



PORTS & HARBORS

Official Journal of the International Association of Ports and Harbors

Crew change conundrum

Fate of crew hinges on dubious agents

Pandemic forces progress

Dredging sector adapts to COVID-19

Focus on Latin America

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Shared duty

BIMCO president Dr Şadan Kaptanoğlu calls for a united response
to enable crew changes and decarbonise the maritime industry




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6

Patrick Verhoeven talked to Şadan Kaptanoğlu, president of BIMCO, about being a shipowner during COVID-19

Photo: BIMCO

REGULARS

Comment: While the port sector stood strong against the pandemic, COVID-19 exposed challenges that the sector must continue to address in 2021 **3**

News: Further updates on how COVID-19 determines the future of ports, and other news **4**

In conversation with: Patrick Verhoeven and Şadan Kaptanoğlu, president of BIMCO, discuss how shipowners and ports can work better together **6**

Open forum: Maritime UK shows how its working groups help to diversify the maritime workforce **10**

Infographic: The top 10 ports in South America rated by their throughput over the past five years **30**

IAPH info: The latest news from your association **32**

WPSP info: The sustainability group discusses obstacles that prevent just-in-time arrival of ships **36**

Last word: Eranda Kotelawala, CEO of the Solomon Islands Ports Authority, issues a call to action **40**

FEATURES

Crew change conundrum: The pandemic has exposed ways of making money with crew changes **12**

Corruption: For some crew, a port call means dealing with bribery and unwanted attention from port officials **16**

Dredging during COVID-19: A round-up into how the pandemic influences dredging works **18**

Brazil: Having been heavily hit by COVID-19, how does the country react to the impact of the pandemic **22**

Argentina: Argentina tries to defy an economic crisis with an extension to its vehicle export hub, Port of Zárate **24**

India: J M Baxi Group's leadership about how its container terminals cope with the changed COVID-19 landscape **26**





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COMMENT

A new chapter

The pandemic exposed challenges that the
sector must continue to address in 2021

Santiago Garcia-Milà
IAPH President



As I am writing this comment, we are still more than two months away from the year's end. We can safely say that 2020 has been the most exceptional year in the 65-year history of the IAPH.

Sadly, the pandemic is still not under control, with several world regions experiencing a second wave that appears to be stronger than the first. Social restrictions are likely to remain a part of daily life, thus putting a dampener on the festive end-of-year period, which we like to enjoy in the company of our family and friends.

We can take comfort and pride in the fact that our sector makes a significant contribution to getting the world out of this crisis. As nodal points of global supply chains, ports have been able to keep their operations going as our COVID-19 barometers demonstrated.

Despite the impact on vessel calls, challenges reported on intermodal delays, warehouse capacity, and port worker availability, ports have progressively adapted their way of

working to keep cargo on the move.

Going forwards, having an efficient supply chain will remain a top priority. Therefore, resolving the crew change crisis should be on top of everyone's agenda unless we want ships to simply stop sailing.

The other immediate priority is digitalisation.

The list of critical actions to accelerate digitalisation and strengthen the resilience of the maritime supply chain that we helped identifying for a report in the World Bank's Transport Global Practice series, which is about to be published soon, forms a good basis to get work on the ground started.

To conclude this comment, I would like to point out that you are holding a collector's item in your hands. The last *Ports & Harbors* of 2020 is also the last one in the format that you have been used to for many years. The first issue of 2021 will not only bring a totally fresh look and feel, it will also be more people-focussed with more room for opinion, debate, analysis, and data-led journalism, provided by the editorial team of our partner, IHS Markit.

I hope you will be enjoying the new *Ports & Harbors* and I wish you and your loved ones a warm and peaceful transition into the New Year. **PH**

“2020 has been the
most exceptional year in
IAPH's 65-year history”





The 50 Let Pobedy nuclear-powered icebreaker, operated by Atomflot, arrives at the Port of Sabetta in the Gulf of Ob

NSR expansion postponed

Some expansion projects in the Russian Arctic are likely to be delayed, as cargo turnover on the Northern Sea Route (NSR) has failed to beat the government forecasts. The Russian government plans to postpone its comprehensive plan for modernisation and expansion of its trunk transport infrastructure, Sergey Dyagilev, deputy director of the government's transport development department, told the Russian press on 16 September 2020.

The plan still involves 11 projects, with the NSR being part of it, with the overall investment cost of USD90 billion, but they will be implemented by 2030, not by 2024. "The plan is a live tool, which means it can and should be adjusted, taking into account new conditions," Dyagilev said.

The key new condition is a revised forecast on the cargo turnover on the NSR. By 2024, it should reach only 60 million tonnes, not 80 million tonnes

as the government predicted initially, Russian state nuclear corporation Rosatom said in a statement on 10 September. The forecast is reconsidered because at least three big projects in the oil and coal production area are being postponed.

For example, Russian major oil producer Novatek has recently notified the government that it would be able to transport only 35.5 million tonnes of cargo on the NSR by 2024, while the earlier projection was 46.7 million tonnes,

the Russian Business Consulting Agency reported. This year, cargo turnover on the NSR, among others, is affected by the COVID-19 pandemic.

"It is obvious that the pandemic has brought certain adjustments. We are not employing robots to mine minerals, so everywhere we encounter problems with working shifts, transportation, etc. In some areas, there will be revision [of the 2020 cargo turnover forecast], although it would be wrong to disclose any figures now," said Minister of Natural Resources and Environment Dmitry Kobilkin.

According to Vladimir Kosoy, president of the Russian Centre for Economic Infrastructure, the infrastructure expansion delay will likely entail an increase in costs. However, the government has yet to adopt an updated plan with a revised timeline and funding.

By 2024, the total transshipment capacity on the NSR was expected to rise to 85 million tonnes, and to 115 million tonnes by 2030, Rosatom stipulated in the NSR development programme.

Indiga Seaport is supposed to become the main income stream of the NSR. The construction cost is estimated at RUB300 and it is slated to begin in 2021; the port should become operational in 2025, with an expected capacity of 80 million tonnes per year.

Weak market may delay Russian container expansion

The planned expansion of some container terminals in Russia is unlikely to happen as expected, while some existing terminals may even be closed.

"Moby Dik container terminal in St Petersburg may be redesigned for passenger vessels," Sergey Shishcarev, chairman of the Delo Group, stakeholder of Global Ports, said in a statement in late September 2020. "This is the less-occupied Global Ports asset, so analysts are currently estimating the passenger flow of the seaports."

Given the current state for demand, those plans do not look realistic, said Alexander Golovisnin, logistic department director of Russian port construction company Morstroitechnologia.

"Basically, most container terminals have either frozen or buried their development programmes," Golovisnin said, explaining that the expansion plans that were not cancelled have no agreed time frame.

"For example, the fate of the Ust-Luga Container Terminal is not fully clear. Global

Ports may return to the expansion plans only in case of some phenomenal growth in the market," Golovisnin explained.

Russian seaports enjoyed a decade of consistent growth, and most had embarked on expansion plans before 2015. However, the overall container flow has slumped from 5.3 million teu to 4 million teu. As such, the capacity utilisation factor of the most Russian container terminals is currently limited to up to 55%, according to the Russian association of marine commercial ports.

Building blocks for the port of the future

The Port of Rotterdam has published a white paper outlining seven building blocks the port of the future will need to work on: organisation and clients, assets, infrastructure, environment and stakeholder engagement, energy, digital transition, and

innovation. This paper explains the steps that need to be taken and describes the impact of COVID-19.

 Download *Port of the Future: 7 Building Blocks* here: bit.ly/3dWQtpf

E-commerce zone planned

An e-commerce zone has been carved out in the Port of Incheon, South Korea, to cater to growing container shipments of goods purchased through online shopping. The port has been marketed as a gateway to capital city Seoul.

The move is similar to the developments undertaken by the Kaohsiung, Taipei, and Ningbo-Zhoushan ports in the Asia-Pacific region. Online retail sales have been skyrocketing, fuelled by the movement restrictions caused by the COVID-19 pandemic.

Cross-border e-commerce sales are expected to hit USD94 billion in 2020, more than doubling from USD41 billion in 2016, the Ministry of Oceans and Fisheries (MOF) stated in a press release.

The 250,000 m² e-commerce zone has been designated within the port's Aam Logistics Complex 2, where an integrated customs inspection centre will be completed in 2023.

The MOF also said that it is appropriate for Incheon port as it has an express customs clearance system alongside a ro-ro passenger/cargo transport service to China. It is also nearby the Incheon International Airport. In short, goods can be transported through a combination of air and sea freight. Busan, while being South Korea's busiest container port, does not have as many international flight connections.

The Incheon Port Authority will select tenants for the zone



Stacks of import-export cargo containers at the largest seaport in Incheon

through a public offering method to make it more attractive to global e-commerce players. Tenants will also be offered discounted rentals according to the scale of investment and other incentives based on the future volume of goods transported and jobs created.

Tenants have to submit business proposals and applicants will be selected by year-end. Construction of a global distribution centre in the zone, which will also serve as an international logistics system, is expected to start in the later part of 2021. The distribution centre will receive and store products from overseas e-commerce companies, sorts, repacks, and delivers products according to individual overseas orders.

The MOF predicted that the e-commerce zone could attract about 50,000 TEU of new cargoes

annually as well as about KRW360 billion (USD309 million) of private investments, both of which could create 500 new jobs.

In addition, it is expected that the logistics cost will be reduced by about 46% if companies in the special zone establish a global distribution system exclusively for e-commerce freight and use sea and air transport.

The MOF's head of logistics, Kim Jun-seok, said, "The demand for maritime transportation to ship goods purchased through e-commerce is expected to grow. The variety of such goods has expanded, from small items such as cosmetics, to bulky items such as television sets and furniture. We hope that with the growth of online retail, South Korea can lead the global e-commerce market by designating such special zones in our ports."


Port updates

► PORT SUSTAINABILITY GUIDE PUBLISHED

Ports Australia has issued the *Port Sustainability Strategy Development Guide: Approaches and Future Opportunities* document to provide advice to Australian ports as they endeavour to prepare sustainability strategies or evolve the work they have already undertaken.

The guide outlines a strategic, robust, and systematic approach that has been applied within the industry throughout Australia and New Zealand. It has also been workshopped at international congresses around Europe.

Ports Australia acknowledged that every port business varies because of their size, location, key demand drivers, financial and governmental considerations, historical constraints, environmental setting, as well as regulation and relationships with key stakeholders such as surrounding communities and port users. However, Ports Australia stressed the methodology outlined in its latest offering should be considered as adaptable and "can be 'right-sized'" to suit a relevant organisation such as private and public ports as well as terminals.

 Download the guide here: bit.ly/2TexYTy



In it together

BIMCO president Dr Şadan Kaptanoğlu and IAPH managing director for policy and strategy Patrick Verhoeven talk to *P&H* editor **Ines Nastali** about how to improve the ship and shore relationship with a focus on decarbonisation and crew changes

When speaking about her first year as the president of BIMCO, Dr Kaptanoğlu, who is also the managing director of HI Kaptanoglu Shipping, divides her presidency into before and after COVID-19.

"Before COVID-19, we were focussed on preparing our members to comply with the IMO sulphur cap," the first-ever female BIMCO president told *P&H* in a discussion with IAPH managing director for policy and strategy Patrick Verhoeven.

Together with her members, Dr Kaptanoğlu said she also worked on "enforcing a non-carriage ban for heavy fuel oil", adding that BIMCO is "arguing for global enforcement" of this.

A recent survey into the switch over by BIMCO, the International Chamber of Shipping, INTERCARGO, and INTERTANKO, which was published in August 2020, revealed that off-specifications regarding fuel characteristics that lead to increased sludge and wax deposits in pipes and filters, as well as poor ignition performance, are the main problems for shipowners.

So, while COVID-19 took the attention away from what many had feared to be a huge predicament – the availability of low-sulphur fuel for ships – Dr Kaptanoğlu is confident that overall, the industry succeeded with the fuel transition. "It was a successful changeover in the name of the shipowners," she said.

Additionally, BIMCO was able to increase its physical footprint by opening a new office in Athens, Greece, a logical step because the Greek shipowners make up the biggest percentage of the BIMCO member base.

While the biggest membership share might be made up of Greek shipowners, BIMCO has been traditionally, and still is, headquartered in Denmark.



BIMCO president
and managing
director of HI
Kaptanoğlu
Shipping Dr Şadan
Kaptanoğlu

BIMCO: 5170503

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BIMCO house – an impressive, early 20th century property that serves as host for conferences – is located just outside the capital Copenhagen. “We managed to keep BIMCO house open, too,” said Dr Kaptanoğlu.

Taking action

At the same time, COVID-19 sent millions of people into a home office, as were the shipowners. “We are also really lucky that we are a digitalised office and can work from anywhere,” said Dr Kaptanoğlu.

In the after COVID-19 part of her presidency, to help members tackle the problems that arose from the pandemic, “we made sure to keep members informed by updating our website on a daily basis,” she said.

In addition, what Dr Kaptanoğlu described as the “fastest job we’ve ever done, for which I would like to thank the committee”, was to enable a crew-change clause for timecharter parties to allow shipowners to deviate to a different location to enable crew changes.

“I think the biggest thing COVID-19 has shown is how fragile our supply chain is in this point and that something is very wrong when it comes to allowing crew changes,” she said. “Seafarers are the heroes of the sea, but this is still a problem despite our efforts,” Dr Kaptanoğlu said, calling for a swift recognition of seafarers as key workers.

According to Dr Kaptanoğlu, seafarers being at sea might be the main explanation why they escape the attention of governments and politicians. “Politicians tend to go to those they can see – but where are the seafarers? Far out at sea. Governments fail to understand the global aspect of shipping,” she said.

As a result, the BIMCO president urges to call out issues on social media and talk to political representatives directly to raise awareness.

Consequently, while the supply chain overall coped with the changed dynamics of the pandemic, it did so “at the cost of human lives,” said Dr Kaptanoğlu.

Verhoeven agreed with the pattern that Dr Kaptanoğlu outlined. “The speed by which we came together, and the response of all members was so sympathetic, we had more dialogue than ever,” he said.

At the same time, the managing director of the IAPH acknowledged shortcomings. He said, “Our main weakness is the lack of digitisation.” He also re-emphasised the need to improve the interface between ship and shore.

Working together

The pandemic might have taken the attention away from the decarbonisation efforts of the maritime industry, but that does not mean that those are slowed down. “Whenever there is a disruption, there is a focus on it, but decarbonisation is always on the back of our mind,” said Dr Kaptanoğlu.

She is fully on Verhoeven’s side to increase collaboration between ship and shore in the fight against emissions. This also means that the BIMCO president has a clear opinion about the recent decision of the European Union to include shipping in its emission trading scheme – something that has been perceived as undermining global efforts of the International Maritime Organization (IMO) by the majority of the maritime industry.

This was until the CEO of Maersk Tankers Christian Ingerslev said during the Global Maritime Forum in October, “As a parallel to pushing for a global levy through the IMO, we should lean in by showing active



“Our main weakness is the lack of digitisation”

Patrick Verhoeven

IAPH managing director, policy and strategy

ECSA: 5048774



support and push for national and regional regulations." His approach was echoed by Lasse Kristoffersen, president and CEO of Norwegian shipping company Torvald Klaveness. Since then, regional regulations have also been discussed by non-EU states.

While the BIMCO president understands that the EU wants to speed up efforts, for Dr Kaptanoğlu, "the emission trading scheme is a simple tax, nothing more, and it's not enough. BIMCO believes such regulation is best done globally – as opposed to regionally".

So instead of what is perceived as a punishing tax by the shipowner association, the focus should be on developing technology that helps to build cleaner ships. "We know that there is no technology available at this point in time," she said, adding that this is why a research and development (R&D) fund is needed.

Consequently, Dr Kaptanoğlu hopes the IAPH will support the shipowners at the 75th session of the IMO Marine Environment Protection Committee in mid-November when the matter of establishing an R&D fund for this endeavour will be discussed in one of the first virtual IMO meetings.

Verhoeven agreed that a global way of reducing emissions is the right approach. For him, it is also important that the discussion is not about investments for ships alone. "About 85% of investment is on land and 15% on ships, so it would be wrong to focus on those," he said. While Verhoeven might share the scepticism about the regional approach, for him the upside is that cargo owners have also recently stepped into the discussion, and going forward, he would also like the oil and gas industry to join in the discussion. "It's a positive step that we broaden the discussion," he said.

Staying on course

Of course, Dr Kaptanoğlu is a shipowner herself, so whatever the outcome of this debate, it will influence her business. Speaking about navigating her company, which specialises in bulkers and tankers but also ship repair, through the recent times of uncertainty, her main advice is to "know your business". She explained, "I live by an old family principle, 'never bite off more

than you can chew," she said. Her family's shipping business goes back to 1904 and her own experience to a thorough university education in MSc in Shipping, Finance, and Trade from Cass Business School and a PhD from Leicester's De Montfort University.

Dr Kaptanoğlu has learnt that in challenging economic environment, the fundamentals of a business come to light and also, how stable those are. "Diversification helps," she said.

Up next

After a turbulent first year as BIMCO president, what is next for Dr Kaptanoğlu in her two-year tenure?

In addition to pushing the maritime industry to reduce emissions, she would like to co-ordinate with the EU and explain that it would be better to wait until the IMO timeframe for emission reduction goals is agreed upon to combine efforts.

Just-in-time (JIT) arrival is one of the building blocks on the way to decarbonisation, so BIMCO has recently started a working group to draft a new JIT clause. The focus here is that ship and shore need to share data and agree on a harmonised data mode, as well as allow real-time updates. "This is very important to cut emissions," she said. A first draft of the new clauses will be reviewed by BIMCO's documentary committee at its next meeting in January 2021.

Commenting on the past feud between shipowners and shoreside, pointing at each other to change something when it comes to reducing emissions, Verhoeven said, "I think it's good that we took out the antagonistic view of who is to blame; instead we are focused on a constructive approach and therefore on a good trajectory."

Second, with crew changes having become complicated during the pandemic and COVID-19 exposing a flawed system, sorting the crew change conundrum is also a priority for the BIMCO president.

Lastly, while decarbonisation and COVID-19 will stay on the agenda, looking ahead, Dr Kaptanoğlu also hopes to further promote the inclusion of women in maritime. "There are successful women out there, but they don't come forward," she said.

BIMCO successfully managed to ensure that Dr Kaptanoğlu's potential successor is a woman too – Sabrina Chao, chairperson of Wah Kwong Shipping based in Hong Kong.

The election of the next BIMCO president and the president designate will take place at the BIMCO general meeting in summer 2021.

Verhoeven, agreeing with Dr Kaptanoğlu's hopes to promote the inclusion of women in maritime, said, "We can do little things that help, such as making sure that women are heard at conferences and events and get coverage in industry publications such as ours."

Dr Kaptanoğlu can therefore also count on the IAPH's support on this matter, ensuring that in 2021, the maritime industry shows it is in it together. **PH**



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Port workers

Nurturing diversity in maritime

Making maritime more inclusive requires a sector-wide commitment to share information, implement best practice, and drive forwards cultural change, writes **Namrata Nadkarni**, chair of Maritime UK's Diversity Communications and Events Working Group

Maritime has long had a diversity issue, with the lack of women in the workforce being recognised by the International Maritime Organization (IMO) three decades ago when it launched its gender programme in 1988.

Today, the IMO states that women represent only 2% of the world's 1.2 million seafarers and of that small number, an overwhelming 94% of female seafarers work in the cruise industry – low figures that prompted the theme of “getting on board with gender equality” for World Maritime Day on 25 June 2019.

Of course, the effort to create a gender balance in our sector has had other champions as well, with many high-profile

organisations taking steps to make maritime more welcoming to women. The IAPH has had its Women in Ports mentoring scheme, while WISTA has various UK branches as well as an international presence throughout Europe, the Americas, Africa, and Asia.

Maritime UK set up its Women in Maritime Network in 2018 to bring together discussions across the five sectors of maritime: shipping, ports, leisure marine, professional services, and engineering and science.

These myriad efforts appear to be slowly paying off. According to the Maritime HR Association's 2019 Gender Market Analysis report, which captured data for over 30,000 employees working in shore-based positions around the globe, the number

of women working in the sector increased by 7% during the last 12 months.

Being truly inclusive

However, to address the growing skills gap, we need to push the envelope further and be truly inclusive of other under-represented groups – an attitude espoused in the UK government's Maritime 2050 strategy, which states, “The maritime workforce of the future will be diverse. New roles, new technologies, and a changing image of the sector will draw in people from all backgrounds across the entire UK.”

Accordingly, the UK government has provided USD730,000 to boost diversity, wellbeing, and skills in maritime and is championing its Diversity in Maritime



‘ A truly diverse working environment will benefit everyone in maritime ’

Namrata Nadkarni

*Maritime UK, Diversity Communications
and Events Working Group, chair*



HRM Mark Richard Cleed: 5160758

is the case with many organisations for the length of the pandemic, our networking and information sharing is taking place online. This has the benefit of lowering the barrier to entry not only for individuals scattered around the UK, but also for any individuals who are based overseas and would like to contribute to the discussions and access the resources being created.

UK-based companies looking to be more inclusive also have additional access to a range of initiatives that I hope will serve as an inspiration to set up similar schemes within the global ports' sphere. These include:

- The pledge: Signatories to the pledge make clear their support for creating positive change within their respective organisations, and collectively, across the UK maritime sector. Each pledge signatory has the opportunity to profile their work to improve diversity within their respective organisation. To date, more than 120 companies have signed the pledge and Maritime UK is working to increase this number.
- The charter: The Women in Maritime Charter was launched in September 2018 during Maritime UK Week. The charter creates a framework to challenge companies to make progress on gender diversity and is supported by the network to realise those targets. Charter companies are required to agree on an action plan, setting out individual targets for each participating company.
- A key commitment is that companies identify a member of senior management responsible for implementation of the action plan as well as distributing a survey to staff on workplace culture. Performance against action plans will be self-assessed via online portal. Eight companies are charter certified, and Maritime UK are looking forward to announcing more charter companies soon.
- Speaker bank: The speaker bank provides

a portfolio of diverse speakers spanning a range of different roles, levels, and sectors across the maritime industry. Maritime UK, with the networks, are now expanding the speaker bank to profile people from the maritime sector with expertise on mental health and LGBT+-related issues.

- Interview pool: The interview pool has been set up to assist maritime organisations access for women and other minorities in the sector to help with recruitment, enabling more diverse interview panels that show companies intent towards creating an inclusive environment. Several companies have successfully used the pool and Maritime UK is hoping more companies will be able to utilise it.
- Toolkits: The toolkits are resources designed to help companies make progress against diversity commitments including case studies, long-term projects, and quick wins. Maritime UK is working to update the toolkits to ensure there is a range of best-practice guides and resources to assist our sector.

These are very useful tools that have been made available to the sector thanks to the hard work of the dedicated individuals who volunteer their time and effort and we would love to see more volunteers and industries take up the initiatives so that this knowledge is being effectively implemented. We are also happy to talk to and work with organisations that have identified best practice and are happy to contribute to our bank of resources or to help guide other organisations that are looking to set up similar programmes.

Having a truly diverse working environment will benefit everyone in maritime; this brings new ways of thinking, widens the talent pool, and prepares the industry to face any storms that the future may bring. Let's make maritime more inclusive together. **PH**

programme, which was launched in May 2020. In addition to the Women in Maritime Network, which continues to grow and operate as an open, safe-space community to discuss barriers and deliver a range of gender-focussed programmes and initiatives, the Diversity in Maritime programme includes the establishment of networks across diverse challenged areas with three inaugural groups: Pride, Mental Health, and Ethnicity.

The programme, led by Chrissie Clarke at Maritime UK, includes four networks chaired by individuals from across the sector and is supported by four working groups: Recruitment, Retention, Pledge and Charter, and Communications and Events, which I chair. The programme is committed to gathering resources, sharing information, and bringing about meaningful change for the sector.

Membership of any of the networks or working groups is open to everyone. We encourage anyone with an interest to sign up, as we welcome allies that would like to learn more about inclusivity and are happy to share knowledge and best practice. As



Risky business

The complicated logistics for a crew change under COVID-19 conditions have exposed unethical practices that pose a growing safety risk, writes **Samira Nadkarni**

Almost a year after countries began to close their borders to non-nationals to prevent the spread of COVID-19, the crew change crisis continues to intensify. According to the International Maritime Organization (IMO), about 400,000 seafarers were stranded on board ships in September, continuing to work but unable to be relieved.

There have been extensive efforts by several high-profile organisations, such as the IMO and the

International Chamber of Shipping (ICS); individual shipowners; and various associations to address this. There was even an international crew change summit held in the United Kingdom in July 2020, which was attended by 15 countries.

"The International Chamber of Shipping has produced recommended framework protocols for ensuring safe ship crew changes and guidance to ensure safe shipboard interface, all of which have



Crews often face the effects of bribery

Gerry Images/Fantastic Studios/erhu 1979, 5170078

been supported by the IMO,” ICS spokesperson Stuart Neil told *P&H*, adding that specific industry guidance to manage the health risks are available on the ICS’ website. “The level of co-operation across the sector has been very good. We’ve worked with our partners and chaired weekly calls with all parties to ensure that best practice is shared and problems can be addressed quickly and effectively.”

However, the situation is yet to effectively resolve on a global level, with the availability of ports changing from one day to the next in response to local infection rates. “One of the main issues is that countries and ports are responding in different ways. We’ve recommended to our members that it’s vital to open lines of communication with port state control and port authorities. We have had cases where medical care has been denied for non-COVID-related incidents and this is not acceptable,” Neil said.

He added that the ICS has been working closely with its social partners, UN agencies, and other industry bodies to address problems and ensure that best practice is followed.

Unethical behaviour

The uncertainty for vessels calling at a port hoping to take new crew on board has created a fertile ground for unscrupulous activities by stakeholders trying to profit from this crisis. This is reportedly happening in India. The country went into total lockdown in March and has heavily restricted the number of flights and routes allowed to repatriate nationals and transport key workers such as seafarers.

However, the Vizhinjam International Transshipment Deepwater Multipurpose Seaport has emerged as crew

The Kerala Maritime Board, the government agency overseeing the Kerala maritime industry, in addition issued conditions at the end of October under which agents are permitted to undertake crew changes. According to *The Hindu BusinessLine*, the board sent letters to three agents stating: the agents must keep INR300,000 (USD4,000) as deposit in the bank account of Kerala Maritime Board, which will be used to recover “any liability caused by the shipping agents”; they must have a functional office in Vizhinjam; police clearance; experience in activities similar to crew change with corroborating documents; and hold a licence from the Customs Department to operate in Vizhinjam port for carrying out crew change.

When approached by *P&H* for comment on the issue, Vizhinjam port did not respond. This scenario illustrates the expectation of bribery that occurs at some ports around the globe (see pages 16–17), which have apparently accelerated under the current pandemic. “The maritime industry is exposed to frequent demands for corruption, including cash or in-kind benefits,” warned Cecilia Müller Torbrand, executive director of the Maritime Anti-Corruption Network (MACN).

The MACN launched an e-learning training toolkit and platform on ethics and integrity for shipowners, managers, agents, and maritime cadet schools in June 2020. The e-learning resource, delivered by the Ocean Technologies Group, is aimed at equipping the captain with tools and support functions to say no to demands as well as building a solid anti-corruption programme. “Ultimately, it’s the master who must manage the situation when government officials make demands for corrupt payments. This results in great stress and has a detrimental effect on the health and safety of the crew,” she added.

Speaking on condition of anonymity, one European ship manager said that the COVID-19 crisis has eroded the ability of ship operators and crew to resist demands for bribes. “Getting a crew change done during COVID-19 times requires a lot of co-ordination and is very expensive,” they explained. “You have to make sure your vessel will be able to call at a port, you have to arrange for tests for the crew that will be going on board, you need to arrange flights to get the crew to the ship in the window while the test results are valid, and often the crew fly in to a different airport and then you have to arrange internal travel to the port. Then you need to make sure you have arrangements for the disembarking crew to either quarantine if this is required by the local government, or you have to have a separate flight or flights to take the crew out of the country to their home countries or an international hub to connect.

“By the time you have made all of these arrangements, you’ve expended a lot of time, money, and effort, so some port agents and the officials know that they have you in a tight spot where you are likely to pay over the odds to grease the wheels. They are definitely taking advantage of the situation, but for us, the care of our

“The maritime industry is exposed to frequent demands for corruption”

Cecilia Müller Torbrand, executive director of the Maritime Anti-Corruption Network

change hub due its proximity to major shipping lanes in July 2020. Since then, multiple news reports allege that vessels attempting to perform crew change in the port in the south of India have not just been faced with a swathe of red tape by port officials, but also exorbitant charges from ship agents ranging from USD4,000 to USD12,500 for the operation.

With a lack of standardisation, it is hard to determine an average price for crew changes at the port, but, according to a series of investigative articles by *The Hindu BusinessLine* that looked into crew change at Vizhinjam, vessels attempting to use cheaper agents other than one favoured by the port found that these cheaper agents were forced to move to court to be able to undertake similar crew changes.



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crew comes first – we have an obligation to get them home to their families – so we are doing what is needed to get our seafarers home safely. Obviously, we will look for other ports for future crew changes so that it's cheaper, but it's not always possible to divert a vessel and synchronise flights at these ports, in which case you have to make it work."

Co-ordination complications

For many vessels, a complicating factor for crew change is the attitude of the stakeholder in charge of vessel decisions. Carl Schou, CEO and president of Wilhelmsen Ship Management, pointed out that in many cases, ship managers are unable to control vessel routes that have been decided by the owner or charterer. This means that the options to call at crew change-friendly ports are severely limited.

"Having said that, we do observe that our clients do try detour to ports in [the] Philippines and India when it's possible. Although these major diversions – such as travelling to the port of Manila during the Australia-China route – could cause time delays, they ultimately still prove a more practical alternative," he told *P&H*. He added that even in cases where there is not an artificial inflation of prices, the costs of crew change have skyrocketed due to the additional costs of limited commercial flights, quarantine accommodation, COVID-19 tests, and socially distanced transport. "Generally, crew change cost has gone up compared to the days prior to the pandemic," he said.

Often, the accelerator for cost comes in the form of logistical hurdles, warned Neil, who shared the example of shipowners who have been unable to gain visas, obtain customs clearance for luggage, or even find seats on flights to specific destinations as they were sold out for a four-month period.

In one case a few months ago, he explained, a shipowner was forced to take the ship off-hire and –

after being unable to arrange a crew change at various European ports – made the decision to sail to the UK to relieve the seafarers trapped on board. "This has all been done off-hire and at the shipowner's expense," he said. "We've estimated [not from the shipowner] that with the loss of hire at say USD15,000 per day and bunkers at say USD12,000 per day, we are probably talking about a total cost of USD820,000, which this shipowner has had to pick up to ensure their seafarers get home. This is obviously not sustainable for the entire sector and shows how red tape, bureaucracy, and a lack of political focus is creating significant issues for seafarers and the industry."

He highlighted another example in which due to flight delays, crew reached their connecting airport hub a mere 11 minutes after the 48-hour acceptance window for their COVID-19 test results expired and were refused boarding. The shipowner then had to pay to fly the crew back at a high cost and was unable to perform the crew change.

Safety risk

Philip Adkins, CEO at Red Box Energy Services, which provides module transportation services for Arctic liquefied natural gas (LNG) projects, has also, on numerous occasions, diverted vessels from pre-planned routes towards ports that were allowing crew change and had to co-ordinate flying replacement crew out to those new locations. "We recently spoke with one of our officers on a vessel carrying wind farm parts, who said that the COVID-19 risk was too high to transit the Suez Canal, so we took a four-day extension to go via Cape of Good Hope," he told *P&H*, highlighting that the potential risks of getting caught in a logjam at the canal and arriving in Taiwan with an infected crew member persuaded them to change routes.

Adkins warned that many crew members are on board their vessels long beyond their contract expiry dates and, in many cases, they are dealing with physical and emotional exhaustion. "If crew are not well rested and treated respectfully and responsibly, then something could go wrong," he said, pointing out that this has humanitarian and commercial implications. "If you can't unload the cargo that is critical to someone else supply chain, that would be critical. If we don't have a safe crew on board our vessels, and we can't deliver an LNG project due to an incident on board related to exhaustion, we have potentially cost people millions of dollars in delay. The consequences of a poorly crewed vessel in our industry is the single biggest threat."

This commercial risk also carries over to ports and coastal communities, who are likely to be at the sharp end of fatigue-based accidents that may result in oil spills, vessels running aground, and other disasters. As seafarers continue to work beyond their employment contracts, this risk increases exponentially, making it clear that the costs for delaying crew change extend far beyond the financial burden. **PH**

Countering corruption

Helen Sampson and **Iris L Acejo** from the Seafarers International Research Centre, University of Cardiff, discuss how corruption in ports hurts seafarers' mental health and port business



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Ports are not only a place to exchange cargo, they also give seafarers a much-needed break. However, not all ports are the same for seafarers.

Despite being unanimously regarded by seafarers as busy and hectic places, some ports have a positive reputation for offering a variety of features and services that make seafarers look forward to visiting.

At these ports, they gain brief respite from life at sea and to have a chance of interacting with other people outside of the confines of the ship. Meanwhile, there are seafarers who fear port calls.

This is because they have encountered corruption in some ports before and know they will again. Thus, they will describe feelings of dread and anxiety in advance and approaching the port will not be anticipated as an uplifting 'land, ho!' occasion.

The level of corruption and pressure seafarers experienced in some ports was highlighted in a study, *The relationships between seafarers and shoreside personnel*, conducted in 2012–16 by the Seafarers International Research Centre (SIRC) at Cardiff University, UK. The findings from this study were then turned into engagements and activities to raise awareness between 2018 and 2020. Those have shown that seafarers find themselves increasingly unable to respond to demands

for sweeteners in port, with an increasing impact on port reputation and popularity.

Various accounts of seafarers' stressful experiences in ports show the many ways port reputations may be tainted by unsatisfactory interactions with port personnel and officials.

An overwhelming majority of seafarers had witnessed the distribution of facilitation gifts in many parts of the world, with 95% of deck officers indicating that this was the case. It was regarded a routine practice, common in certain ports and regions such as Southeast Asia, China, the Indian subcontinent, and West Africa, and was believed to be increasing.

More than half of respondents (57%) believed that demands for facilitation gifts in ports in some parts of the world were increasing.

No protection

Ironically, now that many companies have introduced bans on the disbursement of facilitation gifts as a result of new national and regional anti-corruption laws, this places them in an especially difficult position.

In other circumstances, captains and senior officers would not mind giving officials a few sundry goods; however, in the new context, often this has

become impossible for them. Crew also identified practices that were regarded as 'going too far' when it came to making demands for goods and provisions from vessels.

When officials raid ship stores, seafarers felt it very personally as the officials were taking food that would have been the basis for seafarers' meals. In these cases, seafarers have no access to stores and cannot replenish lost goods. Many had experiences of rationing or hunger and it is unsurprising that this left them with a strong, negative view of such ports and their personnel.

Seafarers were also wary of cash extortion potentially occurring in certain ports in West Africa, the Suez Canal, Southeast Asia, the Indian subcontinent, and China. The fear of cash extortion was experienced by 69% of seafarers in the study. This was regarded as the most stressful of all corrupt practices, especially by captains who had to face port authorities, and, at the same time, account to company personnel for any incidents or losses. There were some cases when captains either paid cash demands from their own pockets or from welfare funds meant to support seafarers' safety.

Trying to help

Seafarers largely work on temporary employment contracts and are very fearful of angering their employers in case this bears upon their future employment. With the prospect of these practices blemishing their job records, seafarers are placed in a very stressful and uncomfortable position by some corrupt port personnel and they feel they are passive victims of practices in contexts where they cannot exert and retain control.

In striking a fine balance between protecting the interests of their crew and the principals and charterers, seafarers are being penalised by corrupt port officials who may believe they are doing little harm as they imagine their actions target large multinational shipping companies and not the individual seafarers they encounter on board. In today's context, such a perception is very far from the truth and it is seafarers who suffer as a result of such behaviours and demands.

In some areas of the world, initiatives by ports to introduce beneficial changes, such as transparency in port operations, reforms in the conduct of inspections, and campaigns against corruption, are under way.

A variety of collective actions against systemic corruption has been carried out in ports in Argentina, India, Indonesia, and West Africa to raise awareness of the detrimental impact of corruption and offer a form of support for seafarers and vessels.

Reducing port corruption

Amid the complexity of the industry, initiatives of various local and global stakeholders involving private and government institutions through the Maritime Anti-Corruption Network, the International Chamber of Shipping, and the International Transport Workers' Federation have proved fruitful. The improvements in systems and processes that have led to reduced incidence of port corruption hopefully serve as a call for similar uptake from other ports facing the same dilemma.

Several resources available at SIRC are designed to raise awareness of the consequences of corruption in ports. In early 2020, the centre launched a short film highlighting the ways in which the corrupt practices in port were not 'victimless' crimes. The film is available on the SIRC website, and has subtitles in Arabic, French, Italian, Mandarin, Portuguese, Russian, and Spanish languages. It is also available to everyone around the world free of charge.

Ports are indispensable in relation to economic trade worldwide. However, ports with a negative image – where problems with port personnel, extortion, and theft are anticipated – might not attract optimal levels of tonnage and business.

Furthermore, with 1.5 million seafarers working globally and in the age of social media, the ports' public image may be boosted or conversely undermined by seafarers' experiences of them. A positive public image is vital not only to the business of specific ports but to national business, trade, and tourism.

Ports that take steps to stamp out corrupt practices will not only impress seafarers and lower their stress levels, they can also expect to benefit from associated reputational rewards in the form of increased business.

Seafarers' stressful experiences in some ports are detrimental to their health and safety and this is the main reason why corrupt practices must be addressed and stopped. Ports have the potential to provide hardworking seafarers with a brief respite from their difficult lives at sea. It is important that ports achieve this and move away from the damaging practices, which have become embedded in some parts of the world. **RH**

i MORE INFO: Watch a film made by SIRC to help ports improve their image, provide fairer treatment of seafarers, and eliminate injustice: bit.ly/34Z8TS6.

Bribery in port adds to the mental stress of seafarers

“There are seafarers who fear port calls”

Iris L Acejo

Research associate, Seafarers International Research Centre, University of Cardiff, UK



Moving on

COVID-19 has affected port operations in various ways, but what about expansion projects and vital dredging campaigns? **Tony Slinn** asked ports globally about the pandemic's impacts

The *Magdalen*, a hopper dredger, makes its way through the New York City harbour as the sun sets on the Statue of Liberty and the Empire State Building on 18 June 2020 as seen from Bayonne, New Jersey

Gary Hershorn/Getty Images: 5167746



The Port of Antwerp in Belgium, Europe's second-largest port, had no expansions planned when the COVID-19 pandemic hit, but it did have one of the most important dredging campaigns scheduled for August. The port will be carrying out the expansion plan over the next five years.

"In partnership with the government of the Belgian region of Flanders and contractor SeReAnt – a joint venture between Jan De Nul's and DEME's environmental subsidiaries – we've started dredging and processing the port's most polluted sludge, which contains tributyltin," Antwerp representative Annelies Oeyen explained to *P&H*.

It has taken years of research and a pilot project in 2018 to confirm that removing the contaminated sludge and treating it in the Antwerp Mechanical Dewatering, Recycling, and Application of Sludge Treatment Plant (AMORAS) was viable. Now the plan is to dredge 800,000 m³ over the next five years and process it into 500,000 tonnes of filter cake.

The Flemish government provides EUR25 million (USD29.4 million) annually for AMORAS and is giving an additional EUR700,000 per year to dispose of tributyltin sludge.

"Port of Antwerp invested EUR1 million in the preliminary phase of this project and will spend another EUR1.5 million per year," port alderman Annick De Ridder stated.

Dredging for the five-year campaign will be carried out by different parties.

Back in Europe

After many years of delay, the Port of Hamburg was about to begin deepening its ninth fairway when COVID-19 hit, Kai Gerullis, head of public affairs, told *P&H*. "Strict hygiene rules and digitalisation – such as automatic data transfer from the dredgers to administration – had to be in place to make sure the project could go ahead as planned.

Throughout, only one hopper barge had to be quarantined for eight days after a crew member tested positive for the virus.

"Rules also had to be introduced for regular maintenance works. Physical interaction between crew and Hamburg Port Authority [HPA] employees were kept to a minimum. Remote supervision of hopper dredgers and efficient teleworking within the administration meant these works continued without any delays. Digital infrastructure was improved along the way.

"The situation has pushed the HPA to an even more efficient, sustainable way of working," Gerullis concluded.

In the United Kingdom, Peel Ports' group head of energy and environment, Alex Pepper, told *P&H*, "The pandemic has certainly brought sustainability discussions to the forefront. We've developed and launched our Enviro365 strategy, which reaffirms our commitment to managing the operational environmental impacts at all levels. That includes reusing dredged materials and sustainable sediment



management and we currently have projects that promote beneficial reuse across Peel Ports, in particular in Clydeport and Liverpool, where we have ongoing investments.

"Additionally, by reducing the distance dredged material is transported, we reduce road miles and carbon emissions – all of which contribute to our wider Enviro365 strategy," Pepper concluded.

PD Ports owns Teesport, the fifth-largest UK port, and as CEO Frans Calje explained to *P&H*, "We've continued to run operations as normal throughout the pandemic. We're currently celebrating the official opening of a GBP9.2 million [USD11.8 million] bulks terminal at Teesport, an important milestone that's created 44 new jobs in the Tees Valley revival, following the collapse of the SSI Steelworks in 2015.

"The near 28,000m² Teesside Bulks Terminal comprises seven walled bays and dedicated, covered rail access," Calje concluded. "Glencore will utilise three bays to store its agribulk products, destined for UK distribution. The terminal builds on the GBP1 billion of investment PD Ports has attracted to the region over the last decade."

Scandinavia

In September, the Gothenburg City Council approved a SEK1.2 billion (USD134.7 million) grant to enable the Port of Gothenburg to finance the Skandia Gateway project that will deepen the access channel from 13.5m to 17.5m. The Swedish Transport Administration matched the council's grant to fully fund the project.

Quay reinforcement is set to begin in 2022. After that, about 12 million m³ will be dredged, starting in 2024, with project completion scheduled for 2026.

Port CEO Elvir Dzanic described Skandia Gateway as the "most important port project in Sweden this century."

He said, "Direct services to and from Gothenburg without the need for transshipment are vital if Swedish companies are to reach global markets in a climate-friendly, cost-effective way. At present the largest ships can only call half-loaded; without the largest ships, the port will be marginalised."

Meanwhile, in Finland, the Port of Turku's new ferry terminal is still at planning stage, cruise and ferry business developer Marita Anstead told *P&H*. "It's due to arising issues, but not COVID-19," she explained.

The Americas

The Port of Santos in Brazil is now depositing some dredged material in confined aquatic disposal units outside the port area.

"Most dredged sediment, however, is disposed of in the licensed Ocean Disposition Polygon," port representative Paulo Silveira told *P&H*. "New terminal projects have not, so far, been impacted by the pandemic – construction of terminals leased in August 2019 are on schedule. Santos also continues to attract investors and two pulp and paper terminals were recently auctioned for USD94.2 million in addition to an investment plan of USD71 million. Our perspective is that by early 2021, two more terminals for liquid bulk cargoes will also be auctioned."

In Canada, the Vancouver Fraser Port Authority is actively seeking opportunities for the sustainable reuse of dredged materials.

"For example, it's been used to provide infill for the Centerm Container Terminal expansion project," port representative Chris Clarke told *P&H*. "Operated by DP World Vancouver, and expected to be complete by 2022, Centerm will increase peak handling capacity from 900,000 teu to 1.5 million teu and support road and rail improvements. It will increase container-handling capacity by 65%, while requiring only a 15% increase of the terminal's physical footprint."

In the United States, the Los Angeles and Virginia ports are carrying out dredging works. For the Port of Los Angeles, COVID-19 has not affected maintenance dredging at APM Terminals' Pier400 nor for the Everport Terminal Services (ETS). ETS will deepen its berths and improve facilities, allowing the operator to accommodate next-generation vessels.

"The project's been awarded to Manson Construction with the dredging portion – approximately 19,000m³ – bid at USD600,000," Rachel Campbell, the port's media relations manager, told *P&H*. "The USD65 million project will improve wharves and increase berth depths up to 16.15m. The project will also involve constructing an additional 6,070m² of backland and electrical improvements for five new Alternative Maritime Power connections, plus electrical infrastructure for three additional container cranes."

The Port of Virginia is hugely expanding its terminals, and deepening shipping channels and its Norfolk Harbor to 16.8m, while widening channels to give ultra-large container vessels a safe two-way passage under a USD800 million project.

"It's on budget and ahead of schedule," port representative Joe Harris told *P&H*. "We're fortunate that COVID-19 has not slowed progress. The dredged material in this project phase isn't suitable for reuse, so



“Without the largest ships, the port will be marginalised”

Elvir Dzanic

CEO, Port of Gothenburg



Gothenburg Port Authority ©165841



Vancouver Fraser Port Authority: 5165849

The expansion of the Centerm Container Terminal is now underway and expected to be completed in 2022

it's being disposed of in a federal-designated offshore site. As work progresses, we anticipate beneficial reuse of better-quality dredged material with erosion control projects."

First-phase dredging is being carried out under a USD78 million contract by Weeks Marine. The company's corporate and government relationship director, Mark Sickles, explained to *P&H* that the work will deepen the Thimble Shoal Channel, which leads into Norfolk Harbor.

Harris concluded, "When dredging is complete in 2024, the port will be the deepest on the US East Coast. The overall project result will be two modern, dedicated container facilities, two deepwater multi-use terminals, two inland cargo terminals, and the capability to handle several different types of cargo."

New Zealand and Australia

Matt Ball, general manager of public relations and communications at the Ports of Auckland, was confined to his home under New Zealand's lockdown when he spoke to *P&H*. He was optimistic for the port's major new capital dredging project following planning consent to deepen the shipping channel from 12.5m to between 14m and 14.2m.

"It safeguards Auckland's vital international supply line by allowing larger container ships to enter the port, such as 366m-long New Panamax vessels with a maximum draught of 15.2m. Tidal windows will be used to make best use of the natural water. As our CEO Tony Gibson has stated, 'The COVID-19 lockdown highlighted the essential role Auckland's port plays in the economy. A deeper channel will ensure it can continue that role for decades.'"

"Currently, all our dredged material is used for reclamation," Ball concluded. "Material from the harbor,

which is often contaminated with run-off from the surrounding city, is mixed with cement to create mudcrete, which is placed on the seabed in layers, creating a strong, stable base for port expansion. Clean material is used to bund the exterior of the reclamation and contaminated material is then put inside the bund, locking up contamination and cleaning up the harbor."

In Australia, the Port of Brisbane's chief development officer David Keir told *P&H*, "COVID-19 has not delayed current construction projects; our sites adapted quickly to government public health restrictions. We have completed construction of the Brisbane International Cruise Terminal and two new warehouse facilities since March. Thinking about the future, during 2019–20, an additional 18 hectare [180,000 m²] of developable land was made available. In the last two years, we have welcomed six new customers and 12 have expanded – we opened 35,000 m² of new facilities over the last year."

As for the Port of Melbourne, Australia's largest container port, corporate relations manager Michelle Hindson told *P&H*, "While COVID-19 has caused a small trade volume reduction, this has not been consistent across key sectors. Notwithstanding such occasional short-term impacts, Melbourne's long-term forecasts and infrastructure investments remain on track.

"Earlier this year, the latest phase of dredging was completed to enhance shipping access, supported by a comprehensive environmental management plan. Additionally, the Victorian government gave the all-clear for the key Port Rail Transformation Project and terminal capacity works will begin shortly," Hindson concluded.

Finally...

P&H turned to consultancy Royal HaskoningDHV for its overview of the situation."

An essential part of keeping navigation channels open, maintenance dredging has continued throughout the pandemic with many countries designating their maritime works essential and those delivering services key workers," said green ports director Caroline Price.

"Some capital programmes, however, like the associated infrastructure projects, have been put on hold – partly related to the economic implications of COVID-19 and partly a reflection of the international nature of the dredging sector. And although many ports retain their own plant for maintenance dredging, capital works often involve international contractors with globally deployed fleets.

"Restrictions on travel and containment and quarantine rules," she concluded, "have introduced difficulties in delivering capital dredging projects this year. Crew changes in particular have become difficult to organise, often resulting in crew spending lengthy periods on board. Nevertheless, a large number of capital projects that constitute essential infrastructure for reasons of connectivity and economic resilience, have continued." **PH**



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Stepping forward

Despite a gloomy outlook for Brazil's future GDP, the Itapoá Container Port presses on with a much-needed expansion project, **Gordon Feller** reports

At the end of September 2020, data analytics company Statista published a special report titled *Brazil: Impact of Coronavirus (COVID-19) on GDP Growth 2020*.

Author Marina Pasquali presented some very difficult facts for South America's largest economy: as of 18 September 2020, Brazil's GDP was forecast to decrease by 5.05% in 2020, according to the Central Bank of Brazil. That was the bad news.

The good news was that this represented an improvement to the projected 5.46% decrease, which had been forecast only a month earlier.

GDP declines had remained stable at 2.3% during the first six weeks of 2020. It decreased for 18 consecutive weeks, until 12 June. These results have been linked to the impacts of the COVID-19 pandemic, which has hit especially hard in a country that now ranks either second or third in the World Health Organization's global tally of COVID-19 death and infections.

Moving on

Despite these problems, the Itapoá Container Port is moving forwards with a major project, aided by generous international financing, to fulfill increasing

market demands. The port is in the southern state of Santa Catarina.

With its long Atlantic coastline, Santa Catarina is playing an increasingly important role in Brazil's economic development, which is why this port expansion is worth looking at.

This is an ambitious project, with potentially important ramifications. The Itapoá Container Port is a private-use terminal, administered by two partners: Portinvest Participações and Aliança Administração de Imóveis e Participações. Both are in the city of Itapoá.

As with ports all over the world, Brazil's ports are coping with the gradual and steady increase in the average size of vessels. Larger ships have capacity for more cargo, thereby achieving scale-driven cost improvements and making transportation more efficient and agile.

The number of container ships in the world was approximately 5,150 vessels at the beginning of 2019. This means that the global container fleet grew almost 50% from 2010, when it totalled 2,760 ships, to 2019. Meanwhile, the average capacity of new ships delivered to shipowners now exceeds 8,000 teu.

This change is noticeable along Brazil's lengthy



Itapoá Container Port

coastline. In 2005, the largest ship that docked at the country's ports had a capacity of 5,000 teu, in comparison to current ships with more than 10,000 teu destined for the highest-cargo-volume routes, such as Europe and Asia.

However, Brazilian ports are less able to adapt to the growth of vessels docking at the country's coast, mainly due to insufficient investment in port infrastructure, especially regarding the dredging of port channels.

Deep dive

It is worthwhile to take a closer look at the trends visible inside each of Brazil's four largest container terminals – Paraná, Rio Grande, Santa Catarina, and Santos – in terms of teu transported. Their maximum depths do not exceed 14 m.

As the world's larger vessels get older –operating in the primary shipping routes between China, the EU, and the US – they tend to be reallocated to secondary shipping routes, such as to South America.

Despite the pandemic's effects, expert studies published in the *Journal of Transport Literature* have affirmed that structural changes in Brazil's ship cargo movements are on course.

This is especially true where the focus of container cargo is on at least three large hub ports. Each of these will, in the coming years, need to pivot in such a manner that they can fully accommodate larger vessels. In addition, more mid-scale terminals will be needed to accommodate the bevy of smaller transshipment vessels.

Economic recovery and the concentration of container cargo will soon make the need for upgrades of port infrastructure more urgent, and the terminals that are faster to modernise their infrastructure will obtain an important competitive advantage.

In the short term, shipowners and port operators

were already planning to dock ships of 366 m with 11,000 teu in 2018 –the only year for which the most up-to-date data is available.

The Itapoá Container Port began its operation in June 2011, with an infrastructure capable of handling 500,000 teu per year. Its upcoming, major project involves developing a 170 m expansion in the port's pier and constructing 40,000 m² of additional storage area.

At the end of the expansion phase, the Itapoá Container Port will have a total storage area of 100,000 m² and a pier with 800 m in length, increasing its capacity to handle 1.2 million teu per year.

Brazilian construction company Piacentini was hired to manage and conduct all of the expansion work on the ground.

The expansion project is being implemented by parent company Itapoá Terminais Portuários. As it is currently constituted, the port has been stretched very hard. In fact, for the past several years it has been operating at above its real capacity. This project, and the long-overdue expansion it brings, will enable the port to handle demands that have been created by changing market conditions.

The aim is to extend the capacity of its existing quay, container storage area from 146,000 m² to 296,000 m², raising wharf capacity from 630 m to 800 m in order to receive two ships at the same time, and increasing container-handling capacity from 510,000 teu to 1.2 million teu.

Economic support

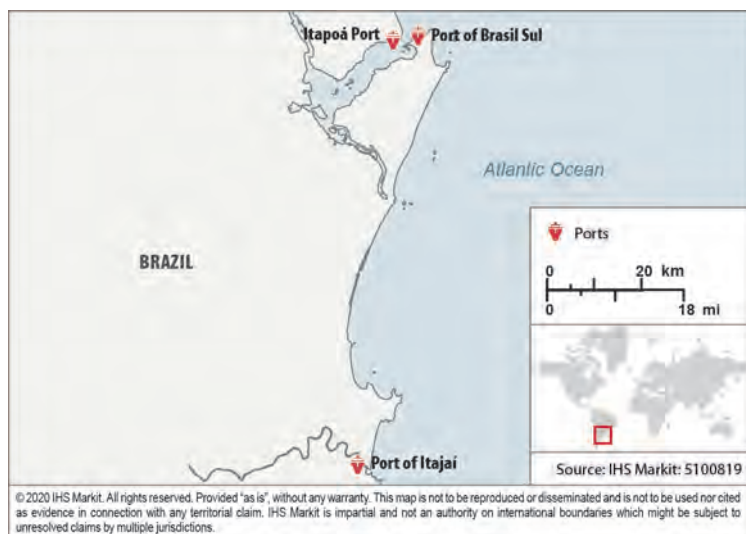
The Babitonga Bay area is not only home to the Itapoá Container Port but also to some other ports, including the bulk terminals of Santa Catarina and Babitonga. A new private port, known as Brasil Sul Terminal, has faced steep public resistance to its plans.

Among the 26 Brazilian states, Santa Catarina is considered to be the most European state. Most of the people who live there are descendants of German, Italian, and Portuguese immigrants.

There are also two railway construction projects in the region: Ferrovia do Frango and Ferrovia Litorânea. These projects are still going through the process of environmental licensing.

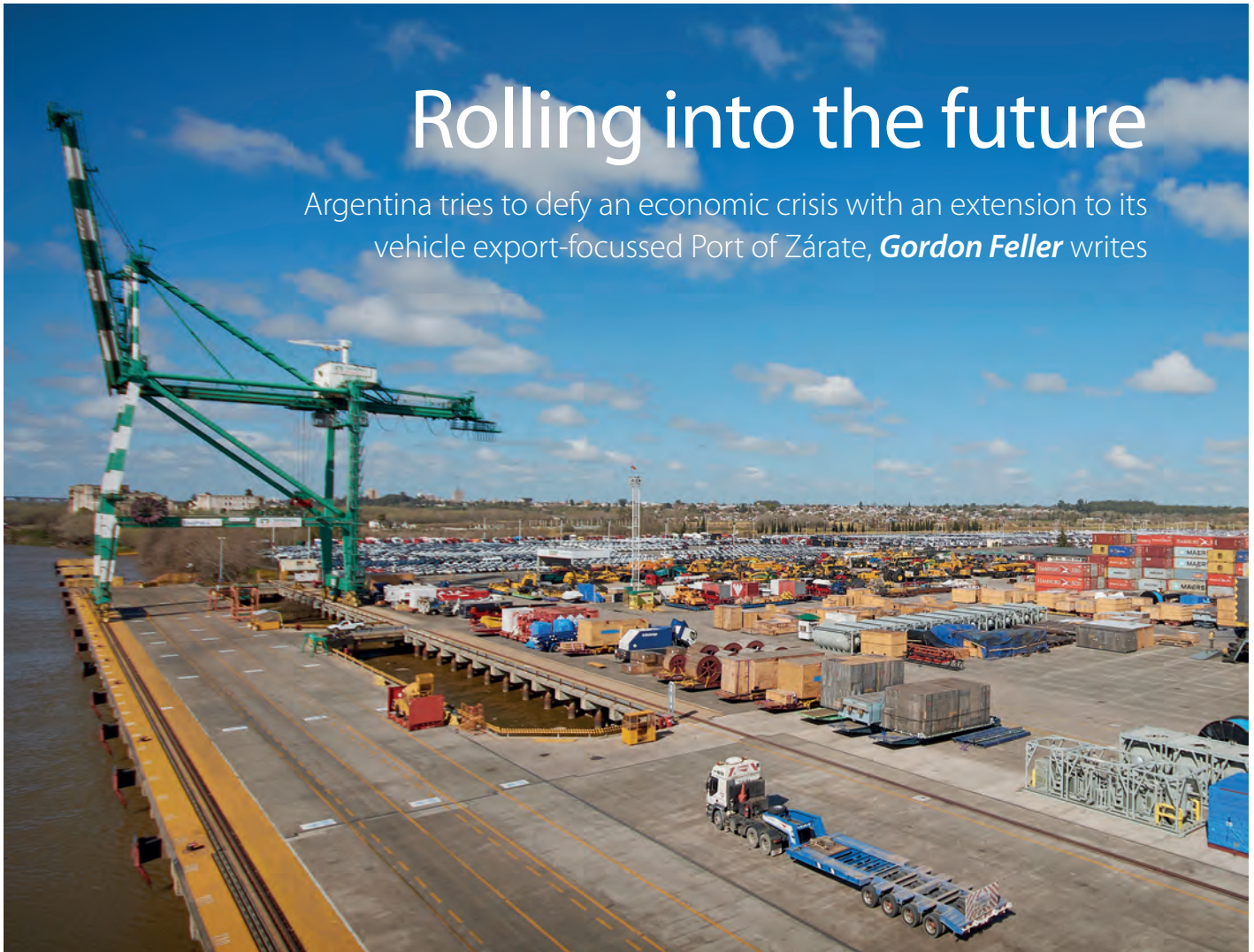
Through its participation in several local forums – including the city council, the municipal business association – the Itapoá Container Port could act as an important catalyst in the city's near- and long-term future. The city's priority is to attract economic development and investments for the port's backup area, advocating for strengthening of the entire municipality. This is also the priority of the Babitonga Bay.

US-based IDB Invest, a private sector institution of the Inter-American Development Bank focussed on supporting Latin America and Caribbean businesses. IDB Invest headquarters is in Washington, DC, and the company is financing BRL150 million (USD35 million) for this project. **PH**



Rolling into the future

Argentina tries to defy an economic crisis with an extension to its vehicle export-focused Port of Zárate, **Gordon Feller** writes



Shutterstock/Denys Yelmanov: 5166992

The port of Zárate, Argentina

In June 2020, an article published by Bloomberg, "In perennial economic crisis, Argentina faces worst year yet", was spread across terminals around the world. The author, journalist Patrick Gillespie, reported that the "worst-case scenario" forecast for Argentina was its GDP shrinking to a record 13%. Gillespie analysed the new national GDP data released a few days prior to his article's publication. It showed that the national economy had returned to the 2010 level.

Despite facing recession for the third year in a row, there is some good news for Argentina and its export and import customers. The central government considers expanding the port's Terminal Zárate a national priority, as it is the most important maritime facility serving Argentina's automotive transportation sector. The port is located in a strategic area inside Buenos Aires Province, the country's largest and most important province. The government's primary strategy is simple: the movement of goods and containers from the centre and north of Argentina must be focussed

along its waterways. Terminal Zárate is located 80km northeast of the city of Buenos Aires, on the shores of the Paraná de las Palmas river, in an industrial area of the city of Zárate. The terminal's premises are located about 2km north of the urban centre of Zárate, and cover a total area of 218 hectares (2.18 km²).

About 977 staff are employed, including permanent and temporary staff. The terminal has a container mobilisation capacity of 210,000 teu per year.

A detailed look

Terminal Zárate is owned by Grupo Murchison, a privately owned 120-year-old Argentine company. The terminal's design is focussed on three key service categories: container transfer; general goods; and vehicles. The latter category includes motor vehicles, lorries, and agricultural machinery. Grupo Murchison consists of a group of companies, and each one is providing different types of services, such as port operations; integral logistics; warehousing; supply of



based in Washington DC, reiterated in September 2020 that they believe that Argentine trade will grow in the coming years, despite the country's current financial crisis. If successful, the project will enable Terminal Zárate to competitively and efficiently meet the incremental demand of its clients for its port services.

IDB Invest hopes to increase Terminal Zárate's container capacity up to 300,000 teu. IDB Invest's loan will be used mainly to expand the port wharf to handle larger ships. It will also be used, among other investments, in to purchase a gantry crane and rubber-tyred gantry (RTG) cranes. These cranes will enable a greater volume of cargo to be managed efficiently.

Since the port is strategically located in Argentina's main industrial region, Terminal Zárate functions as a logistics connector with the rest of Argentina's economy.

Terminal Zárate's port facilities are divided into two distinct units of operation, and each one is being operated independently: the vehicles division and the container and general cargo division. The former was designed according to international standards to operate as a port and as a multibrand distribution centre. Meanwhile, the latter division was designed and built to provide container-handling services with a maximum capacity of 160,000 teu per year. This division also offers logistics services, which are adapted to each client's needs.

Additionally, Terminal Zárate has a project loading operation. This is supported by equipment and infrastructure, which enables the port to provide services for this type of cargo.

Besides South America, Grupo Murchison also invests in North America. A 57-acre (230,671 m²) auto terminal is being built at the US port of Mobile, Alabama. The new terminal will handle up to 150,000 units of rolling stock per year, which will be operated by AutoMOBILE International Terminal (AIT) once completed in early 2021.

AIT is a joint venture between Terminal Zárate and Neltume Ports, a company headquartered in Santiago, Chile. **PH**

equipment; and services, with a special focus on the oil and gas industry.

The expansion project is being internationally financed. It involves upgrading port operations and improving the terminal's container facility as well as new capital expenditures, which enable Terminal Zárate to continue growing its container-focussed business. One primary aim of the project is to extend the length of the existing pier 94m northwards from its existing 385m. Additionally, the new project will result in the purchase of a new 80-tonne capacity gantry crane.

The total project cost is estimated at USD60 million. IDB Invest will finance the project with a loan of USD15 million. At the same time, the Corporación Interamericana para el Financiamiento de Infraestructura (CIF) is providing a second loan of USD15 million. The loans are structured as long-term financing, with a term of up to eight years.

**The vehicle division
is one business
area of the port of
Zárate, Argentina**

Confidence in growth

IDB Invest is a member of the Inter-American Development Bank (IADB) Group. The IADB's leadership,



Navigating change

Shirish Nadkarni spoke to J M Baxi Group's leadership about how the company's International Container Terminal portfolio is coping and will cope with the changed COVID-19 landscape

The global health crisis caused by the COVID-19 outbreak towards the end of 2019 has had a major impact on the international maritime trade. Ships carrying oil and general cargo have been stranded at sea for months owing to the lack of clarity from ports on vessel quarantine, crew change policy, and health and safety executive (HSE) checks, which, in turn, caused massive disruption of international supply chains and left them in a state of disarray.

It was not surprising that the Indian port sector also witnessed a sharp contraction in cargo volume during the first quarter, April–June, of fiscal year (FY) 2020–21 as a result of the pandemic, according to the Indian Ports Association. While the 12 major ports recorded a decline of 22% in cargo volume during

the second quarter, the non-major and private ports registered a 24% decline during the same period.

Assessing the damage

The rate of cargo decline decelerated in July 2020, with major ports experiencing a year-on-year decline of 13% and non-major ports witnessing greater improvement, with a decline of just 4%. Ratings agency ICRA termed the FY 2020–21 outlook for the port sector as “negative”, and although there were early signs of recovery as witnessed by trends in July and August, the ports’ sustainability remains to be seen.

“The contraction in port cargo was driven by a sharp fall in petroleum, oil, and lubricants and coal

View of
Visakhapatnam city,
overlooking the Bay
of Bengal and the
city's container port

Getty Images/AROYBARMAN: 5167754



volumes, due to decline in domestic demand and economic activity, while the container segment was also impacted by subdued export-import trade," said assistant vice-president and associate head of ICRA Ratings Sai Krishna.

"With the easing of containment measures and improved demand for petroleum products and power, the POL and coal segment should witness recovery. However, the recovery in segments like containers may be more prolonged due to dependence on both domestic economic activity and global demand trends. We expect that, while general cargo throughput may witness a less-than-6–8% contraction for the full-year 2020–21, the container segment may witness a decline of 12–15% during the same period."

ICRA also noted that while some of the measures announced by the Indian Ministry of Shipping in the wake of the COVID-19 pandemic to support various stakeholders should help the liquidity profile of

entities such as public-private partnership terminals operating at major ports during the lockdown, the sustained slowdown in cargo volumes will put pressure on their liquidity profile.

An honest realisation

The impacts of the global pandemic were experienced to a lesser extent at the J M Baxi (JMB) Group's infrastructure unit International Cargo Terminals (ICT), which operates eight cargo facilities pan-India, including five container and bulk terminals at various Indian ports, with Visakhapatnam, Haldia, and Paradip on the east coast, and Kandla and Rozi on the west coast. In addition, the group operates container freight stations (CFS) at Mumbai and Visakhapatnam, and an inland container depot (ICD) at Sonapat near Delhi.

Over the past two decades, the group has diversified from being a ship agency – mainly for



national carrier Shipping Corporation of India – to encompassing project cargo movement.

“I am proud to say that JMB has emerged as the largest logistics solutions provider in the country,” said JMB Group chairman Krishna Kotak, whose son Dhruv Kotak, the designated managing director, has played a pivotal role in ensuring that the group stays ahead of its peers while also striving to see that the group is recognised as a pioneer and innovator in the maritime logistics market.

However, COVID-19 did not spare the JMB Group. April 2020 was obviously a weak month, but ICT showed enormous resilience to bounce back during May–July even though ICT’s Mumbai, Sonapat, and Haldia facilities were declared red zones owing to the high incidence of COVID-19 positive cases. “It was impossible to continue with operations,” said Dhruv Kotak. “It made us come to a very honest and stark realisation that, at the end of the day, in spite of the fact that a large amount of capital has been spent, capacity created, technology and processes advancements and growth have taken place, at the core, we are a cargo-handling company – a blue-collar business; and this is very different from the thinking we had about who we were prior to COVID-19.

“That was a very humbling realisation – to take our blue-collar roots very seriously, and to ensure we remain strong in this area in terms of productivity and efficiency.”

During the difficult period of the pandemic, Indian ports emerged as the most preferred destinations for vessel crew changes, for the repatriation of Indian seafarers, while the shipping industry faces its most dire staff-swap crisis globally. The JMB Group was able to contribute to 15,000 crew changes, which takes care of about 65% of the Indian crew that sail abroad on ships.

“Amidst all these challenges, and when compared to other ports on the west and east coasts of India, I am proud to say that ICT has been faring well, with record performances during the first quarter of fiscal 2020–21, despite April having been a disastrous month,” said ICT’s president and chief operating officer K K Krishnadas.

A varied portfolio

To trace the growth of ICT, the JMB Group made a conscious decision before the turn of the century to move from being a ship agency to be an integrated logistics service provider. The first acquisition was a modest 100m quay at the new Rozi port in Gujarat in 1998, and several more followed periodically.

Growing from 100m with suitable back-up area that was handed over in July 1998 to JMB by the Gujarat Maritime Board for a 25-year lease, Rozi International Cargo Terminal (RICT) now has a quay length of 400m.

The volume at the Rozi terminal has grown steadily to 578,226 tonnes handled during FY 2019–20. By the end of the first quarter of 2020–21, the terminal had handled

**Visakhapatnam
Seaport is India’s
second-largest
port, in terms of
cargo volume**



9.41 million tonnes of import and 1.14 million tonnes of export over the years, aggregating throughput of 10.55 million tonnes.

Visakha Container Terminal

However, the jewel in the JMB crown is the Visakha Container Terminal (VCT) at Visakhapatnam port, on the northeastern coast of India. It was a box facility ideally located to cater to the vast hinterland of the states of Andhra Pradesh, Orissa, Chhattisgarh, Jharkhand, Madhya Pradesh, Uttar Pradesh, and West Bengal.

berth that handles containerised cargo, as well as clean cargo such as hot-rolled (HR) coils, steel plates, pig iron, billets, and fertiliser.

"PICT is slowly but steadily gaining prominence and relevance on the east coast of India," said Krishnadas. "The rail siding for the berth for loading and unloading enhances the last mile connectivity for the end-user by attracting rail-borne cargo."

Over the past year, PICT has been able to add prestigious customers like the state-run Steel Authority of India for breakbulk cargo and Jindal Steel and Power for coastal traffic."

Kandla International Container Terminal

On the northernmost point of the west coast, ICT runs the Kandla International Container Terminal (KICT), situated closer to the Gulf of Kutch, which serves as a critical gateway port for the western and northwestern hinterland.

KICT has had significant growth in terms of overall volume in 2019, as compared with 2018. In 2018, the terminal had achieved a throughput of 207,619 teu, which was 176% better than the volumes of 2017. Growth was maintained in 2019, with the terminal achieving 410,924 teu, an increase of 98%.

"Another remarkable achievement for KICT is that nearly 75% of the coastal volume from Morbi, Rajkot, and Ahmedabad catchment area now moves via Kandla, which is a major shift in customers' choice of terminal," said Krishnadas. "On an average, nearly 30,000 teu per month of coastal cargo is handled at Kandla."

Delhi International Cargo Terminal

In the landlocked north, the JMB Group runs the Delhi International Cargo Terminal (DICT), an ICD located strategically at Sonapat, off National Highway 1. DICT is a multi-user logistics park, with rail connectivity, custom-designed to bring cost-efficiency and effective operations in trade across the national capital region (NCR).

Handling a volume of more than 12,000 teu a month on an average, and with a market share of 13% in the NCR region, DICT is the number one private ICD in the region. The terminal also offers daily rakes to India's largest container port, Mundra, with an option to call at Kandla; and four rakes a week to Pipavav port, further south on the west coast.

Not satisfied with what it has achieved in the 22 years since it ventured into the field of cargo terminals, the JMB Group is eyeing opportunities in neighbouring countries, such as Bangladesh, Nepal, and Sri Lanka.

"South Asia will remain a priority area, as far as our expansion plans are concerned," said Dhruv Kotak. "I believe India post-COVID-19 is going to grow a lot. The recovery is going to be V-shaped; and, in accordance with that, our commitment and focus on India will have to double. There is a lot left to be achieved in our own neck of the woods." **PH**

"I believe India post-COVID-19 is going to grow a lot. The recovery is going to be V-shaped"

Dhruv Kotak, *managing director, J M Baxi Group*

In 2019, VCT witnessed a sharp increase of 13% in total volume throughput to 494,390 teu. The average throughput per call also increased from 1,450 teu per call in 2018 to 1,620 teu per call in 2019, reinforcing the terminal's position as a preferred gateway port, as well as a transshipment hub.

In addition, reefer volumes grew by 15% in 2019. The complementary facility, Visakha container CFS, also witnessed considerable volume growth during this period.

Haldia International Container Terminal

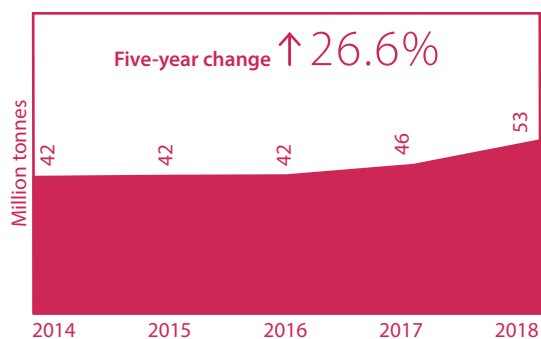
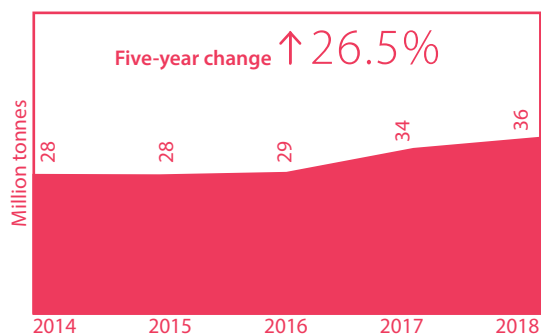
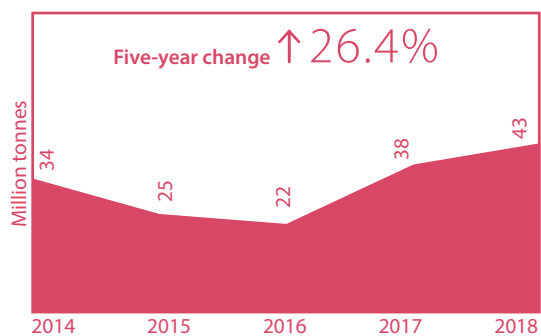
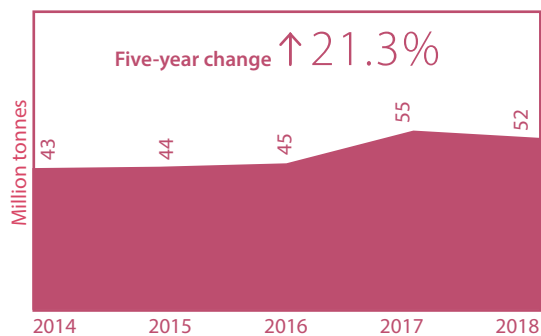
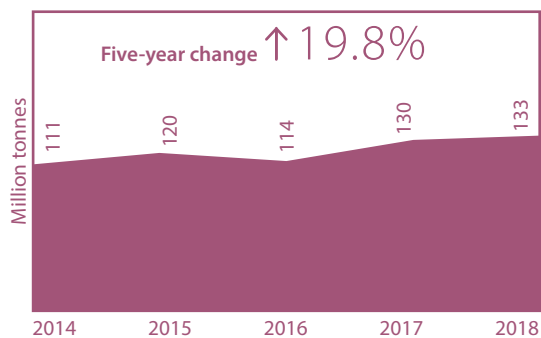
Situated not too far northwards along the eastern coast is the Haldia International Container Terminal (HICT), which has well-established rail and road connections from the mineral-rich hinterland to the port. Dhruv Kotak pointed out that safety and quality have been given paramount importance to maintain high levels of efficiency.

HICT completed another successful year of operation in 2019, while strengthening its presence on the east coast. The terminal witnessed an increase of 14% in total volume throughput in 2019, in comparison to 2018.

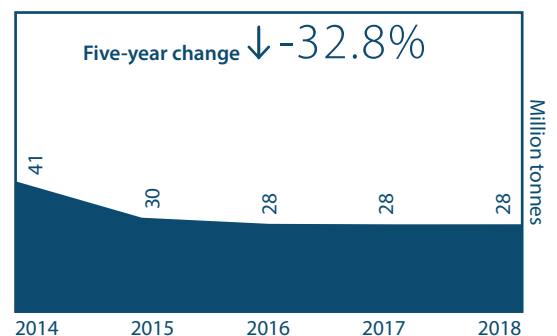
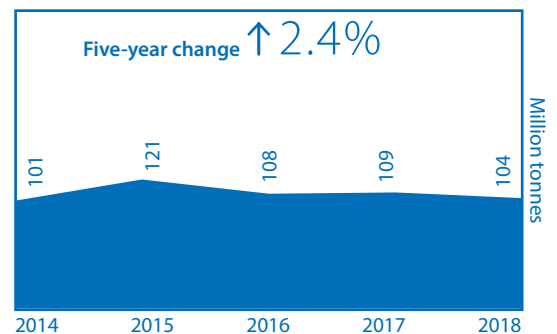
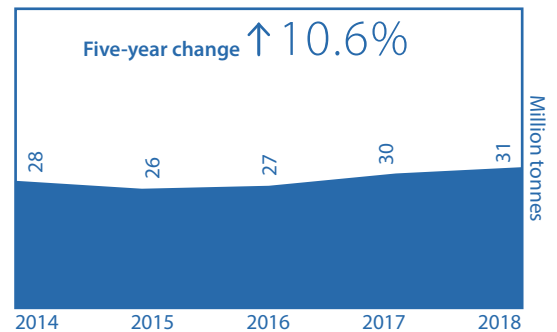
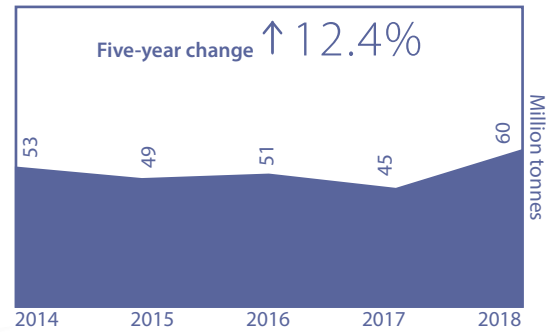
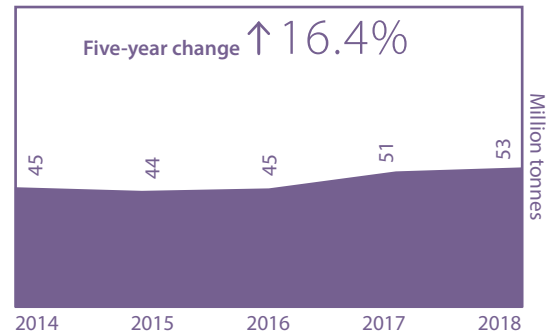
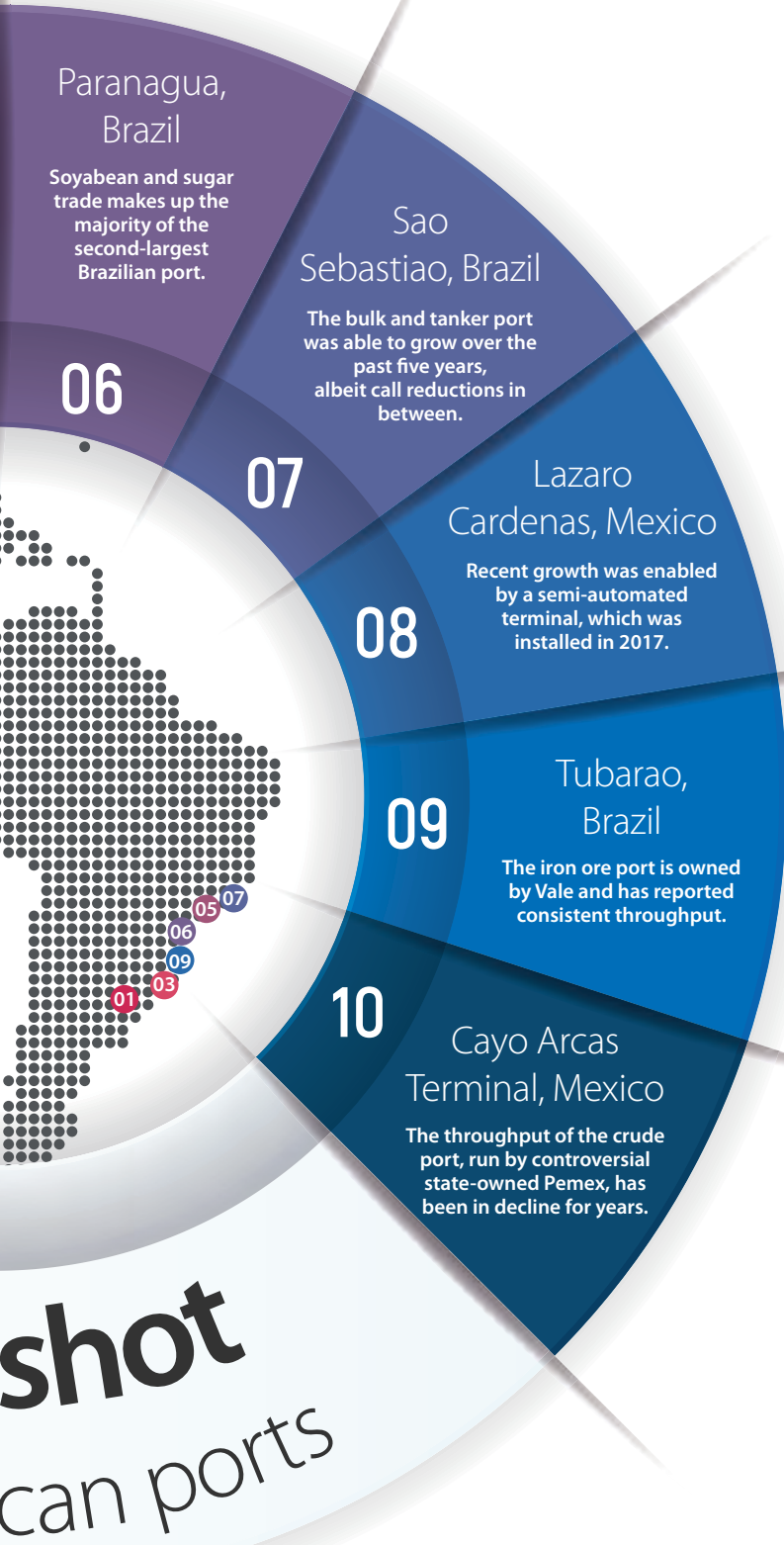
"HICT will, in future, play a key role in connecting the northeastern state of Mizoram through the Kaladan Multi-Modal Transit Transport Project," said Krishnadas. "Once the route is operational, HICT will be instrumental in cutting off 900 km to bring Mizoram closer to the world."

Paradip International Cargo Terminal

The most recently commissioned box facility within the JMB Group is the Odisha-based Paradip International Cargo Terminal (PICT), which boasts state-of-the-art facilities and attracts the trade with its multipurpose



Nine out of 10 of the biggest Latin American ports have reported growth for the past five years. Only Cayo Arcas' crude throughput in Mexico is declining.



Note: all volumes displayed in metric tonnes
Source: IHS Markit – Ports and Terminals © 2020 IHS Markit/Shutterstock: 5100818

Organisational changes take shape

The IAPH management team, Masahiko Furuichi and Patrick Verhoeven, take readers through the changes made to the association's board set-up

Since the middle of this year, the IAPH Board made several decisions regarding the strategic course of the organisation, establishing new technical committees, and the reorganising our resources.

These organisational changes complete the reform process that was started five years ago with the conception of a new constitution.

The board identified three strategic focus areas for the coming years: climate and energy, data collaboration, and risk and resilience. These cover genuinely global topics that are on the agenda of most port managers and international regulators such as the International Maritime Organization (IMO). These areas

also correspond with the themes of the World Ports Sustainability Program (WPSP) and the World Ports Conference, thus enabling strong synergies with both.

Three new technical committees are to cover these areas. These committees have a set work programme with clear deliverables, which the board has adopted for the first year (see boxouts). The committees will meet four times a year, mostly online. One meeting will be held in person and coincide with the World Ports Conference.

These new committees will receive active support in terms of content, meeting preparation, and follow-ups. To enable this,

the board restructured the staff and resources in Japan and Europe in two complementary operational units: a Finance and Administration Unit, led by the secretary general; and a Policy and Strategy Unit, led by the managing director (see boxout).

The organisational chart will be completed in 2021, with the Finance and Administration Unit further streamlined and the Policy and Strategy Unit reinforced with a London-based policy and advocacy officer who will look after the daily interaction with UN agencies, notably the IMO.

The technical committees will have their first actual meetings in November this year and will

be evaluated next June. The pre-existing technical committees will remain in place until then, at which point their integration and possible creation of additional committees will be discussed to meet the constitutional requirement of having minimum six committees in place.

The technical committees are the backbone of IAPH. With their reorganisation, we aim to increase the value added to our membership. We therefore warmly invite all members to nominate their experts for our new committees. A simple email to info@iapworldports.org is all it takes! We will then add the names to the respective Microsoft Teams group of each committee so that delegates will have access to all documentation and communication.

Calendar of first technical committee meetings issued

All meetings will be held online via Microsoft Teams.

Monday, 9 November : 3–5 pm CEST
Tuesday, 10 November : 2–4 pm CEST
Monday, 16 November : 3–5 pm CEST

Climate and Energy Committee
Risk and Resilience Committee
Data Collaboration Committee



Finance and Administration Unit

Masahiko Furuichi

Secretary general

Hiromichi Manaka
Undersecretary, Finance and Account Management

Saki Takizawa
Accountant assistant

Junichi Takemura
Undersecretary, Internal Membership Relations

Fumiko Yamaji
Membership Data Management

Hiro Nagai
Undersecretary, External Membership Relations

Keiko Iwabuchi
Website and Database Operations

Policy and Strategy Unit

Patrick Verhoeven

Managing director, Policy and Strategy

Antonis Michail
Director, Programmes and Projects

Victor Shieh
Director, Communications and Events

Policy and Advocacy Officer
Vacant, to be filled in 2021. Until then the position is observed by the Programmes and Projects director

Fabienne Van Loo
Co-ordination and support manager



Work programme of the 2020–21 technical committees

Climate and Energy Committee

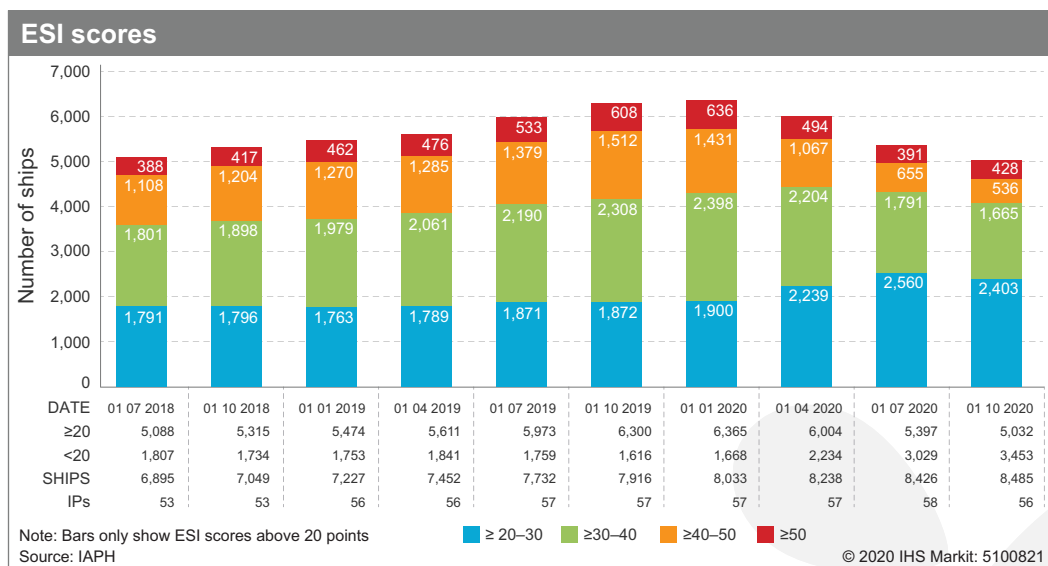
Topic	Focus/purpose	Deliverables
IMO GHG Ports Resolution	Partner in IMO GreenVoyage2050 project: development and delivery of workshops on sustainable ports and onshore power supply	Workshops
	Status of implementation in ports	Dashboard
	Sharing best practices in a structured way	Database
IMO GHG Strategy	IAPH positioning in IMO Marine Environment Protection Committee and Intersessional GHG Working Group	Submissions and interventions
Other emissions	IAPH positioning in IMO Marine Environment Protection Committee and Sub-Committee on Pollution Prevention Response	Submissions and interventions
Marine litter	IAPH positioning in IMO Marine Environment Protection Committee and Sub-Committee on Pollution Prevention Response	Submissions and interventions

Data Collaboration

Topic	Focus/purpose	Deliverables
Acceleration of digitalisation	Work with World Bank, IMO, and others in setting up a capacity-building project for ports	Workshops
	Status of implementation in ports	Dashboard
	Sharing best practices in a structured way	Database
	Facilitate dialogue with ports, shipping and standardisation bodies on common data sets	Roadmap
IMO Facilitation Convention (FAL)	Support implementation FAL requirements	Submissions and interventions
	Support adoption of common administrative and operational data standards (port call optimisation)	
Cybersecurity	IAPH positioning in FAL and Maritime Safety Committee	Submissions and interventions
Automation	IAPH positioning in IMO Maritime Safety Committee	Submissions and interventions
Innovation	Facilitate the emergence of startups on a global scale to facilitate data collaboration and smart ports	Platform

Risk and Resilience

Topic	Focus/purpose	Deliverables
Business continuity policy and risk preparedness	Assist ports with business continuity policy	Guidelines
	Sharing best practices in a structured way	Database
	Status of risk resilience in ports	Dashboard
	Determine longer-term agenda for the committee	Membership survey
COVID-19	Monitoring economic impact	Barometer
Dangerous goods	Work with World Bank on regulation and good practices (linked to root causes of Beirut explosion)	Information paper
Extreme weather	Work with PIANC on follow-up survey “Navigating a Changing Climate”	Report
Anti-corruption	Work with Maritime Anti-Corruption Network in producing a port integrity index	Index



fuel oil) with a sulphur content between 0.5% and 0.1% in the fourth quarter of 2019 in order to be compliant. Due to the mechanics of the ESI formula, this decreased the SO_x sub-points significantly.

Although the SO_x formula has meanwhile been adapted for 2020, the new mid-fuel bunkered by vessels is close to the legal limit. This also explains why going forward, a lower SO_x sub-score is expected than in the past.

In total, 8,485 ships have been registered with the ESI as of 1 October 2020, of which 5,032 vessels have a score of 20+ points.

The infographic on the left shows the latter group. Currently, the split within this group is: 2,403 vessels have between 20 and 30 points, followed by 1,665 vessels with up to 40 points, 536 ships reached between 40 and 50 points, and a select 428 managed to secure more than 50 points.

Read more about the ESI here: www.environmentalshipindex.org

Updated ESI scores published

Compared with the July 2020 update, the number of vessels on the Environmental Ship Index (ESI) has decreased again; however, the number of vessels with an ESI score above 20 points has increased compared with the July 2020 tally.

The ESI is split into two categories: vessels that scored below 20 points for their nitrogen oxide, sulphur oxide, and carbon dioxide (NO_x, SO_x, and CO₂) emissions, and those that scored above 20. These vessels are assessed through a

formula-based calculation for their NO_x, SO_x, and CO₂ emissions.

The decrease is therefore related to the introduction of the global sulphur cap on 1 January this year. Many vessels were bunkering so-called mid-fuel (marine gasoil or low-sulphur

World Ports Sustainability Awards are open for entries

The call for entries has been announced for the 2021 World Ports Sustainability Awards, with winners to be declared in five categories at the IAPH 2021 World Ports Conference.

The conference is scheduled to take place between 23 and 25 June next year.

IAPH regular and associate port members that are acting on behalf of IAPH member ports as client, partner or collaborator can enter a project by submitting a simple online form.

Once accepted, the project will automatically qualify as a potential award candidate.

Dr Antonis Michail, the IAPH's technical director of the World Ports Sustainability Program (WPSP), explained the selection process. "Entries have been

coming in since late January and we will continue to accept project submissions between now until 31 March 2021.

Ports are aiming to meet the challenges of the COVID-19 pandemic as well as targeting medium- to long-term sustainability objectives and addressing relevant UN Sustainable Development Goals with various initiatives.

"A long list per category that best meet the selection criteria will be submitted to an international jury for scrutiny, after which three selected finalists for each award will be offered to an online vote by the public who will have 30% of the final say on winners and runners up," he said.

Each project submitted for an award will be accepted onto the WPSP database

as part of the global project portfolio on the WPSP website to inspire other ports.

"During the COVID-19 pandemic, we have seen ports making measurable impacts on their sustainability and environment. Many have changed their security procedures, improved digital infrastructure resilience, reduced human contact through innovation, and take community initiatives to relieve and assist the people they serve," Dr Michail said.

Consequently, "all of these projects are welcome as potential award candidates," Dr Michail concluded.

Regular and associate IAPH members are encouraged to submit their project at sustainableworldports.org/submit-your-project/

Finance and Audit Committee appoints chair

The IAPH Board confirmed the appointment of Eranda Kotelawala, CEO of the Solomon Islands Ports Authority as the new chair of the IAPH Finance and Audit Committee.

The decision was made at the board meeting on 8 September 2020. We welcome Eranda as chair and wish him every success.

IAPH CMF releases new guidance for port operators


Guidance is now available on procedural and operational preparedness to assure a safe terminal handling of liquefied natural gas (LNG)-fuelled vessels.

Experts from the IAPH Clean Marine Fuels (CMF) working group have published its *LNG-Ready Terminal* guidance document.

The document details procedures and actions that terminal operators can undertake to assure a safe handling of LNG-fuelled vessels, including a safe ship-to-ship bunkering of LNG-fuelled vessels alongside.

This document is the latest offering designed by IAPH member experts to equip port authorities with the necessary instruments to ensure safe bunkering of LNG, given the increasing uptake of LNG-fuelled vessels calling at their ports.

The IAPH CMF working group consists of 13 member ports. The guidance series that the CMF has released all are the result of translating the concepts of system safety, spatial allocation, and operational safety into practical instruments.







 **MORE INFO:** Download the guidance tool here: bit.ly/3og2GKh

Membership notes

We are pleased to announce new members of the association:

Regular members

Ashdod Port Company Ltd

 Address: P.O. Box 9001, Ashdod, Israel 77191
 Telephone: 972-8-8517771
 Fax: 972-8-8517772
 Email: RINATA@ashdodport.co.il
 Website: <http://www.ashdodport.co.il/English>
 Representative: Moshe (Shiko) Zana, CEO

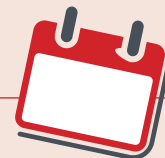
2020

2021

2022

Dates for your diary

A selection of forthcoming maritime courses and conferences



November

- 9–10:** African Ports Forum
Djibouti, also virtual
www.forumafricaindesports.org/
- 10:** IAPH Risk and Resilience Committee
Microsoft Teams, 2–4 pm CEST
- 10:** World Ports Conference webinar
On24, 4–5 pm CEST
www.worldportsconference.com/webinars
- 16:** IAPH Data Collaboration Committee
Microsoft Teams, 3–5 pm CEST
- 17–18:** Smart Ports Conference Barcelona
Smart Ports TV Platform
smartports.portdebarcelona.cat
- 19:** Incheon International Ocean Forum
Incheon, South Korea
www.iiof2020.com/2020_en
- 24:** IAPH Board and Council meetings
Microsoft Teams, 4–6 PM CEST

December

- 30 Nov** **Moved to 29 November–10 December 2021**
- 11 Dec:** La Planification Stratégique des Opérations Portuaires
Le Havre, France
www.iper.fr
- 30 Nov** **Moved to 22–26 March 2021**
- 11 Dec:** Le Contrôle Budgétaire en Milieu Portuaire
Le Havre, France
www.iper.fr
- 7–9:** **Renamed to TOC EMEA Virtual Expo, to be held in February 2021**
TOC Middle East
Virtual
<https://www.toc-events.com/en/home.html>
- 7–11:** **Moved to 6–10 December 2021**
Conception et Réalisation de Quais Portuaires
Le Havre, France
www.iper.fr
- 15–17:** **Moved to 13–15 December 2021**
La Gestion des Engins de Levage et Ouvrages Métalliques Portuaires
Le Havre, France
www.iper.fr



Going on a journey together

International Taskforce Port Call Optimisation chairman **Captain Ben van Scherpenzeel** talks to WPSP communications partner **Victor Shieh** about the stumbling blocks that need to be removed to make just-in-time arrivals possible and efficient



Following the subject-matter expert meetings of the International Task Force Port Call Optimisation (ITPCO), held between 30 June and 9 July, and the latest

workshop of all stakeholders that took place online on 22 July, the task force has published its latest *Port Information Manual* for shipping and port authorities.

It features comprehensive updates on processes, data elements, and definitions to provide a better understanding of the data exchanged in the ship-port interface.



Vehicles waiting to take on containers loaded at the foreign trade container terminal in Qingdao, east of China's Shandong province

Costfoto/Barrcroft Media via Getty Images: 5167572

The manual also identifies existing international standards that connect ships and ports.

The aforementioned workshop played a key role to define the next steps to be taken at industry level, including a review of the hurdles to overcome to achieve a consistent and sustainable approach, berthing, stay, and departure to and from a port or harbor of a vessel.

Every port is dealing with the same International Maritime Organization (IMO) regulations, BIMCO contracts, and processes, which are now clearly defined in the *Port Information Manual*.

The first real "D" barrier ahead is therefore

to agree on a minimum scope of data elements, who has the ownership to deliver them, and an agreed minimum standard of data definitions and data models that can create an efficient system-to-system exchange model for the industry.

"Data quality is the key to unlock port call optimisation," said task force lead, and director of Nautical Developments, Policy, and Plans at the port of Rotterdam, Captain Ben van Scherpenzeel.

"The decisions taken to optimise will always depend on the quality of the data available at the time. Administrative data will allow authorities to provide clearance to the vessel for operations. Nautical data advises

charterers and operators whether the port is safe and advises captains on berth-to-berth navigation," van Scherpenzeel said.

"Operational data advises when and where the berth is available to the ship's crew and the port entities servicing that vessel," he said, adding that, "Administrative and operational data should connect to the supply chain industry standards to address where and when the goods of the cargo will be available to complete shared end-to-end visibility in the supply chain." Van Scherpenzeel added, "However, such a simple premise is complicated by the number of actors involved, the data they provide, and how they interact with each other." Because the common

interpretation of the information by different actors is crucial, the focus of development was first on the functional definitions to ensure adoption of common semantics

Unlocking the potential

The subject-matter experts of the task force and relevant IMO and non-governmental organisations (NGO) have now prioritised the improvements in a group of data elements, defined within three data sets, with relevant standards, ownership, and electronic interchange in several vital areas touching every port call process:

Administrative data

- For notifications/declarations in port to be compliant with authorities and IMO objectives
- Update information in the IMO Global Integrated Shipping Information System data base
- Accept ship data with IMO Facilitation Committee Compendium data format and structure
- Planning of clearances

Nautical port data

- To be compliant with Safety of Life at Sea (SOLAS) berth-to-berth navigation and safe port clauses
- General port information as per IMO BLU Code
- Maintained depths and soundings
- Terminal; berth positions, locations, and identifications

Operational port data

- To be compliant with rest hour planning as per Maritime Labour Convention, International Ship and Port Facility Security Code (ISPS), and ambitions of IMO to reduce emissions in shipping
- Planning of arrival times at berth/pilot boarding place and departure times from berth
- Planning of start and completion times of ship and cargo services
- Notifications of ISPS clearances of ship and cargo services

Without exception, the subject-matter experts concur that the availability of timely, consistent, logically formatted data in each of these vital areas is lacking in many ports. Evidence of this issue has come to light in several projects to optimise port calls, including the recent initiative

co-ordinated by PortXchange and other projects such as the work of Sea Traffic Management, Hamburg Vessel Coordination Centre, or the Valencia Port Foundation.

Creating a harmonised approach

"Despite excellent efforts of many port authorities to promote data transparency and their efforts to standardise data, enable application programme interfaces between multiple systems and persuade previously reluctant parties to share that data for common benefit, creating a harmonised approach will not happen solely through a coalition of well-intentioned port community partners," said van Scherpenzeel. "It has to come from both shipping and port stakeholders adopting and respecting applicable international standards that are maintained by robust standardisation bodies."

Since the beginning of 2020, the task force has worked closely with UN-recognised maritime NGOs, including the IAPH, as well as IMO member states to encourage the development and widespread adoption of internationally recognised data standards.

This includes the recent adoption of IMO resolution MEPC.323(74), in May 2019, which encourages voluntary co-operation between the port and shipping sectors to lower greenhouse gas emissions from ships.

The resolution also invites IMO member states to facilitate, among others, actions that support the industry's collective efforts to improve quality and availability of data.

Agnostic trading

As described in the IMO Global Industry Alliance's recent publication *Just-In-Time Arrival Guide*, global digital data standards allowing reliable and efficient data exchange between ship and shore need to be developed, which



are trade agnostic; to be used by the entire industry and across all trades.

The second real "D" barrier is an elephant that has been in the shippers' room for decades: due despatch clauses in charter contracts are formulated in a way that obliges the ship's master contractually to proceed to the next port with utmost despatch, regardless of whether a berth is available or not. Often, the consequence is that the ship is left either to drift or anchor beyond pilot station while awaiting delayed arrival at berth. In the meantime, the timer on demurrage is triggered, usually at the cost of the shipper or receiver, but also occasionally also at the cost of the terminal.



“Data quality is the key to unlock port call optimisation”

Captain Ben van Scherpenzeel

Lead of International Taskforce Port Call Optimisation



Various cargo ships waiting to load and unload in the harbor at the busiest port of Singapore

Getty Images/igor57b 5166340

Work has been done on this issue, notably with BIMCO publishing a Virtual Arrival clause for voyage charter parties and also shipping companies developing their own clauses for just-in-time (JIT) arrival implementation that differ from the BIMCO clauses (such as, SHELLVOY6 and BPVOY4). However, further work is needed by the industry to incentivise parties to implement JIT arrival.

Avoiding dockside down time

The only group of stakeholders set to benefit – at least in theory – in the instance of queuing vessels outside the port perimeter, are the terminal operators, whose motivation is to primarily minimise the third “D”, namely dockside down time.

With multiple vessels awaiting a berth, terminals are able to maximise productivity by optimising the use of their quayside availability and materials handling equipment by serving those ships in an order based on their priorities and preferences.

In the case of container terminals, this is often further complicated by concession ownership, where one or more shipping lines have a stake in the terminal concession where the ship will arrive. In addition, competing terminals may be reluctant to share commercially sensitive information externally such as berthing windows, terminal productivity, and type or location of

commodities loaded and discharged.

“Aside from looking at prioritising anchorage governance, port authorities could look at incentivising their concessionaires or owner/operators who regularly have vessels calling to apply the concept of just-in-time arrivals. This can only be done if all stakeholders, and in particular the terminal, shipping line, and port authority, are on the same page,” said van Scherpenzeel. “Of course, they would have to govern and guarantee an absolutely level-playing field of data sharing, which is complex and difficult to apply in practice.”

However, the world is changing, and the COVID-19 pandemic is accelerating this transformation. Further consolidation of global terminal operators and the trend for them to expand into other elements of the end-to-end chain by investing in feeder vessels, inland depots, and even customs clearance outfits will motivate them further to synchronise the port call process.

“Shipowners’ impetus towards improved vessel automation and targeting autonomous vessel pilots in niche markets may herald a new openness towards achieving an integrated approach to supply chains between ship and shore,” van Scherpenzeel said.

IAPH is set to advance the cause of port call optimisation to reduce emissions under the framework of the GreenVoyage2050 project, a collaboration between IMO

and the Norwegian government.

This international project will initiate and promote global efforts to demonstrate and test technical solutions for reducing emissions. Initially, eight countries, from five high-priority regions – Asia, Africa, Caribbean, Latin America, and Pacific – are expected to take pilot roles, to pursue and undertake actions at the national level.

IAPH managing director policy and strategy Patrick Verhoeven commented, “IAPH is setting a new course to support the port industry’s increasing appetite to work alongside ship owners and other maritime organisations to resolve what were seemingly intractable issues in the past such as the digitalisation of the industry.”

He continued, “The single benefit that has emerged from the pandemic has been the acceleration of change happening in the ship-port interface today. Reducing emissions around ports, saving costs, and increasing the safety of port calls as well as improving the efficiency of sea and land legs of the end-to-end supply chain for goods can and must be achieved through better data collaboration.”

In conclusion, Verhoeven added, “We will work with the ITPCO, the Port Roundtable, as well as IMO member states so that just-in-time arrivals and port call optimisation can be applied by our members in practice.” **PH**



Solomon Islands Ports Authority: 5163625

The wake-up call

Eranda Kotelawala, CEO of the Solomon Islands Ports Authority and IAPH Finance and Audit Committee chair, argues that COVID-19 serves as a warning to the ports industry to financially prepare for future disruption

“It is important to understand that a business should be immune to risks in volatile and hostile environments, which may affect its daily cash flow”

Unlike any other era in recent history, the COVID-19 pandemic propelled the maritime industry into uncharted waters. Challenges and circumstances have been unprecedented, leading to widespread disruption to global businesses and people's lives around the world. Ports, shipping lines, and global businesses faced a logistical nightmare with a plethora of unanticipated challenges and risks that were more than anyone bargained for. The global economy has been dragged to the threshold of a financial crisis.

With multitudinous risks and challenges flooding in with the pandemic, many global enterprises have already faced a high degree of financial trauma, which is affecting their future sustainability. Such financial headwinds reached their doorstep at a time they were least prepared for a business doldrum while most risk management frameworks hardly envisaged the potential risk horizon following a global pandemic. The COVID-19 pandemic must be a wake-up call for global businesses. Irrespective of their size, they need to take a step back and understand the importance of financial

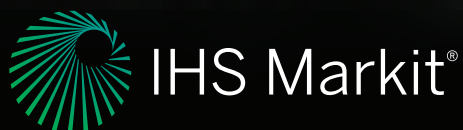
resilience and strong risk mitigation plans as opposed to a reactionary response to overcome an acute time-centric situation.

In order to sustain commercial and operational resilience, it is important to understand that a business should be immune to risks in volatile and hostile environments, which may affect its daily cash flow.

Such resilience could be further compounded through the development of a comprehensive enterprise management framework to mitigate risks, which hinder access to finance and liquidity to stay afloat during times of acute financial stress.

While the effects of the COVID-19 pandemic have been devastating to the global economy, maritime industry, and its overarching businesses so far, it has served as a warning to the enterprises to be poised for better financial resilience and preparedness for the most unusual risks we could envisage in a lifetime.

COVID-19 has given us a wake-up call to be better prepared for the future, more than ever before, in the aftermath of this pandemic. **EH**



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