

# Newsletter

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*Link road, rail, sea!*

Centro Internazionale Studi Containers

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**PORTS AND TERMINALS**

MEMORANDUM OF UNDERSTANDING SIGNED TO PROMOTE LNG IN LIGURIA ..... Page 3

**MARITIME TRANSPORT**

CHINA'S ALL-EMBRACING MARITIME INFLUENCE ..... " 5

**RAIL TRANSPORT**

SWISS SUBSIDIES FOR RAIL FREIGHT REMAIN IN PLACE TILL 2026 ..... " 12

**ROAD TRANSPORT**

TAPA SEEKS TALKS WITH BRUSSELS ON TRUCK PARKING STANDARDS ..... " 16

**INTERMODAL TRANSPORT**

RZD LOGISTICS ORGANIZED THE FIRST TRANSIT SHIPMENT FROM EUROPE TO JAPAN VIA RUSSIA 19

**TRANSPORT & ENVIRONMENT**

INTERVIEW: CASTROL'S GIANLUCA MARUCCI TALKS IMO 2020 ..... " 21

**INDUSTRY**

EUROPEAN TRANSPORT TO CUMULATE IN VERONA ..... " 25

**LOGISTICS**

THE TUNNELS PROMISING TO OVERHAUL HOW OUR SHOPPING IS DELIVERED ..... " 28

**LAW & REGULATION**

LEAKED EU GREEN DEAL COULD SUIT THE RAIL FREIGHT SECTOR ..... " 31

**PROGRESS & TECHNOLOGY**

WORLD'S FIRST ISO APPROVED DRONE SAFETY STANDARDS ANNOUNCED ..... Page 34

**STUDIES & RESEARCH**

GLOBALIZATION IS EVOLVING, NOT DECLINING, SAYS DHL CHIEF ..... " 38

**REEFER**

CAPT PETER ARRIVES TO BOOST MAERSK-HAMBURG SÜD PERISHABLES SERVICES ..... " 41

**ON THE CALENDAR** ..... " 43

**December 15<sup>th</sup> 2019**

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## PORTS AND TERMINALS

### MEMORANDUM OF UNDERSTANDING SIGNED TO PROMOTE LNG IN LIGURIA

A memorandum of understanding to define a shared path between the local bodies for LNG, the liquefied natural gas, to introduce it as an alternative fuel, explaining the advantages, both in environmental and safety terms, at every level.

This is, in summary, the objective of the agreement signed by the Liguria Region, the Metropolitan City and the Municipality of Genoa, the Port System Authority of the Western and Eastern Ligurian Sea, the Maritime Direction for Liguria, University of Genoa, Fire Brigades and Ligurian Chambers of Commerce, which becomes a starting point to start a virtuous path for the introduction of this technology.

"The memorandum signed represents a unicum in the national territory - underlines the councilor for economic development of the Liguria Region Andrea Beneduti - and for the first time, on the theme of the diffusion and promotion of Liquefied Natural Gas, all the main public institutions, each in its own ambit and for its own competence, contribute to coordinated and shared actions".



"The memorandum meets three requirements: introducing LNG as an alternative fuel, explaining, at every level, the advantages, both in environmental and safety terms, and responding to the growing demand for LNG", continues Beneduti.

From this document, however, it will also begin a path to identify the location of the deposits in the Genoa area.

"This protocol has the purpose of deepening, and not lowering the decisions from above - underlines the councilor for environment and transport of the Municipality of Genoa, Matteo Campora - because it will allow to identify, from a technical point of view, the areas that could host the facilities".

Also because this type of fuel could feed, in addition to ships, also public transport.

"We know that the LNG is necessary for the development of ports - concludes Campora - but it can also be a means by which to feed local public transport".

*(from: e-gazette.it, December 4<sup>th</sup> 2019*

## MARITIME TRANSPORT

### CHINA'S ALL-EMBRACING MARITIME INFLUENCE

In the maritime world conversations among professionals soon turn to China, reflecting the country's pervasive influence.

After rapid enlargement during the past two decades, this presence is at the forefront of both the demand and supply sides of many global maritime market sectors.

And looking ahead, signs of a changing emphasis are becoming more visible.

Aspects of China's role are discussed in the Review of Maritime Transport 2019 (RMT), published at the end of October by the United Nations Conference on Trade and Development.

Activities reviewed in this annual report include China's seaborne trade, Chinese ports, the China-owned fleet, and shipbuilding in China.

One aspect highlighted is the overdependence of global sea trade on import demand in China.

#### *Seaborne trade*

The RMT draws attention to the large proportion of global seaborne trade growth which is attributable to expansion of China's imports.

Over the past ten years, from 2008 to 2018, imports of all types of cargo into China grew by over 1500 million tonnes, equivalent to nearly half (49 percent) of the increase in the entire world's imports.

As a result of the trend, in 2018 more than a fifth of world seaborne trade was comprised of China's imports.

These figures largely explain why the outlook for future trade is perceived to be heavily dependent on progress in China's economy, and in the industries and agricultural activities which are reflected in seaborne cargo movements.

Currently, the economy is on a slowing trend.

Government policy envisages a transition to a more sustainable economic growth pattern, which shifts the emphasis away from capital investment and manufacturing towards consumer spending and services.

It is a change potentially restraining China's seaborne trade flows, with substantial consequences for global shipping markets.

Justifications for expecting changes in China's trade trends are not discussed in detail in the RMT.

However, some of the reasons for expecting a modified pace are quite conspicuous.

As the economy matures, part of the impetus behind commodity imports into China probably will fade.

More specifically, reduced emphasis on further expansion of industries which have been, during the past decade or more, growing at an exceptionally rapid rate is likely to have implications for import demand.

Changes in the balance between domestic commodity production and foreign supplies, and in manufacturing processes, also could have restraining effects on imports.

One potentially positive influence, not yet quantifiable with any precision, is the impact of the Belt & Road Initiative.

Infrastructure building and industrial development connected with this extensive project could result in additional flows of commodities and manufactured goods, providing a boost for seaborne trade.

However, as the RMT comments, it is unclear whether extra volumes of cargo arising would offset adverse influences affecting China's imports.

According to UNCTAD calculations, growth in the volume of merchandise imports decelerated to 6.4 percent in 2018, after accelerating to 8.9 percent in the previous year.

Merchandise exports volume growth slackened to 4.1 percent last year, after surging to 7.1 percent in the preceding twelve months.

Alternative calculations for these years, published by Clarksons Research, show changes in China's specifically seaborne trade volumes.

Based on this source, imports of all seaborne cargoes totalled 2521 mt in 2018, a 3.4 percent increase, after growing by 8.1 percent in the previous year.

Exports of all seaborne cargoes were almost flat in 2018 at 586mt, after a marginal 1 percent decrease in the previous year.

As a key player in container trade movements, China's diminishing role in Asia's low-cost manufacturing is a feature.

The RMT points out that "China has become more self reliant and increasingly requires less imported inputs for production.

This shift is altering the demand for intermediate goods and weighing on intra-Asian containerized trade flows".

International trade tensions, especially between China and the United States, are also a topic.

Tariffs introduced have affected up to two percent of global seaborne trade, with exposure varying among cargo types and market segments.



Geographical trade patterns have changed as a consequence.

Another observation, from the OECD organisation in its November 2019 report on the world economy, emphasises that escalating conflict over tariffs has weakened world trade and business investment, contributing to a continuing global economic growth slowdown.

### *Port activity*

An entire chapter in the RMT 2019 edition is devoted to performance indicators for the maritime transport sector.

Port performance and connectivity is a focus, with coverage of China among nine hundred ports in countries around the world.

UNCTAD's new port liner shipping connectivity index was created recently, to show the position of a port or country in the global container shipping network.

The index is designed as an indicator of accessibility to global trade.

There are also new statistics on port calls and vessel turnaround time spent in port.

China is revealed as the most connected country, and has improved its liner shipping connectivity index by 51 percent since 2006, more than double the 24 percent improvement for the world average in this period.

Shanghai is described as now the most connected port in the world, after overtaking Hong Kong, and Shanghai and Ningbo have strengthened their lead.

Container port traffic through mainland China's ports comprised 28.5 percent of the world total in 2018.

Most of this traffic consists of Chinese exports, augmented by imports and coastal movements.

### *China-owned fleet*

Shipowners based in China have doubled their share of the world merchant ship fleet since the early years of this century.

In the early 2000s China-owned ships comprised 5-6 percent of the total deadweight tonnes capacity of the global fleet of all types of commercial vessel.

At the beginning of 2019 the proportion was 10.5 percent, according to figures contained in the RMT, about one percentage point higher than seen at the same point in the previous two years.

During 2017 and 2018 the China-owned fleet grew rapidly, resulting in a 1 January 2019 total of 206.3m dwt, comprised of 6125 ships.

The total places China still in third place among the world's largest shipowning countries by nationality and location of owner, after Greece in top position (17.8 percent of world capacity) and Japan in second place (11.5 percent).

Over the five years since the beginning of 2014, when the China-owned fleet totalled 158.7m dwt, cumulative capacity added was 47.6m dwt or 30 percent, according to UNCTAD statistics.

The past two years saw especially strong annual growth rates, 10.7 percent in 2017 and 12.7 percent in 2018.

This progress corroborates evidence of a government policy priority to increase the proportion of nationally-controlled sea transport in prominent market segments.

Statistics also show registration breakdowns for fleets.

At the beginning of this year over half, 56 percent, of the China-owned fleet was registered under foreign flags, with the remainder registered under the national flag.

These proportions have not changed greatly in recent years.

By contrast owners in the other two largest shipowning countries register a much larger part of their respective fleets under foreign flags, currently 83-84 percent.

The latest RMT has a greater emphasis on environmental sustainability in the maritime sphere, reflecting the evolution of this aspect as a major policy concern, with associated regulations increasingly affecting market dynamics.

The report introduces environmental indicators for the world fleet as a whole, and for individual countries including China.

It comments that the shipping industry is currently in a transformational phase, including environmental development.

Three features are identified as indicators relevant to assessing the environmental impact of vessels: ballast water treatment systems, exhaust gas cleaning systems (scrubbers) and compliance with tier III regulations to reduce nitrogen oxide emissions.

Percentages of the number of ships in the China-owned fleet which had these features, at the beginning of this year, were 8.05, 0.43 and 0.13 percent respectively.

For comparison in the Japan-owned fleet the figures were 13.13, 0.14 and 0.16 percent respectively.

### *Shipbuilding*

Among the three largest shipbuilding countries, China is well-established, together with South Korea and Japan.

In 2018, as reported in the RMT, China contributed 40 percent of world newbuilding deliveries, measured by gross tonnes.

The China total was 23.3 million gt, compared with 14.6m gt in Korea and 14.4m gt in Japan.

These three countries comprised nine-tenths of the global newbuildings volume.

A large part of activity in China's shipbuilding yards consists of bulk carriers, two-fifths of the country's total newbuilding deliveries last year.

Container ships were also prominent, comprising 29 percent, and tankers comprised 21 percent.

The remaining 10 percent included mainly general cargo ships and offshore vessels.

In recent years Chinese shipbuilders have made considerable progress in producing more complex vessel types, gaining orders for liquefied natural gas carriers and cruise ships.

Figures compiled separately by Clarksons Research show the full extent of the world orderbook for merchant ships.

When 2019 began, China had the biggest shipbuilding orderbook for new vessels, scheduled to be delivered on completion mostly during 2019 and the following two years.

Orders placed at Chinese yards by shipowners in China and other owners around the world totalled 56.9m gt, a 39 percent share of the world total.

The next largest element was South Korea with 30 percent.

Shipbuilding activity in China and elsewhere has been adversely affected in recent years by over-capacity and subdued ordering.

As UNCTAD analysts observe, the worldwide industry has been “undergoing reforms to ensure competitiveness..., mitigate the impact on a labour-intensive sector and develop a modern vessel-construction model fit for the future”.

One theme has been consolidation of shipbuilders.

In China a merger between the two main shipbuilding companies, China State Shipbuilding Corporation (CSSC) and China Shipbuilding Industry Corporation (CSIC) has been approved.

### *Future perspectives*

Analysis of these prominent aspects of China’s maritime role benefits greatly from the valuable insights and commentary contained in the Review of Maritime Transport 2019.

Important clues are provided about how future trends in China and other countries may evolve, although forecasting is not the principal feature.

One firm forecast which is included in the RMT, although not focusing on China specifically, is worth examining.

UNCTAD analysts expect global seaborne trade to grow at an average annual rate of 3.4 percent in the five years from 2019 to 2024, a notably upbeat outlook.

It is suggested that growth will be driven by rising trade volumes in the container, dry bulk and gas cargoes sectors.

However, it is acknowledged that “uncertainty remains an overriding theme...with risks tilted to the downside”.

When historical growth patterns are examined, it is evident that this 3.4 percent average world seaborne trade growth forecast, for the next five years, replicates the preceding performance.

It compares with a similar 3.4 percent average growth rate seen in the past eight years, from 2011 to 2018.

In that period actual annual growth rates were in a 2.2 – 4.2 percent range.

Arguably, the future trend in several major parts of world seaborne trade – coal, iron ore and crude oil – comprising two-fifths of the total volume could be broadly flat, or even negative.

This alternative prospect suggests that average overall growth predictions exceeding 3 percent annually are too optimistic.

A significantly lower average 2 percent increase may be more likely.

Within this view of global trade prospects, perceptions about China’s future performance are central.

Expanding imports into China have been a large part of growth in global seaborne trade during the past decade or longer.

If China’s import expansion rate slackens over the next five years as seems probable then – especially in the absence of a compensating surge in import demand elsewhere – the impact will be widely felt in many activities in the maritime world.

*(from: hellenicshippingnews.com, November 26<sup>th</sup> 2019)*

## RAIL TRANSPORT

### **SWISS SUBSIDIES FOR RAIL FREIGHT REMAIN IN PLACE TILL 2026**

The Swiss government will extend its subsidising scheme for rail freight operations up till 2026.

Previously, these subsidies were to be abolished in 2023.

In addition, track access for freight trains in Switzerland will be lowered starting from 2021.

This is to support the shift from road to rail for transalpine traffic, an ambition which has been an integral part of the national policy since 2000.

The Federal Council announced these decisions on 13 November, after it adopted the relocation report 2019.

This report comes out every two years to evaluate the status of the modal shift policy and analyse expected results.

Although the 2019 report shows that the existing measures are effective, it also revealed that the targeted reduction to 650,000 truck journeys per year were not accomplished.

The Federal Council therefore proposed a package of measures to further strengthen the modal shift.

#### *Subsidies until 2026*

The extension of the subsidy scheme is an important part of the package.

The Federal Council has requested the Parliament to extend the payment framework up till 2026.

In the period 2024-2026, an additional 90 million francs (82.2 million euros) will be made available to compensate unaccompanied combined transport operators.

Although the Swiss rail freight market has been preparing for the loss of subsidies, various parties expressed their concern that it would harm the market.

According to Hupac, the largest intermodal operator on the market, only half of today's operating subsidies, around 110 million francs (0.88 million Euros) for the entire transalpine combined transport, could be compensated by 2024.

### *Lower track access charges*

The lowering of track access charges has been on the agenda for a little longer, but has now also been confirmed in the package of measures.

This was done via an amendment to the Network Access Ordinance adopted by the Federal Council.



Starting from 1 January 2021, the charges for using the Swiss railway network will be decreased by around 90 million francs (82.2 million euros) every year.

In addition, a special discount is to be introduced for long freight trains, since long trains can make better use of the infrastructure's capacity.

The Swiss charges are currently relatively low compared to other EU countries.

However, Germany and the Netherlands have also planned similar measures, increasing the pressure on Switzerland to remain competitive in its railway pricing.

### *Other measures*

Other measures included in the package are an adjustment in the classification of distance-related heavy goods vehicle charges (HGVC).

Lorries of emission classes EURO IV and V should no longer fall into a more favorable category.

This should encourage a shift of heavy-good vehicles to rail.

Since 2001, lorries on all Swiss roads pay distance, weight and emissions-related charges.

Two thirds of the revenues are allocated to the Rail Infrastructure Fund (RIF).

Without the latest adjustment, the weighted average would fall from 293 francs (2018) to 275 francs in 2024, the Swiss Federal Office of Transport explains.

A fourth measure is the intensifying of heavy traffic inspections, among other things by realising the heavy goods traffic control center Gotthard south in Giornico.

Also this measure is aimed at encouraging the shift of HVG's to the railways.

### *Volumes*

The Swiss modal shift policy provides that the number of journeys by domestic and foreign lorries and semi-trailers through the Swiss Alps must be lowered from what was 1.4 million in 2000 to 650,000 per year.

In the years 2017 and 2018, 954.000 and 941.000 transalpine journeys of HVG's were counted respectively.

Hence, the target was not achieved.

Positively, the number of journeys by HVG's over Swiss roads decreased by 3.5 per cent in the period 2016-2018.

Compared to the reference year 2000, the decrease is even 33 per cent, meaning that a third of these vehicles were taken off the road since the start of the modal shift policy.

On the other hand, the numbers are not positive for rail freight transport.

Rail freight transport through the Alps witnessed a drop of 2.6 per cent in the period 2016-2018.

At the end of 2018, the share of rail in transalpine freight traffic was at 70.5 per cent, 0.5 percentage points lower than in 2016, the 2019 report reads.

### *Railway link through the Alps*

The rail freight volumes should be lifted significantly with the opening of the Ceneri Base Tunnel in 2020.

The New Railway link through the Alps (NEAT), a passage of tunnels and railroad, is then completely operational.

The entire north-south axis is then also accessible for 4-metre height trains, which should have its effect in 2021.

Although the NEAT was a core element to support the shift to rail by reducing production costs and increasing capacity, this alone will not be enough to achieve the modal shift ambitions, the rail freight market has repeatedly said.

This has now been recognised by the Swiss government.

The package of measures, in combination with the NEAT should lead to more satisfactory results.

*(from: railfreight.com, December 10<sup>th</sup> 2019)*

## ROAD TRANSPORT

### **TAPA SEEKS TALKS WITH BRUSSELS ON TRUCK PARKING STANDARDS**

The Transported Asset Protection Association (TAPA) is urging the European Commission to “listen to the voices of buyers and decision-makers” to drive the growth of the EU’s new Safe and Secure Truck Parking Areas (SSTPA) Standard, as recorded cargo thefts from trucks in Europe break all previous records in 2019.

It said that with the lack of secure parking places “now representing the biggest threat to the safety and security of drivers, trucks and cargo in Europe”, TAPA was “ready to bring its more than 20 years’ experience of overseeing successful certification programmes to the discussion table to ensure businesses have access to, and trust in, a robust and affordable solution”.

By aligning its own, fast-growing Parking Security Requirements (PSR) industry standard with the EU’s emerging programme, the association said it “will help the Commission accelerate the growth of safe and secure parking places in Europe and eliminate any confusion in the industry between the two Standards.

In calling for constructive dialogue with the Commission, TAPA proposes adapting its PSR to embrace the core requirements of SSTPA, while retaining the association’s existing and proven methods of oversight which has been supporting facility, trucking and secure parking certifications for industry for over two decades.”

Thorsten Neumann, president and CEO of TAPA in the Europe, Middle East & Africa (EMEA) region, commented: “We are not looking to compete with the EU SSTPSA; we simply want to add value to it.

As the leading supply chain security association for manufacturers and logistics service providers, we represent secure parking buyers and decision-makers.

“In PSR, we have developed a standard which has been created by industry, for industry and is already being used at 53 parking locations offering more than 5,000 secure parking places in 10 countries.

By the end of 2020, we expect to have 80 PSR certified sites and have put the infrastructure and expertise in place to deliver a full end-to-end certification support to the industry.”

He continued: "TAPA has played an active role in supporting the Commission's safe and secure parking standard but we also recognise that businesses are cautious because the EU LABEL project, the predecessor to SSTPA, failed to attract many parking sites and certifications were not maintained.

Our solution is based on this business reality as well as our knowledge of what customers of secure parking places will accept.

"We support all initiatives, standards and regulatory requirements which promote the safety and security of people, goods, equipment and services in the global supply chain as long as they are affordable, easy-to-adopt, fit-for-purpose and sustainable.

We hope the Commission's representatives will step forward to talk to us to achieve a real step change in secure parking in Europe."

TAPA already works successfully with EU LANDSEC to support its security objectives.



"We confidently believe a mutually-recognised TAPA PSR Standard, aligned with the EU SSTPA Standard, will receive broad industry support because it makes no sense to have separate standards," Neumann added.

"The proposal we are making offers assurance to buyers of secure parking places and Parking Place Operators because it includes TAPA's proven capability of administering and growing independent certification programmes alongside the requirements of the EU."

TAPA's solution is outlined in its new Position Paper on 'Support for Truck Parking in European Union Member States'.

European Parliament research has previously estimated that cargo crimes cost businesses in Europe some €8.2 billion a year.

In the first 11 months of 2019, TAPA's Incident Information Service (IIS) recorded over 3,500 cargo thefts from trucks parked in unclassified parking locations in the EMEA region, with as recorded cargo thefts from trucks in Europe breaking all previous records in 2019 – based on cargo crimes reported to TAPA's Incident Information Service (IIS) in the Europe, Middle East & Africa (EMEA) region.

The number of cargo crimes reported to TAPA's IIS has been climbing annually over the past five or more years.

2018 was the previous highest number of recorded crimes – with TAPA's 2018 IIS Annual Report reporting 3,981 incidents in the EMEA region, up 38.2% on 2017.

In the first nine months of 2019, the association's quarterly reports have already published 4,783 incidents – already easily surpassing last year's record.

TAPA believes that information on the vast majority of incidents is still not being captured.

*(from: lloydsloadinglist.com, December 4<sup>th</sup> 2019)*

## INTERMODAL TRANSPORT

### RZD LOGISTICS ORGANIZED THE FIRST TRANSIT SHIPMENT FROM EUROPE TO JAPAN VIA RUSSIA

RZD Logistics JSC, the largest multimodal logistics operator in the CIS and Baltic countries, successfully transported the first transit container from Europe to Japan through the territory of Russia within the Trans-Siberian LandBridge - the service for expedited delivery of transit cargo.

The 40-foot test container, consisting of various groupage cargoes, was departed from Hamburg (Germany) to the port of Yokohama (Japan).

The shipping customer was one of Japan's largest forwarding companies Nippon Express Co., Ltd.



The route passed through the Malashevich-Brest border crossing, and then through the territory of Belarus and Russia to Vladivostok, from there the container was delivered by sea to the destination point.

The cargo was in transit for 22 days, 10 days of which were in the space of the 1520 gauge.

The container was equipped with temperature, humidity and vibration sensors so that the customer could verify the safety and quality of transport along the Trans-Siberian Railway.

In addition, throughout the entire time the service was provided, the client was provided with detailed information on the location of the cargo on a daily basis.

"Since the end of May this year, we have been organizing transit shipments from Japan and Korea to Europe via the Russian Far East via the Trans-Siberian Railway as part of the Trans-Siberian LandBridge service.

And the launch of shipments in the opposite direction from West to East is a logical continuation of the development of our promising logistics product.

The first test large-tonnage container destined for the port of Yokohama demonstrated to the Japanese client that this multimodal route is not only more than twice as fast as shipping by sea, but also guarantees cargo safety throughout the entire transportation period.

In Trans-Siberian LandBridge, we see very great potential, as many shippers are extremely interested in reducing transit time between the European countries and Japan.

For example, only Nippon Express annually delivers about 10 thousand TEU via deep sea to Europe and back", Vyacheslav Valentik, General Director of RZD Logistics JSC.

Trans-Siberian LandBridge is a new multimodal transit service for the expedited delivery of cargoes in containers from Japan to Europe and back through the ports of the Russia's Far East and the Trans-Siberian Railway.

The service can significantly reduce the shipping time in comparison with traditional sea routes or transit through China.

Trans-Siberian LandBridge is the main tool for the implementation of the agreement between Russian Railways, the Ministry of Transport of the Russian Federation, the Ministry of Land, Infrastructure, Transport and Tourism of Japan and the Association of Trans-Siberian intermodal operators of Japan on the organization of container transportation using rail transport in the Japan-Russia-Europe connection.

*(from: rzdlog.com, December 2<sup>nd</sup> 2019)*

## TRANSPORT & ENVIRONMENT

### INTERVIEW: CASTROL'S GIANLUCA MARUCCI TALKS IMO 2020

Gianluca Marucci is Global Director of Technical Services at Castrol, a leading global supplier of marine lubricants.

With less than a month to go before the IMO 2020 0.5% sulphur cap, Castrol's global technical services teams stand ready to provide a range of 2020-compatible lubricants and technical support at over 800 ports worldwide to help shipowners and operators comply with the new rules.

By working closely with customers, Gianluca has had his finger closely on the pulse of the shipping industry's preparation for the new regulations, the challenges facing ship owners and operators, and things the industry can do better prepare itself for even greater challenges going forward.

*How do you see the marine lubricants market being impacted by IMO 2020?*

It's heavily impacted.

The decisions that operators are going to have to make are more complex in 2020.

They have different ways to comply (example: scrubbers, low sulphur fuel, alternative fuel, etc.) and depending on which way they go, there is a different product to match their decision.

In addition to this, there's also some, what we call, "known unknowns".



This refers to things that we know are going to happen, but we may not fully understand the impact of them because we are not yet there.

Right we are less one month to going live with the legislation, but until we get there we will not know.

So it is definitely going to be a more complex environment for all operators.

The other thing is that operators will need to look at how they operate their engines in a more holistic way.

It's not just the fuel, it's the lubricants, and also the way they are operating their engines.

*What are the engineering risks associated with switching to Very Low Sulphur Fuel Oil (VLSFO)?*

In theory, there shouldn't really be any risks, that is as long as the compliant fuel is as per specifications.

The risks might be two-fold, however.

One is around the different types of compliant fuel that is available to the market.

For example, there might be blended fuels, low sulphur fuel but heavy fuel in terms of viscosity.

So the fuel type availability is going to be very diverse, especially in the beginning, so there's a risk related to the compatibility of these fuels.

The other is around really matching the right lubricant with the right fuel.

We've been talking with a lot of our operators and their main focus is on fuel, but it's not just the fuels, you need to match the right lubricant with the right fuel to avoid any issues with the engine, as well.

But in theory, if you do things right and you use the right fuel and couple that with the right lubricant, the two of them will be very intrinsically linked fuels and there shouldn't be any major risks.

*So it sounds like it falls on operators to make sure the right fuel is sourced and used with the right lubricants?*

It's not just the operators.

For example, on our side, we've been working for many, many years on the new product range.

But not only that, but we've also been talking and engaging with our customers.

I lead the technical support team for Castrol's marine business and we've been spending the last 18 months visiting with customers and explaining how they need to prepare.

For example, making sure to choose the right lubricant depending on which compliance decision they've made.

So there has been a lot of work that has been done in preparation for this.

Another element I can think of is also technical support.

As the operators move into 2020, what is very important is to start monitoring the engines very closely.

There are means to do that which allows the operators to really understand what the engine is doing.

We have a lot of expertise on this as we've been doing this for years and years.

At Castrol, we like to provide a kind of consultancy service.

So, it's not just passing over a piece of paper with numbers, but really giving the interpretation of those numbers and explaining to our customers what they should do.

As they move into 2020, it should be fundamental to do that because they need to find a new balancing point, or new normal as we like to call it.

*What is the ideal new feed rate for a two-stroke engine when operating with VLSFO and the 40 Base Number (BN)?*

Nobody knows yet.

Once we get there, we will work with the customer to help them find what is the optimal feed rate.

*From a lubricants perspective, what do you see as the biggest challenge to IMO 2020?*

From a lubricants perspective, the challenge is the fact that with sulphur going to 0.5, the engine is going to operate in a very different way, for both the two- and four-stroke side.

*Do you think the hysteria surrounding IMO 2020 is overblown?*

This is one of the major changes for the industry for a long time.

I've been in this industry for 20 years and I remember 2020 being very far away, but now it's happening.

So this is, indeed, a major change in the industry.

From my experience and what I've seen from talking to customers over the last months and years, customers are preparing for that, everyone in the industry is preparing for that.

We are preparing our footprint so that the new products are available where the customers need it.

*Is there a main lesson you would like to get across as we approach the IMO 2020 deadline?*

I think that if there's a lesson from all of this, it's that companies need to collaborate more.

Operators, us as suppliers, engine manufacturers, etc.

Also, we believe that 2020 is not the end, it's the beginning.

We think that changes are going to happen at pace after 2020.

There'll be other changes in the legislation as well.

We are in an industry where things have been very stable for a long time, but IMO 2020 is not the final change.

There's still a number of changes that are happening at pace going forward.

But overall, I think customers are getting ready for next January 1.

If there's a main takeaway, I think calling on the industry to have a collaborative approach to 2020 and beyond is very important.

These changes are happening at pace, so if all of us can work more collaboratively, we can get ready and prepare for these challenges ahead of us.

That's really what I'd like to stress.

*(from: gcaptain.com, December 5<sup>th</sup> 2019)*

## INDUSTRY

### EUROPEAN TRANSPORT TO CUMULATE IN VERONA

The Interporto Quadrante Europa has great plans in the pipeline.

It is set to invest EUR 59 million in its railway infrastructure that will bring new tracks, more trains and a position as one of the continent's leading terminals.

The facility is already very well developed today; Freja joined its customers in October with the launch of a new service between Kiel and Verona.

Interporto Quadrante Europa is the poetic name of one of Italy's largest freight villages.

Southwest of the city of Verona there are intersections of both the north – south and the east – west motorways, as well as of railway lines.

This rather advantageous traffic location enables the Interporto Quadrante Europa to handle a total of approximately 28 million t of goods.

Approximately 8 million t thereof are handled by the railways today, with the remainder being hauled by road.

#### *Brenner tunnel to bring more traffic*

One of the objectives of the exercise is to massively boost the railway's share of activities there.

The state-owned rail infra-structure operator RFI and Consorzio Zai, which operates the freight village, have announced that the village's train-handling capacities are set to be increased.

The project includes the construction of a new compound with five 750 m railtracks, gantry cranes and warehousing.

Interporto Quadrante Europa's overarching aim with this measure is to increase its capacities, to put it in a position to be able to manage the expected growth of railfreight activities.

In particular, operators expect the volume of goods traffic to increase once the Brenner base tunnel is completed and the high-speed rail network is extended to the east of Italy.

On top of this there are the EU's goals, which call for 30% of all goods transport that covers more than 300 km to be handled by the railways by the year 2030.

The share has to rise to 50% by 2050.

Total investment in this project, including modernising the operational railway station, come to around EUR 59 million.



The EU is contributing some of its financial support.

The undertaking is due to be completed by 2026.

“When the Brenner base tunnel starts operations in 2028, the Italian transport system must seize the opportunities that will arise,” RFI director general Maurizio Gentile underlined.

Matteo Gasparato, chairman of the Consorzio Zai, emphasised the pro-active approach to the expansion of the Interporto Quadrante Europa.

“Regional, national and continental infrastructure plans are our yardstick.

Verona is ready to take a leading role amongst European terminals.”

#### *From Oslo all the way to Verona*

Since mid-October this year a new train service operated by Freja has been one of the roughly 16,000 trains that shuttle to and from the Interporto Quadrante Europa annually.

The Danish logistician established this new service between Oslo and Verona in collaboration with Color Line Cargo.

The new vessel Color Carrier sails from Oslo to Kiel once a week.

The consignments are transferred to a railfreight train in the German North Sea port.

The train has the capacity to carry 30 trailers.

Basically, it is open to anyone to use, but by and large, Freja makes use of most of the capacity itself.

The train departs from Kiel on Sunday afternoon, it reaches Verona early on Tuesday morning.

Besides the advantages of protecting the environment, the train's capacities are also a motivating factor for Freja.

One trailer can carry 29 t on the railways, compared with 24.5 t on a lorry.

On top of this there are the well-know Sunday driving bans, as well as other restrictions in play.

The link is suitable for all goods, with car parts offering a great potential; Volkswagen has a large compound in the Interporto Quadrante Europa.

*(from: transportjournal.com, November 28<sup>th</sup> 2019)*

## LOGISTICS

### THE TUNNELS PROMISING TO OVERHAUL HOW OUR SHOPPING IS DELIVERED

When businessman and engineer Roger Miles pitched his idea for an underground delivery system to the UK government in 2003, he was told that it “doesn’t invest in crackpot ideas”.

The transport department felt that his plan to build a network of tunnels to transport parcels — an idea developed by the Victorians in London — was not an economically viable alternative to the trains and trucks that typically handle deliveries, according to Mr Miles.

But by 2050, the UN predicts that 68 per cent of the world’s population will live in urban areas.

Such demographic changes will increase the need to figure out how to deliver goods to consumers in these congested, sprawling megacities efficiently and without harming the environment.

To answer this conundrum, governments and companies are taking underground delivery systems more seriously.



“If we’re going to solve the climate crisis, we’re going to need innovative solutions,” says Phill Davies, commercial director of Magway, a delivery company that is developing technology to transport parcels via a network of pipes.

The system uses magnetic motors, powered by electricity, to shuttle pods filled with goods through pipes above and below ground that measure 90cm in diameter.

The company says it received £653,998 from the UK government in 2018 to build a prototype for a pipeline that could move goods from a warehouse in Milton Keynes, Hertfordshire, to a consolidation centre in Park Royal, west London.

Though Magway is currently focused on freight delivery, in future it hopes to install 850km of track in London's decommissioned gas pipelines to deliver parcels to consumers in the city.

By 2050 the company estimates its technology could cut current carbon dioxide emissions from delivery vehicles by a third, while ensuring that 94 per cent of the city's population can reach a station to collect their goods (known as "delivery nodes") in less than 15 minutes on foot or by bicycle.

Some of the world's biggest companies are also experimenting with technology to ferry goods through tunnels from warehouses on the edge of town direct to customers' homes or nearby pick-up points.

In 2017, Amazon patented an underground delivery system that moves packages from regional depots to delivery nodes in city centres using conveyor belts and rail cars.

The patent also states that containers could travel through a vacuum or a liquid or gas-filled pipe.

Alphabet subsidiary Sidewalk Labs says its planned underground delivery system, which would use "electric, self-driving delivery dollies [carts]" to link a logistics hub on the edge of town with the basements of residential and commercial buildings, could reduce truck traffic in Toronto's Quayside neighbourhood by 72 per cent.

The potential benefits are not just environmental, however.

The technology could also prove cost effective for businesses given that the "last mile" of a package's journey — from a regional warehouse to its final destination — accounts for roughly 50 per cent of the total delivery cost, according to a 2016 report by McKinsey.

That makes last-mile delivery ripe for disruption.

In the same report, McKinsey estimated that in the five years to 2016, start-ups looking to break into the last-mile market attracted just under \$10bn in funding.

But while the idea of underground delivery is no longer dismissed out of hand, doubts over whether it might solve the last mile problem linger.

Alan McKinnon, professor of logistics at Kuehne Logistics University, Hamburg, is "deeply sceptical" of Magway's ambition to use existing infrastructure.

"Mapping logistics operations on to a pre-existing network designed for a totally different purpose would be extremely difficult, near impossible, to pull off," he says.

While Clemens Beckmann, head of smart cities and last mile solutions at international courier company DHL, argues that “we need to make use of existing infrastructure”, he ultimately concedes that it is “completely utopian to think your Amazon delivery will ever shoot out from your fireplace into your lap”.

When it comes to last mile delivery, Mr Beckmann says it is better to trust in technologies that do not require the installation of a delivery pipe in every home.

Instead, he points to emerging technologies such as the replacement of traditional delivery vans with autonomous vehicles containing parcel lockers.

Customers could then be notified by text when their package is ready to collect — a technique already being used by several Silicon Valley start-ups — or pay professional queuers to pick up packages on their behalf.

Kyro, a distillery company based in Finland, already uses professional queuers for customers at festivals.

Delivery companies encouraging people to pick up goods themselves might sound counterintuitive, but the market is already heading that way.

Last month, the food delivery company Deliveroo announced plans to offer a new pick-up service at half of its UK restaurants.

Whether these other, more straightforward solutions to the last-mile problem might limit the growth of underground systems in city centres remains to be seen, but what is certain is that urban deliveries will look very different by 2050.

As Jesse Norman, minister of state for transport, predicted in a report published this year: “Over the next two decades, transport technology will change faster than at any time since the Victorian era.”

*(from: ft.com, December 3<sup>rd</sup> 2019)*

## LAW & REGULATION

### LEAKED EU GREEN DEAL COULD SUIT THE RAIL FREIGHT SECTOR

Brussel's draft plan for the European Green Deal was leaked last week.

If all what is ambitioned will actually go through, the future for rail freight looks bright.

The plan responds to many of the demands that have been made by the rail freight industry.

Most notably, the Green Deal is to support the shift from road to rail and inland waterways, as these are the most environment-friendly modes of transportation.

There should be a shift of 75 per cent of all traffic that is currently moved by road, the plan reads.



The rail freight sector has set the goal to increase railways' current share in freight transport from 18 per cent to at least 30 per cent by 2030.

"A shift to rail should be supported, for rail freight with an action plan of EU and national measures", the Community of European

Railway and Infrastructure Companies (CER) uttered a few weeks back, anticipating the European Green Deal proposal.

#### *Action plans*

These action plans seems to have been formed.

"The Commission will adopt a comprehensive strategy for sustainable and smart mobility by 2020 addressing all sources of emissions from the transport sector", the draft reads.

In doing so, it wants to ensure that prices reflect the true impact on environment and health of the different transport services.

Pricing is indeed one of the main topics the rail freight sector has highlighted.

“The European Green Deal should help implement robust carbon pricing for transport across the EU.

Specifically, it should allow taxing energy used in international aviation or maritime shipping and end subsidies for flying.

Moreover, it should make road charging more comprehensive”, the CER has said.

### *Road pricing*

The leaked document seems to resonate these ideas.

“The Commission will withdraw and resubmit ambitious proposals on the Eurovignette and Combined Mobility Directives to give fresh impetus to effective road pricing in the EU”, it says.

This proposal was made earlier but is currently stuck with EU member states in the Council of Ministers.

It is believed that through stricter road pricing, the shift to rail freight will be more likely and easily made.

It also wants to reduce the amount of free pollution credits allocated to airlines and propose a new set of air pollutant emissions standards for combustion engines.

Moreover, it wants to assess the possibility of including road transport emissions in the Emission Trading System to complement existing and future strengthened CO2 emission performance standards for vehicles.

### *Further impetus*

The CER has however suggested more far-reaching measures that are not yet clearly embraced.

Among others, it has suggested to significantly increase the Connecting Europe Facility (CEF) budget for transport.

“Besides developing rail infrastructure, investment is specifically required for electrifying further rail tracks, further digitalising railways and further reducing rail freight noise.

Robust funding should be provided for railway research and innovation.

A scale-up of private investment in rail projects should be facilitated.”

Moreover, the CER and other interest groups have repeatedly urged for incentives in the form of reduced track access charges, the CER even going as far as proposing a temporary waiver of part of rail track access charges, in order to achieve the objected 30 per cent modal split by 2030.

The European Green Deal is due to be unveiled on 11 December and is the work of the recently installed European Commission of Ursula von der Leyen.

The draft of the document:

[https://www.euractiv.com/wp-content/uploads/sites/2/2019/11/europeangreendeal\\_summary\\_for\\_permreps\\_leak.pdf](https://www.euractiv.com/wp-content/uploads/sites/2/2019/11/europeangreendeal_summary_for_permreps_leak.pdf)

was obtained by Euractiv last Friday.

*(from: railfreight.com, December 2<sup>nd</sup> 2019)*

## PROGRESS & TECHNOLOGY

### **WORLD'S FIRST ISO APPROVED DRONE SAFETY STANDARDS ANNOUNCED**

On Thursday, the world's first ISO approved drone standards have been announced by the International Organisation for Standardisation (ISO) following a 12-month period of consultation with drone professionals, academics, businesses and the general public.

The final publication of these new international safety and quality Standards for Unmanned Aircraft Systems (UAS) are set to have a massive impact on the future growth of the drone industry throughout the world, and, are the product of several years of cooperation and rigorous interrogation from all sectors of society.

This important first step is part of a wider deliverable by ISO which is expected to trigger rapid acceleration in the use of air drones by organisations keen to reap the rewards of this transformative technology, against a background of reassurance on safety and security within a new framework of approved regulatory compliance.



Today's announcement by ISO represents enormous progress in the standardisation of the global drone industry and is of particular significance in addressing the operational requirements of the more recognised and prevalent air drones, also known as UAS.

The new Standards include protocols on Quality, Safety, Security and overall 'etiquette' for the operation of commercial air drones, which will help shape future regulation and legislation.

It is the first in a series of emerging standards for air drones, with others due to address General Specifications, Product Manufacture and Maintenance, Unmanned Traffic Management (UTM) and Testing Procedures.

The Product Manufacture standards for UAS, which are due to be published next year, will combine with the operational standards already published to establish a full-airworthiness suite of standards for UAS.

Commenting on today's announcement, Robert Garbett, Convenor of the ISO Working Group responsible for global air drone operational Standards, Chairman of the BSI Committee for UK Drone Standards and Founder of Drone Major Group, the world's first global drone consultancy, said: "I am delighted that the operating Standards for air drones have now been approved and published.

This success follows four years of collaboration involving ISO, BSI and other national standards bodies from all over the world, reinforced through expert input from a wide range of industry and public sector stakeholders.

The Standards will deliver a new confidence among investors in the safety, security and compliance of commercial drone operations, which together with the Product Manufacture and Maintenance Standards, is expected in turn to facilitate a massive expansion in the availability and use of drone technology in the years to come.

Drones are a transformative global phenomenon, offering an unprecedented economic opportunity for those businesses and countries with the foresight to embrace this technology.

My own conversations with Government, businesses and other stakeholders have shown that the new Standards will be enthusiastically welcomed and will empower organisations to discover how they can use drone technology to enhance their competitive position, adding value and creating growth and jobs."

### *Air safety*

A key attribute of the ISO Standards announced today is their focus on air safety, which is at the forefront of public attention in connection with airports and other sensitive locations.

The new Standards promotes an 'etiquette' for drone use that reinforces compliance towards no-fly zones, local regulation, flight log protocols, maintenance, training and flight planning documentation.

Social responsibility is also at the heart of the Standards, which strengthens the responsible use of a technology that aims to improve and not disrupt everyday life.

The effectiveness of the Standards in improving air safety will be further strengthened by the continuing rapid development of geo-fencing and counter-drone technology, providing frontline protection against 'rogue' drone operators.

### *Privacy and data protection*

The Standards also seek to address public concerns surrounding privacy and data protection, demanding that operators must have appropriate systems to handle data alongside communications and control planning when flying.

The hardware and software of all related operating equipment must also be kept up to date.

Significantly, the fail-safe of human intervention is required for all drone flights, including autonomous operations, ensuring that drone operators are held accountable.

### *The exciting future for drones*

Air drones are already beginning to provide solutions to some of the most pressing economic, transport, security, environmental and productivity challenges faced by governments and industry throughout the world, reducing road traffic, easing congestion, saving lives through a reduction in accidents and reducing pollution in our cities.

As well as speeding up the delivery of large-scale infrastructure projects, drones are expected to reduce the need for some expensive new major transport infrastructure altogether.

New exciting applications for air drones are being developed daily.

Revolutionary approaches are emerging for freight and passenger transportation, with drones providing a cost-effective and environmentally responsible alternative to traditional methods, relieving the burden on our already stretched urban road networks.

Further applications in the agricultural, maritime, construction and energy sectors among others, are already transforming businesses, with virtually all industries and business sectors set to benefit from the Standard-led adoption of rapidly evolving drone technology.

### *Impact on the economy*

A number of recent reports have attempted to forecast the economic impact of air drones globally.

For instance, in its report *Drones Reporting for Work*, Goldman Sachs has estimated that the size of the global drone industry will reach \$100 billion by 2020.

Most recently, analysts at Barclays estimate that the global commercial drone market will grow tenfold from \$4bn in 2018 to \$40bn in five years.

They believe the use of drones will result in cost savings of some \$100bn.

These predictions relate solely to air drones, demonstrating that the economic benefits offered by drone technology are vast, with growth set to accelerate across surface, underwater, air & space, as well as emerging hybrid drone applications.

*(from: seanews.co.uk, December 6<sup>th</sup> 2019)*

## STUDIES & RESEARCH

### **GLOBALIZATION IS EVOLVING, NOT DECLINING, SAYS DHL CHIEF**

Globalization is evolving, not declining, according to the CEO of DHL Express, with the latest findings from the DHL Global Connectedness Index (GCI) indicating that the world remains more connected than at almost any other point in history, despite some strong recent headwinds in global geopolitics and trade.

DHL and the New York University Stern School of Business today released the 2019 update of the DHL Global Connectedness Index (GCI), which highlights key developments in international flows of capital, trade, information, and people.

Commissioned by DHL, the new report shows that shrinking international capital flows caused global connectedness to dip slightly in 2018.

However, despite strong headwinds in global geopolitics and trade, the GCI stayed close to its record high of 2017, with the report concluding that the world “remains more connected than at almost any other point in history, with no signs of a broad reversal of globalization so far”.

DHL Express CEO John Pearson commented: “International exchange empowers people and businesses around the world to collaborate and seize new opportunities.

While current geopolitical tensions could seriously disrupt global connectedness, this 2019 update finds that most international flows have remained surprisingly resilient so far.

Ultimately, what we’re seeing today is the evolution of globalization, not its decline.

Decision-makers need to be careful to not overreact to strong rhetoric or headlines.”

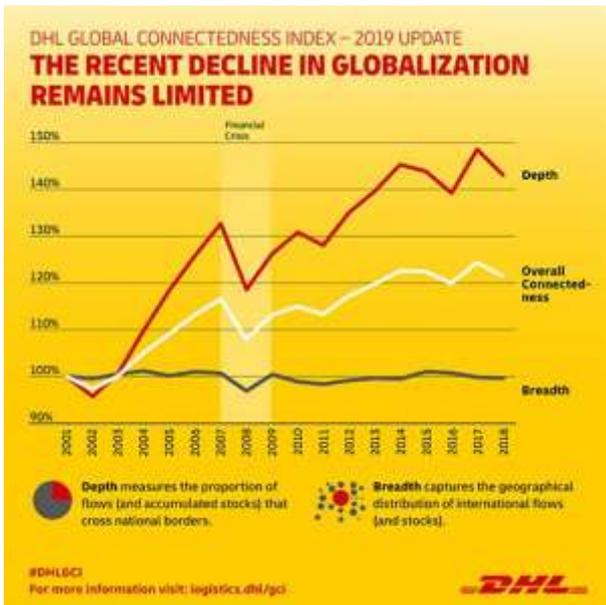
This update of the DHL Global Connectedness Index was calculated based on more than 3.5 million data points on country-to-country-flows.

It provides full coverage from 2001 to 2018, along with partial analysis of the first half of 2019.

The report also features a deep dive into the US-China trading relationship, “tracing the sharp decline in US-China trade, as well as an examination of recent claims that globalization is giving way to regionalization” the report noted.

Steven A. Altman, senior research scholar at the NYU Stern School of Business and lead author of the GCI, commented: “Our analysis does not confirm a robust regionalization trend.

Instead, we see that the average distance across which countries trade has held steady since 2012.



While fraying relations between major economies could lead to a fracturing along regional lines, such a shift has not yet conclusively taken place.”

The GCI update claims to show that trade flows “continued to intensify through the early stages of the US-China trade war in 2018.

However, this strength did not extend into 2019.

In the first half of this year, the share of global output traded across national borders fell.”

It continued: “While trade volume growth is likely to remain positive this year, it is not expected to keep pace with GDP growth.

Nonetheless, current forecasts suggest that trade intensity is on track for only a modest decline through 2020.”

It said capital was the only pillar of the index that declined in 2018, adding: “In fact, the pullback in global connectedness was entirely driven by shrinking international capital flows, specifically foreign direct investment (FDI) and portfolio equity investment.

While early capital flow data for 2019 suggest some stabilization, a robust recovery on these metrics remains elusive.

“However, a large part of the recent FDI drop was due to US tax policy changes, which have prompted US multinationals to repatriate earnings held abroad.

This suggests that fundamentals may be stronger than they appear, with no broad retreat from corporate globalization underway.”

Meanwhile, the globalization of information flows continues to progress, but available measures point to a possible slowdown.

“While growth of international communications has typically far outpaced the growth of domestic communications since at least the early 2000s, recent data suggest that both are now growing at more similar rates,” the report noted.

“Global people flows also continue to advance.

Outbound travel from emerging economies and liberalization of tourist visa requirements have given international tourism a significant boost.

Despite public policy controversies, international migration also continues to grow.”

Looking ahead, the 2019 update notes that “all four flows measured by the GCI – trade, capital, information and people – are currently running up against powerful headwinds.

Rising barriers and uncertainty about future openness are starting to carry significant costs.

At the same time, a survey on globalization perceptions reveals that many people do not realize how limited global connectedness actually is.

A summary of the report concluded: “While the world is more connected than at almost any previous point in history, most business still takes place within rather than across national borders.

The report highlights how such exaggerated perceptions of globalization can lead to distorted decision-making in business and an underestimation of the significant potential available from further increases in global connectedness.”

*(from: lloydsloadinglist.com, December 4<sup>th</sup> 2019)*

## REEFER

### **CAPT PETER ARRIVES TO BOOST MAERSK-HAMBURG SÜD PERISHABLES SERVICES**

The integration of Hamburg Süd's reefer container fleet into parent Maersk appears to have been completed today, after the German carrier announced it was offering all perishables shippers Maersk's remote container management (RCM) system.

The combined reefer fleet of the two carriers, including subsidiaries Sealand, Safmarine and Alianca, is now 380,000 units, all covered by RCM.

And Maersk today announced it had released a revamped RCM platform, featuring a virtual assistant app, Captain Peter, developed in conjunction with some of its largest perishables shippers, including Dole, Fyffes and Wiskerke Onions.

"Over the past two years, our RCM product has proven good value to our reefer customers, but we have also identified key areas of improving such a cargo visibility tool," said Ken West, reefer digital development manager at Maersk.

"With Captain Peter, we are significantly elevating the customer experience of working with the data, and building the foundation for delivering even more advanced features around it," he added.



One key development is exception reporting – the app “keeps an eye on the container's temperature, humidity and CO2 levels, and notifies the customer if something needs attention”.

Hamburg Süd said: “The added value of using RCM is that it enables customers to use this data to monitor their supply chain better, to make it much more efficient and reliable, and to thereby leverage great potential for cost savings.

As a special feature the data of the cargo probes for cold treatment cargo are available online.”

Chayenne Wiskerke, managing director of Wiskerke Onions, was an early customer of the RCM platform and said: "I choose Maersk and Captain Peter over others because I can see what is happening with my cargo.

You can't imagine the pain I'm feeling when I can't see what is happening during the voyage."

*(from: theloadstar.com, December 3<sup>rd</sup> 2019)*

## ON THE CALENDAR

- 15-17/12/19            Teheran            4th Asia Logitrans Expo
- 20-24/01/20           Davos              Caspian Week
- 29-30/01/20           Amsterdam        8<sup>th</sup> Ship Recycling Congress
- 30-31/01/20           Milano              Shipping, Forwarding & Logistcs meet Industry
- 05-07/02/20           Carrara            Seatec – Sea Technology & Design
- 05-07/02/20           Berlin              Fruit Logistica 2020
- 10-12/03/20           Stuttgart          LogiMAT 2020
- 11-12/03/20           Ravenna           REM 2020
- 11-12/03/20           Singapura        26<sup>th</sup> Maritime HR & Crew Management Summit
- 17-19/03/20           Shanghai          Intermodal Asia 2020
- 18-20/03/20           Padova            Green Logistics Expo 2020
- 19-20/03/20           Amsterdam       Home Delivery World Europe 2020
- 21-25/03/20           Verona            Transpotec Logitec SaMoTer – Asphaltica 2020
- 08-09/04/20           Rotterdam        24<sup>th</sup> Ballast Water Management Conference
- 21-23/04/20           Antwerpen        Antwerp XL / Shaping the future of breakbulk
- 23-24/04/20           Shanghai          The 9<sup>th</sup> Annual Event Green Shiptech China Congress 2020
- 28-30/04/20           Moskva            14<sup>th</sup> LTE.CRANES
- 12-14/05/20           London            Infrarail 2020
- 13-14/05/20           København       Danish Maritime Fair
- 17-18/06/20           Milano            3<sup>o</sup> Automation Instrumentation Summit
- 25-27/08/20           Batam              5<sup>th</sup> Indonesia Marine & Offshore Expo (IMOX) 2020
- 26-28/08/20           Jakarta            Inmarine 20
- 28/09-03/10/20       Napoli              Naples Shipping Week
- 05-09/10/20           Valletta           Malta Maritime Summit – “The Voice of the Industry”

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