

# Newsletter

June 30<sup>th</sup> 2018

Link road, rail, sea!

C.I.S.Co. - Via Garibaldi, 4 – 16124, Genova Tel. 010 2518852 - www.ciscoconsultant.it

### YEAR XXXVI Issue of June 30<sup>th</sup> 2018

## **PORTS AND TERMINALS** ROTTERDAM REDUCES PORT CONGESTION WITH NEW BARGE SHUTTLE ..... Page 3 MARITIME TRANSPORT BRUSSELS CALLS FOR INPUT ON CONSORTIA BLOCK EXEMPTION ...... 5 RAIL TRANSPORT HOW CAN BLOCKCHAIN OPEN UP NEW OPPORTUNITIES FOR RAIL FREIGHT? ..... 8 **ROAD TRANSPORT** DB SCHENKER INTRODUCES IHUB PROJECT IN BERLIN ..... 12 INTERMODAL TRANSPORT ZURICH-MELZO FOR GENOA AND LA SPEZIA ..... 14 **TRASPORT & ENVIRONMENT** OPTIMISING SHIPS FOR ENERGY EFFICIENCY: RINA INTERVIEW WITH DARIO BOCCHETTI, ENERGY SAVING MANAGER AT GRIMALDI GROUP..... 16 INTERNATIONAL TRADE US TARIFFS HIT PORT EQUIPMENT AND CONTAINERS ..... 19 **LOGISTICS** AMAZON `WILL REDEFINE GLOBAL LOGISTICS WITHIN A DECADE' ..... 22 **PROGRESS & TECHNOLOGY** INNOVATING FOR THE FUTURE OF THE EUROPEAN MARITIME SECTOR ...... 25

#### **STUDIES & RESEARCH**

THE SHIPPING INDUSTRY IS BACK – AND IT HAS BIG IMPLICATIONS FOR THE GLOBAL ECONOMY	Page	28
ON THE CALENDAR	w	33

## June 30<sup>th</sup> 2018

The content of the C.I.S.Co. Newsletter is also published in the newspaper "Informare" accessible on the Internet site http://www.informare.it

#### **PORTS AND TERMINALS**

#### ROTTERDAM REDUCES PORT CONGESTION WITH NEW BARGE SHUTTLE

The Port of Rotterdam has made further progress in its efforts to reduce vessel and container congestion and streamline intermodal hinterland distribution after Oosterhout Container Terminal (OCT) joined the Moerdijk and Tilburg inland container terminals in participating in its 'West-Brabant corridor' partnership.

The partnership initiative launched in February 2018 between deep-sea



terminals, inland shipping companies and inland terminals to consolidate container cargo on the sailing route between Tilburg, Moerdijk and the Port of Rotterdam.

PoRA said the addition of OCT had resulted in an approximate 30% increase in container volume on this sailing route, and port congestion had been reduced, due to the launch of an inland container shuttle service.

"In practice, the partnership means that vessels consolidate cargo at different terminals in

Moerdijk, Tilburg and Oosterhout for one deep-sea container terminal in Rotterdam or vice versa," PoRA explained.

"Partnership on the main corridors and the consolidation of cargo in the hinterland is important in achieving improved vessel capacity usage and reducing waiting times at the terminals.

This was a reason for the Port of Rotterdam Authority to provide financial support for the chain partnership on the West-Brabant corridor in February 2018."

Arie Rietveld, owner of OCT, commented: "The West-Brabant corridor is an example of reliability and good cooperation between strong partners in the logistics chain.

That's the reason we joined this."

Emile Hoogsteden, director of containers, breakbulk and logistics at the Port of Rotterdam Authority, commented: 'The more container freight is consolidated for transport to and from the hinterland, the better, as this accelerates efficient handling in the Port of Rotterdam."

Highlighting the initial results of the partnership, PoRA said: "The West-Brabant corridor is an important sailing route for connections between the Port of Rotterdam and the hinterland.

Over 15% of the total inland container shipping volume to and from the terminals in Rotterdam is transported along this corridor.

Barge Terminal Tilburg, Combined Cargo Terminals and Moerdijk Container Terminals have been cooperating to consolidate cargo on the route between Tilburg, Moerdijk and the Port of Rotterdam since early 2018.

"The initial results demonstrate that the West-Brabant corridor has approximately 75% fewer deviations from the requested port call agreements at the terminals, compared with the average; 30% fewer inland vessels arrived at the deep-sea terminals and the volume transported by truck fell by 20% compared with the same period last year.

Consolidating volumes has doubled the call size, reducing the total port stay by 30%.

These results demonstrate that consolidating container freight reduces port congestion. "

(from: lloydsloadinglist.com, June 21st 2018)

#### **MARITIME TRANSPORT**

#### **BRUSSELS CALLS FOR INPUT ON CONSORTIA BLOCK EXEMPTION**

Brussels will begin its investigation into the block exemption regulations for container carriers later this year and has begun taking submissions from stakeholders ahead of its assessment.

The European Commission is seeking to evaluate the relevance of container shipping's exemption from rules banning agreements and undertakings that inhibit competition, and wants to determine if the changing nature of the sector has had a material effect on its exempt status.

"In recent years, given the challenging economic context, the liner shipping

industry has been undergoing a significant process of consolidation," the commission said.

"Some carriers exited the market, merged or cooperate in increasingly larger consortia and some continue to co-operate in smaller consortia.



Under such circumstances, the question arises of the continued relevance of the regulation."

The move comes at a critical time for container shipping, which is facing increasing complaints over service levels and fuel surcharges.

Shipper bodies will be keen to use this as an opportunity to air their grievances.

The Global Shippers' Forum has already complained that fuel surcharges are "an unwelcome legacy of the cartel era".

Recently retired GSF secretary-general Chris Welsh said: "A decade since the abolition of the liner conference system in October 2008, the container industry is still using conference-style pricing methods to impose surcharges on its customers."

The commission said the purpose of the evaluation was to assess whether the consortia exemption was still relevant and delivering on its objectives, and whether it is doing so in a coherent, effective and efficient manner.

"This evaluation will inform the decision of whether to let it expire or prolong it and if so, under which conditions," it added.

Allowing the block exemption rules to expire would not mean that consortia agreements would become unlawful, but that they would be examined under the general rules on competition in the same manner as co-operation agreements in other sectors.

The 12-week consultation will launch in the third quarter of 2018.

The commission will collect evidence and views from stakeholders to assess whether the consortia block exemption is effective, efficient, coherent with other competition policy measures and still relevant.

Targeted questionnaires will be sent to the major stakeholders, identified as the carriers, shippers and freight forwarders, and their associations.

Meetings will also be held with the competition authorities of member states.

The Consortia Block Exemption has been renewed four times since it was first introduced in 1995, and now Brussels must decide whether to extend the rules again when the current regulation expires in April 2020.

Consortia differ from conferences, which were banned in Europe 10 years ago, in that collective price-setting is prohibited, and members must still compete with each other.

The idea was that by working together by, for example, sharing ships, lines would gain efficiencies that could be passed on to the customer.

Under the rules, consortia are automatically permitted as long as their share of a specific trade lane does not exceed 30%.

Those levels can be legally breached, but member lines are required to conduct a self-assessment to ensure they are not abusing their dominant position, and could be investigated if there was any suspicion of uncompetitive behaviour.

In an early submission to the commission, the World Shipping Council, which represents the majority of global carriers, said vessel-sharing agreements promoted competition by lowering barriers to entry on a given trade lane.

"The recent consolidation in liner shipping has not undermined the consortia block exemption regulation," WSC said.

It added: "The market remains 'rather fragmented' and is not close to a point where even the leading companies could maintain their level of service individually.

In fact, the increase in high capacity vessels has made the Consortia BER more relevant than ever."

It said consolidation had not increased consortia market shares to the point that the exemption was redundant.

"The majority of consortia fall within the exemptions market share threshold."

Even with respect to the three large alliances, on the two biggest east-west trade lanes touching Europe, four of the six alliance/trade-lane pairs were under the 30% threshold in May of 2018."

(from: lloydsloadinglist.com, June 15<sup>th</sup> 2018)

#### **RAIL TRANSPORT**

# HOW CAN BLOCKCHAIN OPEN UP NEW OPPORTUNITIES FOR RAIL FREIGHT?

Blockchain technology promises to cut out the middle man in financial transactions, improving efficiency for businesses around the world.

But how can railways benefit and what challenges does universal acceptance of the digital ledger technology face?

Nick Newman investigates.

\* \* \*

Despite the many recent advances in tracking the movement of goods, railways and their customers still have a hard time following specific freight consignments, leading many to question the reliability of rail freight services.

But this could be about to change.

BNSF Blockchain Trials of blockchain technology are underway around the world which could help to improve the level of service provided to customers and cut costs.

For example, over a nine-month period Russian Railways (RZD) successfully carried more than 5000 freight consignments ordered via Freight Transport, an electronic trading platform underpinned by Emercoin, a blockchain technology launched jointly by RZD and Intellex in April 2017.

Likewise, State Railway of Thailand (SRT) is investing in blockchain with Internet of Things (IoT) technology to manage signalling, passenger information systems, ticketing and goods delivery.

At its simplest, blockchain is an online ledger, which allows parties to conduct secure (encrypted) transactions without a middleman or a centralised authority.

Each transaction is cryptographically recorded and stored, enabling secure exchanges of value with pre-existing trust.

"Blockchain is not so much a concept, but a technical application," says Dutch logistics expert, Ms Klara Paardenkooper, a lecturer and researcher at Rotterdam Business School.

"It logs data in a way that it cannot be changed or erased de-centrally.

Blockchain should bring massive improvements in quality of service, efficiency and organisation for transport companies for current and future operations."

Indeed, blockchain has the potential to transform and reduce the costs of business processes such as documentation and identification management, infrastructure billing and supply chain management across multiple intermediaries.

For example, the movement of freight containers from a factory in Shanghai to



a warehouse in London can be coordinated by matching shippers with multiple carriers.

Similarly, in logistics, blockchain can provide a single environment to exchange and check documents, improving efficiency and effectiveness while strengthening supply chains.

IoT sensors fitted to freight wagons or containers could also monitor real-time use of capacity, with this data sent to a blockchain-based system, enabling accurate billing for the actual space occupied by a freight consignment.

By making business processes less error-prone, faster, more effective and more traceable, blockchain can help to reduce costs significantly and reduce the risk of fraud.

It could also strengthen relationships with customers and partners.

However, for the rail and logistics world to successfully realise the prospective benefits on offer, three pre-conditions must be met: building trust, gaining the full participation of all stakeholders, and data standardisation.

Blockchain works on the basis of trust between its participants.

It is a digital ledger recording blocks of transactions, linked and secured by cryptography.

To use a rail analogy, blockchain is a train of information with each coach holding blocks of transactions.

However, unlike a train which can be divided or even exchanged, the data cannot be modified or corrupted.

What's more, because the ledger is distributed, there is no single central authority in charge of certifying the information.

That's the attractiveness of the system.

In addition, all parties must have confidence in the accuracy and security of the data.

For example, a customer could demand that the rail operator has at least \$US 250,000 of freight insurance before committing his goods.

When the rail freight operator enters "yes, we have the insurance" in the blockchain, the prospective customer must trust that this is the case.

Likewise, carriers must trust that the customer hiring them through the blockchain will pay for their services.

Moreover, since commercial confidentiality is important, all participants need to be vetted.

This might be achieved by automatically processing the blockchain using a smart contract connected to a reputable insurance company.

Alternatively, the members could be vetted by an industry group setup for the purpose.

To secure customer acceptance and adoption requires everyone - infrastructure managers, carriers and shippers - to have access to the correct software, hardware and knowledge.

This is a really big ask because of the potentially large number of participants in a chain.

In Europe alone, there are hundreds of rail operating companies providing freight, passenger, infrastructure services for all aspects of the logistics chain.

In the United States, the figure is even larger.

And if the experience with the national adoption of Positive Train Control (PTC), which has seen numerous delays and deadline extensions, is anything to go by, adoption of a similar industry-wide technology application could prove just as problematic.

Defining and adopting international standards of terminology, development, deployment and security is therefore crucial to gain widespread acceptance of blockchain by the logistics industry and its customers.

Indeed, successful deployment of blockchain in the rail sector is dependent on standardisation of inputs such as customer purchase orders and invoices.

There is some encouragement in the work of the Blockchain in Transport Alliance (Bita), which has brought together some of the United States' leading logistics firms, with the goal of leading, developing and embracing a common framework and standards from which the industry participants can build revolutionary applications.

Speaking when US Class 1 BNSF joined Bita in February 2018, the railway's vice president of technology services and chief information officer, Mr Muru Murugappan, said that it is important for the industry to come together to define a set of standards for blockchain, and that BNSF is "excited to drive those standards forward as a member of Bita."

Yet current experience shows that data standardisation is neither easy nor fast.

For example, despite globalisation, there is still no single electronic data interchange (EDI) standard for the logistics sector: ANSI ASC X12 is used in the US, while Europe's car industry uses the Odette standard with Edigas the standard dealing with commerce and transport.

Communications standards also vary between continents and industries.

To sum up, blockchain technology is at the trial and error stage.

The opportunities are exciting, but companies will need time to familiarise themselves with the technology and to identify the best prospective application areas which are supported by a universally-accepted set of standards.

Only then can blockchain truly transform the rail and logistics world.

(from: railjournal.com, June 11<sup>th</sup> 2018)

#### **ROAD TRANSPORT**

#### **DB SCHENKER INTRODUCES IHUB PROJECT IN BERLIN**

As part of a series of talks, DB Schenker and its partners today introduced a project in Berlin that examines the potentials and benefits of adding electric trucks to the vehicle fleet of logistics service providers.

While, nowadays, forklifts and load movers at logistics centers are usually electric-powered, the majority of logistics service providers have yet to make use of electric vehicles when it comes to long-distance and less-than- container load deliveries.

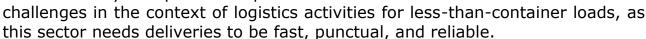
The iHub project is designed to show in what way an IT-supported system can be used for efficiently managing fleets of diesel and electric trucks.

To realize this, DB Schenker cooperates with FRAMO, an electric truck

manufacturer from the German state of Saxony, the PTV software house from Karlsruhe, the Fraunhofer Institute for Transportation and Infrastructure Systems IVI from Dresden, and the Institute for Post-Fossil Fuels Logistics from Munster.

Funding is provided by the Federal Ministry of Economic Affairs and Energy.

Electromobility poses particular



Since electric vehicles need to be regularly recharged, they seemingly are at a disadvantage compared to diesel-powered trucks.

To balance out this shortcoming, a logistics service provider that wants to incorporate electric trucks in its vehicle fleet needs an intelligent management system allowing dynamic trip planning.

With this, a transport order is allocated to an electric truck only if this vehicle can perform at the same level of reliability as a diesel truck.



This form of management will be performed by the iHub system that is to be developed.

While couriers and delivery firms are already using electric vans and small trucks to provide their services, the experiences made by these companies can't be transferred to the context of logistics.

Considering the issue of limited reach of electric trucks and its location close to the city center, DB Schenker's branch in Berlin was strategically chosen as the testing site.

To carry out the project, three electric trucks with a total permissible weight of up to 18 metric tonnes will be used.

While en route and in order to avoid any recharges, the software will calculate the most efficient course for the vehicles.

To maximize battery efficiency, their operating data will be tracked online and used for recommending specific courses of action.

(from: dbschenker.com, June 13<sup>th</sup> 2018)

#### **INTERMODAL TRANSPORT**

#### **ZURICH-MELZO FOR GENOA AND LA SPEZIA**

Swissterminal Group will offer Swiss importers and exporters a new direct rail link from its container terminal in Niederglatt/Zurich to Rail Hub Milano in Melzo (Milan), with five departures per week from 2<sup>nd</sup> July.

This new connection is operated by intermodal operator Hannibal, which is part of the Contship Italia Group.

Over Melzo, Contship Italia and other service providers offer steel wheel connections to Genoa and Contship Italia's own import/export gate in La Spezia, so this builds on the Italian ports' alternative to the Rhine seaports for Swiss-Asia flows.

In addition, Schweizerzug, also part of Swissterminal Group, will increase its



rail service connection between Niederglatt and Frenkendorf to four links per week at the same time.

Frenkendorf offers direct rail links to Antwerp and Neuss (Germany).

Via Neuss, there are further connections to Rotterdam and Antwerp respectively, either via barge or rail.

Since the Swissterminal Group reopened its Niederglatt site in the greater area of Zurich in 2017, the company has recorded a growing demand for additional connections, especially from clients around Winterthur, St Gallen, Chur and Zug.

The expanded service frequency between Niederglatt and Frenkendorf and onwards to Antwerp and Rotterdam as well as the new direct link to Melzo offers shippers a wealth of transport options via ports in the west as well as south.

The demand for shipments via ports in the south has been steadily increasing since 2013.

This route is an important alternative to the Rhine sea ports, says Swissterminal, adding to a better risk management for shippers and forwarders.

The importance of having different transport options ready in case of need was illustrated by the Rastatt closure in August 2017 and Niederglatt's introduction of new service connections meets the need for alternative transport options.

On top of the new rail link to Niederglatt, Hannibal will continue to operate between Frenkendorf and Melzo, from which manifold links to Italian sea ports such La Spezia and Genoa and to continental destinations are available.

Niederglatt features a direct link to the Swiss rail system, which means the Swissterminal Group can make an important contribution.

"We estimate that a transport volume equivalent to the capacity of 10,000 goods vehicles can be shifted from road to rail.

And that applies only to the distance between Basel and Zürich," said Roman Mayer, CEO of Swissterminal Group.

Furthermore, the new rail links help to reduce congestion on the roads.

Easy access to the A1 and A51 motorways ensures excellent connections for freight transport to neighbouring regions.

"It is the goal of Swissterminal Group to offer Swiss shippers the best solution for shipping their freight via different European ports," said Mayer.

"Through Niederglatt's new connections, clients in greater Zurich and in the East of Switzerland benefit from a quicker and more reliable service to destinations in the west and south."

(from: worldcargonews.com, June 16<sup>th</sup> 2018)

#### **TRANSPORT & ENVIRONMENT**

#### **OPTIMISING SHIPS FOR ENERGY EFFICIENCY: RINA INTERVIEW WITH** DARIO BOCCHETTI, ENERGY SAVING MANAGER AT GRIMALDI GROUP

"Saving energy has major advantages and no disadvantages."

By implementing innovative technologies and smart policies to improve energy efficiency on our ships, we significantly reduce fuel consumption and costs.

Saving fuel goes hand in hand with controlling emissions of greenhouse gases and protecting the environment.

In turn, stronger environmental protection measures help us comply with international emissions regulations.

I'm responsible for energy efficiency and innovation for over 100 ships in the

Grimaldi Group, so in our case these

advantages are multiplied by 100.



It is immensely satisfying to see the real, positive results of our efforts in terms of cost savings, environmental conservation and compliance.

We innovate constantly in order to optimise the energy consumption of our fleet.

A good example is our recent order of six hybrid ro-ro vessels from CSC Jinling Shipyard in China, for delivery starting from 2020.

In order to achieve this fuel efficiency, the ships will be equipped with some cutting-edge technologies.

Among these are two-stroke, electronically controlled engines, which offer lower consumption than four-stroke engines.

Twin shaft lines and a combined rudder-propeller propulsion system will also improve efficiency.

The hull will be optimised with a "reverse bulb" design and a special low-friction silicon coating.

An air lubrication system under the keel will create a carpet of bubbles to reduce hydrodynamic resistance.

The new vessels will also be equipped with mega lithium batteries that are, until now, the world's most powerful batteries ever to be installed on a ship.

Charged during navigation via shaft alternators and taking advantage of solar panels and a number of energy-saving devices while at sea, they will be able to offer eight hours of zero-emissions power while the ships are in port.

The batteries will also provide benefits during navigation through "peak shaving", i.e. maintaining a constant, efficient engine speed and using the batteries to make any necessary adjustments.

Implementing all these innovative technologies will certainly be a challenge, but we are confident that with the support of RINA and Jinling Shipyard we will be successful.

Jinling's specialist experience in building ro-ro and car carrier vessels is one reason we chose them for the newbuilding project.

In addition to the price competitiveness of Chinese shipbuilding, we have had good experiences working with Jinling over the last 10 years and they have always delivered on schedule.

Our relationship with RINA is also excellent.

Their approach to new technologies is practical and realistic, allowing us to achieve challenging projects by working together.

For existing ships and those scheduled for delivery in 2020, we will combine scrubbers with the use of batteries in port not just in order to comply with the IMO sulphur emissions cap but to go beyond it.

It is not viable to retrofit existing ships to run on LNG, and reliable infrastructure to supply gas and electricity is not available in all ports.

Perhaps in the future, we will be able to build ships powered purely by hydrogen.

However, given the current situation of ships, ports, infrastructure and logistics, and given the type of ships in our fleet and the routes that they operate, scrubbers plus batteries are the winning solution for us.

In fact, two of our super-large Grimaldi Lines ferries – Cruise Roma and Cruise Barcelona – will undergo extensive refitting work next January, including extensions and the installation of scrubbers and batteries.

As well as physical measures to improve the efficiency of our operations, we are also adopting new digital technologies to help us with this.

In addition to powerful monitoring systems to optimise energy efficiency during navigation and in port, we benefit from digital technologies that help us to manage bookings, organise logistics, communicate and share information, take care of customs formalities, and so on.

Working with experienced partners helps us to innovate and constantly optimise energy efficiency across the fleet.

Most of our ships are classed by RINA and we have benefited from their assistance during newbuilding projects and many other initiatives.

By adopting suitable technologies and taking bold steps to reduce fuel consumption and emissions, we will continue to elevate the image of Grimaldi Group as a forward-thinking company strongly committed to innovation and sustainability."

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

#### **INTERNATIONAL TRADE**

#### **US TARIFFS HIT PORT EQUIPMENT AND CONTAINERS**

The Office of the United States Trade Representative (USTR ) has released a list of 1,102 separate items that will or could be subject to a 25% tariff when imported from China.

The list is broken into two separate parts.

The first is a list of 818 of the original 1,333 product lines that were included in the US\$50 billion worth of tariffs announced on 6 April.

"USTR has determined to impose an additional duty of 25 percent on these 818 product lines after having sought and received views from the public and advice from the appropriate trade advisory committees.

Customs and Border Protection will begin to collect the additional duties on July 6, 2018," the USTR announced.

The second list contains 284 product lines, representing approximately US\$16



billion worth of imports from China that will undergo further review, including a public hearing, before a final determination is made.

WorldCargo News has previously reported on how the proposed US tariffs might apply to cargo handling equipment, with the caution that whether a particular piece of equipment falls under a specific tariff code is a regulatory matter, and not our particular expertise.

Nevertheless, there are important differences between the initial proposal and the final determination.

In particular the following HTS codes for types of cranes from the United States Harmonized Tariff Schedule (HTS) that were in the proposed list have been omitted from the final determination:

84261100 Overhead traveling cranes on fixed support;

• 84261200 Mobile lifting frames on tires and straddle carriers.

While overhead cranes and straddle carriers have been removed from the items subject to a 25% tariff, the following items remain on the list:

- 84264100 Derricks, cranes and other lifting machinery nesoi, self-propelled, on tires;
- 84264900 Derricks, cranes and other lifting machinery nesoi, self-propelled, not on tires;
- 84269900 Derricks, cranes and other lifting machinery nesoi.

Note: "nesoi" refers to not elsewhere specified or indicated.

As noted previously, it is not clear whether one of these codes would be applied to STS and yard gantry cranes, but it has previously been held in the US that a reachstacker falls under HTS 84264100.

The position with regard to liftrucks is clearer, and imports from China that fall under the following categories will be subject to the 25% tariff from 6 July:

- 84271040 Self-propelled works trucks powered by an electric motor, rider type forklift trucks;
- 84271080 Self-propelled works trucks powered by an electric motor, fitted with lifting and handling equipment, nesoi;
- 84272040 Self-propelled works trucks not powered by an electric motor, rider type forklift trucks
- 84272080 Self-propelled works trucks not powered by an electric motor, fitted with lifting and handling equipment, nesoi.

#### Containers too

The new list of 284 product lines that are now being considered for a 25% tariff includes shipping containers under HTS Code 8609.00.00 "Containers (including containers for transport of liquids) specially designed and equipped for carriage by one or more modes of transport."

There is no doubt, and a long list of classification rulings, holding that HTS 8609.00.00 applies to intermodal containers of various sizes, reefer containers, folding containers, intermediate bulk containers, flexitanks and even lashing gear.

This includes the 53ft containers that are the mainstay of the North American domestic intermodal system.

As far as is known, all new 53ft containers for the US market are now made in China, and transport operators and Class I railroads have vigorously opposed a previous attempt to put a tariff on them.

In 2015, in response to a complaint filed by Stoughton trailers, the US Department of Commerce launched a dumping investigation to determine whether CIMC and Singamas were receiving subsidies for their US 53-ft domestic container production.

It ultimately found that the Chinese manufacturers were receiving subsidies, but as there was no US producer that could provide the product the market demanded, there was no material harm to any US industry, and no tariffs were finally agreed.

That decision took a lot of careful consideration in a process that spanned over two years.

By contrast the Trump administration imposed tariffs on items including cranes after a consultation and consideration process that took under two months, and now the industry has to get to grips with a 25% increase in the cost of this equipment that comes from China.

The US intermodal industry has to move very fast if it is to convince the Trump administration shipping containers should not be caught up in its war on Chinese imports as well.

(from: worldcargonews.com, June 20th 2018)

#### **LOGISTICS**

#### AMAZON 'WILL REDEFINE GLOBAL LOGISTICS WITHIN A DECADE'

The expansion of Amazon and the wider impact of internet retail and new technologies will completely transform and redefine global commerce and logistics within a decade.

That's the message ParcelHero's head of consumer research, David Jinks, will bring to the Digital Ship Maritime CIO Forum in London next week.

"From Amazon's own aircraft and shipping services, to deliveries direct to consumers' fridges; and from Blockchain and the IoT to 3D printing – the impact of e-commerce means global supply chains will be transformed by 2028," Jinks said, in a preview of his presentation next week.

At a time when US trade policies seem to be the biggest threat to the global



supply chain, Jinks argues that home shopping will have a far bigger impact on the industry than US president Donald Trump.

He highlighted the collapse in the last few years of several major 'High Street' chains and claims "this tsunami will reach global trading networks next".

Jinks predicts that companies such as Amazon will use their own logistics services to drive international trade, bypassing traditional global logistics providers, noting: "Amazon Prime

Members spend twice as much as non-members with the e-commerce giant and it uses free deliveries, one-hour services, etc., as a hook to gain new members.

By persuading retailers to use its Fulfilment by Amazon Pan European/US services, Amazon will create new shipping patterns and transform the industry.

It's all part of its avowed aim to be the pipeline through which everything is delivered."

He says the evidence for this is available for anyone to see already on their doorsteps, citing the example of the UK.

"Amazon Logistics now delivers most of your Amazon packages, not the Royal Mail, for example," he notes.

"And don't go thinking Amazon Logistics is only about delivering its own products; that's not the half of it.

It has moved into Chinese/US logistics as a provider of entire services.

Amazon Logistics+ is targeting small and mid-sized Chinese wholesalers – they might be Amazon sellers, they might be Alibaba users – selling to the US.

So how long before Amazon controls its own fleet of ships too?" he asks.

"Amazon already runs its own aircraft fleet.

As of January, Amazon Air had a fleet of 32 Boeing 767 freighters flying out of Kentucky."

Meanwhile, closer to home, home deliveries and e-commerce are transforming the requirements of the domestic supply chains.

"A new hub and spoke logistics model will feature mega hubs on city outskirts feeding small hubs inside urban areas," he predicts.

"Electric vehicles, droids and drones can then be used for final mile deliveries as the crackdown on diesel intensifies."

Looking at some of Amazon's more creative visions of the future, he highlights how "Amazon has patented floating warehouses called Airborne Fulfilment Centres that sort items en route and could be used at special events, etc.

AFCs would be in position over major cities ready for peak delivery times and would be ideal for music festivals and sporting events."

But back down to earth, Jinks also points to other new technologies that will fundamentally change global supply chains.

"The Internet of Things means appliances such as fridges and coffee machines will soon be re-ordering our supplies of coffee or milk automatically," he predicts.

"That means demand can be anticipated, cutting down on storage requirements.

And our internet purchases in the future will be delivered to our car boot, or even into our kitchen, while we are out.

And soon smart packaging will alert shoppers where a product is in the aisles and enable our pie to communicate cooking instructions direct to the microwave."

He also believes that 3D printing will bring "an entirely new dimension in the supply chain", noting: "Already domestic printers have moved beyond plastics and resins to producing items in steel and titanium that build up from fine strips.

But what of larger items such as car parts, plastic furniture, etc.?

It's probable manufacturers and e-commerce retailers will develop a hybrid manufacturing and distribution centre, creating and despatching larger items that can't be produced on a home 3D printer."

He concludes: "Perhaps one day the only thing we ever ship globally will be strips of plastic and metals for use in domestic, hybrid manufacturingdistribution centres and High Street printers.

3D printing will certainly create a new dimension in supply chains as products are made available for delivery literally hot off the press."

(from: lloydsloadinglist.com, June 14<sup>th</sup> 2018)

#### **PROGRESS & TECHNOLOGY**

#### INNOVATING FOR THE FUTURE OF THE EUROPEAN MARITIME SECTOR

In order to usher in the next generation of maritime technologies, continuous investment in the research and development of products and technologies are key in enhancing and sustaining competitiveness in the future of the European maritime sector.

As a result, several high-profile projects have explored the way in which autonomy – which is already becoming a reality for personal transport – could be translated to the marine vessels of the future, in order to provide an industry which is both energy efficient and safe.

#### Vessels for the Future

In 2014, the Vessels for the Future (VftF) initiative was launched, bringing together those with interests in Europe's maritime industry in a public private partnership (PPP) and overseen by the European Research Association.

With 50 members which include companies, research institutes, academic



organisations and interested associations, the initiative works to stimulate integration amongst shipbuilders, suppliers, research bodies and classification associations.

With a highly skilled workforce and strong investment influencing its R&D position, it

is positioned as the leader in the construction of vessels which are simultaneously high-tech, safe and efficient; the VftF initiative was established to ensure that European vessels remain cutting edge and to pursue the newest market and business developments in the maritime sector.

In pursuit of this aim, the project seeks to develop the innovations that will transform the future of the European maritime sector.

The initiative focuses on championing several key areas, including improving the safety and efficiency of waterborne transport, and developing a

competitive maritime sector in Europe, which altogether will deliver a holistic vision of a future of the European maritime sector which is safer and cleaner.

To achieve these aims, the Vessels for the Future project has set a clear goal to reduce CO2 by 80% and SOx and NOx by 100%, as well as a reduction in risk by a factor of 10, by 2050.

In order to make progress in meeting these goals, several key technologies and strategies are being developed to help unlock enhanced efficiency and improving environmental performance.

#### These include:

- New materials and processes;
- Fuels and propulsion systems;
- Information and communication technology;
- Hull water interaction;
- Energy management; and
- Unique vessel design concepts.

Through the development of energy efficient and safe ships, VftF aims to address the societal challenges which surround transitioning towards sustainable transport.

The project will also incorporate an innovative approach to design, manufacture and production capacities, which is expected to contribute positively to employment and the global competitiveness of Europe's economy.

A new base for autonomous shipping

In January 2018, Rolls-Royce opened a state-of-the-art facility in Turku, Finland, whereby research activities will oversee the development of the technologies which Rolls-Royce and its partners envision will mould the future of an autonomous international shipping industry.

The Research & Development Centre for Autonomous Ships will feature a Remote and Autonomous Experience facility, which aims to showcase the technologies in development.

On the opening of the R&D centre, Finland's minister of transport and communications, Anne Berner, commented: "There is great global interest in autonomous vehicles and vessels as a future means of transport.

The opening of the Rolls-Royce Research & Development Centre for Autonomous Ships here in Turku, a maritime city with a history of technological innovation, will help achieve our goal of digitalising the country's transport sector."

The R&D centre is anticipated to unlock the ability for Rolls-Royce, and partners, to carry out projects related to autonomous navigations, land-based control centres and the use of artificial intelligence in the vessels of the future and the operations of shipping more generally.

At the official opening, the president of Rolls-Royce, Mikael Makinen, said: "I'm proud to say that the R&D centre is now up and running and that all stakeholders, partners and customers will be able to see here what a remote-controlled autonomous maritime future could look like, and work with us to shape the future.

The experience space that is part of the centre here in Turku, and a similar one we have in our technology centre in Norway, is aimed at demonstrating to our customers the very tangible benefits of what is often considered an intangible technology."

"The centre allows us to more accurately communicate our capabilities, what we have available today and what will be available tomorrow," added Karno Tenovuo, senior vice president of ship intelligence at Rolls-Royce.

"It will completely focus on the development of solutions capable of smoothing the maritime industry's transition to the digital age.

An autonomous maritime ecosystem will open up unprecedented opportunities."

(from: hellenicshippingnews.com, June 19th 2018)

#### **STUDIES & RESEARCH**

# THE SHIPPING INDUSTRY IS BACK - AND IT HAS BIG IMPLICATIONS FOR THE GLOBAL ECONOMY

You may not realise it, but nearly everything from toys to power tools that you buy at Wal-Mart, Takashimaya (in Singapore), or Hudson's Bay (in Canada) is shipped months before from ports in Shanghai and Hong Kong.

Your iPhone and MacBook were shipped by sea from factories in the southern Chinese city Guangzhou, and Taiwan.

And if you're in China, much of the soybeans, grains and aircraft parts and components that keep the economy running were shipped from ports in the U.S. states of Louisiana or California.

In fact, about 90 percent of today's global trade is carried by ship.

Raw materials like coal, iron ore, copper and nickel are usually produced far away from where they're consumed.

They're shipped in massive ocean-going vessels – called dry-bulk carriers – that are the blood in the veins of the global supply chain.

Oil in ocean-going tankers accounts for about one-third of all global maritime trade.

The importance of shipping is why it's one of the most useful indicators of the health of the global economy... and, more recently, the state of China's economy – the largest consumer of a range of commodities, including iron ore, coal, copper, and zinc, and the largest importer of oil.

So what is shipping activity saying today about the global economy?

The big shift in shipping activity

The Baltic Dry Index (BDI) tracks the price of shipping raw materials such as metals, grains and fossil fuels by sea.

It takes into account the day-to-day changes in shipping rates for the three major carrier sizes: Capesize, Panamax and Supramax.

Shipping companies committed a classic boom/bust cycle mistake back in 2011.

At the height of the commodity boom, they ordered a huge number of cargo ships.

How huge?

Based on transport research firm, Crucial Perspective, the global shipping order book-to-fleet ratio stood at 36 percent by 2011.

The order book-to-fleet ratio is a key measure used by the shipping industry to determine the outlook for future supply of vessels.

It's a useful indicator of supply growth, because a proportionately high ratio will lead to a fast-growing fleet... and, if history is any guide, oversupply in the market, as these ships are delivered.

A 36 percent order book-to-fleet ratio means there were enough existing new

ship orders to increase the 8,600 total cargo fleet size as of 2011 by more than 3,000 new ships over the coming years.

So even with a lot of order cancellations, an average of 400 new dry bulk cargo chips were still being delivered into the



market each year – a nearly 5 percent annual increase – for the past five years.

Meanwhile, less than half of that number of old ships were being sent to the scrap heap.

That means global shipping capacity continued to expand by approximately a net 2.5 percent rate each and every year.

Meanwhile, according to the World Bank, global trade of goods and services has declined by 7 percent from 2011 to 2016, as commodity prices collapsed.

So for the better part of the last five years, the global shipping industry had been plagued by overcapacity, with many shipping firms operating their ships at a loss.

Until recently...

The BDI has been on fire, rising 58 percent increase since April.

It's more than quadrupled from its record lows in late 2016.

That's a pretty impressive move, and it would appear to signal that the global economy is moving ahead at a brisk pace.

China takes the lead

Back in December 2016, we wrote about how China's economy – despite having a poorly performing stock market, an overinflated housing market and a currency that had just hit an eight-year low against the dollar – continued to grow.

In particular, manufacturing industry, as reflected by the Purchasing Managers Index, stood at 51.7. (Anything above 50 indicates expansion.)

As of May 2018, the PMI was at 51.9, indicating that China's manufacturing industry continues to expand.

This is also being reflected in industrial activity more broadly, where year-onyear growth has picked up momentum over the past 1.5 years, from 6 percent to nearly 7 percent last month.

China's trade with the rest of the world is also booming.

In May alone, Chinese exports grew 12.6 percent, while imports surged 26 percent.

That's a big leap from the flat export growth and 6.7 percent import growth in November 2016.

Imports of copper ores and concentrates, a key raw material used in electronics, wiring, tubing and motors, are up 14 percent over the first five months of the year.

These imports are at their highest levels since 2000.

Chinese demand for iron ore is also keeping apace, rising 3 percent in May.

And average daily crude oil imports for the month grew 5 percent year-onyear.

All this growth in economic activity and demand for commodities from China is what's propelling the BDI higher.

Commodity prices – as measured by S&P's GSCI Total Return Index – have risen by 30 percent in a year, and are up 52 percent since the start of 2016.

And because the more valuable the cargo is, the more it costs to ship it across the world, the BDI usually rises (and falls) alongside commodity prices.

This time is no different.

Why the BDI could keep rising...

Earlier, I mentioned the order book-to-fleet ratio, which keeps track of the amount of new ship orders relative to the size of the global shipping fleet.

This ratio peaked at 52 percent in 2009.

That means that there were enough ships being built that year to grow the global fleet size by a whopping 52 percent – nearly 5 times higher than a decade earlier.

Although that ratio eased to 36 percent by 2011, it was still incredibly high by historical standards.

But as of this year, the ratio has fallen to about 10 percent – the lowest of the last two decades – according to Singapore-based research firm Crucial Perspective.

That means, for now, there's likely going to be less supply of new ships entering a market that's finally getting back to profitability.

As long as China's manufacturing, exports, and imports continue to grow, the BDI should continue to rise.

Yet, at the same time, major shipbuilders all around the world are starting to see their order books grow once more, as better times come back to the industry.

While it can take as long as three years for the biggest of these ships to be built and commissioned, too much new supply hitting the market could hurt the shipping market once again.

China's largest shipbuilder, for instance, just signed a deal to build nine new vessels in May alone, worth nearly US\$600 million.

That's twice the value of contracts it won in the first four months of the year combined.

One of South Korea's largest shipbuilders, Daewoo Shipbuilding & Marine Engineering, secured US\$4.4 billion worth of orders as of May, equivalent to 60 percent of its full-year target.

So if anything, the recovery in global shipping is already benefitting shipbuilders who have fallen out of favour in the market in recent years.

One last point.

Trade wars are always bad for (you guessed it)... global trade.

And the recent tit-for-tat tariffs between the US, Canada, the European Union, and China certainly risks hurting trade sentiment.

That could stall the shipbuilding recovery if it results in cancellations of orders.

In short, the sector is worth keeping an eye on.

And we'll be watching to see if a sustainable, long-term recovery in the BDI – and shipbuilding stocks – is forthcoming.

(Source: Stansberry Churchouse Research)

(from: hellenicshippingnews.com, June 22<sup>nd</sup> 2018)

#### **ON THE CALENDAR**

•	04/07/2018 - 05/07/2018	Johor	16th ASEAN Ports & Shipping 2018
•	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.