

# Newsletter

January 31<sup>st</sup> 2018

Link road, rail, sea!

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#### YEAR XXXVI Issue of January 31<sup>st</sup> 2018

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### **January 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**

#### **SINGAPORE UP 9%**

Growth of over 3 million TEU in Singapore in 2017 suggests PSA is wining the regional transhipment race, but the port operator is taking nothing for granted as it looks to the future.

PSA has just reported its 2017 throughput figures in the following statement: "PSA International Pte Ltd (PSA) handled 74.24 million Twenty-foot Equivalent Units (TEUs) of containers at its port projects around the world for the year ending 31 December 2017.

The Group's volume increased by 9.8% over 2016, with flagship PSA Singapore Terminals contributing 33.35 million TEUs (+9.0%) and PSA terminals outside Singapore handling 40.89 million TEUs (+10.4%)".

The very solid result shows Singapore benefitted significantly from the new alliances that started operating in 2017.

It also shows the port operator's strategic moves with certain carriers have paid dividends.

In early 2017 CMA CGM extended their "joint terminal" to four berths with a capacity of 4M TEU (doubling the previous area), and PSA then signed a similar deal with COSCO SHIPPING Ports Limited, extending that agreement to cover a third berth at Pasir Panjang (taking capacity to 3M TEU).

These arrangements helped PSA return to growth last year, with volume bouncing back from the drop of 0.1% to 30.59 million TEU that occurred in 2016.

Commenting on the 2017 result Mr Tan Chong Meng, Group CEO of PSA, said, "In 2017, the global economy saw some recovery and bright spots of growth although the shipping industry continued to face challenges as the huge wave of consolidation and alliancing in 2016 began to manifest its full effects operationally.

The word 'disruption' has moved from being a buzzword to being the norm for most industries, reflecting the accelerated pace of change and leaving no industry untouched".

Tan Chong Meng made no mention of Singapore outperforming its competitors last year, preferring to say PSA has "demonstrated resilience and performed reasonably well against the challenging backdrop and tough competition.

Amid the many business and technological forces and IT security threats



buffeting us, we remain unwaveringly committed to our core focus of adapting to and pre-empting the changing needs of our shipping line customers.

In addition, we are also preparing for a future where logistics and supply chain needs are transformed by new technology, trade, manufacturing and e-

commerce dynamics".

This has become the Singapore mantra. Speaking in mid 2017, Singapore's Minister of Transport Mr Khaw Boon Wan said Singapore is "acutely aware" other ports aspire to take its position.

As well as raising its game in automation and technology he stressed that PSA "must remain relevant to your customers."

They are facing tough competition; they are confronting the challenges brought about by digitalisation. They are at risk of being disrupted by new players.

Have your ears close to them, respond to their fast-changing needs, and work with them as your partners".

Tan Chong Men said PSA is cognizant that global trends "will have further impact on the form and flow of the global supply chain.

PSA Management, Unions and Staff will continue to journey closely alongside our customers and partners as we contribute to the shaping of our industry amidst the widening ripples of change".

(from: worldcargonews.com, January 15<sup>th</sup> 2018)

#### MARITIME TRANSPORT

#### **CONTAINER LINE FORUM TSA TO CLOSE**

The Transpacific Stabilization Agreement, a legacy of container shipping's old 'conference' system that set prices and coordinated the behavior of shipping lines, is to close next month after concluding that its original mission was no longer viable.

The decision comes several weeks after its largest member, Maersk Line, announced its resignation from the TSA, a move that was set to see the market share of the TSA's member lines on the transpacific fall to around 65%, compared to more than 80% in the past.

Brian Conrad, executive administrator for the TSA, commented: "TSA has for many years served a valuable function to the carriers and other industry stakeholders.

TSA has been a key element in helping to maintain and grow a wide range of carriers operating in the trade over the long-term, offering shippers the broadest, most reliable choice of service options possible.

It has also been a strong advocate for carrier interests with both global regulators and the shipping public."

Regarding TSA's decision to close its doors, Conrad commented: "The commercial and operational environment in the transpacific trade and, more broadly, in ocean transportation worldwide, has experienced significant changes in the past few years that are likely to continue through 2018 and beyond.

During these challenging times in shipping, it became apparent that the TSA's original mission was no longer viable, but I believe that TSA has performed an important role over the years in supporting the development of US international trade."

Although the full reasons for the decision were unclear at the time of writing, it is thought that recent rates volatility in the transpacific market reflected the weakening influence of the TSA and its member lines.

As Lloyd's Loading List reported last December, the inability of lines to exercise supply-side discipline was a feature of the transpacific market during 2017.

For example, TSA carriers had made up to 18 attempts to impose general rate increases (GRIs) ranging from \$400 to \$1,000 per feu last year, but none of the initiatives found serious traction.

Discussing Maersk's decision to withdraw from the TSA in December, industry analyst Alphaliner speculated that Maersk's departure may have been prompted by frustration at the lack of success of those GRIs.

"Numerous attempts to implement General Rate Increases, both by member

carriers and non-members of TSA, have already failed this year and Maersk's decision to withdraw from the TSA in December could further de-stabilise the trade," said Alphaliner.

"[Maersk's] resignation is the latest in the series of recent departures from the transpacific discussion group that has already been weakened by the resignation of several members — K Line, NYK and Zim — as well as by the exits of Hanjin Shipping and CSCL in 2016."



Alphaliner continued: "Maersk's departure will leave the TSA carriers' share of the transpacific trade at only 65%, compared to a peak of over 80% in the past.

With significant capacity expansion planned in the Far East-North America trade in May next year, the TSA's weakened membership position could lead to further rate volatility in 2018."

The TSA was established in 1989 and over time, replaced a more rigid rate conference system in the Asia-US market.

That reflected an evolutionary process in liner shipping – from a heavily regulated common carrier system of fragmented trade lanes, basic port-to-port ocean transportation and protection of national flag fleets for trade and security reasons, to a global, more vertically integrated commercial system offering customized, value-added logistics services.

Until as recently as 1999, ocean carrier conferences engaged in joint pricing and service contract negotiation, although that function ceased following competition objections led by shipper organisations.

Nevertheless, the TSA was granted antitrust immunity in the US for its member lines to exchange market information, jointly conduct market research, and to "develop voluntary, non-binding guidelines for rates and charges" – behaviour forbidden under competition law in Europe – as well as to discuss ways members can manage costs and improve efficiency.

(from: lloydsloadinglist.com, January 25<sup>th</sup> 2018)

#### RAIL TRANSPORT

#### OVERCOMING THE LEGAL CHALLENGES TO 'ONE BELT, ONE ROAD'

One Belt, One Road (OBOR) is a global project seeking to deliver China's ambition of co-ordinated trade routes on both rail and sea, spanning 65 countries.

When completed, it will provide freight access to over 60 per cent of the world's population by rail and sea whilst creating significant trade opportunities.

Alan Woolston, Partner at Fladgate LLP tells Global Railway Review about the

varying legal challenges involved in the project.

"The initiative is already backed by \$100 billion of funding from the newly formed Asian Infrastructure Investment Bank and an additional \$40 billion from China's

Silk Road Fund.

Over \$150 billion of OBOR

projects have already been committed and new rail services are emerging along the route between the UK and China as nations embrace the OBOR vision.

With over \$900 billion worth of projects in total, planned or underway, many involve rail or associated infrastructure and some have described OBOR as "the world's biggest project since putting man on the moon".

The opportunities are bound to capture the imagination, but a project of this magnitude is not without its difficulties.

The most immediately obvious challenges are technical.

The proposed network combines existing rail routes with upgraded and new connections across many countries, with varied geographies and conditions, on a previously unseen scale.

This will require complex interfaces to be carefully managed.

However, the challenges go beyond the technical

The pioneering nature of this vast project requires an equally far-reaching approach to managing the legal issues in the creation and operation of OBOR, driven by a thorough understanding of the project as a whole.

#### Cross-border issues

Cross-border operations inevitably give rise to legal issues and OBOR will be no different.

The physical infrastructure can only achieve so much if immigration and fiscal regulation are a barrier to the practice of trade.

On issues as wide ranging as border control and customs, to track access arrangements for infrastructure, every jurisdiction involved will need to consider how best to ensure that there is an integrated approach, in some cases from quite diverse starting points.

#### Contract models

The legal risk associated with technical interfaces already mentioned is often managed by aggregating the risk to a single point of responsibility; wrapping all interfaces under one provider using well-established contract models such as a Build-Operate-Transfer structure.

However, OBOR is not a single project.

It will involve multiple projects of different types, many essential for OBOR to operate as an integrated network but with each one being delivered using one of many different procurement and contract models.

The critical interfaces for OBOR are not just those within a project but also the 'project-to-project' interfaces.

A new collaborative contracting model will be needed to ensure this can be managed.

#### Currency

The approach to currency risk is an often overlooked issue for projects of this scale and complexity.

Projects may be funded in one currency, built in another and operated in yet more currencies across different parts of the project, with revenues also being generated in yet more.

Currency risk hedging arrangements are common but also complex.

They are notoriously fertile ground for dispute and will require careful structuring.

#### **Fundability**

The substantial reserves already made available will not fund the schemes in their entirety.

Considerable amounts of additional private finance will be required.

Even in the UK, financing arrangements for public-private funded (PPP) structures are often said to have become more complex than the technical delivery, even against a typical PPP risk profile.

Many OBOR projects will additionally be affected by political instability, concerns over the sovereign country's ability to meet its obligations or long lead times from the point of inception to operation at planned capacity (which may itself be contingent on other projects also completing).

These are all risks which would traditionally be prohibitive for a PPP transaction and more innovative structures will be needed.

Choice of law and dispute resolution

OBOR projects will be truly international, involving participants from many countries.

Deciding which law will govern a project will be critical, not least to ensure the fundability of the venture.

Both commercial and political influences may well be at stake and issues such as certainty of law and the speed/effectiveness of enforcement procedures will be important considerations.

Similarly, should disputes arise, the best forum in which to resolve them is one which is familiar with OBOR.

A number of jurisdictions are already seeking to establish themselves as the 'go-to' centre for OBOR dispute resolution.

Wider influences

The legal challenges to OBOR do not stop at infrastructure.

A global project requires a global approach and experience has shown that harmonisation of infrastructure also requires harmonisation of international agendas.

For example, in 2016 the EU refused to endorse OBOR because the proposals did not include commitments to social and environmental sustainability and transparency.

A project of this scale is about more than just putting the building blocks in place.

OBOR's success will require a broader alignment of regulations and legal principles, in a wider sense, where rights held in high regard in some jurisdictions must also be harmonised to remove barriers to progress."

(from: globalrailwayreview.com, January 15th 2018)

#### **ROAD TRANSPORT**

#### PLATOONING TESTS ON PUBLIC ROADS IN JAPAN

After testing the electronic connection of trucks (truck platooning) in Europe and the US, Daimler Trucks now also operates in so-called platoons with its Asian brand FUSO.

During these tests, a heavy-duty FUSO Super Great operates electronically connected and semi autonomous in a platoon with trucks of other Japanese commercial vehicle manufacturers.

These test drives take part between January 23rd and February 1st on Shin-Tomei Expressway southwest of Tokyo and on Kita-Kano Expressway, north of the Japanese capital.

The Japanese ministry of economy, trade and industry (METI) and the ministry

of land, infrastructure, transport and tourism (MLIT) initiated the platooning test.

It is part of the Japanese government's Future Strategy 2017.

This strategy aims to roll out innovations like the Internet of Things, big data and artificial intelligence across all industries.



In the commercial vehicle sector, truck platooning will contribute to the reduction of fuel consumption and to lower CO2-emissions.

In addition, truck platooning will help with Japan's dramatic driver shortage issue.

Martin Daum, Member of the Board of Management of Daimler AG, responsible for Trucks and Buses: "Two years ago, we demonstrated with Mercedes-Benz trucks in Europe that platooning can be done and is highly advantageous.

Right now, we keep developing the technology with Freightliner on public roads in the US.

Japan is a key market for us that is on the lookout and promotes new technologies.

We take part in the Japanese government's initiative to push platooning further ahead in Asia and to remain in the lead in the development of this technology."

Daimler Trucks leading autonomous, connected and electric driving

For years, Daimler Trucks has been doing pioneer work in autonomous, connected and electric driving with its truck brands Mercedes-Benz, Freightliner and FUSO.

Throughout the globe, Daimler Trucks has now connected around 560,000 trucks to the Internet of Things – more than any other manufacturer.

For the digital connection of the FUSO Super Great during the platooning test, Daimler Trucks is combining the technological possibilities of connectivity with its experiences in the field of autonomous driving.

Wi-Fi-based Vehicle-to-Vehicle communication (V2V) interacts with driver-assistance systems, which are also used in Daimler-brands Mercedes-Benz and Freightliner.

Some of those are Cooperative Adaptive Cruise Control (CACC), Lane Departure Assist and Active Brake Assist 4 (ABA 4).

In 2014, Daimler Trucks launched the truck-concept Mercedes-Benz Future Truck 2025 with autonomous driving function.

Its designated aim was to develop the autonomous driving technology for series production until 2025.

The following year, Daimler introduced "Highway Pilot" in Germany.

In 2016, Daimler took part in the Dutch government's initiative European Truck Platooning Challenge with three electronically connected and semi autonomous driving Mercedes-Benz Actros.

The Freightliner Inspiration Truck has been driving in a so-called pairing-configuration (two electronically connected trucks) on public roads in Nevada and Oregon, since 2017.

The FUSO Super Great is the first model of a Daimler-brand to drive in a platoon with other trucks in the key market Japan.

When it comes to platooning, the trucking industry in Japan in not only talking about technology, but also – like in Europe and the US – about regulatory issues.

As a matter of fact: when the legal framework is set, Daimler Trucks customers will be able to operate their vehicles in platooning mode.

(from: transportjournal.com/daimler.com, January 29th 2018)

#### **INTERMODAL TRANSPORT**

#### LINEAS STRIVES TO TAKE LOADS OFF THE ROADS

As Europe's rail freight market continues to go through the growing pains of liberalisation, it's perhaps easy to lose sight of the fact that rail's share of the overall freight market is stagnant or declining in many European countries despite growth in the overall market.

According to a report by the European Court of Auditors in 2016, rail freight volumes in the European Union remained stable between 2000 and 2012 at around 400 billion tonne-km, but road freight performance increased from 1522 to 1693 billion tonne-km.

As a consequence, rail's market share fell from 19.7% to 17.8% in 2013, while the proportion of freight moved by road increased from 73.7% to 75.4%.

While some rail freight operators might be content to target existing rail-borne traffic by offering lower prices or better service quality, others recognise that the industry needs to win back custom from road hauliers if it is to grow market share.

In April 2017, rail freight operator B Logistics cast off its historical brand, a legacy of its days as a loss-making arm of Belgian National Railways (SNCB), and relaunched itself as Lineas with the core aims of promoting modal shift to rail and reducing CO2 emissions from freight transport, while becoming a profitable international logistics business.

"The lorry is our benchmark - we want a rail product so good that people will choose us over road transport," says Lineas CEO Mr Geert Pauwels.

"Our clients say that if we can match the transit time and service quality of lorries, they will move more of their freight by rail.

But at the same time we don't want to provide something that's the same as road haulage, we want an offering that takes advantage of the strengths of rail.

If you can move 2000 tonnes in one go over large distances, back-and-forth every day, you can beat road transport for cost and reliability.

We also want to ensure that clients have the flexibility to use our product whenever they need it, not just when it is available."

Through its growing Green Xpress network, which was launched by B Logistics in 2015, Lineas aims to provide a rail freight product that will appeal directly to road freight customers.

Green Xpress mixes intermodal and single wagonload operations, extending the benefits of fast, reliable connections expected by intermodal customers to the wagonload market.

"This approach has a lot of advantages - we can run longer, heavier trains, increase frequencies, and make the product more robust," Pauwels explains.

"It takes the high quality necessary for intermodal and gives it to wagonload



customers, who didn't have such a great offering in the past."

Wagonload is a sector where rail freight comes into direct and intense competition with road, and here the industry has ceded a huge proportion of its traffic to road over the last five decades.

As volumes declined, the networks needed to sustain this type of operation shrank and in many regions became unsustainable, leading in

some countries to the total abandonment of the wagonload business.

The Green Xpress network expanded in 2017 with the launch of new services from Belgium to Sweden and Austria.

In December, three short-sea and deep-sea terminals in Zeebrugge were added to the system, giving the Belgian port a daily service with connections to industrial hubs in Switzerland, Germany, Italy, Spain, the Czech Republic, Sweden, Slovakia, France, Austria, and the Netherlands.

"We will add more Green Xpress services throughout 2018, and we'll keep expanding the network," Pauwels says.

"This isn't just customers coming to us with a question, we are actively targeting road flows.

This is our mission, and there are few operators really doing this."

The Green Xpress concept is built around an offering that reflects the quality of road-based logistics solutions.

This includes features that are not yet universal in rail freight: regular services, track-and-trace, and a clear estimated time of arrival.

Pauwels also sees first and last-mile solutions and warehousing as logical extensions of Green Xpress to create an end-to-end rail-based logistics product which meets the needs of a wide variety of industries.

While rail freight operators can adapt their offer to attract companies that are currently reliant on road haulage, Pauwels argues that modal shift to rail will at best be minimal without the support of policymakers and infrastructure managers (IMs).

"There are four elements we need for change," Pauwels explains.

"Firstly, rail freight operators should see the lorry as the benchmark, and we should all have the same goal of stimulating modal shift to rail.

Secondly a big mental shift is needed among regulators and IMs to facilitate the work of train operators who want to achieve modal shift.

It should be just as easy for a train to cross an international border as it is for a lorry.

Thirdly, policymakers need to have a shared vision for rail.

The European Commission seems convinced that more freight should go towards rail, but not all member states seem to support that aim.

The fourth lever is innovation.

As an industry we've been around for 200 years and some things haven't changed much in that time.

If you look at other sectors, they have entirely reinvented themselves.

We are seeing this now in the road haulage industry and it's moving much faster than rail.

It's vital that we push innovation in the rail sector as a whole to develop solutions that are at least as good as what is emerging for road freight.

The infrastructure is already there, we just need to dramatically improve its performance.

What we need is hyper-rail, not Hyperloop.

This requires cooperation between IMs, train operators, and suppliers."

#### Wake-up-call

Lineas was not directly affected by the landslip at Rastatt in Germany last August, which led to a seven-week closure of the Rhine Valley Line between Karlsruhe and Basle and huge disruption for freight services on the Rotterdam - Genoa corridor.

However, Pauwels argues that event is a wake-up call which should reshape the relationship between IMs and the rail freight sector.

"IMs should see themselves as actors in mobility, but they are not always great at providing end-to-end service for the operators," Pauwels says.

"Essentially, their mission should be to make running trains easier.

But if you look at the response to Rastatt this simply wasn't the case.

There's a general feeling among operators that many IM's don't see us as

customers.

Rastatt should clarify the relationship between IMs and operators, and what happens in a crisis - there should always be a plan B in such situations.

The IM needs to be able to make better use of the network and manage freight flows

proactively, especially when things go wrong.



IM's seem to see their role as providing safe infrastructure as cheaply as possible, not being a mobility provider.

For the freight operators, it's not necessarily investment in new infrastructure that really matters - it's really about how well the infrastructure and the capacity that is there in the network is managed.

Rastatt has exposed the weaknesses in the system and I hope it will drive a mental shift.

But governments also need to make this clear to the IM's, which are stateowned, and ensure they collaborate with other industry stakeholders."

Despite these challenges, 2018 will be a year of further expansion for Lineas as it extends the Green Xpress network and pushes into new markets.

"We're recruiting a lot in 2018, we plan to expand our workforce by 15% and become much more international," Pauwels says.

"Internally we are preparing our organisation and IT to ensure we can continue growing in the coming years.

We're looking for organic growth but we will start looking at acquisitions to facilitate growth in certain areas."

With the European Union forecasting GDP growth of 2.1% in 2018 and 1.9% in 2019, the economic conditions look set to favour rail freight, aiding the sector's recovery after a long and painful downturn.

However, rail freight continues to fight against many of the headwinds that have limited growth and suppressed rail's ability to claw back market share.

If the sector can sustain the debate that has erupted in the wake of Rastatt, perhaps it has an opportunity to finally convince policymakers of its value.

(from: railjournal.com, January 16<sup>th</sup> 2018)

#### **INLAND RIVER TRANSPORT**

# DUTCH COMPANY INTRODUCES AUTONOMOUS ELECTRIC BARGE IN EUROPE

Cars and light trucks are sexy, but when it comes to reducing carbon and nitrogen emissions from the transportation sector, vehicles that haul freight are where the action is.

Tractor trailers, urban delivery vans, and ships have long been reliant on diesel engines.

They are efficient and reliable, but have a nasty habit of spewing millions of tons of vile stuff into the atmosphere every year.

Dutch company Port Liner has a better idea.

It will be introducing an autonomous electric barge for the European market

beginning in August of this year.

Port Liner CEO Ton van Meegen tells The Loadstar, a shipping industry trade journal, that 5 autonomous electric barges will begin operating between the De Kempen intermodal terminal in the south of the Netherlands and Antwerp beginning in August.

They have been designed to fit beneath the many bridges found in the Netherlands and Belgium.



The barges are expected to remove 23,000 trucks — most of them diesel powered — from area roads.

Larger barges that can handle up to 280 containers are expected to enter service between Amsterdam, Antwerp, and Rotterdam later this year.

The technology for the autonomous ships was made possible through an investment of  $\in$ 7 million by the European Union as part of a program to improve port efficiency.

The port of Antwerp also invested €200,000 in the project.

Apart from the ability to operate autonomously, what is interesting about the new vessels is that the batteries are mounted in a container of their own, which means they can be used by existing vessels.

"This allows us to retrofit barges already in operation, which is a big boost for the industry's green energy credentials," says van Meegen.

"The containers are charged onshore by carbon free energy provider Eneco, which sources solar power, windmills and renewables."

He goes on to say, "There are some 7,300 inland vessels across Europe and more than 5,000 of those are owned by entrepreneurs in Belgium and the Netherlands.

We can build upwards of 500 a year, but at that rate it would take some 50 years to get the industry operating on green energy."

Far be it from me to argue with the learned Mr. Van Meegen, but my calculator says it would take 15 years to replace 7,300 vessels at the rate of 500 a year.

Nevertheless, transitioning from diesel-powered ships to those that run on electricity has to be good news for all concerned, including the larger world community.

Norway, which has an extensive network of cargo ships and passenger ferries, is also pushing ahead with plans for autonomous electric vessels.

China recently launched an electric cargo ship.

Ironically, it will be used to haul coal, but at least it will deliver it without adding emissions from a diesel engine.

Electric ships may not be able to span the globe and cross oceans just yet, but Rome wasn't built in a day.

Converting coastal and inland ships to electric power is a harbinger of good things to come.

(from: cleantechnica.com, January 13<sup>th</sup> 2018)

#### **TRANSPORT & ENVIRONMENT**

#### **DB CARGO INCREASES NOISE PROTECTION FOR RESIDENTS**

German's national operator Deutsche Bahn and freight subsidiary DB Cargo will this year begin testing noise protection technologies.

It's the latest step in a concerted drive to reduce noise pollution for those living and working near rail lines.

\* \* \*

"Transport services are vital in a collaborative and globally networked economy and are therefore a prerequisite for our prosperity.

Rail freight traffic is the most environmentally friendly transport option here, but it needs to be quieter to maintain social acceptance.

DB and DB Cargo have taken on this challenge.

As an eco-pioneer, Deutsche Bahn has set itself the objective of halving rail traffic noise by 2020, compared to the values from the year 2000.

This can only be attained by applying different measures on roads and vehicles.

The railways have already accomplished a great deal where infrastructure is concerned and further comprehensive measures are planned.

Approximately 1,580 of a total of 3,700 kilometres of track requiring noise remediation have already been treated within the scope of the federal government's voluntary noise abatement programme.

Approximately 650 kilometres of noise protection walls have been erected to this end (as at end of 2016) and approximately 56,750 residences have been equipped with passive noise protection.

By 2020 noise-abatement measures will have been rolled out for a total of some 2,000 kilometres.

We are pursuing this noise remediation programme intensively.

Innovative noise reduction technologies on the infrastructure were successfully tested in the second phase of the stimulus programme.

The innovation process was continued in the second phase of the infrastructure acceleration programme and will also be continued in the coming years.

Fifty per cent of wagons quiet by the end of 2016

DB Cargo already had 8,300 new quiet goods wagons in use at the end of 2016.

By 2020 a total of approximately 9,000 new quiet wagons with composite brake blocks will be



operational.

In addition to the new procurement of wagons, conversion of the existing

freight wagons poses a great

challenge.

The LL-type quiet composite brake block which can be used without the costly conversion of the brake system was approved in June

2013.

All approximately 55,000 existing DB Cargo freight wagons awaiting conversion (and which do not to be taken out of service in the meantime) will be equipped with LL-type whisper brakes by 2020.

DB Cargo started the systematic conversion of the existing freight wagons in January 2014, six months after approval of the LL blocks.

In total, over 24,000 freight wagons had already been converted by the end of 2016.

Consequently, DB Cargo had over 32,000 quiet goods wagons, including the new quiet wagons, at the end of 2016.

Thus, more than 50 per cent of the DB Cargo active wagon fleet was equipped with whisper brakes at the end of 2016.

All wagons will be quiet by the end of 2020.

Conversion is and remains a feat of strength

In order to be able to attain comprehensive noise reduction, however, all freight wagons operating in Germany and thus also the approximately 120,000 existing freight wagons of other wagon keepers (domestic and foreign wagon lessors and railways) are to be converted to quiet brake blocks or replaced by new quiet wagons.

The federal government is providing a subsidy of approximately EUR 150 million for the conversion of the existing freight wagons operating in Germany.

In addition, the DB network has introduced the noise-dependent route pricing system (LaTPS) as a financial incentive for converting wagons to quiet brake blocks.

Train operating companies have been paying a premium on top of the track access charge for loud freight trains since June 2013.

This has been billed at 3 per cent since December 2016 and must be paid unless the train is made up of at least 90 per cent quiet wagons.

Conversely, the train operating companies receive a bonus for using converted quiet wagons.

This part of the incentive system is therefore financed by the railway sector itself.

In addition to the national subsidy, there is also a limited subsidy from the European funds of the Connecting Europe Facility (CEF).

Conversion is an economic feat of strength for the railways sector in fierce intermodal competition with very narrow margins.

While conversion itself is 50 per cent publically funded, the increased operating costs of converted wagons are not subsidised.

Brakes and wheelsets need to be inspected at shorter intervals, wheelsets frequently need to be re-profiled and wear more quickly, and LL brake blocks are considerably more expensive to replace than the old cast-iron brake blocks.

These increased operating costs will amount to approximately EUR 700 million for the entire railway sector by 2020.

Improved funding would reduce the additional noise pollution produced by rail freight traffic and thus limit the deterioration of the sector's competitive position."

(from: railfreight.com/dbcargo.com, January 12<sup>th</sup> 2018)

#### **LOGISTICS**

## LOGISTICS EXECUTIVES EXPECT A STRONGER YEAR FOR EMERGING MARKETS

Logistics executives are optimistic and share the IMF's view that 2018 will be a stronger year for emerging markets despite its prediction that China's economy will slow slightly in 2018, according to a new survey of more than 500 global logistics industry executives.

The survey findings are part of the 2018 Agility Emerging Markets Logistics Index, an annual ranking of the world's 50 leading emerging markets as measured by size, economic strength, infrastructure, transport connections and business climate.

Supply chain and logistics executives worldwide shared their views of the 2018 global economic outlook, prospects for emerging markets, key growth drivers and trends affecting emerging markets countries.

Nearly two-thirds (65.1%) say the IMF's 4.8% emerging markets growth forecast is "about right."

Last year, a significant minority (42.8%) said the IMF was being too optimistic in forecasting 2017 emerging markets growth of 4.6%.

Optimism about emerging markets is especially notable because the IMF predicts that China's economy – the most dominant among emerging markets – will slow slightly in 2018.

Transport Intelligence (Ti), a leading analysis and research firm for the logistics industry, compiled the Index.

John Manners-Bell, chief executive of Ti, said: "Emerging markets enjoyed favourable market conditions in 2017 with trade growth the healthiest in years.

However, there are many storylines yet to fully unfold, such as China's debt, the renegotiation of NAFTA and ongoing political and economic transition in the Middle East.

While the going looks good for now, there are numerous challenges on the horizon."

In other highlights form the survey, supply chain professionals are baffled by the Trump administration's high-stakes brinkmanship over NAFTA and cannot agree on who will win and lose in renegotiations.

Logistics executives were split on whether an updated agreement would help Mexico (24.3%); hurt Mexico (21.8%); or leave trade broadly unchanged (25.7%).

The original agreement, widely credited with generating growth in the United States, Canada and Mexico since it went into effect in 1994, has been derided by President Trump as the "worst deal ever made."

U.S. negotiators have taken a hard line in renegotiating talks.

Industry executives see poor governance (40.78%) as the biggest obstacle to growth in Brazil, but a larger percentage (29.13% vs. 21.1% a year ago) blame outright corruption.

India's Goods & Services Tax unification and other economic reforms have been greeted favorably by the logistics industry.

The percentage of professionals who said their companies are now considering investment in India jumped from 22.8% a year ago to 37.4% in the latest survey.

Infrastructure is playing a larger role in the industry's view of Sub-Saharan Africa.

A much larger percentage of supply chain professionals (21.4% vs. 15.2% a year earlier) identified rapid infrastructure development as a significant driver in African growth.

A greater percentage (16.7% vs. 12.2%) said poor connectivity and links between economic centres was one Africa's biggest challenges.

Finally, industry executives cited poor infrastructure as Africa's biggest supply chain risk, ahead of corruption, government instability and terrorism.

Few in the logistics industry see reason to worry the UK's departure from the European Union will damage emerging markets economies, even though Brexit will force the UK to negotiate its own trade agreements with non-EU countries.

Nearly 45% of executives say emerging markets will be unaffected; 25.4% said emerging markets stand to gain from Brexit.

The findings represent something of a turnaround in sentiment.

A year ago, 69% of executives surveyed said they worried that the UK's Brexit vote and breakdown of regional and global trade talks signalled a retreat from free trade.

"The big worry a year ago was that the Brexit vote and U.S. election results represented a desire to pull back from free trade and that an anti-trade backlash would hurt emerging markets economies," said Essa Al-Saleh, CEO of Agility Global Integrated Logistics.

"Those concerns have waned, especially when it comes to Brexit."

Among the other key highlights of the survey and index, in volume terms, air



freight and ocean freight lanes from the EU to Turkey were among the fastest-growing emerging markets trade lanes in 2017.

Automotive assembly locations in Turkey continue to be critical to the strategies of European vehicle

makers.

However, Turkey slipped one place to No. 10 in the Index, despite blistering 11% growth in the third quarter of 2017.

Turkey is still recovering from the after effects of a failed coup in 2016, when the economy shrank nearly 1%.

International economists warn that Turkey needs to raise interest rates to control inflation and avoid overheating.

In the 50-country Index rankings, Russia climbed three spots to No. 7 after years of declining performance brought about low energy prices, capital flight and U.S. economic sanctions.

Russia's economy stabilized and showed modest growth in 2017 after a wave of corporate cost-cutting, banking industry consolidation and economic reform.

Russia also benefitted from Saudi-led efforts to persuade major oil producers to rein in production.

Kazakhstan slumped six places to No. 20 in the Index, despite increased oil production that helped lift growth and release of a long-term national

development blueprint that emphasizes high-tech and green industries, along with diversification from commodities.

China and India top the 2018 rankings and put more distance between themselves and No. 3 UAE in the Index, a broad gauge of emerging markets' competitiveness.

Brazil, struggling to emerge from political turmoil and its worst recession in a century, slips two places to No. 9.

Industry executives can't agree on the future of the North American Free Trade Agreement, which has come under intense criticism from the Trump administration.

The United States, Mexico and Canada are in negotiations aimed at updating the agreement.

Logistics executives surveyed were sharply split about whether a new pact would help Mexico (24.3%); hurt Mexico (21.8%); or leave trade unchanged (25.7%).

Egypt surges six spots to No. 14 -- the largest jump by any country in the 2018 Index – and rockets up 26 places to No. 21 in the separate category ranking countries' business conditions, or Market Compatibility.

Bangladesh (No. 23) and Uruguay (No. 25) both leapfrogged four spots in the overall rankings.

Nigeria, Africa's largest economy, tumbled to No. 31 from No. 24 a year ago.

In spite of its potential, Nigeria ranks next-to-last in infrastructure and transport connections, or Market Connectedness, and 46th in business climate.

Also falling: Venezuela slumped to No. 48, and ranked dead last in Market Size and Growth Attractiveness; Kazakhstan fell six places despite a resumption in economic growth and announcement of a long-term development blueprint.

Gulf countries continue to dominate the top of the rankings when it comes to emerging markets business conditions. UAE, Qatar, Oman and Bahrain outpaced all other countries.

Saudi Arabia was No. 8; Kuwait was No. 16.

Gulf countries also rank toward the top in quality of infrastructure and transport connections: UAE (1), Bahrain (5), Oman (6), Saudi Arabia (7) and Qatar (8) were top performers.

Fifty-five percent of executives surveyed say small and medium-sized businesses – those with fewer than 250 employees – will benefit most from emerging markets growth.

Twenty-six percent said large companies would be the biggest beneficiaries.

India and China are the logistics industry's favorite investment destinations, but Vietnam leads a second group that includes UAE, Brazil and Indonesia.

Algeria, Ukraine and Ethiopia made big improvements in business conditions.

The business climate deteriorated in Sri Lanka, Cambodia, Tanzania, Lebanon and the Philippines.

The percentage of supply chain executives whose companies are considering investment in India jumped to 37.4% from 22.8% a year ago, following the rollout of India's Goods & Services Tax unification and other reforms.

The countries improving their infrastructure and transport connections most were India, Indonesia, Turkey, Egypt, Iran, Pakistan, Argentina and Bangladesh.

Infrastructure and transport rankings fell for Kazakhstan, Sri Lanka, Colombia, Brazil, Thailand and Kuwait.

(from: lloydsloadinglist.com, January 23<sup>rd</sup> 2018)

#### **LAW & REGULATION**

# FROM 1 JANUARY 2018 LARGE SHIPS MUST MONITOR AND REPORT CO2 EMISSIONS

As of 1 January 2018, subject to a few exclusions, ships over 5000 gross tonnage ("Relevant Ships") became subject to monitoring and reporting requirements on carbon dioxide emissions (CO2), fuel consumption and cargo carried within all ports under the jurisdiction of a Member State and for any voyages to or from a port under the jurisdiction of a Member State.

The new monitoring and reporting requirements for ships were established by the EU Regulation on monitoring, reporting and verification of carbon dioxide emissions from maritime transport (Regulation (EU) No. 757/2015 as amended) (the "EU Regulation") which came into force in April 2015.

#### Background

It is estimated that Relevant Ships account for 55% of all ships calling into EU



ports and 90% of related emissions.

The monitoring and verification requirements are part of a staged process to understand **GHG** reduction potential prior to possible pricing of those

emissions.

There has been talk of including them within the EU ETS subject to any proposals for global agreements on the reduction of GHG from international shipping.

The EU Regulation is therefore a key European measure designed to understand how to make shipping 'greener'.

The EU Regulation

The EU Regulation establishes rules for monitoring, reporting and verifying CO2 emissions from Relevant Ships which make voyages that start or finish in an EU Member State port.

The EU Regulation has been designed to be compatible with a global data collection system which is being developed by the IMO (effective from 2018).

The duty holders directly affected are defined in the EU Regulation as "Companies" meaning "a shipowner or any other organisation or person, such as the manager or the bareboat charterer, which has assumed responsibility for the operation of the ship from the shipowner".

Importantly, ships are subject to the EU Regulation regardless of their flag.

A limited number of categories of ships are excluded, including warships, naval auxiliaries, fish-catching or fish-processing ships, ships not propelled by mechanical means, and government ships used for non-commercial purposes.

#### Key compliance dates

<u>From 1 January 2018</u>, Companies are required to monitor emissions for each Relevant Ship on a per-voyage and aggregate on an annual basis by applying the appropriate method chosen in their monitoring plan.

The monitoring plan indicating the method chosen to monitor and report emissions and energy efficiency related data for each Relevant Ship should have been submitted to independent verifiers by 31 August 2017.

<u>From 2019, by 30 April of each year,</u> Companies will be required to submit to the Commission and to the authorities of the flag States concerned, an independently verified emissions report concerning the emissions and other relevant information (such as distance travelled, time of journey, type of fuel used and cargo carried) during the annual reporting period for each Relevant Ship under their responsibility.

<u>From 2019</u>, by 30 June of each year all Relevant Ships having performed activities in the previous reporting period and visiting EU ports, must carry on board a valid Document of Compliance ("DoC") issued by an accredited EU Regulation shipping verifier (i.e. an independently accredited company appointed to assess the veracity of the emissions report).

This might be subject to inspections by Member States' authorities.

#### Implementing Regulations

Importantly, on 4 November 2016 the European Commission published the following pieces of legislation which specify (a) how cargo is to be calculated

for different categories of Relevant Ships; and (b) which templates are to be used for monitoring plans, emissions reports and DoCs.

Further details are contained in the following:

- Implementing Regulation (EU) 2016/1928 on determination of cargo carried for categories of ship others than passengers ro-ro and container ships pursuant to Regulation (EU) 2015/757
- Implementing Regulation (EU) 2016/1927 setting templates for monitoring plans, emissions reports and DoCs pursuant to Regulation (EU) 2015/757

UK enforcement of the EU Regulation

The EU Regulation is in force and binding but the precise enforcement process is left to Member States.

The UK Government has implemented the enforcement process via the Merchant Shipping (Monitoring, Reporting and Verification of Carbon Dioxide Emissions) and the Port State Control (Amendment) Regulations 2017 which entered into force on 1 October 2017 (the "UK Regulations").

The key point to note is that under the UK Regulations a Company could be made criminally liable.

The potential fines should a Relevant Ship:

- 1. enter or leave a port in the United Kingdom without a valid DoC; and/or
- 2. fail to keep on board a valid DoC or to present a valid DoC upon inspection,

are unlimited in England and Wales and subject to the then statutory maximum in Scotland and Northern Ireland.

For instance the current statutory maximum in Scotland is £10,000.

The UK Regulations also amend the Merchant Shipping (Port State Control Regulations) 2011 to make it a requirement for an inspection under those regulations to include a check that the ship is carrying a DoC.

This will apply to inspections carried out on and after 30th June 2019.

Any impact on these inspections as a result of the proposed exit by the UK from the EU is unknown at this point.

Importantly, under the UK Regulations there are wide powers of enforcement including the power:

- To detain a Relevant Ship by serving it with a 'detention notice' if anyone attempts to navigate it out of a port without a valid DoC; and
- Where a Member State has informed the Secretary of State that it has issued an expulsion order, refuse entry for the particular Relevant Ship to any port in the UK.

The UK Regulations make provision for arbitration in the event that a Company alleges that a Relevant Ship was improperly detained.

In the event that an arbitrator finds in favour of the Company following detention of a Relevant Ship, compensation will be payable in respect of any loss suffered in consequence of the detention of the Relevant Ship as the arbitrator thinks fit.

(from: hellenicshippingnews.com, January 9<sup>th</sup> 2018)

#### **PROGRESS & TECHNOLOGY**

#### MAERSK LINE AND IBM IN BLOCKCHAIN JV

A.P. Møller - Maersk and IBM to establish a joint venture to develop and market blockchain technology for the shipping industry, offering an alternative to other collaboration platforms in the process.

With the new JV, yet to be named, Maersk is putting its weight behind blockchain, while at the same time trying to put a blockchain service at arms length so it can be marketed to the wider shipping industry.

"The aim of the new company will be to offer a jointly developed global trade digitization platform built on open standards and designed for use by the entire global shipping ecosystem.

It will address the need to provide more transparency and simplicity in the movement of goods across borders and trading zones," the companies stated.

Noting the high costs and time involved in current shipping transactions, which





are spread across a large network of disparate partners, Maersk and IBM believe blockchain deliver can significant improvement in efficiency.

"A distributed ledger technology, blockchain

establishes a shared, immutable record of all the transactions that take place within a network and then enables permissioned parties access to trusted data in real time.

By applying the technology to digitize global trade processes, a new form of command and consent can be introduced into the flow of information, empowering multiple trading partners to collaborate and establishing a single shared view of a transaction without compromising details, privacy or confidentiality".

The new JV company will be launching a platform that extends beyond blockchain for streamlining the information flow.

The announcement - full details can be found at this link: <a href="https://www.maersk.com/stories/maersk-and-ibm-launch-digital-joint-venture">https://www.maersk.com/stories/maersk-and-ibm-launch-digital-joint-venture</a> - mentioned the platform will also include "other cloud-based open source technologies including artificial intelligence (AI), IoT and analytics, delivered via IBM Services, in order to help companies move and track goods digitally across international borders".

"This new company marks a milestone in our strategic efforts to drive the digitization of global trade.

The potential from offering a neutral, open digital platform for safe and easy ways of exchanging information is huge, and all players across the supply chain stand to benefit," said Vincent Clerc, chief commercial officer at Maersk and future chairman of the board of the new joint venture.

"By joining our knowledge of trade with IBM's capabilities in blockchain and enterprise technology, we are confident this new company can make a real difference in shaping the future of global trade."

IBM noted its blockchain platform is being used in other industries to manage transactions, including cross border payments, supply chains, and digital identification.

"The major advances IBM has made in blockchain have shown that the technology can foster new business models and play an important role in how the world works by building smarter businesses," said Bridget van Kralingen, senior vice president, IBM Global Industries, Solutions and Blockchain.

"Our joint venture with Maersk means we can now speed adoption of this exciting technology with the millions of organisations who play vital roles in one of the most complex and important networks in the world, the global supply chain.

We believe blockchain will now emerge in this market as the leading way companies seize new untapped economic opportunities."

Not everyone in the industry agrees with that statement: other alternative technologies to facilitate supply chain planning and collaboration include the XVELA platform from Cargotec company Navis.

In fact Raj Gupta, CTO at Navis, commenting on the top emerging technology trends for shipping in 2018 was dismissive of blockchain, describing it as "a solution looking for a problem".

Gupta believes there are better ways for the industry to meet the challenge of digitizing the information flow.

"There is lot that can be done to digitize the paper-based information flow in shipping with online network collaboration systems, however the application of blockchain seems like a solution looking for a problem.

Although blockchain does provide security of transactions a lot of the security needed in the shipping industry can be easily handled by simple encryption and RBAC," he stated, referring to rules based access control.

Blockchain has also received some negative press recently over the increasing time and cost of clearing Bitcoin transactions through the system of "miners", which replaces the need for a central clearing house.

Initially Bitcoin transactions costs less than \$0.10 to process, but in December 2017 that figure had risen to over US\$20, and long processing delays were being reported.

In comments to World Cargo News Maersk and IBM said this will not happen in the shipping industry.

"IBM Blockchain is based on Hyperledger Fabric, and it uses the computing power differently than bitcoin.

In layman terms that means that the miners have to perform computations to build the winning block for the chain.

Multiple miners build the blocks and the one with the longest chain wins.

Bitcoin mining operation is known to be computationally intensive, making it less than ideal for the enterprise.

Mined currencies like Bitcoin have transaction processing times measured in minutes.

"IBM uses the open source Hyperledger Project Fabric which does not use mining like bitcoin and does not need to perform computationally intensive operations to commit a transaction to the chain.

This makes a blockchain for business built on Hyperledger less computationally intensive and less power hungry.

IBM Blockchain can secure thousands of transactions per second, in most instances and based on the size of the network, that could be near real-time".

Michael J. White, former president of Maersk Line in North America, has been named CEO of the new company, which can not start operating until it has obtained regulatory clearance.

Once this is obtained the first products are expected to be on the market within six months, starting with two key areas: a "shipping information pipeline" for exchanging information and providing end-to-end supply chain visibility; and blockchains for supporting paperless trade.

(from: worldcargonews.com, January 18<sup>th</sup> 2018)

#### **STUDIES & RESEARCH**

#### WHAT NEXT FOR FREIGHT RATES IN 2018?

Freight rates have risen steadily from lows in 2016, but ample vessel availability should cap further increases, analysts say.

Freight prices have risen steadily for almost two years, chipping away at margins for the industrial mineral trade.

But with plenty of vessels available, the sector is unlikely to see the cost of shipping rise much further in the year to come, shipping consultants have told Industrial Minerals.

The Baltic Dry Index, which measures global prices for the shipping of bulk commodities, hit a low of 290 points in February of 2016 after coming under pressure from the seasonal lull during the Chinese New Year, which brings much shipping activity in China to a halt.

Prices have ticked up gradually since then, rising to 961 points by the end of 2016 and hitting 1,366 points by the end of 2017, but prices are still well below their historical peak of 11,793 points in May 2008.

"It's been good times for the shippers of industrial minerals," Peter Malpas, at transport group Braemar Shipping Services told Industrial Minerals.

"March 2016 saw a real low period, really across all sizes, but particularly on large capesize vessels," he said, adding, "the handysizes were less impacted, but were still well below operation cost levels."

Handysizes are mid-sized bulk carriers, which transport most industrial minerals.

"We've had that period of recovery," Malpas said, adding that in 2018, "the recovery will still be evident...what we are not expecting is a significant increase in rates beyond what we currently see."

"2016 was an extremely bad year, and so [2017] looks good, comparatively speaking," Basil Karatzas, chief executive of New York-based Karatzas Marine Advisors & Co. said, adding, "however, the question is whether this trend is sustainable."

#### Increase in demand, especially for capesize

The demand picture for freight is mixed, with a modest global economic uptick looking positive for demand.

But the mineral sector has been hit by the Chinese government's crackdown on

pollution, which is reducing heavy industrial activity there.

Chinese pollution controls, however, are helping to support demand for capesizes, the largest bulk carriers. which are used to transport iron ore, Malpas said.



"The anti-pollution

measures put in a greater focus on higher grade iron ores," Malpas said, because higher grade ore requires less energy to process.

The focus on ore quality is driving demand away from local supplies and from Australian imports, and toward Brazilian ore, increasing the distance ore consumed in China has to travel, and tying up capesize capacity.

"This is having a great bearing on capesizes," Malpas said.

#### Ample vessel availability

The main downward pressure on shipping rates is that vessel availability has remained strong, due to recovering prices easing the pace at which ageing vessels were scrapped.

The low prices of freight in 2016 meant that shipowners were facing losses.

"Handysize average rates were as low as \$2,900 per day," Malpas said, adding, "operating costs were \$4,500... that doesn't take into account any capital costs."

But returns have risen since then.

"By the end of 2017 we were looking at the average rate being \$9,000 per day," he said.

"In 2017 you saw significantly less scrapping [of ships].

As the recovery was evident, the incentive to scrap was dissolved and they could start to make some profits.

Enough to keep the ships away from the scrapyard."

This has helped maintain ship availability, which is also being bolstered by a delay in the enforcement of new environmental rules.

"What we were initially anticipating was the ballast water regulation coming into effect in late 2017 and, playing out over a four year period, we would see significant numbers of middle-aged ships scrapped," Malpas said.

But in July 2017 the International Maritime Organisation pushed back the requirement for ships to comply with new ballast water management rules.

The rules, which were designed to prevent ships from dumping untreated ballast water and potentially disrupting local ecosystems, will now come into force from 2019, two years later than previously allowed.

"That is going to delay the need to scrap the middle-aged ships," Malpas said, allowing for tonnage to continue to see "modest" growth.

Karatzes also saw vessel availability as ample.

"In general, demand has been growing, overall, because world economies are growing," he said, adding, "but fortunately for the cargo shippers, it's an oversupplied market."

"In 2017 the freight market may improve a little bit, but it's a market in favour of the charterers and not the ship owners," he said.

(from: hellenicshippingnews.com, January 15<sup>th</sup> 2018)

#### **ON THE CALENDAR**

•	07/03/2018 - 09/03/2018	Padova	Green Logistics Expo
•	28/03/2018 - 29/03/2018	Beira	19th Intermodal Africa 2018
•	18/04/2018 - 19/04/2018	Livorno	6th MED Ports 2018
•	30/05/2018 - 31/05/2018	Varna	7th Black Sea Ports and Shipping 2018
•	04/07/2018 - 05/07/2018	Johor	16th ASEAN Ports & Shipping 2018
•	24/09/2018 - 29/09/2018	Napoli	Naples Shipping Week 2018
•	26/09/2018 - 27/09/2018	Riga	2nd Baltic Sea Ports & Shipping 2018
•	24/10/2018 - 25/10/2018	Aqaba	15th Trans Middle East 2018
•	28/11/2018 - 29/11/2018	Accra	20th Intermodal Africa 2018
•	30/01/2019 - 31/01/2019	Kuwait City	16th Trans Middle East 2019
•	20/02/2019 - 21/02/2019	Manila	10th Philippine Ports and Shipping 2019
•	20/03/2019 - 21/03/2019	Mombasa	21st Intermodal Africa 2019

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