so that trade continues to more freely through ports on 'day one', whenever that may be."

The BPA has called for the Government to seek compatibility with the EU on plant and animal health standards, which could lead to potential challenges for some ports and particularly at Roll-on Roll-off ferry terminals.

This is a vital part of ensuring trade continues to flow freely through our ports after Brexit.

Under present EU rules, plant and animal products could be subject to a hugely disruptive inspection regime at the border.

This could be problematic for all types of port handling such European trade but the most challenging would be in respect of HGVs at ports such as Dover, Holyhead, Immingham and Portsmouth.

To require lorries to stop and undergo time-consuming inspections at ports could lead to significant disruption at the border and create congestion around ports.

*(from: hellenicshippingnews.com, July 4<sup>th</sup> 2018)*

## MARITIME TRANSPORT

### SHIPPERS 'GET WHAT THEY PAY FOR'

Poor container shipping reliability is the inevitable result of low ocean freight rates, and so shippers should not be surprised that service levels have continued to fall, according to one senior consultant that has worked with numerous lines and beneficial cargo owners (BCOs).

Gary Ferrulli, a former senior liner executive and now CEO of Global Logistics & Transport Consulting, writes in an article today in Lloyd's Loading List that a report in June by Drewry, commissioned by the European Shippers' Council (ESC), concerning the declining level of customer service by ocean carriers "can't be a surprise to anyone, looking at the financial results of the industry in the last seven and a half years and knowing that rates have fallen 50% in the last 20 years, in real terms".

He notes: "Under those conditions, something has to give, and it is service levels of all types.



For those who don't understand that, the saying is: 'you get what you pay for'."

In regular meetings with BCOs, he observes that the majority say they would pay more for a better service – "and when presented with the real option, don't use it for much cargo".

He cited the example of Matson, the line with the best performance record in the industry, which charges \$150-\$250 more than tier-one carriers, but which has been unable to successfully expand beyond one string that lifts an average of 1,000 loads a week.

But he says the failure to improve standards is also "the ocean carriers' fault.

As with the fuel surcharge, they focus on volume and market share and not profitability."

Although, in theory, shippers could persuade carriers to improve service at higher rate levels, "you can't start a 'fast and reliable' service with a handful of

customers", too few supply chain or logistics executives are incentivised to prioritise quality over price.

"How many have incentives in their compensation with a 'cost containment' KPI?" Ferrulli asks.

"They all do – it comes from the top.

And that's the big guys; think of the traders, wholesalers, etc. – they have to have the lowest rates to get any margin for their profitability."

It is, therefore, up to the carriers to "control their destiny", he argues, adding: "They can manage capacity if they want to.

They did it in late 2009 through 2010 and had a \$30 billion turnaround from losing \$22 billion to making \$8 billion, in one year.

They anchored over 600 vessels.

They created the model and it worked.

They made money.

And have never done anything remotely like it again."

But after one decent year, lines "reverted to form, chasing volume, filling ships and market share", Ferrulli said.

"They had a great opportunity (again) in August 2016 when Hanjin pulled the plug.

They each got a portion of the significant volume available that Hanjin couldn't carry and they were rid of one of the price-focused carriers.

For four months they kept rates up and, like in 2011, in 2017 they reverted to form: chase volume, fill ships, and gain market share with price as their catalyst."

He said the recent report by Alphaliner of how, adjusted for inflation, rates are 50% lower than 20 years ago, illustrates that "this is an industry occupied by entities that, for whatever reasons, are not profit driven as are other businesses".

That is easy to explain in the case of state-supported carriers in China, Korea and Taiwan, but doesn't explain the behaviour of the European lines "who dominate the industry, absent Cosco".

Ferrulli concedes that "it is not an easy, single-issue matter", noting: "There are complex circumstances.

But the reality is in those words: 'you get what you pay for'; and not many are truly willing to pay any more."

He continues: "If shippers complain about a fuel surcharge at \$50-65 when they know full well that fuel has risen 70% in the last 19 months, what real opportunity is there for a reasonable conversation about price and service being connected?"

He concludes: "On the flip side, carriers have to force the issue – as they did eight years ago.

And they won't, for whatever reason they conjure up."

*(from: lloydsloadinglist.com, July 9<sup>th</sup> 2018)*

## RAIL TRANSPORT

### **EAST EUROPE BORDER TOWN STRAINS UNDER SILK ROAD TRAIN BOOM**

The growth of Asia-Europe container rail services has been one of the great transport success stories of the past five years.

However, a Reuters visit to the Polish town of Malaszewicze, close to the Belorussian border, shows the downside of this growth: local authorities simply weren't prepared for the number of trains logistics firms and Chinese rail companies have wanted to push through, even if many services remain heavily subsidised.

Congestion is mounting – at one point late last year there was said to be a queue of 100 trains waiting to cross the border and enter the Malaszewicze terminal.

\* \* \*

When cargo trains from China began arriving at the Polish border town of Malaszewicze almost a decade ago, they were considered a novelty - able to ship laptops and cars to Europe in as little as two weeks, but extremely infrequent, with one service a month.

However a surge in the number of trains over the past year, fueled by Beijing's plans to grow trade along ancient Silk Road routes to Europe, has left authorities scrambling to meet demand that has ballooned to as many as 200 locomotives a month.

Rail shipments have experienced delays of over ten days at land ports in both Europe and China, bogged down by insufficient infrastructure and paperwork pileups, shippers say.

That congestion is anticipated to worsen as Chinese authorities encourage a further ramp up in volumes.

The situation illustrates how China's Belt and Road initiative is delivering some successes but also how its partners are struggling to keep up.

The rail network, used by companies like Hewlett Packard, the sports gear company Decathlon and the carmaker Volvo, handled 3,673 train trips between

China and Europe in 2017, up from 1,702 in 2016 and just 17 in 2011, according to China Railway, the national operator.

To view a graphic on China-Europe Railway Express img, click: [www.tmsnrt.rs/2txkLZJ](http://www.tmsnrt.rs/2txkLZJ).

The network remains unprofitable and heavily supported by subsidies, but Chinese city authorities have launched new services with fervor after it was subsumed under the four-year-old Belt and Road initiative.

In 2016, China's top state planner named the network "China Railway Express" and said it wants train trips to hit an annual number of 5,000 by 2020.

By April, the number of regular rail services linking China and Europe jumped from just one in 2011, between Chongqing and Duisburg in Germany, to 65, connecting 43 Chinese cities and 42 destinations in 14 countries including Spain and Britain, China Railway said on its website.



Carsten Pottharst, managing director of InterRail Europe, is among a number of freight forwarders who expressed

frustration to Reuters about congestion on the network, citing insufficient government investment in European railway infrastructure.

"They believed that they would come, but they didn't believe that it would become that big," he said.

### *Congestion*

While congestion occurs across the network, much of the shippers' frustrations are being directed at Malaszewicze, which handles roughly 90 percent of the cargo.

There, containers which travel from China through Kazakhstan, Russia and Belarus on Russian gauge tracks are transferred to other trains running on European standard ones.

The land port processed nearly 74,000 containers in 2017, four times the volume it handled in 2015, earning Poland nearly 400 million zlotys (\$109.02 million) in tax and customs revenues last year, Polish tax and customs authorities said.

But PKP Cargo, the Polish state-controlled rail operator that runs the main terminal, said in March that the current infrastructure was unable to handle the anticipated growth.

Europort, which runs a private rail terminal, said that in late 2017 there were queues as long as 100 trains awaiting entry to Poland from Belarus.

"This is a huge challenge and a huge chance," said PKP Cargo's chief executive, Czeslaw Warsewicz in March.

PKP Cargo said in an e-mail that there were currently no queues at its terminal, and that it was looking to expand capacity and cooperate with private terminal operators to shorten loading times.

Poland's infrastructure ministry, meanwhile, said the government was considering opening a second border crossing with Belarus.

However, shippers say they are concerned that the improvements will not happen fast enough.

This is worrying locals such as Krzysztof Iwaniuk, mayor of Terespol Municipality, which includes Malaszewicze, who has seen the town and surrounding areas benefit from the rail trade.

On a recent visit to Malaszewicze, Reuters saw navy blue shipping containers emblazoned with the China Railway Express logo stacked up in rail terminals, as well as new roads and a local government headquarters.

Iwaniuk said he was worried that PKP Cargo's upgrade plan would not meet anticipated volume growth and that the town would lose traffic to other transshipment hubs.

"We are sounding an alarm that we use this historic opportunity," he said.

"If we don't properly use these five minutes in history, it will be over."

### *Ambitious targets*

In China, meanwhile, the flood of containers into Europe is expected to keep surging as city authorities try to outdo each other promoting Belt and Road, President Xi Jinping's signature foreign policy initiative.

Chongqing in southwestern China, which recorded 663 trips last year, is targeting 1,000 trips, while Xi'an, home to China's terracotta army, also wants to hit 1,000 trips, according to state media and government statements.

Yiwu city in the eastern province of Zhejiang, home to one of the world's largest wholesale trading centres, plans to increase trip numbers from 168 in

2017 to 350 this year, said Simon Jian, assistant to the chairman of Yiwu Timex Industrial Investment, a rail service provider.

Industry executives say the network is currently unprofitable as cargo volumes have not reached a sustainable level, and costs are higher than shipping by sea.

But it is attracting business from companies selling goods like cars and electronics because it can deliver them as much as 20 days faster than sea at a lower cost than by air.

"We've probably managed to reduce our logistics costs thanks to China Railway Express," said Hu Jie, a Suzhou-based logistics director at Pegatron Corp, a Taiwanese electronics manufacturer that began using the rail route in 2015.

For now, Chinese government subsidies are supporting the rail operations.

A study published by the Shanghai-based Donghua University last year estimated that provincial governments in China had collectively spent \$303 million subsidizing China-Europe block trains - generally those carrying goods to destinations without being split up en route - between 2011 to 2016.

Jian said that firms would likely need to charge \$10,000 per container to make a profit but subsidies allowed many to charge about \$3,000-6,000 per container.

Some were offering rates as low as \$1,000 per container, about the same as shipping by sea.

"It's very chaotic," he said.

### *Infrastructure*

There is currently far less rail congestion on trips back from Europe to China, reflecting the large trade deficit between two partners.

Polish government sources said there was concern that China was not doing enough to open its market to foreign producers.

One official said there was growing concern that the new Silk Road might become a one-way gateway to flood Europe with China-made goods.

The United States is currently threatening a trade war with Beijing in a bid to cut its own trade balance with China.

As trains pile up in Malaszewicze, some shippers are looking to move goods through Finland, which launched a rail freight service with China in November, or Lithuania and Estonia.

But new transshipment hubs also had drawbacks, they said, citing longer travel times and less familiarity with services and issues like processing paperwork.

“We need the entire network to be upgraded and more railway stations to be built,” said an executive at Wuhan Asia-Europe Logistics, which manages trains from Wuhan, in central China.

Ronald Kleijwegt, the managing director of Jusda Europe, a logistics unit of the contract manufacturer Foxconn, said that would be an uphill task in Europe.

“It’s a win-win if we start ironing out all these bottlenecks,” said Kleijwegt.

“But the demand and requirements of supply chain are sometimes difficult to understand for politicians to understand.”

*(from: [theloadstar.co.uk/reuters.com](http://theloadstar.co.uk/reuters.com), June 28<sup>th</sup> 2018)*

## ROAD TRANSPORT

### **VOLVO AND FEDEX USE DRIVER ASSISTANCE FOR PLATOONING**

Volvo Trucks North America and FedEx have used advanced driver assistance system technology to conduct on-highway truck platooning as part of ongoing research collaboration.

The first public on-highway showcase of platooning technology between a major truck manufacturer and a transportation company in the US took place to expand the on-highway operations of Volvo's Cooperative Adaptive Cruise Control (CACC).

Volvo Trucks and FedEx plan to continue developing the Volvo CACC technology on N.C. 540, the Triangle Expressway, into the foreseeable future to learn more about the potential benefits offered by vehicle platooning, including faster responses to hard braking while maintaining safety and fuel efficiency.

Additionally, this advanced testing will allow the participants to adapt to the technological and regulatory developments that will ultimately determine the commercial viability of platooning technology in the US.

Gloria Boyland, Corporate Vice President, Operations and Service Support, FedEx Corporation, said: "FedEx was built on innovation and it continues to be an integral part of the FedEx culture and business strategy.

We are pleased to collaborate with Volvo Trucks and the North Carolina Turnpike

Authority to learn more about how platooning technology can benefit our team members while improving fuel efficiency for our fleet."



The platoon consisted of three trained, professional truck drivers in Volvo VNL tractors, each pulling double 28-foot trailers.

Through CACC, a wireless vehicle-to-vehicle (V2V) communication technology, the tractors and trailers remained in constant communication.

A V2V communication system, designed to serve as an aid – not a replacement – for skilled professional truck drivers, helps reduce the reaction time for braking and enables vehicles to follow closer, automatically matching each other's speed and braking.

The tractors and trailers travelled at speeds of up to 62 mph while keeping a time gap of 1.5 seconds, maintaining a closer distance than what is typical for on-highway tractors.

Staged and unplanned vehicle cut-ins demonstrated how the technology handles common traffic situations.

Trucks driving closely behind one another improves fuel efficiency because of reduced drag.

Drag accounts for up to 25% of a truck's total fuel consumption, and the closer the trucks drive to each other, the greater the fuel-saving potential.

Reducing the traveling distance between vehicles also allows for greater highway utilization, helping alleviate traffic congestion.

Since April 2018, Volvo has had three Volvo VNL tractors paired with various combinations of FedEx trailers to simulate real-world routes and trailer loads while traveling on N.C. 540.

Per Carlsson, Acting President of Volvo Trucks North America, said: "Volvo Trucks has long supported platooning because it benefits freight companies and professional drivers alike through safer, more fuel-efficient operations.

We continue preparing for deployment of trucks with greater vehicle-to-vehicle communication capabilities that support higher levels of ADAS.

We know these technologies will be part of our future, but exact timing depends on many things, namely regulations, infrastructure, safety standards, and market demand."

*(from: porttechnology.org, June 27<sup>th</sup> 2018)*

## AIR TRANSPORT

### ACUTE PILOT SHORTAGE AND FEWER AVAILABLE FREIGHTERS LIKELY TO DRIVE FASTER DRONE ADOPTION

Drones may be hauling cargo in the air much sooner than widely expected.

The worsening shortage of pilots and concerns about available freighter capacity down the road are adding a sense of urgency to the deployment of drones to fill the gaps.

The pilot shortage is the more serious concern for cargo carriers.

A study published by Boeing last year found that more than 637,000 pilots would be needed between 2017 and 2037.



And even large passenger airlines are feeling the pinch.

Emirates revealed in early May it would ground at least six A380s and 14 B777s for two months.

Besides a seasonal drop in demand, lack of pilots was the main reason – by one estimate, the airline is 100-150 pilots short of the number needed to operate at full capacity.

Regional freighter operators have been particularly hard hit by the pilot shortage, and their plight in the US has been aggravated by the change in the minimum flight hours requirement from 250 hours to 1,500, according to Stan Bernstein, president of the Regional Air Cargo Carriers Association (RACCA).

He says the lack of available flight crews and the inability of flight schools to turn out qualified pilots in sufficiently high numbers is going to accelerate the push for drones to carry freight.

Ram Memen, former head of Emirates SkyCargo, agrees.

He sees particular difficulties in the large freighter segment, arguing that the pool of viable conversion candidates is shrinking.

“All airplanes designed and built post-1990s have been optimised for weight.

Hence, cost of conversion is going to be high, and with fuel prices generally remaining high, they will become unviable, especially when cargo yields are under pressure,” he said.

This would turn production freighters into the mainstay of the large widebody freighter pool over time, but their price tag puts them out of reach of some players.

Hence, the call for drones is going to increase, Mr Menen added.

“Fully autonomous large drones will be the mainstay, alongside airships more in regional roles,” he predicted.

Interest in drones from the passenger business is another likely catalyst for their use in airfreight.

Cargo is the initial arena of deployment for drones in aviation, Mr Bernstein said.

“The first commercial flight of an unmanned aircraft is not going to be a United Airlines service from Chicago to Los Angeles; it will more likely be Albuquerque to Santa Fe and a cargo flight,” he added.

Tim Komberec, president of regional carrier Empire Airlines, noted that companies were beginning to build bigger drones.

“I truly believe this is picking up steam,” he said.

Recent signals from the US authorities have been encouraging too, according to Steve Edgar, founder of Empire Unmanned, a subsidiary of Empire Airlines that provides unmanned aerial systems and vehicles that are certified by the Federal Aviation Administration.

Speaking at RACCA’s spring conference in April, Mr Edgar, who is on the Unmanned Aircraft Systems Aviation Rulemaking Advisory Committee, reported that there was broad agreement in the committee that drones could operate under current aviation safety rules for manned aircraft, which would eliminate the need for drafting new rules.

Already drones are operating on a routine basis in Class A airspace, without incident, he added.

He anticipates the integration of drones will unfold in three stages.

The first will involve moving caravan-sized loads to remote locations, the second will usher in intercontinental haulage.

Door-to-door operation, the third step, will be the most challenging, he reckons.

In May the US Department of Transportation selected ten local, state and tribal governments to test commercial drones in partnerships with private companies.

Already drones are carrying small loads to remote locations in some jurisdictions.

In China, JD.com and SF Express were given the green light by the civil aviation authority last autumn to send packages by drone in certain remote areas.

In Canada, the Moose Cree First Nation agreed in late October last year for Drone Delivery Canada to conduct trials moving food, medicine and other supplies to a remote community.

However, the road to the commercial adoption of drones for the carriage of cargo is still a long one, Mr Komberec cautioned.

"It will require some substantial players and investors," he said.

*(from: theloadstar.co.uk, July 5<sup>th</sup> 2018)*

## TRANSPORT & ENVIRONMENT

### EU CHARTING WRONG COURSE ON LNG IN SHIPPING, STUDY WARNS

Europe has little to gain from trying to decarbonise the unwieldy shipping sector with liquefied natural gas (LNG), according to a new study that looks into how the EU could cut emissions over the next three decades.

Research by consultants UMAS revealed on Monday (25 June) that pouring billions of dollars into LNG-refuelling capacity for maritime and inland shipping would only yield emission reductions ranging from 6% to 10%.

The study highlighted how half a billion dollars has already been used by the EU to beef up infrastructure under tools like the Connecting Europe Facility (CEF) and that no notable greenhouse gas emissions (GHGs) have been logged as a result.



Shipping accounted for about 3% of global emissions in 2012 and, on its current trajectory, will contribute between 6% and 14% by 2050 due to increased

growth.

Eighty percent of global trade is already transported by water.

EU commitments to the UN's Paris Agreement mean the bloc is targeting 40% GHG reductions by 2030 and a net-zero emissions strategy for mid-century is likely to be released by the end of the year.

Brussels wants every part of the economy to do its fair share of decarbonising, meaning shipping will have to play its part and a recent agreement by the International Maritime Organisation (IMO) to target "at least 50%" cuts compared to 2008 by 2050 was a step towards that aim.

But the IMO commitment is non-binding and a final plan is not expected until 2023, causing uncertainty about where investment should be directed.

If the IMO revises its ambition up to a net-zero strategy, LNG assets could end up stranded, according to the study.

NGO group Transport & Environment, which commissioned the report, said the EU should “instead back future-proof technologies that would deliver the much greater emissions reductions that will be needed, including port-side charging and liquid hydrogen infrastructure”.

EU legislation dating from 2014 on alternative fuels lays out a number of options across various sectors but its insistence on LNG refuelling and bunkering facilities has now been called into question by T&E.

The group urged the Commission to revise the “faulty” directive.

UMAS’s modelling showed that under a ‘high gas’ scenario, where LNG prices are low and alternative fuels like hydrogen are unavailable, the EU would be hit with a \$22bn bill up to 2050 and GHG reductions would only fall within a 6%-10% bracket.

While increased LNG uptake could help the sector hit the IMO’s 2020 cap on sulphur emissions, according to UMAS researcher Domagoj Baresic, the fuel’s use in “shipping’s transition to a low carbon future can only be transient”.

Other fuel options include biofuels, electrification and hydrogen.

Battery-powered ocean-going freighters are currently not feasible due to cost and component weight, so smaller vessels are the limit, while biofuels face their own set of cost and standards-based challenges.

Hydrogen Europe, a Brussels-based industry group, told EURACTIV that “hydrogen in the maritime sector is today already a reality as many ferry owners are choosing it to reduce their emissions”.

Challenges like fuel efficiency and infrastructure still persist though.

### *Meddlesome methane*

Although LNG is easy to transport, one of its main downsides is its high methane content, whose climate-affecting potential is significantly greater than that of carbon dioxide.

The study explained that the phenomenon of ‘methane slipping’, when unburnt LNG escapes through a ship’s exhaust into the atmosphere, could actually help wipe out any emission reduction gains over diesel depending on the scenario.

The issue of fugitive methane is a serious consideration for energy companies and pipeline owners, as it entails sometimes significant losses in both deliverable capacity and income.

Last week, a landmark study by the Environmental Defense Fund (EDF) claimed that methane leakage in the United States is 60% higher than previously estimated by the country's Environmental Protection Agency (EPA).

EDF chief scientist Steve Hamburg warned that if more than 2.7% of gas production leaks from the US network then the GHG impact is more significant than burning coal for power.

The study drew on a decade of work to estimate that leakages totalled 2.3%.

Oil majors like Exxon and BP already intend to address the problem by rolling out advanced technology like infrared detection equipment.

The International Energy Agency estimates that between 40% and 50% of current methane emissions could be cut at no net cost.

*(from: euractiv.com, June 25<sup>th</sup> 2018)*

## INTERNATIONAL TRADE

### TRADE WARS THREATEN TO DERAIL CONTAINER REVIVAL

The risk to container shipping from US-led trade wars is currently low, but potentially very damaging, according to the latest edition of the Container Forecaster published by global shipping consultancy Drewry.

“In the March report we said that we were hopeful of a peaceful resolution, but at this point in time we must accept that tariffs are going to become a reality.

The only question now is: how severe will they be?” said Simon Heaney, senior manager, container research at Drewry and editor of the Container Forecaster.

Additional tariffs of 25% on the first list of 818 Chinese products, worth approximately \$34 billion, are scheduled to be collected by US Customs from Friday 6 July.



A second list of 284 newly recommended products covering \$16 billion is currently being reviewed, while there are threats of further tariffs on as much as \$400 billion of goods to

follow, in response to Chinese retaliation.

The latest edition of Container Forecaster analyses three potential scenarios for eastbound Transpacific container trade, based on the intensity of a trade war, ranging from tariffs of \$50 billion to \$450bn being applied to Chinese imports.

In the worst-case scenario, Drewry calculates that as much as 1.8 million teu, or nearly 1% of world loaded traffic could be lost to the market over a period of time.

As things stand, the impact from the initial two lists of Chinese products alone would be relatively insignificant at around 200,000 teu.

Drewry research shows that revised lists announced on 15 June were heavily weighted towards industrial goods, while also being readily available from other trading partners.

China only exported about 13% of the first list of products to the US last year and around 8% of products on the second list.

“With other sourcing options available, tariff increases on Chinese goods on these initial products lists will most likely create a small amount of trade diversions and raise the prospects of other exporting partners of the US,” said Heaney.

“The current risk threat to container demand is relatively low, even when factoring in tit-for-tat measures and disputes with other trading partners, but there is clearly the potential for matters to get much darker if additional tariffs are forthcoming.

Perhaps, the biggest risk is the unpredictability of it all and the potential confidence knock it will give to the world economy, just when it seems to be finding its feet.”

The trade disputes take the gloss of the strong demand growth seen in the early months of 2018, driven by a speeding of the world economy.

From this report, Drewry is using a redesigned demand forecasting technique, under the guidance of new senior quantitative economist Mario Moreno.

The improved model now enables us to present five-year demand forecasts for global and regional port throughput and selected tradelanes within every quarterly report.

Subsequently, Drewry has upgraded its demand forecast for the next two years to 6.5% and 5.8% respectively.

There was also an upgrade to the fleet growth outlook for this year after surprisingly few demolitions.

However, anticipated supply growth of 5.4% is below the revised demand increase, which will support ongoing supply-demand rebalancing.

“There will be some gain for carriers this year in the form of increased demand and slowly improving supply-demand, but a lot more pain,” said Heaney.

“Escalating fuel prices have caused us to slash the industry’s profitability forecast to break-even and while freight rates are expected to rise modestly in 2H18 it won’t be sufficient to turn things around.

In some ways, buoyant demand is a problem for carriers right now as every extra box shipped at a loss only amplifies the deficit.”

*(from: [hellenicshippingnews.com/drewry.co.uk](http://hellenicshippingnews.com/drewry.co.uk), July 5<sup>th</sup> 2018)*

## LOGISTICS

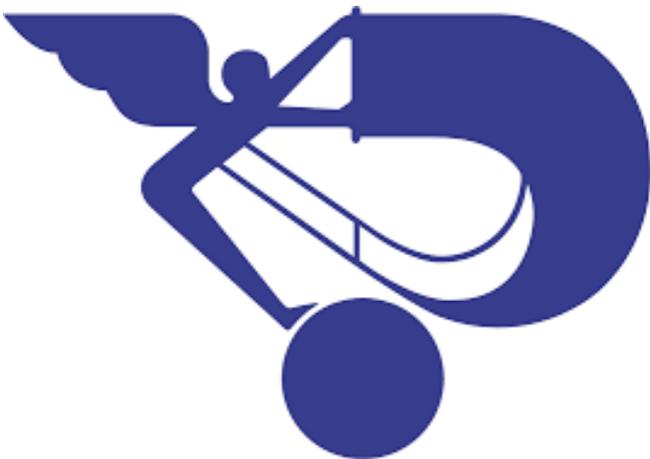
### PANALPINA LAUNCHES 'DIGITAL HUB' TO EMBRACE INNOVATION

International freight forwarding and logistics company Panalpina has launched what it calls the 'Panalpina Digital Hub' as part of its "digital transformation process" it attempts "to embrace new technologies including the Internet of Things (IoT), artificial intelligence (AI) and blockchain that have the potential to disrupt the business in the coming years".

The new business unit, which reports directly to CEO Stefan Karlen, is intended to explore innovative technologies, develop new digital solutions for customers, and engage with digital start-up companies.

The company said: "Panalpina is embracing modern information technology and the digitization of services to meet customer expectations and secure long-term growth.

The Panalpina Digital Hub is tasked with exploring disruptive technologies and developing new digital solutions for customers as well as realizing business opportunities for Panalpina."



Karlen commented: "We, like many of our competitors, are challenged by new market entrants with innovative business models and digital approaches that improve upon the old way of doing things.

Additionally, our customers increasingly demand the digital experience they have become accustomed to as consumers: they now expect a similar experience in a business-to-business environment.

It is therefore obvious that the frontier of freight forwarding and logistics does not lie in new modes of transport, but in digital transformation.

Knowing that, we want to shape our industry's future with innovative digital solutions that create new levels of value for our customers and accelerate growth for our company in the years to come."

Panalpina said the Digital Hub would focus on “innovative technologies with a potentially high impact on the freight forwarding and logistics industry, such as the Internet of Things (IoT), cloud computing, predictive analytics, artificial intelligence (AI) and blockchain”.

Luca Graf, head of the Panalpina Digital Hub, commented: “In the short term, IoT can help us streamline our processes and create more efficient supply chains.

The challenge will lie in deriving the relevant actions from the wealth of IoT data.

Predictive analytics and artificial intelligence will optimize products and services and create new ones, as can currently be seen in Amazon’s recommendation engine.

Blockchain technology, which creates a digital record of every transaction made in a decentralized and secure way using cryptography, has the potential to disrupt the industry in the long term by impacting contracts, freight payments, chain of custody, and other issues facing the industry.”

The company said that while it was difficult to predict when blockchain “will reach commercial break-through”, Panalpina is planning to start some pilot projects using the technology in the third quarter of this year (Q3).

As reported in Lloyd’s Loading List last month, Panalpina also joined the Blockchain in Transport Alliance (BiTA) – a forum of tech and transport companies pushing for the development and implementation of blockchain standards in the freight and logistics sector.

Earlier this year, Karlen, provided a public demonstration during this year’s ‘Bosch Connected World’ event of how the latest IoT technologies in use and those being developed will shape tomorrow’s supply chains, noting: “Imagine a world in which products plan their own journeys around the globe.

Panalpina and Bosch are working on the solution.”

The Panalpina Digital Hub also acts as “a gateway to the bustling community of digital start-up companies”, offering potential partnerships with start-ups, “beginning with the European ecosystem”, the company noted.

“For the moment, we are focusing on European start-ups of a certain maturity.

Further down the road, we will expand our network to the USA, Israel and China,” said Graf.

He sees three options to engage with start-ups: to partner with a start-up and act as a vendor for certain (Software as a Service – SaaS) applications; to

enter into a strategic partnership where the start-up develops customized solutions for Panalpina, allowing the company to enter new markets; or Panalpina could also buy a stake in a start-up.

The Panalpina Digital Hub is based in Zurich, Switzerland, although the experts working in the Digital Hub will also frequently be present in Berlin and Hamburg, “two European hotspots with a very strong digital start-up scene”, the company said.

“We will engage with promising digital start-ups and work closely together with our colleagues in Air and Ocean Freight, Logistics, IT and finance, to bring viable and value-adding digital solutions into daily practice,” concluded Graf.

*(from: lloydsloadinglist.com, June 26<sup>th</sup> 2018)*

## STUDIES & RESEARCH

### **DYNAMAR: 124 CARRIERS ARE ACTING AS A FEEDER OPERATOR DEPLOYING AN ANNUAL TRADE CAPACITY OF 43 MILLION TEU**

“Transshipment and Feeder” is all about an invisible trade.

About containers that do not exist in statistics on the worldwide carriage of full containers.

Why not?

It is “commercial” full containers that are being counted to assess the world full container trade, which reached around 168 million TEU in 2017.

Commercial full containers are shipped on a Bill of Lading issued by the shipping company to the shipper.

This Bill of Lading covers the carriage of the boxes from their (first) port of loading until the (ultimate) port of destination.

In contrast, a feeder move constitutes an operational port-to-port activity, arranged by the mainline carrier using the services of a feeder company.

Feeder containers usually travel on a Service Bill of Lading issued by the feeder operator to his principal, the mainline carrier.

In the case of feeder, the container, full or empty, is the cargo.

Relevant statistics do not exist, but the total number of feeder containers could be estimated at 65 million TEU worldwide.

Feeder boxes may not exist in full container trade statistics, they count double in port-handled container statistics.

In that case, both the move from the mainline vessel and the handling into the feeder are counted.

*Feeder is...*

Feederling is the first or last maritime leg of an ocean borne container transport, where the ports of loading or discharge of the mainline containership are not the same as the ultimate origin or destination port of the container.

As the regional part of the global container transport system, feederling is an integrated part of the door-to-door transport chain.

Feederling is a short haul trade between a deepsea hub and regional ports that do not have sufficient cargo to warrant a direct call from a mainline service, or are lacking the infrastructure to handle larger vessels.

### *Transshipment hubs*

Feederling involves transshipment.

Containers are discharged at a direct port of call, the hub, for on-carriage to their final destination, the feeder port.

In 2017, around twenty-five ports could be considered a dominant transshipment port.

Only two such ports can be found in North Europe: Bremerhaven (57% transshipment share) and Wilhelmshaven/JadeWeserPort (70%).

The Mediterranean accommodates the largest number of such hubs: nine with an average transshipment share of 79%, followed by the Far East: five dominant transshipment ports, average 71%.

The hub port with the highest transshipment shares are Freeport (Bahamas, 99%) and Marsaxlokk (Malta, 95%).

Singapore is, undisputed, the one with the highest transshipment volume: 28.5 million TEU (2017).

### *Feeder operators, Dedicated and Common*

Dynamar has identified 124 shipping companies worldwide, offering feeder services, split into:

- Dedicated operators: mainline shipping companies handling the feederling of their own boxes
- Common carriers: smaller shipping lines moving another carrier's boxes

Thirteen dedicated carriers deploy the largest ships serving as a feeder.

Another four - CMA CGM, Maersk Line, PIL, ZIM - operate their feederling business under separate brands also active as common carriers.

The remaining 107 common feeder carriers are clearly ruling the overall feeder scene by company numbers.

Most, if not nearly all, companies carrying feeder containers are also taking regional cargo.

It is believed that only X-Press Feeders, present in all trades, is the only pure feeder operator.

It is also the world's third largest feeder operator.

| <b>THE WORLD'S 10 LARGEST DEDICATED AND COMMON FEEDER OPERATORS</b> |                           |                        |                             |                              |
|---|---------------------------|------------------------|-----------------------------|------------------------------|
| <b>Carrier / Feeder operator</b>                                    | <b>Number of services</b> | <b>Number of ships</b> | <b>Average TEU capacity</b> | <b>Annual trade capacity</b> |
| MSC   | 79                        | 131                    | 2,000                       | 6,420,000                    |
| Maersk Line   | 82                        | 171                    | 2,100                       | 5,796,000                    |
| X-Press Feeders   | 54                        | 72                     | 1,500                       | 2,804,000                    |
| Evergreen   | 42                        | 67                     | 1,900                       | 2,528,000                    |
| CMA CGM   | 51                        | 89                     | 1,400                       | 2,328,000                    |
| Unifeeder   | 32                        | 42                     | 1,100                       | 1,286,000                    |
| Arkas Line  | 23                        | 38                     | 1,900                       | 1,268,000                    |
| PIL   | 27                        | 40                     | 1,300                       | 1,250,000                    |
| Hapag-Lloyd   | 16                        | 24                     | 2,200                       | 1,152,000                    |
| Cosco Shipping Line   | 26                        | 30                     | 1,400                       | 1,087,000                    |
| <b>Total top 10 feeder operators</b>                                | <b>569</b>                | <b>841</b>             | <b>1,800</b>                | <b>25,918,000</b>            |
| <b>Share top 10</b>   | <b>64%</b>                | <b>66%</b>             | <b>-</b>                    | <b>60%</b>                   |

*Do feeder ships exist?*

Feeder is basically a vessel classification used in the chartering industry, comprising four different capacity categories of between 1.000 TEU and 2.750 TEU.

Essentially, any container ship can carry any container.

Equally, feeder containers are similar to any other container.

That said, in North Europe container vessels have been designed and built with the specific purpose of feeding in mind.

A somewhat famous ship in this respect is the Sietas "type 168", a partly hatchcoverless vessel.

More than forty "type 168" units have been built with a capacity of 670 TEU, plus another few of 1.010 TEU each.

A good number of them are Ice-class A1, a requirement to serve the Baltic trades during the winter season.

### *The size of feeder ships*

The adage that, rather than the size of the mainline ship, the capability of a port decides upon the size of the feeder ship is unchanged.

As many feeder ports have become more capable over time, they have allowed the feeder ship to grow larger too.

However, not half as big as it is often thought!

It is 1.300 TEU on average today against 700 TEU ten years ago for the common feeder ship.

And 2.000 TEU average against 1.200 TEU for those employed by the dedicated operator.

There are always exceptions: recently MSC used a 10.000 TEU ship on to Antwerp-Eastern Baltic feeder route.

The size of the mainline vessel too plays a role.

Their much larger call sizes require either more or larger, if can, feeder vessels to distribute the cargo to the feeder port, their final destination.

As of early June (2018), the North Europe-Far East trade counted eighteen weekly services, operated by nine different carriers organised in three Alliances (2M/6 services, Ocean Alliance/6, THE Alliance/5), plus Hyundai/1 operating standalone.

The average capacity of all 205 ships employed was 15.000 TEU and total shipboard space was 3.183.000 TEU.

The largest vessel measured 21.400 TEU (CoscoLS/OOCL); the smallest one 4.100 TEU (Hyundai).

The average number of North European mainline port calls is four; any cargo on board for other ports will have to be feedered...

*(from: hellenicshippingnews.com, July 7<sup>th</sup> 2018)*

## ON THE CALENDAR

- 24/09/2018 – 29/09/2018      Napoli      Naples Shipping Week 2018
- 26/09/2018 – 27/09/2018      Riga      2nd Baltic Sea Ports & Shipping 2018
- 24/10/2018 – 25/10/2018      Aqaba      15th Trans Middle East 2018
- 28/11/2018 – 29/11/2018      Accra      20th Intermodal Africa 2018
- 30/01/2019 – 31/01/2019      Kuwait City      16th Trans Middle East 2019
- 20/02/2019 – 21/02/2019      Manila      10th Philippine Ports and Shipping 2019
- 20/03/2019 – 21/03/2019      Mombasa      21st Intermodal Africa 2019

The Secretariat of C.I.S.Co. is able to communicate detailed information on the programs of all the events and how to participate.