



Newsletter

April 15th 2019

Link road, rail, sea!

Centro Internazionale Studi Containers

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PORTS AND TERMINALS

A REGION OF PORT POWERHOUSES

East Asia has much to offer today's world: according to The World Bank, the subregion, along with the Pacific, is responsible for almost 40% of world economic growth.

Unsurprising then that the region is home to eight of the 10 biggest ports in the world, according to the World Economic Forum.

China's Shanghai is the largest, with the superpower's Shenzhen and Ningbo-Zhoushan coming third and fourth respectively and South Korea's Busan coming fifth.

Furthermore, a third of all global containers move through Chinese ports.

The Port of Shanghai is driving continued capacity expansion, in line with other established ports in China.

Last year, annual growth at the port was 4.4% — modest by past standards, although it did add 1.8m teu to the facility's total.

Digitalisation is also being given a push with the port one party to the blockchain consortium the Global Shipping Business Network — an open digital platform based on distributed ledger technology.

Other participants included terminal operator stalwarts DP World and PSA International.

Shanghai is also part of another blockchain and artificial intelligence venture, facilitated by APMEN Trade Tech and Ideanomics, to improve shipping operations by integrating port and supply chain data.

It plans to renew its Vessel Traffic Management Information System with security firm Saab in a project that is set to run to June 2020, replacing the majority of the existing radar and communications systems and delivering a new supervisory centre.

The latest development in Shanghai's growth journey has seen its operator Shanghai International Port Group enter a co-operation agreement with Port of Ningbo operator Zhejiang Provincial Seaport Investment & Operation Group –

the Chinese port located opposite Shanghai – on a development scheme for the northern part of the Xiao Yangshan port area.

The move is expected to increase the efficiency of cargo transit on the Yangtze River and reduce costs.

The Yangtze River Delta region is responsible for up to 70% of the Port of Shanghai's throughput, and almost 50% of the goods in Yangshan need extra waterborne transport.

Ups and downs

Over in Vietnam, development of an ambitious deep-sea project at Lach Huyen Port in Hai Phong city in the north of the country is moving on apace.

May last year marked the opening of its Haiphong International Container Terminal (HICT), a joint venture between Vietnam's Saigon Newport Corporation, Japan's Mitsui O.S.K. Lines (MOL) and ITOCHU and Taiwan's Wan Hai Lines.



It marks the first public-private partnership between Japan and Vietnam.

"Backed by a yen loan from Japan, the Vietnamese government has been constructing various infrastructure projects such as reclamation, levee protection, a groin and breakwater, causeway and access road between the port and Cat Hai Island," MOL said at the time HICT was opened.

HICT is the largest deep-water container terminal in Northern Vietnam, with 750 metres total berth length, a 14-metre access channel, 660 metres of turning basin, and 16 metres of berth.

HICT can accommodate container ships up to 14,000 teu and offers an annual cargo throughput of 1.1m teu.

However, the outlook is not so rosy for one terminal south of HICT.

DP World's Saigon Premier Container Terminal (SPCT) in Ho Chi Minh City opened in 2010 to target container volumes, but the terminal was forced to change tack after heavy sedimentation in the Soài Rap River stopped large container ships from reaching it.

It is the State's responsibility to dredge passages and a lack of funding and red tape has stymied dredging operations.

Car alternatives

While it waits for dredging to take place, SPCT has turned to the car sector to stem losses – which has proven to be a savvy move.

Towards the end of 2018 it reported record high throughput for completely built-up (CBU) motor vehicles.

SPCT offers storage capacity of about 5,000 cars on its 23-hectare site.

“I don’t see that type of capacity open to CBUs in other parts of Ho Chi Minh City, so we should focus on that,” Andrew Hoad, chief executive and managing director for DP World Asia Pacific, was quoted as saying in local press.

“DP World is here to stay and this is a real contribution we can make to the economy as a trade-enabler.”

The next round of dredging of the Soài Rạp River channel was scheduled to take place in February, but there has been no confirmation that this has taken place.

In South Korea, expansion of capacity is continuing at both the Port of Busan and the Port of Incheon.

Busan Port Authority is going ahead with building a 50,000-square metre logistics zone, including 34,000 square metres of warehousing and supporting facilities, in Maasvlakte Industrial Park in the Dutch city of Rotterdam, with commercial operations forecast to start in the summer of 2021.

Meanwhile, operator Busan New Container Terminal has signed a deal with maritime IT solutions provider CyberLogitec for implementation of a terminal operating system.

The Port of Incheon is working on hinterland developments with Incheon Port Authority signing an agreement with Incheon Free Economic Zone Authority to create a co-operative relationship.

The shift towards domestic or cross-border co-operative agreements in South Korea is not accidental.

With the domestic construction industry struggling, there are deliberate moves to boost partnerships to drive trade through the country’s ports.

South Korea has offered its support for the development of a dry port in landlocked Laos through a Memorandum of Understanding that agrees to jointly implement port development co-operation projects and exchange human resources, such as port experts.

Another MoU from late last year agreed to the establishment of a basic plan for 34 ports nationwide in Vietnam, with co-operation of port development between the two countries.

That MOU saw South Korea pledge to help Vietnam to study the function of ports by region, direction, and timing of development as well as the design of the port infrastructure.

Hong Kong grip slackens

While mainland China's terminals have enjoyed riding the long wave over the past few years, Hong Kong has been left in their wake.

Consultant Drewry reported this year that the Port of Hong Kong had dropped out of its ranking of the top five busiest shipping container terminals in the world for the first time since Drewry started compiling global port data 30 years ago.

In 2006, the port handled 23.54m teu, but last year that had slipped to 19.64m teu, according to Drewry data.

Neil Davidson, the organisation's senior analyst for ports and terminals, notes that since the 1990s, mainland Chinese ports such as Guangzhou and Shenzhen have seen massive expansion and modern facility investment and have turned into much more effective competitors to Hong Kong.

"At the same time, these mainland ports are closer to China's factories, which have seen huge growth since the opening up of China's economy," Mr Davidson told Port Strategy.

"Much of Hong Kong's traffic is barge volumes, carrying cargo to and from the mainland before being shipped internationally, and these barge moves have been replaced in part by direct mainline vessel calls in mainland Chinese ports.

In addition, in Hong Kong dock labour costs are higher than on the mainland as the cost of living in Hong Kong is higher, and labour is more easily available in mainland ports.

Plus, land is more expensive and scarcer in Hong Kong and there is pressure to use land for other purposes.

These factors mean that terminal handling charges are higher in Hong Kong than in mainland ports," says Mr Davidson.

Additionally, he notes that previously, the dock had the unique advantage of not being classed as a Chinese port and was thus "the only 'Chinese' port not subject to cabotage restrictions".

However, since 2016, several other key Chinese ports have been granted exemptions from these limitations.

(from: portstrategy.com, April 4th 2019)

MARITIME TRANSPORT

CONTAINERSHIPPING: RESTORING BALANCE

The repositioning of empty containers costs the liner industry an estimated \$15-20 billion every year according to Boston Consulting Group (BCG), as containers sit idle at a depot or are repositioned to a different loading point while empty.

This is time spent not earning revenue, while incurring additional costs, and is estimated by BCG to account for 5-8% of total operating costs for an average container liner.

These expenses can include inland repositioning by rail or road onto a different port or terminal, the costs of shipping to another location, transshipment costs at terminals, and depot storage costs as well as all the associated administrative, handling, labour and third-party costs incurred throughout.

This is a significant burden for carriers working hard to maintain already slim margins.

While this has been a problem that has plagued the liner segment for decades, as an industry, "we too have been sitting idle while technological and software solutions for addressing this problem have been developing at pace around us," says Lars Fischer, Managing Director, Softship Data Processing Ltd Singapore.

There is a wealth of granular data from ports, terminals and depots now available to us thanks to a greater degree of automation and digitization across global supply chains.

With this resource, the liner industry should have far greater control over repositioning operations than it currently does.

This is why Softship has paired with the National University of Singapore (NUS) to build a digital solution.

By applying exceptionally complex but reliable mathematical algorithms which configure supply and demand scenarios, software will be able to empirically assess every available repositioning solution given the scenario parameters and calculate the most efficient repositioning route.

The result will be more agile, flexible and cost-effective container shipping solutions.

Understanding the root causes

There are several reasons for the repositioning dilemma.

An inherent asymmetry in global supply and demand for containerized cargoes is the main causal factor.

China exports more containerized cargoes than it will ever need to import from most countries, for example.

This means that spent containers are either left collecting dust at the discharge port or terminal or sent to sit in a nearby depot.

Each of these containers costs the container line in lost earnings until there is a suitable laden voyage from the same location.

This can take weeks or months.



Alternatively, the spent container can be transported empty to a nearby port or terminal to collect a new load or can be sent directly to a customer.

Repositioning containers incurs the inland as well as international transport costs involved in moving to a point of demand.

In many cases, the reallocation of these vital assets can cost almost as much to move empty as when loaded – all but eliminating the profit gained on some journeys.

When freight rates are particularly high, it is often cheaper to simply purchase a new container where supply is required, rather than incur all the associated repositioning costs.

According to figures shared by research group Transport for Geography, about 1.5 to 2.5 million TEUs worth of containers are manufactured annually (with 90% of this happening in China).

The group suggests it costs around \$2,000 to manufacture a 20-foot container, or \$3,000 for a 40-foot container.

At the time of writing, the Freightos Baltic Exchange Container Freight Rates puts a 40-foot shipment China/East Asia to North America East Coast at \$3276.

Calculating the cost

Currently, most repositioning is calculated using a 'rule-of-thumb' assessment of likely supply and demand; rather than business intelligence and careful consideration of every plausible repositioning option.

Carriers do not always have specific information for future loadings available, and therefore often have to rely on guesswork.

Shipping lines try to pass the additional expense on, but often have to absorb these costs themselves in order to remain competitive.

Despite being a well-established problem, it is still currently very difficult to optimize container repositioning processes.

This is because the number of possible repositioning permutations is so high, that with the tools currently available (mostly spreadsheets), it is extremely difficult to identify the most cost-efficient repositioning plan.

This is why there is significant opportunity for a software solution to truly revolutionize the liner industry, and to make a measurable improvement to profitability.

This should soon change.

Softship, as part of a newly launched research initiative in Singapore is now working to develop a digital solution to this costly problem.

Softship has signed a Memorandum of Understanding (MOU) with a newly launched research institution, The Center of Excellence in Modelling and Simulation for Next Generation Ports (C4NGP), to develop a digital solution for optimizing global container repositioning procedures.

The C4NGP, launched in October 2018 is a collaboration between the National University of Singapore (NUS) and the Singapore Maritime Institute (SMI), based at the NUS.

Six other industry partners signed their own related MOU's with C4NGP, and together will jointly develop 'digital twins' of next-generation ports and maritime systems.

Establishing a new equilibrium

Softship's container repositioning tool will seek to simulate and solve the real-world inefficiencies in re-locating empty shipping containers, to create cost savings for container operators and increase visibility across the supply chain.

The ultimate objective is to minimize the total relevant costs such as transportation cost, handling cost, and holding cost, while giving liner operators and managers greater control over their operations.

It will make it much easier for operators to understand and visualize exactly where empty containers are, where there is demand for containers and how to optimize the route for reallocation.

Having a birds-eye view will make it easier to formulate the most pragmatic solutions, optimize container usage and minimize the time containers spend travelling empty.

This will reduce costs, increase container turnaround and lower unnecessary waste in global containerized shipping.

Repositioning of empty containers, and the significant associated costs, is an issue that has plagued the shipping industry for decades and is the result of an inherent geographical trade imbalance which the shipping industry cannot redress, but it should be able to better manage.

Container ship owners and operators should no longer sit idle, like their empty assets, as there are solutions to be found.

(from: marinelink.com, March 27th 2019)

RAIL TRANSPORT

SWISS ALPS STILL SEE 300,000 TRUCKS TOO MANY

Two years after the opening of the Gotthard Base Tunnel in 2016 the number of trucks passing through the Swiss Alpine structure should have been less than 650 thousand per year.

This was the ambition of the Swiss government, but the goal was not achieved.

Nevertheless, the Swiss modal shift can be considered a success.

This was explained by René Sigrist, transport and logistics specialist at the Swiss Federal Office of Transport.

He provided a workshop about the Swiss modal shift policy on the first day of the Freight & Terminal Forum, which is held from 26-28 March in Utrecht, the Netherlands.

“Due to Swiss policy, 650 thousand trucks have been taken off the road in the past 20 years.

We are now shortly under a million trucks on the road per year.”

More traffic on rail

Bringing more freight volumes onto the rails, off the road in a sustainable way.

This is the aim of the modal shift policy of Switzerland.

“We need to protect the Alps”, Sigrist said.

The mountain range forms an integral part of the freight corridor connecting the port of Rotterdam with the south of Italy.

This corridor is not coincidentally called the Rhine Alpine Corridor.

But, the modal shift policy was also a response to a growing number of trucks on the road, which was causing congestion.

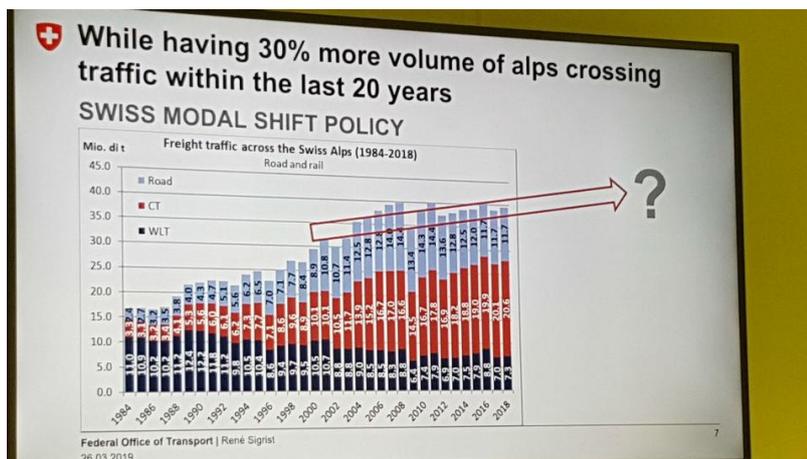
More freight on rails is important for the entire European continent and Switzerland surely depends on the effort of neighbouring countries, Sigrit admitted.

But the country takes a leading role.

Deal with EU

The modal shift policy has been in place since 2000, when the country signed a bilateral agreement with the EU.

In order to limit trucking through the Alps, Switzerland asked for a heavy-vehicle fee (HVF) on the corridor.



In return, the country promised to build the New Railway link through the Alps (NEAT).

The railway link was considered complete with the opening of the Lötschberg Base Tunnel in 2008, while the fee was implemented between 2001-

2004.

“This fee is used for the renewal and maintenance of railways.”

The modal shift was further encouraged with the opening of the Gotthard Base Tunnel in 2016.

Next year the Ceneri Base Tunnel will be opened for traffic, clearing the entire north-south axis for 4-metre height trains.

“This will become visible in the timetable of 2021”, said Sigrit.

“The NEAT was a core element to support the shift to rail by reducing production costs and increase capacity”, said Sigrist.

“However, there are other steps taken to reach the goals of the government.

We also have a terminal grant.

The terminals in Switzerland need to be upgraded to become more efficient.”

Money available

In 2016, the rail infrastructure fund was introduced in Switzerland.

This fund is allocated to the maintenance and renewal of the railways, but also for the extension of the current network.

“We are talking small steps to expand the network as needed.

We have an expansion plan up till 2025, while the expansion plan for 2035 is expected to be adopted by parliament later this year.”

While 7 billion Swiss francs have been allocated to the expansion up till 2025, another 12 billion Swiss francs was budgeted for the expansion till 2035.

“This fund secures the capacity of the infrastructure in the country”, Sigrist explains.

“If there is a need, we have the possibility to expand.

Of course it is subject to approval, but we do not have to fight for funding.

This fund is in place and will remain in place in the future.”

Capacity for freight

Apart from the expansion plan, Switzerland has a clear policy on capacity allocation for freight.

It is called the Network Utilisation Concept, explained the transport expert during the conference.

“Allocation is based on the use of the network in a standard hour, setting dedicated capacities for passengers and freight in the yearly timetable.

This allocation ratio is set for the next six years”, said Sigrist.

The 2019 timetable was the first to be designed based on this methodology.

For example, in the Gotthard Tunnel it allows for six freight trains per hour.

The actual capacity is higher, but this is the minimum capacity that should be available.

“It is not easy to compete with the very popular passenger traffic in Switzerland, but at the same time, we want to guarantee sufficient capacity for freight.

In this manner, we are assured of this capacity”, he explained.

(from: railfreight.com, March 27th 2019)

ROAD TRANSPORT

EU TO END BRICK-SHAPED TRUCK CABS – SAVING LIVES AND CARBON EMISSIONS

MEPs have today passed a law that will literally change the face of trucks in Europe – from brick-shaped cabs to rounder ones.

Transport & Environment (T&E), which campaigned for the reform, said the new truck designs will save lives, carbon emissions and fuel.

Today's vote in the European Parliament follows agreement this morning between governments and MEPs on a 'direct vision' safety standard that will also enhance truck safety.

Truck manufacturers will be able to lengthen the design of cabs by 80-90cm, but only if they use the space to provide better vision from the driver's seat, improve aerodynamics, add new safety features and boost driver comfort.

As a result, new truck cab designs in Europe are expected to include larger windscreens to see cyclists and pedestrians and have more streamlined bodies to reduce fuel use and pollution.

The curved cabs should also better deflect pedestrians and cyclists in collisions – so that they do not go under the truck wheels.

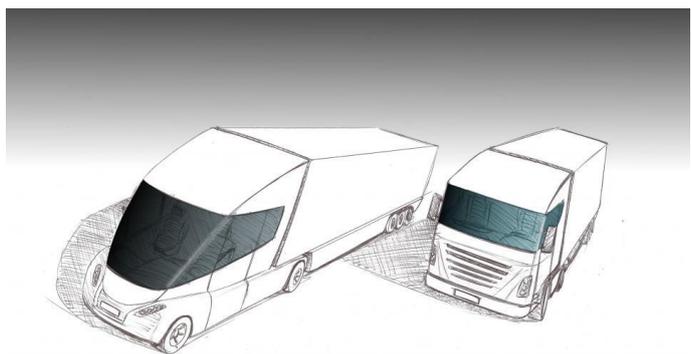
James Nix, freight director at T&E, said: "This reform is a win-win for industry and the public.

The truck of the future will be sleeker, reducing fuel bills and emissions.

It will also be safer through better driver vision of cyclists and pedestrians in particular.

And truck drivers themselves will have more in-cab comforts."

Currently, 4,000 people die in truck-related incidents on Europe's roads every year.



Trucks are just 2% of vehicles on the road but are involved in 15% of fatalities.

Around 1,000 of these deaths are cyclists and pedestrians.

The reforms will also reduce trucks' carbon emissions and fuel bills up to 5% in long-haul trucks (or up to 10% when combined with the newest engines and tyres).¹

The newly-designed trucks will be allowed on Europe's roads from 1 September 2020.

However, European truck manufacturers have given no indication of when they will start producing these safer and cleaner models that will both save lives and save fuel for their customers.

James Nix concluded: "The next question is how soon manufacturers will take advantage of the EU's new design blueprint.

The EU has rolled out the red carpet for the next generation of truck cabs.

If European truckmakers don't deliver them, then US and Asian manufacturers will.

The race is on."

(from: transportenvironment.org, March 26th 2019)

¹ International Council on Clean Transportation, Fuel consumption testing of tractor trailers in the European Union and the United States (2018).

INTERMODAL TRANSPORT

FIRST 49FT LONG SWAP BODY ON THE MARKET

For several years articulated trucks with an overall length of 17.8m have been permitted in Germany, allowing the trailer length to be increased from 13.6m to 14.9m, provided the trailer is built as an intermodal trailer and fitted with DIN lifting pockets accordingly.

This extra loading length is now also available for swap body operations.

Wecon has manufactured the first batch of 10 curtainsider swap bodies for integrated logistics company Ekol, and the multimodal operator will test them on its own wagons and ro-ro ships.

The new unit is specially designed for transporting automotive industry components, says Wecon, with a high volumetric capacity and a relatively low payload requirement.

The swap body has external dimensions of 14.936m x 2.55m x 3.2m (C75 rail codification).



Internal measurements are 14.83m x 2.48m x 2.97m.

Tare weight is around 5,800 kg and gross load is 30,000 kg, providing a payload of 24,200 kg.

The units have ISO bottom fittings at 40ft, 45ft and 49ft centres for securing to chassis and rail car twistlocks.

Empties can be stacked 2-high.

The roof can be lifted up to 300mm on all four sides.

The load security code is XL and the rail code is XL, allowing it to be run in trains up to 140 kph (90 mph).

(from: worldcargonews.com, April 4th 2019)

INDUSTRY

BRITAIN'S QUEST FOR A ROLE IN CHINA'S BELT AND ROAD IS A JOURNEY TO NOWHERE BECAUSE OF THE UK'S DISCONNECTION FROM EUROPE

Britain is at the end of the road, not only because of its messy attempt to leave the European Union, but also because of its physical position with regard to China's Belt and Road Initiative (BRI).

Unlike Italy, which is set to become a way station for the BRI's march into continental Europe, all roads from Britain lead to nowhere.

As the UK staggers and stumbles toward some kind of exit from the EU, like a drunken man through a revolving door, some Brexiteers are looking to a UK-China free trade agreement as a way out of threatened isolation; Belt and Road to the rescue, as it were.

But this misses the logistical imperative: it is with the heartland of industrial Europe that China is intent on connecting, not with an island that is threatening to sever its umbilical cord with the continent.

The best that Britain can hope for is to become an offshore financing centre for the BRI.

Kent Calder, a prominent expert on Northeast Asia, put this very succinctly in a conversation I had with him on China's strategy in Europe.

The real core of the BRI's prospective success, he said, "is building infrastructure that will link Europe and China, particularly Germany and Eastern Europe," he said.

"German production chains since the end of the cold war have been moving to the Visegrad group (the Czech Republic, Poland, Hungary and Slovakia) to the east while China's economic centre of gravity has been moving west.

Border clearance has been rapidly improving access the Eurasian continent, such that production chains across the continent are becoming increasingly economic."

Could UK policymakers not have foreseen this when they sought to sever the supply chain link between their own country and continental Europe?

It seems incredible if so, and yet such collective madness seems to have gripped Westminster and Whitehall lately, that just about anything is possible.

As noted before in this column, policymakers from Donald Trump to Theresa May just do not seem to get the fact that trade and economic relations need to be decided in corporate boardrooms nowadays as much as the hallowed halls of Whitehall or the White House.

When you need to protect vital supply chains, it is foolish to think you can simply ignore them.



Britain has already hobbled Japanese firms in this regard and now it seems to think that the Chinese are also gluttons for punishment.

When Britain's trade minister Liam Fox held talks with China's Ministry

of Commerce in Beijing last August, there was talk of a top-notch free trade agreement between the two countries.

But that was when the UK government still hoped for a best-of-all-worlds trade accord with the EU.

At that time, it still seemed to make sense for China to invest in UK production to secure tariff-free access to the huge European market from Britain.

After all, China-EU relations are still governed by a 1985 EU-China Trade and Cooperation Agreement and China still lacks full access to the EU market.

But Britain has put its access to the EU customs union and to the Single Market in serious jeopardy, to put it mildly.

Who knows how the US-Europe relationship is likely to develop from here on with Britain seemingly divided against itself and incapable of deciding a clear course of action?

Seeing the way some leading Japanese companies have already pulled their investments out of the UK, or are declining to make new ones there, it seems likely that Chinese firms will adopt a very cautious attitude toward investing in Britain while Beijing seeks closer direct ties with the EU.

Certain relationships between Britain and China are likely to continue flourishing.

“The financial relationship of China, Britain and Hong Kong is quite central,” said Calder, director of the Edwin O. Reischauer Centre for East Asian Studies at Johns Hopkins University.

He was referring to the role of the City of London (and of Hong Kong) in handling the issuance of renminbi bonds and other financial securities on behalf of the Asian Infrastructure Investment Bank (AIIB), and indirectly on behalf of the BRI.

Investments from Chinese companies in the UK are mainly in energy, finance, technology, real estate, according to a BBC report.

This investment, the report suggested, is expected to expand into other sectors such as consumables, food, commerce, cultural tourism and film, television and multimedia services.

But unless China decides to enter key strategic areas in Britain such as port ownership, as it is doing now in Italy, Germany, the Netherlands and Greece, it is difficult to see how Beijing can regard the UK as strong and as key a link in the Belt and Road chain as it did before.

(from: hellenicshippingnews.com, April 9th 2019)

LOGISTICS

NEW SILK ROAD: OPPORTUNITY FOR EUROPEAN LOGISTICS?

China's mega-project New Silk Road has shaken up the logistics world with an investment volume of approx. one trillion euros.

Although there are uncertainties about how European companies can contribute to and benefit from the One Belt, One Road (OBOR) initiative, there are opportunities to participate in development with the right strategy.

China aims to revive the ancient Silk Road with the mega-project "One Belt, One Road".

The initiative aims to help transport goods by road, rail and ship between Asia, Africa and Europe, thereby promoting economic cooperation between the Eurasian countries and improving intercontinental trade and infrastructure networks.

In addition, the Middle Kingdom plans to conclude free trade agreements, establish special economic zones and implement simplified customs clearance processes.

The logistics and transport industry in Europe in particular can benefit significantly from this.

More flows of goods, more logistics

For example, Deutsche Bahn expects to significantly increase its goods transport by land.

The company estimated that there were approx. 90,000 container movements distributed over more than 3,600 trains between China and Europe in 2018.

It estimates that this number will be 100,000 containers in 2020.

The logistics service provider Rhenus provides door-to-door transport both in Asia and in Europe via an international network.

"We have responded to an increasing demand for alternative routes with projects for road and rail transport with the help of our own locations.

Expertise on site is essential for the safe, fast and efficient transport of the goods," Tobias Bartz, CEO of Rhenus, stated.

One thing is clear: the New Silk Road will significantly increase the number of goods transported between China and Europe.

"At the same time, it presents companies with major challenges, especially due to geographical, cultural and economic differences.



Transport logistic provides a platform to exchange and network internationally,"

Gerhard Gerritzen explained, Member of the Executive Board of Messe München GmbH.

Where there are opportunities, there are also risks

The Chinese government stresses that its initiative is about peace, integration and security.

At the same time, China wants to strengthen its political influence and open up new sales markets.

In practice, it is difficult for foreign companies to compete against Chinese competition or to find out about tenders in good time.

Most of the projects are awarded to Chinese companies.

According to a survey conducted by the German Chamber of Commerce in 2017, two thirds of all German companies surveyed in China doubt whether their investments in the New Silk Road will have a positive impact on their business at all.

However, approx. 30 percent of German companies operating in China are involved in OBOR or at least are considering participation.

It is definitely the right step to make suitable business contacts early in China and third markets.

Pakistan as a model example

With all due caution, the Silk Road is already showing positive effects.

Andreas Breinbauer, Vice Chancellor of the University of Applied Sciences of the Vocational Promotion Institute BFI Vienna and Department Head of the Logistics

and Transport Management study major, pointed out Pakistan: up to now, US \$60 billion has been invested there, and most of the projects have been completed.

As a result, Pakistan's GDP growth increased from 3.5% to 6% between 2013 and 2017 according to Chinese data.

However, it is also clear that China is pursuing geopolitical interests in the region and in particular with regard to India.

On the other hand, 70 percent of the Silk Road countries have a GDP/per capita income that is below the global average according to Mr. Breinbauer.

There is a high demand for infrastructure investment between Europe and China, which cannot be met without China.

A functioning infrastructure is in turn the basis for industrialization and further economic recovery.

"Consequently, Chinese policymakers see the opportunity in this region to build regional value chains that benefit all participating countries," Mr. Breinbauer explained.

Chinese investments in crisis countries can also stabilize the region, i.e." generate a kind of "peace return".

"Multilateral and above all Chinese investments in infrastructure and logistics should also benefit European companies."

(from: bulk-distributor.com, March 19th 2019)

LAW & REGULATION

IMO 2020 RULES 'UNLIKELY TO DAMAGE BOX LINE COMPETITION'

Incoming low-sulphur fuel laws could accelerate container line consolidation, with the extra costs associated with the so-called IMO 2020 pushing financially vulnerable carriers into mergers and acquisitions (M&A), container shipping analyst Drewry has reported.

But Drewry concludes that even if the new IMO 2020 laws spur another round of mergers, there will still be enough carriers left for the main markets to remain competitive.

Examining how the changes might affect competition on key trades, Drewry noted that most of the major carriers have now reported full-year 2018 financial results; "and thanks to a fourth-quarter (4Q18) rising trend in demand and freight rates, boosted by the sugar-rush of the threatened US tariffs, the industry was able to return a small profit in the region of \$1.5 billion", as reported in Drewry's Container Forecaster report.



"Welcome as that second-half revival was, attention is now focused on the prospects for this year - and beyond that, what impact the new IMO low-sulphur fuel regulation will have on profitability in 2020," Drewry added, noting that the container shipping industry "still hasn't fully recovered from the global financial crash and the devastating losses incurred thereafter".

It noted that an examination of carriers' most-recent financial stability 'Altman Z-score' shows that many are still reside in the so-called "distress zone".

As the deadline for the IMO 2020 mandate draws nearer, carriers are inevitably getting jittery about its overall impact, Drewry noted, with lines examining "are they in a position to deal with myriad of extra associated costs such as unrecoverable BAFs, capex costs to install scrubbers and extra funding requirement for bunker credit, among others"?

Drewry added: "Without wanting to be too alarmist, there is the potential for IMO 2020 to inspire another major carrier bankruptcy or trigger more defensive M&A.

It could turn out that the IMO will inadvertently push industry consolidation along, closer to where it needs to be in order to achieve sustainable profitability."

It said the last round of M&A that started with the merger of Chinese carriers Cosco and CSCL in 2016 and concluded with the integration of the Japanese carriers NYK, MOL and K Line into the Ocean Network Express (ONE) in 1Q18, made some headway in the consolidation process - to the extent that the leading seven carriers now control approximately three-quarters of the world's containership fleet.

"However, while previous M&A has handed near-full control of the global market to a handful of lines, there is still varying degrees of competition at a trade-route level," Drewry highlighted.

"Significantly, that is the case in some of main large-volume and revenue generating East-West routes.

Using the Herfindahl-Hirschman Index (HHI) method, only one trade in our sample, the relatively small Europe-East Coast South America southbound trade, resides in the 'highly concentrated' bandwidth.

Most of the key East-West trades fall into the 'competitive' description."

Drewry said: "The problem for carriers is that in competitive markets they are subject to the vagaries of supply and demand, which is often outside their control.

Conversely, in a concentrated market with few rivals carriers do not seem to live or die by those fundamental economic principles so much."

Bearing in mind the potential for more IMO-induced consolidation, Drewry examined what it would take to budge some of those key East-West trades out of the competitive zone and into new territory that might allow them to become price givers rather than takers.

"To play this game we need to consider some plausible transactions," Drewry said.

"The possibility of any takeovers among the top 7 lines is remote in our opinion, primarily due to the likelihood of such deals being shot down by competition regulators.

However, in our analysis we found that without at least one such deal the HHI needle barely moved so we have included a combined CMA CGM and Hapag-Lloyd entity as there was interest from the French carrier last year.

The other fantasy transactions we have used are Cosco buying PIL and other deals based on common nationality; bringing together the Taiwanese lines Evergreen, Yang Ming and Wan Hai, while also pairing HMM and SM Line from South Korea.”

Drewry continued: “The next step is to use our base trade capacity data from January 2019 and see what happens when we combine all of those carriers.

For the purpose of this analysis we have limited it to the Asia-North Europe and Asia-West Coast North America trades.

It should be noted that capacity shares will be different by the time IMO 2020 is implemented as carriers will have taken delivery of new ships and moved others around so some caution should be applied.

The result of this academic pursuit is that even these deals (which we think stretch the realms of plausibility) would only be sufficient to move these trades into the moderately concentrated zone of the HHI.

Carriers would gain some modicum of pricing power, but certainly not enough to be able call the shots.”

It concluded: “Even if IMO 2020 does spur another round of industry consolidation, the chances are that there will still be enough carriers left to prevent the big trades from being highly concentrated.

It will require a couple of highly unlikely mega M&As to really move the dial.”

(from: lloydsloadinglist.com, April 2nd 2019)

PROGRESS & TECHNOLOGY

AUTOMATION LESSONS FROM OTHER SECTORS

In this feature, we explore lessons that the maritime supply chain can learn from industries which are leveraging automation to generate growth, boost competitiveness and create new opportunities.

In a previous insight, Port Technology focused on how automation could impact the employment of both landside workers and seafarers in the shipping industry, where it is predicted that many jobs could be replaced by intelligent machines and systems.

Despite these concerns, maritime is not the only field which automation could seriously effect.

In fact, many other business areas have already changed massively as a result of technological advances like artificial intelligence (AI) and the Internet of Things (IoT).

Manufacturing

Those responsible for driving change in the maritime sector, especially with regard to cargo-handling operations onshore, could look to the example of other industrial sectors like manufacturing when thinking about how to implement automation successfully.

Even a quick comparison of the two areas reveals a number of similarities; materials need to be handled quickly and safely, a repetitive but important process which seems well-suited to the application of robotics.

Skilled professionals in the manufacturing business are likely to share some of the same concerns as their counterparts at ports and terminals, yet it is the combination of a vital human element working alongside robots which is driving efficiency for manufacturers and factories.

The initial cost of automation is higher than paying workers to perform the same job, even if machines are able to outperform the human workforce in some capacities.

As with process automation at ports and terminals, the key to success is finding out what should be automated.

Key takeaways:

- It is the combination of a vital human element working alongside robots which is driving efficiency
- The key to success is finding out exactly what should be automated

Warehousing and distribution

Closely connected to maritime trade and part of the logistics sector, warehousing is a crucial node in the wider supply chain and a hotbed for effective automation.

While the level of technological advancement across warehouses will of course



depend on such factors as company size, location and the specific demands placed on any one distribution centre, leading players in the market are following the lead of other industries and expanding their use of robotics.

The question though – for the shipping industry – is how this transition to automated processes can be carried out purposefully.

In the case of XPO Logistics, developing technological solutions fit for purpose has been fundamental.

Collaborating with Singapore-based GreyOrange to deploy 5,000 intelligent robots throughout centres in Europe and North America, the autonomous machines perform a key function within “a modular goods-to-person system” that includes the efficient movement of mobile storage racks.

Key takeaway:

- Developing technological solutions fit for purpose

Self-driving cars

While much of the conversation and early development around automation has concerned the increasing intelligence of landside operations, the impact of smart technologies is not only being felt on shore.

With multiple projects and start-ups currently exploring the possibility of autonomous vessels which can safely navigate from one location to another,

even in the presence of other marine traffic, there are many technological hurdles which still need to be jumped.

The growing area of self-driving cars, a mainstream point of discussion in the media today, corresponds quite closely with the less reported interest in autonomous vessels; both have prompted questions regarding safety and security, especially as the digital systems which guide them have not proven entirely immune from attack.

In the case of self-driving vehicles though, standards are being created by the UK Government and other authorities to ensure you have resilient cybersecurity of digital technologies.

With several carriers already suffering from major hacks, including COSCO in 2018, establishing the security of pilotless ships should be a priority.

Key takeaway:

- Ensure you have resilient cybersecurity of digital technologies

Air Freight

In our modern age of next-day-delivery and thriving e-commerce, it is not surprising that air freight has gained a distinct advantage over ocean shipping.

If you can move goods more quickly, you become a more attractive option for the customer.

While the very nature of transporting cargo via air separates this business area from maritime, leading companies in the air freight space are finding ways to boost their efficiency and competitiveness through automation.

Just as digital technologies have been developed to make commercial airlines run more smoothly, cargo planes are using electronic bills of lading and tracking solutions widely to exchange information and ensure that the movement of goods remains transparent and traceable.

Greater visibility ultimately begets greater efficiency, as being able to monitor your supply chain also allows one to plan effectively, especially in situations where delays or other barriers to free movement are experienced. When approaching automation, the maritime sector would be wise to keep this fundamental principle in mind.

Key takeaway:

- Greater visibility ultimately begets greater efficiency

(from: porttechnology.org, April 2nd 2019)

STUDIES & RESEARCH

CONTAINER DEMAND GROWTH SET TO REMAIN 'MUTED'

Overall container trade volume growth will remain tepid in the summer months, according to Maritime Strategies International.

The analyst said there remained potential for near-term upside for the Eurozone economy and continued strong growth in central and eastern European economies, but the overall demand environment would "remain muted" on both Asia-Europe and transpacific headhaul trades.

"Over the next six months we expect growth of around 2.5% on the Asia-Europe headhaul," said MSI.

"Without blanked sailings or major changes to the size of vessels deployed, adjusted Asia-Europe westbound capacity over June-August will total around 5.2m TEU.

June-August volumes last year totalled 4.2m TEU, so in order to achieve an aggregate load factor of 85%, demand will have to grow by 5%."

MSI concluded, therefore, that the Asia-Europe trade would prove troubling for container lines, although some individual carriers would likely fare better than others.

The transpacific eastbound trade is "likely to avoid the most apocalyptic scenarios", but MSI still forecasts the coming quarters will be challenging.

"We expect growth over the next quarter will be slightly negative on the US West Coast and slightly positive on the US East Coast, and that US West Coast ports will bear the brunt of the volume crunch," it reported.

The summer peak season is forecast to yield only modest year-on-year growth, but by the fourth quarter, MSI predicts a slowing US economy and the unusual seasonal trade patterns of late 2018 - which were impacted by frontloading due to US-China trade war tariffs - will weigh heavily on year-on-year demand growth rates.

"Carriers will be tempted to reduce service offerings, although this will raise the difficulty of redeploying idled tonnage," added MSI.

Asia-Europe headhaul volumes expanded by 10% year-on-year in January, although much of this reflected the timing of Chinese New Year which fell early in 2019.

On the Transpacific, a tariff frontloading hangover was the dominant driver of volumes.

"In January and February combined, US imports from the Far East shrank by 1% year-on-year," added MSI.

"Load factors on both trades will remain under pressure in the coming quarters."

Lines were aided by slowing vessel deliveries in the first quarter, however.

"February saw slower developments on the industry supply-side," said MSI.

"Vessel deliveries totalled only 22,000 TEU, while confirmed demolitions totalled 12,000 TEU, although around 40,000 TEU of vessels were reported as sold for demolition in March."

MSI expects 415,000 TEU of new vessel deliveries and 160,000 TEU of capacity to be scrapped over the next six months.

(from: lloydsloadinglist.com, April 1st 2019)



INFORMATION TECHNOLOGY

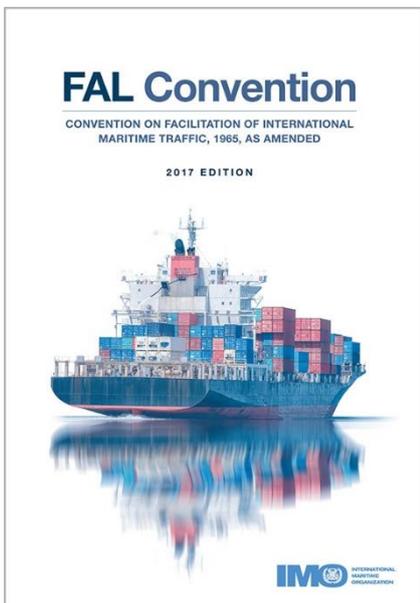
ELECTRONIC INFORMATION EXCHANGE MANDATORY FOR PORTS FROM 8 APRIL 2019

The Facilitation Convention encourages use of a “single window” for data, to enable all the information required by public authorities in connection with the arrival, stay and departure of ships, persons and cargo, to be submitted via a single portal, without duplication.

A mandatory requirement for national governments to introduce electronic information exchange between ships and ports comes into effect from 8 April 2019.

The aim is to make cross-border trade simpler and the logistics chain more efficient, for the more than 10 billion tons of goods which are traded by sea annually across the globe.

The requirement, mandatory under IMO’s Convention on Facilitation of International Maritime Traffic (FAL Convention), is part of a package of amendments under the revised Annex to the FAL Convention, adopted in 2016.



“The new FAL Convention requirement for all Public Authorities to establish systems for the electronic exchange of information related to maritime transport marks a significant move in the maritime industry and ports towards a digital maritime world, reducing the administrative burden and increasing the efficiency of maritime trade and transport,” said IMO Secretary-General Kitack Lim.

The requirement for electronic data exchange comes into effect as IMO’s Facilitation Committee meets for its 43rd session (8-12 April).

Alongside other agenda items, the Committee will continue its ongoing work on harmonization and standardization of electronic messages.

Phase one of the review of the IMO Compendium on Facilitation and Electronic business, including the data elements of the FAL Convention is expected to be

completed and the revised Guidelines for setting up a single window system in maritime transport are set to be approved.

The Committee will also receive an update on a successful IMO maritime single window project, implemented in Antigua and Barbuda, with Norway's support.

The source code developed for the system established in Antigua and Barbuda will be made available to other interested Member States.

A presentation on the system will be made during the Facilitation Committee.

The FAL Convention

The main objective of the IMO's Convention on Facilitation of International Maritime Traffic (FAL Convention), adopted in 1965, is to achieve the most efficient maritime transport as possible, looking for smooth transit in ports of ships, cargo and passengers.

The FAL Convention, which has 121 Contracting Governments, contains standards and recommended practices and rules for simplifying formalities, documentary requirements and procedures on ships' arrival, stay and departure.

Under the FAL Committee, IMO has developed standardised FAL documentation for authorities and Governments to use, and the FAL Convention urges all stakeholders to make use of them.

The IMO Standardized Forms (FAL 1-7)

The Facilitation Convention (Standard 2.1) lists the documents which public authorities can demand of a ship and recommends the maximum information and number of copies which should be required.

IMO has developed Standardized Forms for seven of these documents.

They are the:

- IMO General Declaration
- Cargo Declaration
- Ship's Stores Declaration
- Crew's Effects Declaration
- Crew List
- Passenger List
- Dangerous Goods

Five other documents are required, on security, on wastes from ships, on advance electronic cargo information for customs risk assessment purposes, and two additional ones under the Universal Postal Convention and the International Health Regulations.

Under the requirement for electronic data exchange, all national authorities should now have provision for electronic exchange of this information.

(from: hellenicshippingnews.com, April 10th 2019)

ON THE CALENDAR

- 15-17/04/19 Mosca TransRussia
- 16-17/04/19 Dubai 10th SHIPTEK: International conference on maritime/offshore and oil&gas and International Awards
- 16-17/04/19 Dubai Global Infrastructure Congress 2019
- 29-30/04/19 Lagos West African Ports and Rail Evolution Forum 2019
- 07-10/05/19 Kusadasi 54th MedCruise General Assembly
- 07-08/05/19 Vilnius CEE Small-Scale LNG Forum 2019
- 07-09/05/19 Anversa ANTWERP XL: connecting the breakbulk cargo community
- 10-10/05/19 Shanghai 4th Annual International Shipping Forum – China
- 14-14/05/19 Tokyo Japan Maritime Forum
- 15-16/05/19 Napoli The Small Scale LNG Use. Euro-Mediterranean Conference & Expo
- 21-23/05/19 Brema Breakbulk Europe 2019
- 22-24/05/19 Shanghai Intermodal Asia 2019
- 23-24/05/19 Sorrento ECG Spring Congress & General Assembly
- 23-25/05/19 Pilos Wista MED 2019
- 28-29/05/19 Atene Posidonia Sea Tourism Forum
- 29-30/05/19 Atene International Green Shipping and Technology Summit 2019
- 29-30/05/19 Sevastopol SIMBF 2019 - International Maritime Business Forum & Exhibition
- 30-31/05/19 Ancona Adriatic Sea Forum
- 04-07/06/19 Oslo Nor-Shipping 2019
- 04-07/06/19 Monaco B. Transport Logistic 2019

- 05-06/06/19 Lisbona DELIVER, the European Rendezvous for E-Logistics
- 14-14/06/19 Collecchio Logisticamente Out
- 20-21/06/19 Pireo 7th Global Symposium of Maritime Executives PIREAS 2019
- 24-30/06/19 Genova Genoa Shipping Week
- 25-26/06/19 Dar Es Salaam 3rd Edition of the African Ports Expansion Summit
- 28-28/06/19 Genova Shipbrokers and Shipagents Dinner 2019
- 28-30/08/19 Jakarta Inamarine 2019
- 10-10/09/19 Londra 12th Annual Shipping & Marine Services Forum
- 11-13/09/19 Amburgo Seatrade Europe Cruise & River Cruise Convention
- 11-13/09/19 Amburgo MARINE INTERIORS Cruise & Ferry Global Expo
- 19-24/09/19 Genova 59° Salone Nautico
- 23-25/09/19 Doha Ports & Maritime Evolution, Rail & Logistics Evolution, Road & Logistics Evolution Qatar Assembly & Expo
- 23-24/09/19 Roma AIIT 2nd International Congress on transport infrastructure and systems in a changing world
- 03-05/10/19 Piacenza GIS 2019 - Giornate italiane del sollevamento dei trasporti eccezionali
- 06-09/10/19 Limassol 16th "Maritime Cyprus 2019" Conference
- 15-18/10/19 Oslo 15th GreenPort Congress and Cruise 2019
- 15-15/10/19 New York 11th Annual New York Maritime Forum
- 21-21/10/19 Atlantis The Maritime Standard Awards 2019
- 22-22/10/19 Atlantis The Maritime Standard Tanker Conference 2019
- 23-23/10/19 Parma Logisticamente On Food
- 06-06/11/19 Abu Dhabi The Maritime Standard Ship Finance and Trade Conference 2019
- 27-28/11/19 Madrid International Cruise Summit 2019
- 03-05/12/19 Pordenone Navaltech 2019 - Marine Technologies Expo
- 04-05/12/19 Barcellona Cruise Ship Interiors Expo

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