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Link road, rail, sea!

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PORTS AND TERMINALS

WORLD'S LARGEST FULLY AUTOMATED TERMINAL OPENS

SIPG and ZPMC have opened the 4M TEU Shanghai Yangshan Phase IV Automated Terminal.

The new facility, touted as the world's largest fully automated terminal, was opened on December 11 at Yangshan Island off the coast of Shanghai.

The terminal was "jointly built" by ZPMC and Shanghai International Port Group (SIPG) and features seven berths over 2350m of quay, and a total area of 2.2 million square metres.

The terminal "marks the tremendous updating and significant change that China has made in operation mode and technical application of Chinese ports," ZPMC said in a statement.

"It also provides a new power for Shanghai port to strengthen its leading place in port handling capacity and rank as the No.1."

Yangshan Phase IV has two 70,000t berths, and five 50,000t berths with a capacity of 4M TEU per year in the first phase.

That can be extended to 6.3M TEU in future.

ZPMC describes Yangshan Phase IV as the only fully automated terminal with a "China Core".

By this it means the two core software systems at the terminal were developed by Chinese companies: the TOS by SIPG, and the Equipment Control System (ECS) by ZPMC.

Equipment at the new terminal so far includes 10 "automatic" ZPMC STS cranes, 40 ZPMC ASCs (Automated stacking cranes with the TMEIC automation and control system), 50 ZPMC AGVs and a number of "double-box automatic rail mounted cranes".

These are understood to be double cantilever cranes with a box girder construction.

The AGVs feature changeable batteries with an automated battery charging system.

The batteries are designed to last 12 hours on a full charge.

They are removed for charging (which takes six minutes) and can be recharged in two hours.

At full build out Yangshan Phase IV will feature 26 STS cranes, 120 ASCs and 130 AGVs.

The terminal is the pinnacle of ZPMC's achievements in terminal automation thus far, and builds on the Yuanhai terminal in Xiamen and the new automated terminal in Qingdao (QQCTN), both of which also feature AGVs.

ZPMC notes the it has other automation projects in progress, including Vado for APM Terminals in Italy and a new terminal at Khalifa for Cosco Shipping Ports, as well as another development at Tangshan in China.

At a Smart Terminal Solutions Forum in Shanghai in November ZPMC Huang Qingfeng told the audience the automated container terminal "is a mainstay for ZPMC".

The company notes that since 1998 it has been the largest supplier of STS cranes in World Cargo News' annual market surveys, and has now delivered cranes to 99 different countries.

ZPMC expects automation will play an increasingly significant role in the company's development.

(from: worldcargonews.com, December 11th 2017)

MARITIME TRANSPORT

ASSESSING THE CYBER RISKS OF MARITIME NAVIGATION

You have most certainly heard of it before and have probably had enough of it.

The pre-fix "cyber" is ubiquitous.

It all began with "Neuromancer" by William Gibson, although it is unlikely that you have read it and it is of little concern to you.

However, you will not be able to remain carefree for much longer - unless you have decided to go back in time to rely solely on a wind sail.

However, as you have not, you cannot be immune to the cyber risks of navigation.

Together with the traditional navigation risks (the so-called risks of the high seas), nowadays merchants and insurers have to worry about the emergence of a new category of risks that arise from maritime navigation; risks that arise from the increasing dependence on the use of silicon chips in black boxes.

Cyber risks are inherent to the use of computers.

It is rare that a boat, to some extent, is not dependent on the omnipresent information technology, which converts a vessel into a potential target vulnerable to cyber attacks.

On the one hand, the attacks could be deliberate - a hacker attempting to take control of the vessel – or, alternatively, merely the result of incompetence - a crew member downloading a virus to the on-board computer by error.

The more sophisticated, specialised and interconnected the boat or its port interface is, the more options there will be for a hacker to gain access.

This cyber-pathology can only be further escalated if we consider the foreseeable growth that will occur with autonomous navigation.

Therefore, it is no surprise that BIMCO, INTERCARGO, INTERTANKO, OCIMF, IUMI, CLIA, ICS, DSTL, US coast guard and the IMO have already taken some initiative by issuing guidance and instructions as to how maritime cyber security should be managed.

In light of the above, in this article Kennedys legal advise propose to:

- Identify the cyber risks of navigation.

- Briefly analyse its coverage in the maritime insurance market.

- Study the impact that cyber security could have on SOLAS, ISPS, PSC, as well as the requirement of seaworthiness of the vessel under charter policies.

Identification of navigation cyber risks

The biggest problem that we have when identifying the potential cyber attacks on a vessel is that, with few exceptions, merchants are reluctant to make them public, thereby hiding any financial damage and - more than anything - protecting their reputation (without mentioning any intention to avoid sanctions for breaches of data protection legislation, when appropriate.)

This "law of silence" has a pernicious effect: the merchant community and insurers do not have a claims history that can be used to assess the level of risk that exists, with the impact that either cyber risks are excluded from the policies or that premiums rise.

Nevertheless, information about some cyber attacks to the land based IT systems of the maritime-port sector have been published, including:

- In 2014, a transport company deposited a bond of US$10 million thinking that it was the vessel owner's account.

- In June 2017, Maersk and its subsidiary APM suffered losses of up to US$300 million due to ransomware NotPetya.

- A container terminal in the Port of Antwerp suffered various cyber attacks between 2011 and 2013 allowing smugglers to distribute narcotics with impunity.

- A bunker supplier suffered from a fraud of US$18 million when responding to a false order from US Defence Agency for a tanker vessel located on the Ivory Coast.

As a potential target of a cyber attack, a vessel has various vulnerable points: its IT systems and Operational Technology (OT).

The OT system controls the operative elements of the vessel.

The information or electro-mechanic system of the bridge which controls, amongst others, the systems of propulsion, positioning, ballast and manoeuvre is part of the OT system.

The IT only refers to the electronic communication of data, such as the intranet and email on board, without affecting, in principle, the operative machinery of the vessel.

The security system of the IT system is known as "cyber security", whereas the security system of the OT system is known as "cyber safety", although both form part of the concept of "cyber security."

Traditionally, the OT systems were isolated within the vessel without the possibility of online access so that any risks could only come from crewmembers or non-authorised intruders that gained direct access to the on-board hardware.

However, the trend has changed.

Currently, it is common for vessels to have multiple sensors that monitor and control, in real time, the functioning of the online machinery and transmit information via remote to the merchant courtesy of the IT system of the vessel.

In other words, the OT and IT systems of the vessel are becoming more interconnected - to the extent that the existence of a vessel without crewmembers (controlled entirely remotely) is a future reality.

Naturally, when the IT or OT system is internet accessible, the risk of a cyber attack increases greatly.

But, to gain access remotely to the IT or OT systems, the hacker needs to breach the satellite, 4G or Wi-Fi connections of the vessel.

Although breaching the communications by satellite (for example, the GPS) is possible, it is not a simple process and requires a well-financed, organized and meticulous cyber attack, beyond a common "cyber delinquent".

Nevertheless, the common cyber delinquents have an easier task to pirate the 4G or Wi-Fi network when the vessel is docked.

What are the profiles of our cyber delinquent?

They range from the "hacktivist" that have economic and commercial disruptive motives to the "ethical hacker" that seeks to highlight the vulnerability of information technology systems; from the extortionist that seeks a ransom to disinfect the vessel's malware to the industrial, military or competitor's spy.

Naturally, the hacking will have its own economic logic - nobody will take the time to pirate a satellite network if they are not going to obtain an economic award proportional to their efforts.

Once the hacker has gained access to the vessel's network, various offences against data protection legislation could be committed, exposing companies, for example, of cruise liners (with respect to passenger and employee data) or freight vessels (exposing details of electronic boardings).

In addition, hackers could go further and access the most sensitive elements of the vessel's IT systems.

There are cases of hackers that have managed to inhibit or falsify the GPS signal of a vessel, or pirate the AIS and ECDIS systems which could affect the course of the vessel and cause the vessel to run aground in conditions of poor visibility.

Finally, although various firewalls should prevent it, the cyber delinquent could reach the hard nucleus of the vessel – its OT systems – and manage to take control over the dynamic positioning system, the propulsion, the ballast system or manoeuvring of the vessel.

Hackers have previously managed to modify the location of a petroleum platform off the west coast of Africa and, in February 2017, a container ship on route from Cyprus to Djibouti was hacked for 10 hours, during which the captain lost control of the manoeuvring system.

In addition to the potentially catastrophic nature of such a situation (port blockades, collisions) there could also be more modest consequences in which hackers manage to leave a vessel "off-hire" under a fixed time charter policy.

Therefore, it can be seen that a vessel will be less vulnerable to a cyber attack if it is less dependent on its IT and OT systems.

Coverage of navigation cyber risks in maritime insurance policies

Ship-owners, as any business person susceptible to cyber attacks, now have coverage for cyber risks available (as a non-maritime risk).

In the strict ambit of maritime cyber risks, it is helpful to differentiate between the P&I clubs and insurance companies.

In general terms, in contrast to insurance companies that insert the well-known "Institute Cyber Attack Exclusion Clause 380" (Exclusion 380) in their hull, machinery and freight policies, the P&I clubs (at least, those of the International Group) do not automatically exclude coverage for losses or civil liability resulting from cyber risks.

In fact, being aware of the application of Exclusion 380 by insurance companies, the clubs offer specific coverage for claims that are usually excluded (for example, the Norwegian Hull Club's "Cyber-Clause 380 buy-back").

The P&I clubs expect their members to adopt all of the recommended measures to manage cyber risks, both in port and on-board the vessels, which is why many clubs make reference to compliance with the cyber security guidelines issued by the BIMCO.

In contrast with this, insurance companies expressly exclude cyber risks by way of Exclusion 380 in relation to hull and machinery coverage as well as freight (although in this case there is a sweetened version of Exclusion 380 by virtue of which the exclusion is not applied if the use of a computer has contributed to the theft or appropriation of the insured merchandise).

Exclusion 380 leaves ship-owners without coverage for damage and loss of profits caused by cyber attacks.

Under Exclusion 380, it is sufficient that the damage has been caused remotely by a cyber attack and that the cyber attack has been used to cause damage through the introduction of, for example, a malicious code or virus with intent to cause harm.

This provides an obligation to the ship-owners to obtain a specific ad hoc insurance.

Currently there are not a lot of specific insurance products for hull and machinery against cyber attacks, although some insurers have indicated that they would be willing to abolish Exclusion 380 if ship-owners are willing to report cyber attacks (thereby allowing insurers to obtain information and quantify, consider and grade the insurable risk) and to comply with determined practises and preventative audits.

Legal impact of cyber-security

The IMO is conscious that the maritime-port sector cannot remain on the fringes of the management of cyber risks, both on-board and on-land.

For that reason, the following documents have been published:

▪ A multiple language glossary of "Cyberterms" that serves as a general guide.

- Circular MSC.FAL.1/Circ.3 that provides the "Guidelines on Maritime Cyber Risk Management" (which also makes an express reference to the Guidelines on Cyber Security On-board Ships from BIMCO).

Specifically, the IMO has given ship-owners a deadline of until 1 January 2021 to incorporate the management of cyber security in their ISM Code.

From that date, vessels can be detained for inspection by the Port State Control (PSC) for not having implemented the recommended measures of the IMO for "cyber safety" (applicable to the OT systems of the vessels) or for "cyber security" (applicable for IT systems of the vessel).

Because of these risks, it is likely that the IMO will shortly demand similar measures with respect to the ISPS Code.

Therefore, a new source of obligations are on the horizon for the already saturated ship-owner: management of cyber security, not only to prevent cyber attacks (with its associated costly insurance coverage) but also to avoid fines and detentions of vessels.

As a result of the above, another question arises: could we see a vessel "cyber-unseaworthiness"?

In accordance with sections 3(1) of the Hague Visby Rules and 212 of the Maritime Navigation Act, a ship-owner is obliged to guarantee the navigability (in the sense of both seaworthiness and cargoworthiness) of their vessel, applying due diligence to conserve this condition of navigability at all times.

Charter policies also demand the same.

In summary, seaworthiness is a basic necessity to operate and insure a vessel.

What happens then if a ship-owner does not comply with the guidelines for the management of cyber security on board as required by the IMO and BIMCO?

Can it be implied that the non-compliance will lead to "uncargo-worthiness" or "unseaworthiness" under a charter policy or a bareboat charter lease?

If a ship-owner omits to take preventative cyber security measures and, for that reason, a hacker gains access to the systems of freight, manoeuvres, ballast or propulsion of the vessel and causes a loss, the question arises as to

whether the vessel was really navigable and ready to receive and transport freight securely.

In the same way, this unseaworthiness due to a lack of cyber security could constitute a situation of "off-hire" under a charter policy.

For example, a cyber attack could leave a vessel without machinery, ballast and, therefore, inoperative.

The danger can only increase with the emergence of the autonomous navigation, which will be more vulnerable to cyber attacks (and from which the concept of seaworthiness will need to be re-evaluated as it is intended that such vessels go without crew, something which will need an express reform of the SOLAS).

Comment

No ship-owner is immune to the cyber-risks, although the level of vulnerability will be proportional to the level of automation and interconnectivity of the fleet.

The IMO has set a deadline of the 1 January 2021 for ship-owners to incorporate the management of cyber security into the ISM Code; in the event of non-compliance, we anticipate seeing the first cases of detention for such reasons.

It is foreseeable that the IMO will incorporate similar demands in the ISPS.

It is not beyond the realms of possibility that omissions in the area of cyber security will affect the concept of seaworthiness of a vessel, with all of the associated consequences not only resting with the relevant authorities – fines and detentions – but also contractual, relating to insurance policies for hulls and charter.

With the increasing regulatory pressure over cyber security in the maritime sector and the progressive automation and interconnection of nautical technology, it will be inevitable that there will be a need for new insurance products that specifically cover the maritime and port cyber risks.

Further information

To find out more about Kennedys services and expertise, and key contacts, go to: www.kennedyslaw.com.

(from: hellenicshippingnews.com/kennedyslaw.com, December 19th 2017)

RAIL TRANSPORT

STATE AID: COMMISSION APPROVES PUBLIC FUNDING TO PROMOTE SHIFT OF FREIGHT FROM ROAD TO RAIL IN BOLZANO REGION, ITALY

The European Commission has approved under EU State aid rules an Italian scheme to support the shift of freight traffic from road to rail in the Province of Bolzano.

The measure will further EU environmental and transport objectives, whilst maintaining competition in the Single Market.

The Italian scheme, which has an overall budget of €9 million and will run until 2019, aims to increase the share of rail and intermodal freight transport through the Brenner Corridor, an international transit route across the Alps linking Germany, Austria and Italy.

The public support will be provided to freight transport services carried out by railway companies and multimodal operators along the Alto Adige/Südtirol section of the transport corridor between Brenner and Salorno, comprising 120 km of railway and 116 km of motorway.

The aid takes the form of a subsidy to railway companies and multimodal transport operators that carry freight, ultimately reducing prices for end customers.

The level of support companies can receive is based on the reduction in the external costs (pollution, noise, congestion and accidents) achieved by rail transport compared to road transport.

The Commission found that the scheme is beneficial for the environment and mobility, supporting rail transport, which is less polluting than road transport, while also decreasing road congestion.

As a result, the Commission has concluded that the measure complies with EU State aid rules, in particular the criteria under the 2008 Commission Guidelines on State aid for railway undertakings.

Background

In 2015, 43.9 million tonnes of freight were transported along the Brenner Corridor, of which 71% carried by road and 29% by rail.

The overall volume of freight transported by road along the Brenner Corridor has been steadily increasing since 2013.

This trend goes against the EU's objective to shift freight transport from road to rail as set out in the Commission's White Paper on Transport Policy, and has a negative impact on the concentration of air pollutants along the Brenner Corridor.

The measure approved today complements, at the local level, the Italian national schemes supporting rail and combined freight transport authorised by the Commission on 24 November 2016 and on 19 December 2016.

More information will be available in the State Aid Register on the DG Competition website once any confidentiality issues have been resolved, under the case number SA.48858.

The State Aid Weekly e-News lists new publications of state aid decisions on the internet and in the EU Official Journal.

(from: transportjournal.com, December 14th 2017)

ROAD TRANSPORT

DHL FREIGHT TESTS ELECTRIC TRUCKS TO LOWER ITS OVERLAND TRANSPORT EMISSIONS

DHL Freight, one of the leading providers of road freight services in Europe, is "electrifying its freight forwarding business" with the deployment of two FUSO eCanters made by Daimler Trucks.

Today's official vehicle handover to the first European customers marks the beginning of DHL Freight's extensive 24-month test phase of the electric trucks in the Berlin metropolitan area.

The company said the 7.5-tonne eCanter was "the first all-electric, series-produced truck, and its low-emissions drive and low noise levels make it unique among freight-carrying trucks".

Uwe Brinks, CEO DHL Freight, commented: "By deploying the eCanter, we hope to reduce emissions from our forwarding business, as well as local air pollution emissions, which will in turn reduce our carbon footprint and that of our customers.

The use of alternative drives, such as those built into the all-electric FUSO eCanter, plays an important role in reaching our Group-wide goal of reducing all logistics-related emissions to zero by the year 2050.

DHL Freight is firmly committed to helping make this happen".

In the coming months, the two all-electric trucks will be starting up at the company's Wustermark branch for local freight forwarding services in Berlin.

The new lightweight trucks will mainly be used to deliver to businesses and private customers in the city centre.

The trucks will be on the roads delivering less-than-container-load shipments weighing over 35kg, such as electric or large home appliances, to private customers.

DHL Freight will be using the eCanter both for pick-up and delivery, with the aim of reducing pollution for first and last mile services in the road transport business.

In addition to the two vehicles for DHL Freight, DHL Parcel has also officially taken over four electric trucks for the Berlin region.

DHL Parcel will use the four trucks in the central downtown area of Berlin for supplying companies and major customers.

DHL said: "The electric trucks are fully integrated into the operational process and replace the vehicles previously used.

The aim of the test is to gain more information about the use of e-trucks for company deliveries."

It said the all-electric FUSO eCanter is, in terms of total costs of ownership, more cost-efficient than conventional diesel-driven vehicles and has a range of about 100 kilometres and a maximum commercial payload of 3.5 tonnes.

Deutsche Post DHL Group's GoGreen environmental protection programme encompasses the transparent calculation of greenhouse gas emissions, as well as a variety of practices and technologies to reduce emissions.

By the year 2025, Deutsche Post DHL Group aims to increase the carbon efficiency of its own activities and those of its transport subcontractors by 50% globally, as compared to the 2007 baseline.

At the local level, the group aims to make 70% of its own first- and last-mile services with clean pick-up and delivery solutions, such as electric vehicles.

And ultimately, Deutsche Post DHL Group aims to reduce net logistics-related emissions to zero by the year 2050.

The company said: "The use of vehicles with alternative drives and technologies plays an important role in this regard, which is why DHL is testing and implementing various concepts worldwide.

In addition to new types of drives, other emissions-reducing strategies such as truck superstructures that save fuel and therefore reduce emissions are being used as well."

These include the aerodynamic 'teardrop' trailer, which has a drop-shaped roof to reduce air resistance, thereby reducing fuel consumption by 6% to 10% over conventional heavy trucks.

DHL Freight has been using the teardrop trailer in its transport operations in Germany, France and the Benelux countries since 2014.

(from: lloydsloadinglist.com, December 14th 2017)

INTERMODAL TRANSPORT

ANTWERP TO INVEST IN INTERMODAL PROJECTS

The port of Antwerp plans to invest EUR 1.4 mln over the next 3 years in projects aimed at making port-generated freight traffic smoother and more efficient.

The 7 private-sector projects that were selected for financial support on the basis of a Call for Proposals issued by the Port Authority in the beginning of 2017, will all together reduce the number of truck trips by up to 250,000 annually, informs the port's press service.

The submitted projects were assessed on the basis of various criteria, such as a profitable business plan and whether they offered a reliable and price-competitive alternative to existing, less sustainable solutions.

Each of the ultimately selected projects can count on a support amounting to EUR 200,000 spread over a period of 3 years.

All the winning projects aim at further developing intermodal services.

Thus, DP World, a leading container terminal operator at the port, which operates Antwerp Gateway, plans to enhance its rail services and targets at raising the share of rail transport in its operations to 10% by the year 2020.

DP World plans to attract a new service to Stuttgart offering a sustainable transport alternative for the German car industry.

Two other rail projects were presented by Euroports Inland Terminals, a member of the Euroports Group, and Slovak Shipping and Ports, a container terminal operator from Bratislava, Slovakia.

Euroports introduced a new direct rail service between the port of Antwerp and Liège, which will run twice a week starting from January 2018.

The Slovak company will start operating combined trains – a mix of intermodal and conventional railcars – between the terminal in Bratislava and the port of Antwerp in the second half of 2018.

Starting from two times per week, the frequency will later be increased to four trains per week, providing an efficient direct rail link to the eastern European hinterland.

Other projects aim at developing barge services, like, for instance, the multimodal logistics service provider Delcatrans, which is developing a reefer platform at its River Terminal in Wielsbeke to ship deep-frozen vegetables and potato products from Flanders by barge transport.

West Flanders is an important European hub for the deepfreeze industry products that are sent via Antwerp to destinations all over the world.

Danser, one of the largest intermodal operators in Europe, offers to set up a hub-and-spoke concept along the Brussels-Scheldt canal and also introduces a corridor system between northern France and Antwerp.

The Dutch Port-Liner Holding, specialising in building "zero emission" barges, suggests an innovative barge concept.

The company plans to construct 5 hybrid barges that will ply between De Kempen intermodal terminal in South Netherland and Antwerp.

An interesting project was submitted by Hakka NV, a company operating a digital platform for the truck industry.

Hakka presented an application that finds return loads for trucks, thus avoiding empty trips and making truck transport more efficient.

The Flemish government has announced that it will join the Antwerp Port Authority's Call for Proposals and within the next few months will release a further EUR 1.4 mln for projects to make transport in and around Antwerp more sustainable.

(from: port.today, December 14ᵗʰ 2017)

UPTURN IN SHIPPING FORTUNES A BONUS FOR CONTAINER MANUFACTURERS

A resurgence in demand and new environmental regulations banning solvent-based paints have proved a double-whammy for container manufacturers.

Singamas Holdings, the world's second largest container manufacturer, today revealed that it expects a $100m turnaround in its financial fortunes as a result of a spike in demand for new equipment.

In a profit alert to the Hong Kong stock exchange, the company said that, based on a provisional assessment of its unaudited management accounts, it expected to report a profit of "not less than $40m" for the year.

This compares with a loss of $59.4m in 2016.

Singamas said: "The expected increase in profit is mainly attributable to growing container demand as a result of the improvement in the global economy, the rise in international trade and the corresponding pick up in shipping volumes."

It added that an improvement in trading this year had been particularly notable in China itself.

Singamas's loss of $59.4m last year and $2.7m in 2015 came as the market for new equipment stalled due to weak demand and the parlous financial position of container lines.

Indeed, container leasing companies and carriers postponed deliveries of new equipment, which had a knock-on effect on the average selling price, plunging it to below $1,500 for a standard 20ft in 2016 from around $1,800 the year before.

In a half-year interim statement in August, Singamas identified what it called "favourable developments" for the container manufacturing industry, which included new environmental regulations in China from 1 April requiring all new equipment to be coated in waterborne, rather that solvent-based, paint.

Around 95% of containers are manufactured in China and the regulations spurred shipping companies and container leasing firms to place advance orders to avoid a shortage of equipment when production lines were temporarily halted to convert machinery to apply the new paint.

Additionally, the big improvement in the business of ocean carriers this year, which has seen the majority of liner companies move back into the black, has allowed for investment in new equipment.

Market prices for a standard 20ft container are now in excess of $2,000, according to one contact The Loadstar spoke to today.

Elsewhere, Maersk Container Industry reported an $8m profit in the third quarter, after losing $7m in the same period of the year before, based on "higher market prices of dry containers".

And the world's largest container leasing company, Triton, has also reported much improved trading conditions.

It said container rental demand was being supported by "solid trade growth" and an "increased share for leasing" as inventories of both new and used containers remained "tight".

(from: theloadstar.co.uk, December 19th 2017)

LOGISTICS

BITCOIN'S ROLE IN LOGISTICS

It's been a crazy rollercoaster ride for Bitcoins this year.

At the beginning of the year, the price of one Bitcoin was below $1,000.

It hit $5,000 in October, then doubled by late November.

And on Thursday (Dec. 7), the price of a single Bitcoin rose above $20,000 on some exchanges, according to Coinmarketcap.

Created in 2009, Bitcoin is a digital currency, also known as cryptocurrency or electronic cash that allows people to bypass banks and traditional payment methods.

Often used in ransom payments and purchasing illegal goods online, Bitcoin is moving more into the mainstream which has prompted us to question if it has a place in logistics.

An excellent blogpost from UPS' Rimas Kapeskas, Managing Director of the UPS Strategic Enterprise Fund discusses the potential of Bitcoin in logistics, particularly as a global currency.

Consider that in 2015, when the article was written, that already more than 100,000 businesses accepted Bitcoin, including such companies like Microsoft, Home Depot, Dell, CVS, Expedia and Amazon.

Mr. Kapeskas notes "Our whole concept of money and how it gets exchanged is going to change as we become increasingly digitized".

The idea of cryptocurrency seems to be taking hold.

Bitcoin rivals are appearing such as ethereum.

Launched in 2015, the value of ether (ethereum's currency) has increased more than 6,800% since the start of 2017 with one ether now worth almost $480.

It has also been embraced by a Hong Kong-based company, 300cubits which plans to partially replace U.S. dollars in the container shipping industry with a token on an Ethereum platform.

According to 300cubits, the difference between Bitcoin and Ethereum is that Ethereum is highly programmable and therefore designed to accommodate the construction of complex applications.

How it will work according to Maritime Executive is that 300cubits will issue a token called a TEU.

The number sold in the initial coin offering will assign value to the tokens.

The company will then give a portion of tokens to industry practitioners.

The TEU tokens will be used as booking deposits for container shipping where value could be lost if a customer does not turn up with a cargo or a container liner does not load a cargo according to a confirmed booking.

As booking deposits, the TEU tokens' value will be linked to the value of actual freight rates.

Hence, the trading of the tokens will become a leading indicator for freight rates, serving much like a peer-to-peer crowd prediction platform for container shipping.

The volatility of Bitcoin, in particular, has led to many financial analysts to forecast a bubble burst.

But, remember, the same occurred in the early days of e-commerce which resulted in the short term bankruptcies of various startups.

But, since that 'correction', e-commerce has taken off and continues to grow.

Will we see the same with cryptocurrency?

On December 18, Bitcoin futures will be traded on the Chicago Mercantile Exchange, bringing Bitcoin into mainstream investing.

Much like the massive interest in blockchain which Bitcoin and other cryptocurrencies trade in, cryptocurrencies along with a growing number of

fintech startups, will likely introduce more payment options within digitized businesses and potentially help redefine global supply chains.

As a result, as noted by Mr. Kapeskas, "allow all consumers and businesses of all sizes and in all places to participate."

(from: theloadstar.co.uk/http://logisticstrendsandinsights.com, December 8th 2017)

LAW & REGULATION

DEUTSCHE BAHN LEADS €240M CLASS ACTION AGAINST TRUCK MANUFACTURER CARTEL

Deutsche Bahn (DB) is leading dozens of German companies in a lawsuit for damages from a cartel of truck manufacturers.

This morning, the German company filed a lawsuit in Munich against DAF, Daimler, Iveco, MAN and Volvo/Renault.

They illegally agreed on gross list prices for trucks between 1997 and 2011 and have received fines totalling €3.8bn.

Now they face class actions from customers as well.

Deutsche Bahn has joined its claim with that of the German Armed Forces,

which also had been "severely affected", and 40 or so corporations, including airport operators and logistics companies, have also assigned their claims to DB.

DB told The Loadstar that the full list of companies is confidential.

The claim covers some 35,000 trucks, bought at a cost of more than €2bn.

"Deutsche Bahn is absolutely determined to get full compensation from the members of the cartel," said Ulrich Weber, DB board member for human resources and legal affairs.

"The illegal price fixing has caused enormous damage to our company and to the other parties concerned."

According to the UK's Road Haulage Association (RHA), which has been encouraging hauliers to join its class action, claimants could receive some

£6,000 (€6,785) per truck, which in DB's case could result in damages of some €237m – the German company said that at DB Schenker alone, several thousand trucks were affected.

There are also other lawsuits pending.

The RHA has urged hauliers to come forward and join its own legal action against the manufacturers.

It is working with law firm Backhouse Jones and insurance broker Therium Capital Management, which is underwriting the fees.

The EC case established that the truck manufacturers had illegally agreed on gross list prices, delayed the introduction of new technologies to reduce emissions and passed the costs for these technologies on to the customers.

"The specialists at Deutsche Bahn have substantial experience and have already been highly successful in enforcing cartel damage claims," said Dr Katrin Suder, secretary of state in the Federal Ministry of Defence.

Three years ago, much to the chagrin of the air cargo industry, DB Schenker launched two civil litigation suits against a number of major airlines which were found guilty of price-fixing and gave "inadequate offers" of settlement.

It claimed not only for damages, but interest accrued, amounting to $3.3bn.

It told media at the time it was hoping for out-of-court settlements, which "irritated" the carriers.

One airline told The Loadstar: "We believe there was no real financial damage to our customers.

These are extremely high figures in a low-margin industry, and they would have passed the surcharges on to their customers – so who suffered the damage, the forwarders or the shippers?

It's a dangerous development that makes life difficult for everyone.

Having legal issues is normal, but is it wise to fight such a war in the media?

It's highly unusual."

(from: theloadstar.co.uk, December 20th 2017)

PROGRESS & TECHNOLOGY

INTELLIGENT TRADE AND TECHNOLOGIES: PREPARING FOR THE TRADE FACILITATION OF THE FUTURE

The mindset

When the negotiations on trade facilitation started at the WTO in 2004, negotiators from many developing countries were reluctant to commit their countries to "publish information on the internet".

Developing countries lacked the capacity, they said, and such publication implied the need to invest in costly IT solutions.

One decade later, when the negotiations were concluded, this was much less of an issue.

In fact, it can today be argued that making "Information Available Through Internet" as envisaged under the WTO Trade Facilitation Agreement that entered into force in 2017, is of particular interest to smaller traders from poorer countries as this may be the only way for them to obtain access to relevant information for their import and export activities.

Ship

Larger companies from richer countries are more likely to have the option to obtain the relevant information through their own offices or their countries' diplomatic representations in foreign markets.

Currently, the International Maritime Organization (IMO) manual for the Convention on Facilitation of International Maritime Traffic (FAL) is being revised.

References to the electronic submission of data are being deleted - not because data should not be transmitted electronically, but rather because alternative transmissions are not even considered any longer.

Trade-related regulations and international agreements need to keep pace with technological developments.

The negotiations, ratification and implementation of relevant conventions take time, and in view of today's fast paced technological change, the aim should be to commit to the use of whatever technological solution that is deemed feasible, adequate and fit for purpose.

Solutions to today's requirements

The application of the following Articles of the WTO Trade Facilitation Agreement is probably the more likely to be further enabled by technological improvements and progress:

▪ Article 1 - "Publication and Availability of Information": access to information has to be complete and immediate, be it through the internet or any other future technologies that allow for information sharing and acquisition.

▪ Article 2 - "Opportunity to comment, information before entry into force, and consultations": access to information and technologies that allow relevant stakeholders to communicate and to provide views and comments on proposed legislation can support effective implementation of this provision.

By the same token, Articles 5, 7 and 8 of the TFA include the need for communication and publication which can benefit from information and communication technologies.

▪ Most provisions related to licences, declarations and clearance can be better enforced by making greater use of information and communication technologies that provide solutions to data transmissions, automation, payments, classification, and the transfer of access rights.

These include above all the provisions within Article 7 on the "Release and Clearance of Goods" and Article 10 on "Formalities Connected with Importation, Exportation and Transit".

▪ Finally, Articles 7 and 10 contain provisions, which implementation can be supported by making use of data analysis, and as such also from Artificial Intelligence (AI).

Specific measures where AI could be applied are risk management, separation of release from clearance, audits, authorized operators, and the

analysis of release times beyond the simple "average" that needs to be published.

Solutions to tomorrow's requirements

One-hundred years from now - and probably much earlier already -, the concept of "copies" versus "originals" as per Article 10.2 will become obsolete as processes focus on data rather than on documents.

The same will apply to "information technology to support the single window" as per Article 10.4, as focus shifts to data and information on a distributed ledger.

In the long term, I believe that WTO TFA Article 10.1 will gain in importance, as it does not prescribe any specific technological solution, but rather provides for a dynamic dimension of the TFA.

Progressively, various provisions will have become antiquated or obsolete and we will just want to minimize "the incidence and complexity of import, export, and transit formalities"; continuously "review" requirements; keep "reducing the time and cost of compliance for traders and operators"; and always choose "the least trade restrictive measure".

For these endeavours, AI and blockchain solutions will be highly relevant.

In the current environment, I see three areas of activities that could help today's trade and its transport.

- E-Commerce: Beyond the TFA, already at the WTO Ministerial Conference MC11, the multilateral negotiating agenda may be moving toward electronic commerce.

  The eTrade for All initiative is an important practical step to support developing countries to engage in and benefit from E-Commerce.

  Its modules include issues such as trade logistics and ICT infrastructure and services.

- Networks: The focus of trade and trade logistics will be more and more on the analysis of networks.

  What matters is a country's or trader's connectivity, i.e. the position and role within a network.

  The Internet of Things and AI can help reduce waiting and dwell times with trucks and ships at borders and ports arriving and leaving "Just In Time".

An important initiative in this context is the Global Infrastructure Connectivity Alliance (GICA).

- Energy: There are concerns that distributed ledgers used for blockchains require far more electricity than more basic, traditional IT solutions.

  At the same time, alternative blockchain processes requiring less computing power and electricity are under development.

  In addition, blockchain solutions can also be applied to the energy sector itself, where the technology can help save energy by increasing the efficiency of electrical grids and allowing local energy sharing.

Science fiction?

Decisions pertaining to the above-mentioned technologies will be considered and possibly even taken by AI.

AI systems will learn and adapt faster to new challenges and technologies than humans, as newly acquired knowledge can immediately be passed on to fellow AI-endowed units - no need for schools, seminars and teaching here.

It will become increasingly important that AI systems also be taught a set of values upon which to base their learning and decisions.

By way of example, already today, self-driving cars need to be taught to base decisions on pre-defined criteria - that so far are still set by their human creators.

Back to basics

Many challenges remain.

The use of the Internet is still not universal, especially in many Least Developed Countries (LDCs) and remote and rural areas.

In LDCs only 1 in 6 people use the Internet, and small businesses use the Internet far less than larger enterprises.

UNCTAD member states attach a high priority to ICT connectivity as critical infrastructure, as well as to capacity building for the smaller and weaker economies.

UNCTAD works with developing countries and other international organizations on solutions that help facilitate trade and its transportation, encourage E-Commerce, and provide support to customs administration, port authorities, national trade facilitation committees and transport corridors.

We provide technical assistance and capacity development for those who may otherwise be left out.

As the world economy and society is increasingly moving towards ever more integration through intelligent trade and information networks, we must, a) at the same, b) ensure that nobody is left behind.

For further information, please contact Jan Hoffmann (Jan.Hoffmann@UNCTAD.org).

(from: theloadstar.co.uk/unctad.org, December 13th 2017)

STUDIES & RESEARCH

DREWRY ON PORT CONNECTIVITY

"Size isn't everything" Drewry concludes, with the launch of a new "global port connectivity index" showing sometimes smaller ports have better connectivity than their larger competitors.

Shipping consultancy Drewry has launched a regular, bespoke index of port connectivity in the latest edition of its Ports & Terminals Insight report.

The index aims to show how well connected the world's container ports are.

It divides the world into seven major zones, and measures each port's breadth of connectivity by the number of regions served and how many mainline services call per week.

Routes that involve transhipment are not counted, nor are intra regional services within a region.

Vessel size is not considered: "It is important to note here that the connectivity index deliberately does not take account of vessel size.

The purpose of the index is to show the degree of connectivity (in essence, the ability of shippers using the port to directly access the widest range of origins and destinations).

Hence, even though a large port with the same range of shipping services, but with larger ships, is likely to generate more port volume overall, its connectivity index may be no better than a smaller port with the same range of liner services," Drewry explained.

This is illustrated by rankings for the Top 15 North American ports in Q3, which shows Savannah leading the way with a connectivity index score of 55, compared to 45 for New York New Jersey.

Savannah is a smaller port by volume, but its higher ranking reflects its better connections to Europe, Latin America and Africa.

Los Angeles and Long Beach were ranked well down on the North American table, and do not even make the top 20 in the global rankings.

"At first glance, it is surprising that the largest port in the North American region (Los Angeles) is only sixth in the [North American] table, and the second largest (Long Beach) is not in the top 10 at all (it is 12th).

However, this is because ports concentrated on one or two trade routes, e.g. WCNA ports serving the Transpacific will not score as highly as those with a wider range of regions served directly."

Looking at the UK, "London Gateway scores higher than Felixstowe and Southampton, even though it only has around a quarter of the throughput of Felixstowe and less than half of Southampton.

However, it benefits from its range of trade areas served (all six possible world areas are served by direct services, whereas Felixstowe and Southampton only have five – both missing Oceania).

Additionally, some of London Gateway's services 'score double' in the service count.

For example, the CMA CGM/Hapag-Lloyd (NEWMO/EAX) and MSC (Australia Express) services to Oceania also call at Singapore, and so are counted as services providing connectivity to Asia as well," Drewry noted.

Commenting to WorldCargo News, Neil Davidson Senior Analyst - Ports & Terminals said Drewry developed the index by designing a methodology it thought was "fair and balanced", then applying the data.

For Drewry, connectivity "is as important as port size or scale.

Having the widest possible range of direct services is a significant advantage for all ports."

Shanghai, the world's top container port by volume, does come out on top of the connectivity analysis, but the League table for the top 20 ports by connectivity contains quite a few surprises.

Valencia leads the West Med region, while Le Havre performs well above its rank in a league table based on TEU throughput.

Notable absences from the top 20 ports by connectivity include Dalian and Tianjin.

(from: worldcargonews,com, December 11th 2017)

SAFETY & SECURITY

TT TALK – CONTAINERS: TRADING RISKS

Visionary though he was, it is unlikely that Malcom McLean could have foreseen the extraordinarily varied uses that containers increasingly have.

Apart from being a core tool for trade, the 'humble box' has also now become something of an architectural icon, used in all sorts of places – from edgy pop-up bars to trendy shopping centres, from start-up business villages to practical new hotels, from short-term accommodation to luxury designer housing.

Trade for transport

Companies involved in container buying, selling for transport must comply with relevant regulations.

Container safety is regulated by the International Maritime Organization (IMO) through the International Convention for Safe Containers, as amended (CSC).

When containers are traded, the responsibility of meeting CSC regulations transfers from the seller to the buyer.

Since traded containers are almost invariably nearing the end of life, it is especially important to ensure they are in safe condition.

CSC specifies the responsibilities of the different parties involved in the safe condition of containers, but also requires the administration of an approved periodic examination scheme by the country where the container owner is registered.
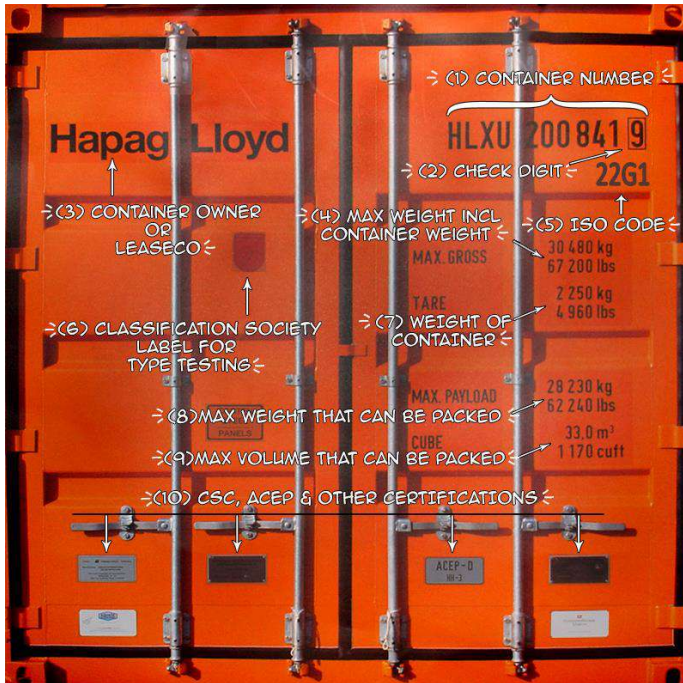
Recognising the need for clarity to help both the seller and the buyer of a traded container meet the regulations and carry out the required tasks correctly, the Container Traders & Innovators Association (CTIA) has recently published three useful guidelines, covering container 'neutralisation', re-marking and grading.

Neutralising traded containers

'Neutralisation' is the process of removing (or obliterating) markings that identify the name and other details relating to the seller of a container.

The purpose is to relieve the seller (the container owner disposing of the unit) of potential exposures that might result from any former identification marking after the sale has been completed.

Containers are marked at the time of manufacture in accordance with ISO 6346 Freight Containers: Coding, Identification and Marking.

In addition, a container might display logos, names and addresses.

Typically, the sales agreement should set out appropriate neutralisation terms and conditions.

The CTIA's new guidelines cover the recommended procedures to ensure correct 'neutralisation' of shipping containers, indicating the minimum markings to be removed in order to facilitate efficient re-marking.

However, where a container is not to be re-marked and used for transport or any other use where regulatory marking provisions apply, additional (or all) markings may be removed.

Re-marking traded containers for shipper-owned container operation

After it has been neutralised, a container may need to be 're-marked'.

For example, where it is to be used as a 'shipper-owned container' (SOC) for further international transport, markings remain statutorily required, covering ratings, dimension and type codes.

These are essential requirements of safe handling.

A second CTIA guidance document sets out the correct process of reinstating the container markings, including the display of a valid CSC safety plate.

These guidelines apply to a container previously neutralised, but may also be helpful as a reference for verifying remaining markings.

The guidelines are based on 'General Purpose' dry freight units, but may be adapted to other container types.

An SOC should display markings on the container in accordance with ISO 6346 and a data plate displaying regulatory requirements.

Shipping lines may require specific procedures prior to acceptance of an SOC.

A container displaying markings should match the markings displayed, such as compliance with ISO dimensions and ratings, and structurally fit for purpose in accordance with the owner's CSC approved procedure.

Recommended standardised grading terminology for traded containers

Those containers that are sold out of the shipping market can be used for a wide range of innovative applications, including static storage or modification into offices, retail units or housing.

Traders grade containers to indicate the purpose to which they might be suited.

A third new publication from the CTIA has been developed to provide the industry with standardised grading terminology.

The use of standardised terminology enables a trader to evaluate the container by its descriptive grading code and – subject to the terms of the contract between the parties – assess its suitability for a particular purpose.

These guidelines comprise a three-part alphabetical code, which grades the structural and aesthetic condition of a container relating to corrosion, accumulated acceptable damage and general appearance, both internal and external.

The guidelines are, again, based on 'General Purpose' dry freight units, but may similarly be applied to other container types.

CTIA members may download these guidelines from the CTIA website.

Why the CTIA?

The CTIA was established in January 2017 to provide a service for industry professionals involved in buying, selling, trading or modifying shipping containers.

It seeks to provide a platform to create industry guidelines and codes, together with a range of technical, marketing and industry data.

There is significant potential for the 'secondary' container market.

While containers may continue to be used in international trade, for example for one-way project cargo shipments, others are used successfully for

innovative non-transport purposes, such as storage, retail units or offices, and accommodation.

Such re-purposing is exciting and to be commended, but it is critical to ensure that what may to the casual eye be identical to freight containers used in international trade is identified in a way that prevents such use.

Stakeholders need to be vigilant to ensure any new life cannot leave residual liabilities.

(from: hellenicshippingnews.com, December 7th 2017)

ON THE CALENDAR

- 24/01/2018 – 25/01/2018 Mauritius 12th Indian Ocean Ports and Logistics 2018
- 07/03/2018 – 09/03/2018 Padova Green Logistics Expo
- 28/03/2018 - 29/03/2018 Beira 19th Intermodal Africa 2018
- 18/04/2018 - 19/04/2018 Livorno 6th MED Ports 2018
- 30/05/2018 - 31/05/2018 Varna 7th Black Sea Ports and Shipping 2018
- 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.