

# Newsletter

July 31<sup>st</sup> 2018

*Link road, rail, sea!*

Council Of Intermodal Shipping Consultants

**YEAR XXXVI**  
**Issue of July 31<sup>st</sup> 2018**

**PORTS AND TERMINALS**

CHINA'S TOP THREE BELT AND ROAD INITIATIVES ..... Page 3

**MARITIME TRANSPORT**

COMPETITION WATCHDOGS AND THE FORCES SHAPING SHIPPING..... " 6

**RAIL TRANSPORT**

POLAND INVESTIGATES USE OF HYDROGEN FUEL FOR RAIL FREIGHT ..... " 10

**TRANSPORT & ENVIRONMENT**

INTERNATIONAL CHAMBER OF SHIPPING ENCOURAGED BY IMO PROGRESS  
ON 2020 GLOBAL SULPHUR CAP IMPLEMENTATION ISSUES ..... " 12

**LOGISTICS**

CHINA MAY TURN MORE TO SILK ROAD TRADING BLOC IF US RELATIONS DETERIORATE " 15

**LAW & REGULATION**

CHINA'S STRICTER RULES ON SHIPPING EMISSIONS A BOON  
FOR IMO 2020 COMPLIANCE – WOODMAC ..... " 17

**PROGRESS & TECHNOLOGY**

KEY FINDINGS FROM SHIP SOLAR POWER STUDY RELEASED BY ECO MARINE POWER ..... " 19

**STUDIES & RESEARCH**

THREAT TO CONTAINER CHARTER MARKET AS CARRIERS DRIFT TOWARDS HEAVY LOSSES " 22

**INFORMATION TECHNOLOGY**

HMM ENTER WORLDWIDE CONTAINER DATABASE ..... Page 24

**SAFETY & SECURITY**

SHIPPING LOSSES CONTINUE TO FALL BUT NEW CYBER AND CLIMATE RISKS  
AND PERENNIAL HUMAN ERROR PROBLEM THREATEN SAFETY PROGRESS ..... " 25

**ON THE CALENDAR** ..... " 30

**July 31<sup>st</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

### CHINA'S TOP THREE BELT AND ROAD INITIATIVES

The One Belt One Road Initiative (BRI) is the single biggest infrastructure redevelopment project in history, and no other state-sponsored enterprise is currently provoking more discussion, dread or excitement.

Upon completion, it should comprise 55% of the world's GDP, 70% of the world's population and 75% of the world's energy reserves and stretch from the South China Sea to the Baltic.

As far as historical parallels go, there isn't one.

The only scheme remotely comparable was the US Marshall Plan, a project to rebuild Europe after WWII, which the BRI dwarfs.



In today's money, the Marshall Plan cost \$110 billion, the price China will pay to link the world's supply chains is \$900 billion.

The BRI is providing some of the world's underdeveloped areas much need investment.

Here are three ports that will determine the success of the project.

#### *Singapore*

Trade between China and Singapore accounts for 13% of the world's total

China has invested more in Singapore than it has in any BRI country.

In fact, almost two-thirds of China's Outward Direct Investment (ODI) goes to Singapore.

One of the largest projects created by the two countries is the Southern Transport Corridor (STC), a series of high-speed rail lines that opens up

several previously landlocked Chinese regions to a dozen sea lanes which connect directly to Singapore.

In 2016, China and Singapore recorded \$66 billion in trade, 13% of Singapore's worldwide total.

Since 2013, Singapore has returned the economic favour by becoming China's biggest investor.

That year saw \$7.23 billion of investment flow to China, and the two countries have since embarked on a series of other major infrastructure projects, such as the Kuala Lumpur-Singapore High Speed Rail.

Keeping Singapore on its side is important as more than three quarters (82%) of China's oil imports pass through the major Asia trade gateway that is the Malacca Strait.

With \$600 billion worth of goods passing through it every year, Singapore is already the second biggest port in the world after Shanghai and the Tuas Port, the 65 million TEU capacity port that will be complete by 2040, will only emphasize its importance to China and the wider region.

### *Djibouti*

As much as 20% of global trade passes between Yemen and the Port of Djibouti.

Djibouti, located on the tip of the Horn of Africa, is a gateway to the Red Sea and on the path between Europe and Asia.

China's approach to the Horn of Africa was initially motivated by its hunt for natural resources to fuel its economic boom.

However, as it rose through the supply chain, it saw an opportunity to supplement and offload some of its heavier industries to a region rich with cheap labour.

As much as 20% of global trade passes through the Bab-el-Mandeb strait – which runs between Djibouti and Yemen - every year.

China has invested heavily in the region, with as much as \$10 billion going into the country from in the shape of BRI projects.

Some of Djibouti's neighbours, such as Somalia have received Chinese funding for the construction of cross-border infrastructure to facilitate trade flow.

A significant trade gateway for Djibouti is its Doraleh Container Terminal, which boasts connections to the country's capital Addis Ababa by rail, and the oil rich Ogaden Basin by a pipeline.

However, after Djibouti's government seized the terminal from DP World in February, Beijing funded and launched the Djibouti International Free Trade Zones (DIFTZ) in July 2018 at cost of \$15 billion.

The DIFTZ links the longest chain of landlocked countries in the world to the sea and gives China almost exclusive access to a new playground for development.

### *Duisberg*

Trade with China has helped Duisberg recover from its post-industrial crash.

As home to the world's largest inland port, the German city of Duisberg is an extremely important part of the BRI, which has invested in this trade foothold by rebuilding its infrastructure.

Duisberg's industrial flame is once again burning after reigniting from China's investment, which once fuelled the city's steel and coal industry before it turned to other markets in the 90s and early 2000s.

With its prime location at the end of the Chongqing-Xinjiang-Europe rail line, which opened in 2011, Duisberg receives up to 25 freight conveyors from China's big electronics hubs every week, with each trip taking just 13 days.

From Duisberg, the products have access to the Rhine and the North Sea, a link so important that at least 60 Chinese firms have moved to the city since the BRI's first announcement in 2013.

As Europe's manufacturing hubs have moved to the Eastern and Baltic states, Duisberg has not only become a gateway for companies seeking access to the Atlantic sea lanes, but transitioned from a town still reeling from the decline of its former heavy industries to a tech hub.

Its importance to China as a trade link was also emphasized by Chinese President Xi Jinping, who made it his only port visit during a 2014 tour of Europe.

*(from: porttechnology.org, July 24<sup>th</sup> 2018)*

## MARITIME TRANSPORT

### COMPETITION WATCHDOGS AND THE FORCES SHAPING SHIPPING

High-street retailers in Western Europe held their breath in September 2016 when container ships bringing goods from Asia due to fill their shelves at the peak Christmas shopping season were suddenly left stuck in ports halfway.

Some ships were even stranded at sea.

Hanjin, the South Korean shipping line, had filed for bankruptcy, weighed down by a global economic downturn that had led to overcapacity, lower freight rates and rising debt levels in the shipping industry.

The company was eventually wound up and its assets liquidated in the shipping industry's costliest and most notorious collapse.

To avoid this fate, shipping companies have for many years increasingly merged or bought each other in a classic process of consolidation that is having profound effects on the efforts of developing countries to better engage with global trade.

On the one hand, global trade benefits from low freight costs and improved shipping connectivity that result from economies of scale and technological advances, yet on the other hand the mergers among shipping lines and their investments in ever larger ships also pose serious challenges to smaller trading nations and their seaports.



The challenge for policymakers – the focus of a session at the Intergovernmental Group of Experts on Competition Law and Policy convened by UNCTAD on 13 July – is to ensure that the benefits of lower costs and improved connectivity will be passed on to the smaller shippers and ports, while also responding to concentrated markets so that players are discouraged from abusing dominant positions.

*The challenge for competition authorities*

Competition authorities must analyse alliances, mergers and acquisitions in shipping and consider not only horizontal competition between carriers but also vertical integration between carriers and terminals.

For example, when shipping giant Maersk acquired competitor Hamburg Süd, the latter's services may switch from their previous terminal in Buenos Aires to the one operated by APM Terminals – which belongs to the same group as Maersk.

But there are several other phenomena shaping shipping in the 21st century that the national watchdogs must also monitor to ensure that trade continues to boost economic progress in developing countries.

- Bigger seaports

Ports are under pressure to dredge, expand yards and invest in ever larger ship-to-shore container cranes, often without any additional cargo throughput.

Trucking, train and barge operators will incur additional expenses as vessel sizes and thus peak demand go up.

Port authorities and local governments need to carefully consider if the additional dredging and investment in berth, yard and hinterland transport capacity that shipping lines demand is worthwhile.

- Domestic shipping markets

Many countries impose restrictions on international operators transporting goods domestically.

In container shipping, this leads to situations in which a ship may call at two ports within the same country but is not allowed to transport cargo between these two ports.

Countries find themselves in the scenario where ports in neighbouring countries become the hub ports for their own cabotage or feeder services.

Montevideo, Uruguay, for example, acts as a relay port for services that connect two ports in Argentina.

Sri Lanka benefits from cabotage restrictions in India as ships call at the port of Colombo, and from there international feeder services connect to seaports in India.

In response, policymakers should analyse the potential of opening up selected shipping services to international service providers to ensure competitive markets.



- Hinterland connections

Closer distances usually involve lower transport costs and thus fewer negative externalities.

However, in view of the need to fill ever larger ships, and the desire to keep alternative options open for shippers, policymakers may also want to expand each port's hinterland.

The resulting competitive pressures will encourage port operators to maximize their efficiency and pass on those efficiency gains to their clients, shippers and shipping lines.

Inter-port competition should not be limited to domestic seaports, but to neighbouring countries' ports as well, while effective instruments for enhancing inter-port competition are efficient trucking markets, rail and road infrastructure, and transit regimes.

- Trade and transit

Under the World Trade Organization's Agreement on Trade Facilitation, in force since 2017, as well as the International Maritime Organization's Convention on Facilitation of International Maritime Traffic, members should establish committees in which stakeholders coordinate and cooperate in the implementation of trade and transport facilitation reforms.

Ideally, such collaborative platforms should go beyond compliance issues, aiming instead at all necessary reforms to facilitate international trade and its transport.

Transit should be facilitated in line with international standards and recommendations, including those of the United Nations, the World Customs Organization and the World Trade Organization.

### *Monitoring and strengthening*

Container shipping is a cornerstone of globalization.

Thanks to the container shipping network, maritime transport connectivity has improved, and real freight costs have gone down.

The operational efficiency gains achieved thanks to alliances have helped increase load factors and added further downward pressures on freight rates.

However, we have reached a situation where the reduced number of companies on some trade routes can result in oligopolistic market structures.

This poses challenges to importers and exporters, who have less choice with whom to transport their goods.

Larger ships and the combined bargaining power of lines in alliances also pose challenges to seaports which will have to invest ever more heavily in port infra- and superstructure.

National competition watchdogs will need to carefully monitor market developments and strengthen competition law enforcement against possible anticompetitive practices to ensure that limited competition does not lead to detrimental effects on costs, connectivity and economic growth in developing countries.

*(from: hellenicshippingnews.com, July 14<sup>th</sup> 2018)*

## RAIL TRANSPORT

### POLAND INVESTIGATES USE OF HYDROGEN FUEL FOR RAIL FREIGHT

Polish coal mining company JSW and national rail freight operator PKP Cargo have agreed to cooperate to research, analyse and possibly produce new types of hydrogen-powered freight wagons and shunting locomotives.

The two companies signed a letter of intent during the Impact'18 conference in Krakow in June covering joint innovative investment projects related to the commercial use of hydrogen fuel.

JSW and PKP Cargo say the main goal is to work out innovative solutions to reduce consumption of energy, fuel and exhaust emissions linked to the commercial operation of hydrogen-powered wagons and locomotives.

They will also analyse investment opportunities on the land of the former Krupiński mine.



JSW president Mr Daniel Ozon says they are betting on hydrogen as the fuel of the future.

"In accordance with the JSW Development Strategy for 2018-2030, we are actively working towards the development of clean hydrogen technologies," he says.

"We are examining the possibility of utilising hydrogen extracted from coke oven gas, which is a by-product of the coke production process; we are also actively involved in e-mobility projects.

We are striving to use coke oven gas to produce pure hydrogen that in the future could become an emission-free fuel for JSW's contemporary rolling stock."

Separated and purified hydrogen can be used in hydrogen cells for environmentally-friendly and emission-free generation of electricity, heat and cooling, environmentally-friendly public transport, powering electrical devices and emergency power supply stations, JSW says.

“The use of hydrogen to drive our locomotives will increase the competitiveness of our services,” says PKP president Mr Czesław Warszewicz.

*(from: railjournal.com, July 10<sup>th</sup> 2018)*

## TRANSPORT & ENVIRONMENT

### **INTERNATIONAL CHAMBER OF SHIPPING ENCOURAGED BY IMO PROGRESS ON 2020 GLOBAL SULPHUR CAP IMPLEMENTATION ISSUES**

In a statement yesterday, the International Chamber of Shipping (ICS) says it is encouraged by efforts made by IMO Member States to resolve some pressing practical challenges ahead of the global implementation of the 0.5% sulphur in fuel cap on 1 January 2020.

Speaking after an important IMO working group meeting last week, to which the industry submitted a number of constructive proposals to help ensure smooth and consistent implementation, ICS Secretary General, Peter Hinchliffe remarked: 'Although there is still much work to be done, last week's IMO discussions were positive.'



International  
Chamber of Shipping

Most important is that governments have acknowledged the safety concerns raised by industry about the use of compliant fuels including possible incompatibility.

We are pleased that Member States have accepted their obligations under MARPOL to ensure that fuel is suitable for use and will not pose a safety risk to the ship or the crew, and that IMO has now agreed that these critical issues should be urgently addressed by the next IMO Maritime Safety Committee in December 2018.'

ICS says it also greatly welcomes an important statement made by the International Organization for Standardization (ISO) to last week's IMO working group.

'ISO announced that the existing industry standard for marine fuel oils, ISO 8217, already addresses the new 0.5% fuel blends that will be used by many ships to comply in 2020.

ISO also advised that it will be providing guidance on the application of the standard to these new blended fuels.'

In view of recent concerns, ISO's confirmation that no revision of the standards is needed prior to 2020 is very welcome as is ISO's recognition that existing tools to assess compatibility are inadequate and its reassurance that ISO is actively seeking solutions before the 2020 deadline.'

Mr Hinchliffe added 'It will be vital for shipowners and crews to have confidence that new fuels will indeed be safe and compatible before taking delivery, which they will need to start doing several months in advance of January 2020.'

ICS has also welcomed the development by IMO, as suggested by the industry, of a template for ship specific 'Implementation Plans', which will be adopted by the Marine Environment Protection Committee in October.

'This template will help ship operators to prepare for implementation and demonstrate good faith in doing everything possible to ensure compliance, which will be important if compliant or compatible fuel is not available in every port during the first few weeks of implementation.

Throughout last week's meeting, the industry stressed the need for a pragmatic approach to enforcement in the event of any initial teething problems that are beyond the control of ship operators, and IMO has agreed that Port State Control authorities may take account of a ship's Implementation Plan when verifying compliance' Mr Hinchliffe explained.

ICS says that solid progress was also made by Member States on draft guidelines for consistent implementation, fuel oil non-availability reporting, verification issues and amendments to the guidelines for Port State Control.

ICS is also pleased by the agreement to apply the 95% confidence factor of ISO 4259 to on board fuel oil samples used for verifying compliance, while retaining the existing absolute 0.50% limit for the MARPOL sample which is taken during bunkering.

ICS says this should help avoid potential scenarios where the sample taken during bunkering receives an acceptable test result only for the in-use fuel to be found non-compliant.

'More work is obviously needed to fully address the important issues raised by the industry, but the usual IMO spirit of co-operation has moved us all significantly closer to achieving smooth implementation in January 2020.' said Peter Hinchliffe.

'During last week's IMO meeting, it was again made clear that there is absolutely no possibility that the legal date of implementation will be postponed.

It is therefore of the utmost importance that shipping companies and charterers proceed with their implementation planning without delay.'

Taking account of the decisions made by IMO Member States last week, including the template for ship specific Implementation Plans, ICS is now developing detailed guidance on implementation of the global sulphur cap, which it will make available to shipowners via its member national shipowner associations during the next few weeks.

*(from: hellenicshippingnews.com, July 18<sup>th</sup> 2018)*

## LOGISTICS

### CHINA MAY TURN MORE TO SILK ROAD TRADING BLOC IF US RELATIONS DETERIORATE

One outcome of the growing Sino-US tariff war could be a strengthening of the trade bloc being built around China's Silk Road initiative, according to one leading logistics consultant.

The Silk Road project, better known as One Belt One Road (OBOR) and covering multiple maritime and overland trade routes, now encompasses at least 70 countries, 4.4 billion people and about 60% of global GDP.

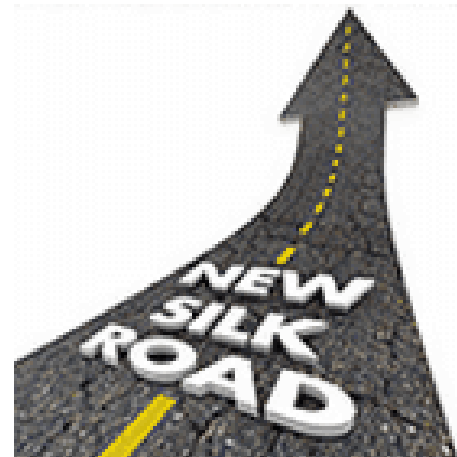
According to Cathy Roberson, founder and head analyst at US-based consulting firm Logistics Trends & Insights, OBOR could be fortified by US protectionism.

"Even though among the goals of OBOR is to ship Chinese goods to a broader audience, it could potentially result in a large economic trade bloc unto itself potentially leaving the US out in the cold in terms of global trade," she said.

"Jin-Yong Cai, former head of the International Finance Corporation further notes that the project will also shore up China's economy against any potential slowdown in demand from Europe or the US."

OBOR includes several land routes connecting East Asia with Europe via Russia, Kazakhstan, Iran and Turkey with future routes into Africa.

By sea OBOR now connects Asian, Middle East, African and European ports and has encouraged Chinese state-owned Cosco to invest in port operations in Spain, Greece, Italy and Belgium.



The initiative is definitely reshaping supply chains and redrawing trade lanes," said Roberson.

"As the rift between China and the US grows, both countries will look for alternative solutions to meet the needs of its populations.

Already China has shifted some of its agricultural imports from the US to countries such as Brazil while encouraging its own farmers to grow more."



The growth of rail services between Asia and Europe has been dramatic since 2011 with multiple 3PLs launching new services and Eastern European countries as well as Germany becoming major hub locations for warehousing and last mile capabilities to meet OBOR needs.

"Chinese e-commerce providers, Alibaba and JD.com are utilizing the rail and establishing warehousing along the route to move goods between the regions," said Roberson.

"Early this year, Alibaba opened its Silk Road Headquarters project in Xi'an, capital of northwest China's Shaanxi province.

It has been designated as Alibaba's strategic hub covering western areas of China and Silk Road Economic Belt.

Good supply chains are built to withstand, as much as one can, economic and political impacts such as tariffs.

However, with the redrawing of the old Silk Road and its expansion along with global political sentiment, supply chains appear to be moving from global to regional, thus establishing new trade lanes and new demands."

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

## LAW & REGULATION

### CHINA'S STRICTER RULES ON SHIPPING EMISSIONS A BOON FOR IMO 2020 COMPLIANCE -WOODMAC

Tighter rules on shipping emissions around China's coastlines from the start of next year is a clear sign the world's No. 2 economy will strive for 100 percent compliance when the global sulphur emissions cap starts in 2020, consultants Wood Mackenzie said on Tuesday.

On July 9, China's Ministry of Transport announced it would extend its emission control areas (ECAs) to include the country's entire coastline from 2019.

China's ECAs limit the sulphur content of fuel ships can burn while operating in the ECAs to 0.5 percent.

"China's stricter policies for marine fuel specifications will undoubtedly play an important part in meeting the International Maritime Organization (IMO) global sulphur cap," said Wood Mackenzie consultant Yujiao Lei.



In a global effort to combat air pollution from the shipping industry, the IMO ruled it will cut the sulphur content of the fuel that ships can burn to 0.5 percent by January 2020, from 3.5 percent currently.

But questions around how the IMO will implement the rules and ensure compliance have given rise to uncertainty since they were announced in 2016.

Yet China's role in the world's shipping market for commodities and containers, as well as the large number of international and domestic vessels calling at its ports, "the new regulations could be significant," said Wood Mackenzie consultant Yujiao Lei.

For shippers, however, the impact of the new ECAs is expected to be limited over the near term.

“China’s ECA extension in 2019 will have minimal impact (for sea zones) since a majority of marine traffic is currently concentrated in the existing ECAs,” said Lei.

Also, China’s ECAs only reach 12 nautical miles out to sea, and ships generally tend to slow down as they near the coast, so fuel consumption in these areas is minimal, said Lei.

### *Bunkering ambitions*

There will be more upside for diesel demand from China’s coastal areas later in 2020, when the IMO global sulphur cap takes effect, said Lei.

China’s ECA extensions come amid government efforts to turn some of its major ports in to marine refuelling, or bunkering, hubs by setting up free-trade zones in Zhoushan and Hainan.

“By generating this demand, the Chinese government is not only creating a bunkering industry but also providing a solution for its refining industry’s diesel surplus,” said Lei.

These ambitions could come at the expense of Singapore, the world’s largest marine refuelling hub.

“Additional marine fuel demand in China to meet IMO regulations will also put the country very close to Singapore in terms of total marine fuel demand,” said Lei.

“We expect 90,000 barrels per day (around 5 million tonnes) of bunker demand to shift from Singapore to China in 2020 for international shipping,” said Lei.

*(from: hellenicshippingnews.com/reuters.com, July 25<sup>th</sup> 2018)*

## PROGRESS & TECHNOLOGY

### KEY FINDINGS FROM SHIP SOLAR POWER STUDY RELEASED BY ECO MARINE POWER

After an extensive study project, Eco Marine Power (EMP) has released some of the key findings related to the use of solar power on ships and the selection and installation of related equipment.

This study was carried out over a 5 year period and included: installation of a trial system on the high speed RoRo Ferry Blue Star Delos, several ship surveys, computer-aided analysis, plus evaluation of various equipment in a test lab and also at an outdoor evaluation area.

The overall system design used as a basis for the study was EMP's Aquarius Marine Solar Power.

This system incorporates class-approved hardware and is able to provide a stable and reliable source of emissions-free power on-board ships or it could be used as an emergency back-up power system.



The study covered a range of topics including system design, system performance, installation methods, hardware selection and a review of marine-grade photovoltaic (PV) technologies.

Some key findings resulting from the study included:

- The type of PV module best suited for a ship-based project may vary depending on a number of factors including the location where the modules will be installed.

In some cases PV modules of differing types and/or technologies may be required in different locations.

- Careful attention needs to be focused on the way the PV modules are installed and mounted.

For best results specially designed marine-grade frames suitable for use on ships should be used.

- High quality valve regulated lead acid (VRLA) battery technologies are suitable for ship-based solar projects.

These batteries are cost effective and require very little ongoing maintenance.

- The installation methods suggested by the PV module manufactures may not be suitable for ships, and customization of the PV module may be required in certain cases.
- A class approved monitoring system should be included with any ship-based solar power system.
- A solar power system on a ship combined with DC loads such as lighting can be an effective way to reduce system cost, lower power losses & simplify the overall system design.

Based on these and other findings resulting from the study, EMP has taken a number of actions including product improvements, with some key highlights being:

- Customized high quality PV module and frame kits have been developed.

Several types are available with each type modified if required to suit a particular ship type or application.

- VRLA hybrid battery packs using class-approved batteries have been released in co-operation with The Furukawa Battery Company.

These battery packs include easy to assemble battery frame kits that simplify the installation process and reduce costs.

- The PV modules & mounting frames customization process has been refined and will now be carried out mainly in Onomichi, Japan, in co-operation with Teramoto Iron Works.
- Additional alarm & performance monitoring features have been added to the Aquarius Management & Automation System or Aquarius MAS.
- EMP will initiate a certification process for selected PV modules based on the review of specifications, testing & the evaluation of their performance.

Commenting on the completion of the study, Greg Atkinson, Chief Technology Officer at Eco Marine Power said, "We have gained many valuable insights into the design, installation and use of solar power on ships during the last 5 years.

These insights have been used to refine our system design and product offerings and we are now in the process of deploying commercial systems.”

EMP will also expand the range of technologies being evaluated at the Onomichi MTTC and will work with selected manufacturers of PV modules and solar panels to further optimise them for ship and marine use.

*(from: hellenicshippingnews.com, July 17<sup>th</sup> 2018)*

## STUDIES & RESEARCH

### **THREAT TO CONTAINER CHARTER MARKET AS CARRIERS DRIFT TOWARDS HEAVY LOSSES**

While container shipping lines face soaring operational costs, recent signs that they are preparing to suspend services in light of weakening demand suggest vessel charter rates could also come under pressure.

According to new analysis from Drewry Maritime Research, daily vessel charter rates have "fallen slightly over the past few weeks as carriers have reacted to the red ink by suspending a number of services, releasing some ships back to the open market, but they remain significantly higher than a year ago".

Drewry's figures show that, in the first quarter of this year, charter rates across all sizes were up 50% year on year and gained further in April and May "to approach heights last seen in mid-2015, with daily prices for classic panamax ships being fixed for around \$13,000, according to broker reports".

But while shipowners may have welcomed a stronger charter market, Drewry warned it also posed a considerable challenge to their business model.



"The financial losses being incurred by ocean carriers should be a concern to independent owners," it said.

"The risk of default on a charter contract rises when your customers are in the red.

While we do not envision a repeat of Hanjin Shipping's bankruptcy, prolonged losses do raise the chances of carriers off-hiring chartered ships upon contract expiry," it added.

However, it also suggested that non-operating shipowners may be more insulated from carriers' financial difficulties than before, as many of their vessels are deployed on trades that are seeing strong volumes and where carriers have few options in terms of vessel sizes and types.

For example, the Asia-Australasia trade is dominated by vessels in the 4,000 teu classic panama range, which is currently seeing a volume growth of 6.5%,

while the westbound Asia-Europe trade is dominated by carrier-owned ULCVs and has seen volumes decline 1%.

Carrier plans to introduce larger vessels onto Asia-Australasia loops could undermine this, however.

“Because the charter market is more heavily weighted towards smaller and intermediate-sized ships, oversupply of bigger units is more isolated to trades where owned ships dominate,” said Drewry.

“However, the introduction of new mega-ships during the first half does still poses a threat to the charter market, as it intensifies the cascading process [when existing ships make way for newbuilds by being transferred to another trade] with the potential to dilute the supply-demand balance of the more charter-market friendly intermediate trades.”

Carriers have adopted very different chartering strategies.

Drewry said some 2,450 serving box ships were owned by non-operating owners, amounting to 9.6m teu and representing 44% of the world fleet.

MSC has the “largest pool of chartered ships, with nearly 400 units aggregating 1.8m teu, representing approximately 57% of its total operated fleet”.

But both Zim and Yang Ming have chartered a higher proportion of their fleets: 72% and 64%, respectively.

“Having a large charter composition is not necessarily a bad thing,” noted Drewry.

“Some carriers simply prefer the flexibility to dip in and out of trades when it suits them, while also avoiding the initial capital outlay of purchasing ships.

However, having a greater dependency on hired ships to operate services does mean that those lines are more exposed when charter rates increase, depending on the rates and fixture periods agreed.”

*(from: theloadstar.co.uk, July 16<sup>th</sup> 2018)*



## INFORMATION TECHNOLOGY

### HMM ENTER WORLDWIDE CONTAINER DATABASE

The Korean container line Hyundai Merchant Marine (HMM) has become the latest carrier to join the BoxTech Global Container Database, which provides access to the data of over 11 million units.

After 2M carriers Maersk and Mediterranean Shipping Company (MSC) recently entered, the world's twelfth largest carrier has also agreed to upload their container fleets to the service.

Operated on a non-profit basis by the Bureau International des Containers (BIC), a long-established and active participant in the development and maintenance of industry standards, this fast-growing database is connecting the shipping community.

Using a standard API, BoxTech's database gives shippers instant access to the technical characteristics of approximately 45% of the global container fleet, easily navigable from a single interface.



Korea is especially well-represented now within the BoxTech Global Container Database, as SM Line, Pan Ocean and CK line have also uploaded their fleets to the service.

Other major carriers, including CMA-CGM and APL, have also registered their fleets, alongside hundreds of smaller owners and operators.

Douglas Owen, Secretary General of BIC, said: "We are thrilled to welcome another of the top carriers to BoxTech, and especially pleased that HMM has joined the 2M carriers on the platform."

With each additional carrier, the database becomes more valuable to shippers, depots, terminals, software providers and others wishing to utilize a single API call for container characteristics, or simply to have a single website to obtain container information."

*(from: porttechnology.org, July 20<sup>th</sup> 2018)*

## SAFETY & SECURITY

### **SHIPPING LOSSES CONTINUE TO FALL BUT NEW CYBER AND CLIMATE RISKS AND PERENNIAL HUMAN ERROR PROBLEM THREATEN SAFETY PROGRESS**

Large shipping losses have declined by more than a third (38%) over the past decade, according to Allianz Global Corporate & Specialty SE's (AGCS) Safety & Shipping Review 2018, with this downward trend continuing in 2017.

Yet recent events such as the collision of the oil tanker Sanchi and the impact of the NotPetya malware on harbour logistics underline that the shipping sector is being tested by a number of traditional and emerging risk challenges.

There were 94 total losses reported around the shipping world in 2017, down 4% year-on-year (98) – the second lowest in 10 years after 2014.

Bad weather, such as typhoons in Asia and hurricanes in the US, contributed to the loss of more than 20 vessels, according to the annual review, which analyses reported shipping losses over 100 gross tons (GT).

“The decline in frequency and severity of total losses over the past year continues the positive trend of the past decade.

Insurance claims have been relatively benign, reflecting improved ship design and the positive effects of risk management policy and safety regulation over time,” said Baptiste Ossena, Global Product Leader Hull & Marine Liabilities, AGCS.

“However, as the use of new technologies onboard vessels grows, we expect to see changes in the maritime loss environment in future.

The number of more technical claims will grow – such as cyber incidents or technological defects – in addition to traditional losses, such as collisions or groundings.”

There are multiple new risk exposures for the shipping sector: ever-larger container ships – longer than the Empire State Building is high – pose fire containment and salvage issues.

The changing climate brings new route risks, with fast-changing conditions in Arctic and North Atlantic waters posing new hazards.

Environmental scrutiny is growing as the industry seeks to cut emissions, bringing new technical risks and the threat of machinery damage incidents at the same time.

Shippers continue to grapple with balancing the benefits and risks of increasing automation on board.

The NotPetya cyber-attack caused cargo delays and congestion at nearly 80 ports, underlining the threat of cyber risks for the sector.

Almost a third of shipping losses in 2017 (30) occurred in the South China, Indochina, Indonesia and Philippines maritime region, up 25% annually, driven by activity in Vietnamese waters.

This area has been the major global loss hotspot for the past decade, leading some media commentators to label it the “new Bermuda Triangle”.

The major loss factors are actually weather – in November 2017, Typhoon Damrey caused six losses –, busy seas and lower safety standards on some domestic routes.



Outside of Asia, the East Mediterranean and Black Sea region is the second major loss hotspot (17) followed by the British Isles (8).

There was also a 29% annual increase in reported shipping incidents in Arctic Circle waters (71), according to AGCS analysis.

Cargo vessels (53) accounted for over half of all vessels lost globally in 2017.

Fishing and passenger vessel losses are down year-on-year.

Bulk carriers accounted for five of the 10 largest reported total losses by GT.

The most common cause of global losses remains foundering (sinking), with 61 sinkings in 2017.

Wrecked/stranded ranks second (13), followed by machinery damage/failure (8).

Analysis shows Friday is the most dangerous day at sea – 175 losses of 1,129 total losses reported have occurred on this day over the past decade.

Friday 13th really can be unlucky – three ships were lost on this day in 2012 including Costa Concordia, the largest-ever marine insurance loss.

The unluckiest ship of the past year is a passenger ferry operating in the East Mediterranean and Black Sea region – it was involved in seven accidents in 12 months.

Despite decades of safety improvements, the shipping industry has no room for complacency.

Fatal accidents such as the Sanchi oil tanker collision in January 2018 and the loss of the El Faro in Hurricane Joaquin in late 2015 persist and human behaviour is often a factor.

It is estimated that 75% to 96% of shipping accidents involve human error (AGCS, Safety & Shipping 1912-2012 From Titanic to Costa Concordia).

It is also behind 75% of 15,000 marine liability insurance industry claims analysed by AGCS – costing \$1.6bn (AGCS, Global Claims Review: Liability In Focus, 2017).

“Human error continues to be a major driver of incidents,” says Captain Rahul Khanna, Global Head of Marine Risk Consulting, AGCS.

“Inadequate shore-side support and commercial pressures have an important role to play in maritime safety and risk exposure.

Tight schedules can have a detrimental impact on safety culture and decision-making.”

Better use of data and analytics could help.

The shipping industry produces a lot of data but could utilise it better, producing real-time findings and alerts, Khanna believes.

“By analysing data 24/7 we can gain new insights from crew behaviour and near-misses that can identify trends.

The shipping industry has learned from losses in the past but predictive analysis could be the difference between a safe voyage and a disaster.”

Cyber incidents like the global NotPetya malware event have been a wake-up call for the shipping sector.

Many operators previously thought themselves isolated from this threat.

“As technology onboard increases, so do the potential risks,” says Khanna.

At the same time, new European Union laws such as the Network and Information Security Directive (NIS), which requires large ports and maritime transport services to report any cyber incidents and brings financial penalties, will exacerbate the fall-out from any future failure – malicious or accidental.

“The current lack of incident reporting masks the true picture when it comes to cyber risk in the marine industry,” says Khanna.

“The NIS directive will bring more transparency around the scale of the problem.”

Container ship fire struggles continue: container-carrying capacity has increased by almost 1,500% in 50 years.

Today’s “mega-ships” create new risk exposures and there have been a number of fires at sea in recent years.

Fire-fighting capabilities have not necessarily kept pace with increasing vessel sizes.

Climate change brings new route risks: climate change is impacting ice hazards for shipping, freeing up new trade routes in some areas, while increasing the risk of ice in others – over 1,000 icebergs drifted into North Atlantic shipping lanes last year (US Coast Guard International Ice Patrol), creating potential collision hazards.

Cargo volumes on the Northern Sea Route reached a record high in 2017.

Emissions rules bring problems: estimates suggest that the shipping sector’s emissions levels are as high as Germany’s, prompting a recent pledge to reduce all emissions by 50% in the long-term, alongside existing commitments to reduce sulphur oxide emissions by 2020.

As the industry looks to technical solutions to achieve these aims, there could be accompanying risk issues with engines and bunkering of biofuels, as well as operator training.

Autonomous shipping and drones: legal, safety and cyber security issues are likely to limit widespread growth of crewless ships for now.

Human error risk will still be present in decision-making algorithms and onshore monitoring bases.

Drones and submersibles have the potential to make a significant contribution to shipping safety and risk management.

Future use could include pollution assessment, cargo tank inspections, monitoring pirates and assessment of the condition of a ship's hull in a grounding incident.

*(from: shipmanagementinternational.com, July 18<sup>th</sup> 2018)*

## ON THE CALENDAR

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

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