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Providing thought leadership on the role of ports in a connected world

Modern link

Dr Sigrid Nikutta, CEO of DB Cargo,
digitizes rail freight



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CONTENTS

EDITOR'S COMMENT & CONTRIBUTORS | 02

Connecting to the salvage sector

PERSPECTIVE WIND PROPULSION | 08

Harnessing nature's energy to fuel the energy transition

WAKE-UP CALL PORT WORKER STRIKES | 14

Nautilus International argues the case for crew

INTERVIEW LE THI THU THUY | 16

The head of car builder VinFast on partnering with ports

04 | IN CONVERSATION WITH DR SIGRID NIKUTTA

The head of DB Cargo on digitizing freight rail

10 | FEATURE PORT WORKER STRIKES

How the cost of living crisis impacts port operations

15 | CLOSING THE GAPS JACOBS

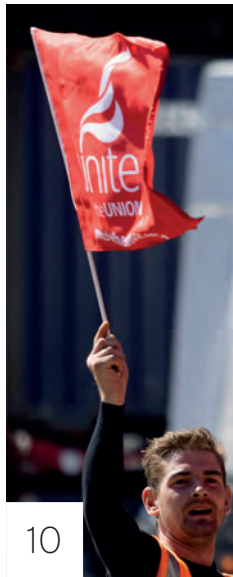
Connecting ports with engineering companies

20 | WORLD PORTS TRACKER Q3 UPDATE

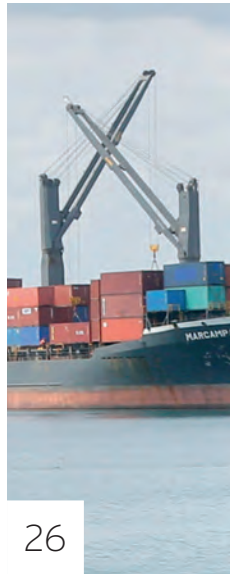
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08



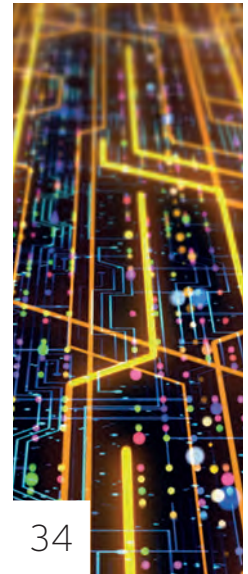
10



26



32



34

THE COLUMN TRADE | 24

The ocean as a medium of trade

LOOKOUT LNG TERMINALS | 32

The use of LNG as a fuel is on the rise

HOW TO KEEP YOUR PORT SECURE | 36

Ensuring safe operations

CREATIVE SIDE PORTS, PAST AND PRESENT | 40

A community-led investigation

THE REVIEW CABIN FEVER | 44

The traumatising journey of the *Zaandam*

26 | PROJECT FOCUS AFRICAN ISLAND STATES

Progress of digitalization in Zanzibar and Mauritius

34 | PERSPECTIVE MACHINE LEARNING

Using data to propel maritime into a new century

38 | NINE TO FIVE PROFESSOR SERGIO PRETE

A day in the life of the Port of Taranto president

42 | IAPH INFO

News and events from your association

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EDITOR'S COMMENT



INES NASTALI

Editor

Ready or not

In December 2022, I was invited to moderate a conference panel on places of refuge as part of Seatrade Maritime's Salvage and Wreck conference in London.

It was an interesting discussion that has made me want to share a few follow-up thoughts with you here.

First of all, with updated guidance around places of refuge having been agreed upon by the IMO in November 2022, it was a timely discussion that involved representatives from the shipowners' side via BIMCO, crew views via InterManager, and the Port of Rotterdam.

The updated IMO guidance relates to the preparedness of places of refuge, mainly ports, to take in ships in distress.

However, it is not a manual or a legal request to make preparations – for either of the involved parties, and it cannot be. But I think it is a prompt to collaborate with each other.

This sector-to-sector collaboration is particularly important as, due to the IMO's remit, the guidelines speak to shipowners and crew but do not specifically call for ports to prepare and train to help in salvage operations. Rather, their role focuses on offering the chance to stabilize the ship and prevent pollution as a general outcome of the incident response.

Consequently, the salvage industry and ports need to connect outside of any regulatory realms. With the IMO only governing the shipping industry, the guidance acknowledges ports as an involved party, but it addresses member states.

**NAMRATA NADKARNI**

Freelance journalist

When researching the article about decarbonization in African Island state ports, I was struck by the immense potential that technology has to benefit the maritime sector in developing regions such as Africa. The ability to move away from paper-based systems to digital platforms opens up opportunities not just to optimize operations but also draw in new partners. ■

**STEPHEN COUSINS**

Freelance journalist

The onset of industrial action at ports in Germany and the United Kingdom last year was, it seems, a canary in the coal mine moment foreshadowing more widespread strikes across different industries as workers attempt to mitigate the cost of rising inflation and falling living standards. But was the port disruption a one-off or will rising discontent lead to more people taking to picket lines in Europe, the United States, and other regions in 2023? ■

It can therefore only directly reach those ports that are run by a government agency.

The main discussion points of the conference panel therefore revolved around this collaboration and preparedness. How able and willing are ports to take in ships that find themselves in trouble – especially when it comes to threats that pertain to new technology and fuels? Those could, for example, involve cyberattacks that potentially render a ship unmaneuverable or a potential salvage operation that requires the handling and cleanup of alternative fuels with properties different to heavy fuel oil.

I was therefore happy to see that the audience, mainly consisting of salvage operators, was keen to hear from the other maritime stakeholders, but especially from a port, how they can collaborate on those developing but also current issues.

In my opinion, the exchange between ports and salvagers should therefore focus on the specifics. What equipment can a port offer – and spare – to help while not interrupting its operations? This could concern fire-fighting tugs, which also serve to pilot ultra-large container ships and are therefore essential in the daily operations of a deep-sea port and hard to spare.

Considering that some salvage sites can be hard to reach in the middle of the ocean, which nearby ports can be on standby to deliver equipment? Especially as should a ship end up in distress, close to the port or not, and a fire-fighting response is needed, that of course takes precedence. It is then the responsibility of the port to ensure that operations are not interrupted by such situations.

This includes avoiding a certain blame shifting. While it is easy to acknowledge the fact that ship sizes are growing, ports also have to act on that development. Hence, infrastructure and equipment need to cater to both: efficient operations and incident readiness. It is no use to blame bigger ships for inefficient port operations.

Proactivity is therefore key, as the attendees of the salvage and wreck conference heard from the Port of Rotterdam. With the port not only being a major bunkering hub but one that is located amid both major trade lanes between Asia-Europe and US-Europe, the port's safety advisor, Cees Boon, was able to share the port's preparedness training with the audience.

With safety of operations – for both port and ship crew – paramount, this includes training for incidents that involve future fuels such as methanol, ammonia, and hydrogen.

This is an exercise that is only advisable to be held for any port along major trade lanes. ■

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IN CONVERSATION WITH DR SIGRID EVELYN NIKUTTA

Supercharged connections

The CEO of DB Cargo, Dr Sigrid Evelyn Nikutta and Dr Patrick Verhoeven, managing director of the IAPH, talk connecting digitized freight rail and ports

INES NASTALI

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B Cargo connects 18 countries around the world with its network of freight trains. By no means, however, is this the ultimate goal of the German-headquartered company that separated

from logistics sister company DB Schenker in 2016. For the CEO of DB Cargo, Dr Sigrid Evelyn Nikutta, booking rail freight should be as easy as online shopping or sending an email.

Her main priorities at the moment are therefore, “getting more freight on rail! Rail freight transport is active climate protection, because one freight train can replace up to 52 trucks. This is what our customers want – they are on the way to zero emissions. We at DB Cargo are extending the assembly lines of the industry in Europe! Supply chains are to be considered in a holistic and integrated way. The challenge is: How can all steps in a complex, intermodal supply chain become green? By proceeding step by step. For hinterland connections to seaports, rail is the fastest option for CO₂-neutral connections to the recipient.”

Those plans therefore go hand in hand with getting more cargo onto rails and off the road, something that long has been recognized as a valid route to decarbonize part of the transport sector. “We set on innovation and efficiency through digitalization! The freight train of the future will be digitally connected and faster than today. Train formation, which is still time-consuming, hard work today, will be automated – thanks to digital automatic coupling. This

will save a lot of time in operating trains,” the DB Cargo CEO said. For manual coupling, workers lift links weighing 30 kg to shoulder height around 70,000 times a day.

For Dr Nikutta, rail is the chosen mode of transport to reduce the impact of climate change. Before she took on her role at DB Cargo in 2020, she led the public transport company in Berlin, Germany, for 10 years – as the first female chairperson and also making the company operate profitably for the first time. For another 10 years before that, she held other senior leadership positions at DB Cargo.

She therefore has a clear goal of what she wants rail to achieve. “To stop climate change! Everything we invest in rail freight transport now will benefit our future. Why? Let’s take a look at, for example, intermodal container transport by land. In almost all cases, it functions as a connection between ports. And it has the highest dynamics in the logistics industry: Growth has been up by 6% every year since 2010. Experts estimate that by 2030, the market share of rail freight transport will have increased to up to 35%. This has a direct impact on ports – because they are the engine for this freight traffic. Containers are ideal to make supply chains climate-friendly.”

Strength in numbers

Currently, 18% of cargo is being transported on rail in Germany – a European leader in freight rail transport, with 123 billion ton km in 2021, representing around 31% of the total EU freight rail usage, according to Eurostat. In comparison, runner up France transports 9%.

DB Cargo’s digitalization efforts are therefore much-needed given that the EU demands a third of freight transport in the union to be on rail by 2030.

Dr Patrick Verhoeven, managing director of the IAPH, applauded DB Cargo’s efforts to reduce truck usage as the modal split of many seaports is still largely dominated by road transport.





“Increasing the share of rail often remains a challenging task, both in terms of infrastructure and operations. Policies to open rail freight markets, as introduced by the European Union, are helpful in this regard, and they provide opportunities for port authorities to take a proactive role in the development of rail connections, including the establishment of inland hubs,” he said.

He also emphasized that rail is not the only environmentally friendly hinterland transport mode that ports need to connect to. “Waterborne transport – via inland waterways or coastal shipping – is part of the equation as well when it comes to decarbonization of port-related transport.” Dr Verhoeven added, “Where a port is connected to the inland waterway network, there is again an opportunity for port authorities to step in and take a facilitating role in matching supply and demand and avoid waiting times for inland barges. For a dispersed market like inland navigation, this is particularly relevant.”

Digital services

To push this development, transparency, of costs and booking processes is key to unify ship and shore hinterland connections. One way to enable this, and make it easier for cargo owners to book rail services, is therefore DB Cargo’s digital booking services.

Freight wagons equipped with sensors, GPS, and telematics enable tracking services for both the customer and DB Cargo. “We benefit from digital solutions internally, too, for example in capacity planning, analysis of idle and turnaround times and management of our wagon fleet.”

It controls those services through its link2rail digital platform that allows for booking, monitoring, and invoicing of rail freight. In autumn 2022, the rail provider also launched the use of APIs for customers do all this directly from their system without having to separately log into the portal.

Pictured: The CEO of DB Cargo, Dr Sigrid Evelyn Nikutta overseeing the freight rail provider’s operations.

“The maritime industry is in a similar phase of transition,” commented Dr Verhoeven. “A growing number of ports is embracing the possibilities offered by digital technology. But the essence is not about technology, it is about trust between stakeholders, trust in sharing data.” That became very clear to the IAPH when it surveyed the global port community in 2020 about the state of implementation of the 2019 IMO requirements to exchange data electronically between ship and shore. Only one-third of the ports that replied were able to give a positive answer. “This does

raise substantial concerns about the next deadline ahead,” Dr Verhoeven warns.

By 1 January 2024, IMO requires member states to have a maritime single-window system in place. “The term in itself causes confusion and there is a risk that there will be various single windows per country, even per port. This will neither help the port nor the shipping industry.” Together with the IMO secretariat and BIMCO, the IAPH has taken the initiative of setting up an awareness campaign, including a hybrid symposium, held 18–19

January, which provides practical guidance to IMO member states, based on experience of countries that were successful in introducing the maritime single-window concept already. “In the end, it is government leadership that will make a difference,” Dr Verhoeven said.

“Rail freight transport is active climate protection”

DR SIGRID NIKUTTA
CEO, DB Cargo

All aboard

Those services can, however, only be offered with the right physical equipment in place. “Almost the entire DB Cargo fleet is equipped with telematics and sensors to record position and movement data. 63,000 freight wagons generate some two million datasets daily, which are transferred to



and processed in the DB IoT cloud. The wagons' digital twins are displayed in dashboards and provide information for additional applications to improve wagon management and to optimize logistics and operating processes. Standardization at European level enables the integration of third-party wagons in the DB Cargo information systems," said Dr Nikutta.

"We are witnessing similar pioneering examples in the maritime industry," responds Dr Verhoeven, "What is needed is an exchange of experience between transport modes. We still tend to work in isolation. Ports are unique connecting points, also for exchange of knowhow."

Connecting the sectors – and customers

Dr Nikutta agreed. "Cooperation with ports is elementary for DB Cargo. Ports are the access point for climate-friendly land logistics. Close networking – also literally with technical platforms – is essential. The importance of global trade and the growth of container transport means that seaports become increasingly important for global supply chains. Every chain is as strong as its weakest link. My point is: we need strong interfaces and connections between ship and rail. These are the ports!"

For Dr Verhoeven, IAPH forms an ideal platform to bring those stakeholders together. "When I took up my role at IAPH five and a half years ago, I made it a priority to reach out to our partners in the supply chain, starting with the international shipping community. We are now moving on to a dialogue with the ultimate customers of ports, which are the cargo interests. This will inevitably bring in discussions with land-based transport modes."

Examples of DB Cargo's partnerships with ports include work with the Port of Antwerp-Bruges. It is a big transshipment site for cars: around 2.2 million vehicles pass through Zeebrugge annually. Here, the company works with Jaguar Land Rover. Cars arrive from Jaguar's manufacturing base in Slovakia. From Zeebrugge, they get shipped further to the UK, US, Canada, or Australia.

When cooperation between the port, DB Cargo, and the vehicle manufacturer started, they faced a conundrum: the biggest car model weighs 3.3 metric tons and two cars would not fit on top of each other. The two companies therefore engineered a custom solution that also ensured the train could cross railway bridges and meet freight transport route restrictions – a successful collaboration.

"Cargo flows are like water, they will look for pathways with the least resistance"

DR PATRICK VERHOEVEN, IAPH

Inspired by this, DB Cargo is working on an IKEA-like modular service where customers can configure wagons to fit their intended use.

While previously, freight wagons for timber steel coil, or scarp, were built – similar to ships – for a specific purpose, the modular carrier wagons and superstructures enable the wagon to be customized in terms of length, loading capability, and mounting points.

An interesting concept, Dr Verhoeven acknowledges. "The maritime industry is still largely thriving on the revolution that

Malcolm Maclean introduced in the 1950s with the standardized cargo container, which could be interchanged easily between sea- and land-based modes. Standardization remains a key issue for efficient intermodal transport that involves a sea-leg."

Reaching the general public

At the same time, the two transport sectors have something in common: the newly found appreciation by the public that came about during the pandemic. While in shipping's case, it was more due to the subsequent release of the *Ever Given* that had blocked the Suez Canal trade artery, DB Cargo's pasta trains, transporting pasta from Italy to Germany, were met with approval by the public. Equally, the transport of aid material to Ukraine in 2022 after Russia's invasion and subsequent closure of ports and land routes, emphasized the capability of the freight rail network.

"In the end, what we need are logistics networks that are agile", said Dr Verhoeven, "Near-shoring is an emerging trend, given the Ukrainian conflict, radically shifting COVID policies in China and other geo-political changes. Cargo flows are like water, they will look for pathways with the least resistance, including political barriers."

Outreach to the public is therefore important. The description of the DB Cargo Twitter bio reads "Official account of those who made you wait at the railway crossing for so long". The feed is full of goods-related memes.

That approachability pays off could be something that Dr Nikutta has learned when she oversaw operations and comparably successful marketing campaigns during her time at the public transport provider of Germany's capital.

It also shows that admitting weaknesses might be more appreciated by a business partner than trying to cover them up. ■



PERSPECTIVE WIND PROPULSION

The winds of change

Smart Green Shipping's (SGS's) FastRig is retractable, recyclable, retrofittable, and its robust wing sails deliver direct thrust to augment a ship's main engine propulsion. It is therefore an important tool to reduce the maritime industry's carbon footprint.

Back in 2018/19, we conducted a feasibility analysis with Drax, the United Kingdom's largest renewable energy company that imports 8 metric tons of biomass wood pellets into the United Kingdom from the United States per year. On that route, we evidenced that 20% fuel and greenhouse gas (GHG) emissions could be saved every year with the vessel sailing at its usual speed on its usual route. These savings were verified by the University of Southampton and gave us confidence that we are on the right track.

The economics

In our research and work, we focus on wind as it is a primary renewable, free, and abundant form of energy, which is exclusively

available to any ship equipped to harness it.

Wind provides direct thrust to a vessel, which is an extremely efficient use of energy. Truly green alternative fuels take primary renewables such as wind or solar, and then convert it into an energy carrier such as hydrogen or nitrogen. This loses up to 90% of the energy value in the conversion process. Imagine sailing past an offshore wind farm knowing that the energy companies are converting that power, which you could use directly on your ship, into a commodity fuel and then selling it back to you. It is a bit crazy! Shipowners get more fuel autonomy by using the energy themselves. The conversion process itself is challenging technically and the safety implications for use of these exotic fuels at scale are concerning. It is going to take several years to see a significant transition to alternative fuels.

As we approach the new regulatory landscape with instruments such as EEXI, CII, and the EU ETS, we will see carbon having

a value that can be monetized – wind-assist gets shipowners into that economically beneficial space faster. Wind-assist needs no landside infrastructure investments, therefore it is much cheaper and much faster to get to market, meaning shipping can address the climate emergency while saving money. The International Panel on Climate Change Working Group III said in its "Summary for Policy Makers", "Without immediate and deep emissions reductions across all sectors, limiting global warming to [as agreed by the Paris Agreement] 1.5°C is beyond reach." At 1.2° of warming, we are all experiencing devastating impacts. Wind-assist is the only clean power available to shipping in line with climate science. And, again, it is free.

The other side

In contrary, alternative fuels have non-maritime applications, which means other sectors will compete to secure green fuels. Consequently, this will create tight markets,



ABOUT THE AUTHOR

DIANE GILPIN leads design house Smart Green Shipping. She has driven innovation uptake in cellular phones, financial information services, Formula One, offshore yacht racing, and renewables. She combines all the learning accumulated along the way to develop 21st century wind-assisted shipping.

forcing prices upward as fossil fuels are phased out. Commodity-based fuel prices are very difficult to predict; volatility is driven by geopolitical events and human emotion.

Wind is much more predictable. It is, of course, intermittent but by using 21st century digital analysis tools, it is perfectly possible to predict the fuel saved on FastRig-equipped ships, and to do so within acceptable margins to develop insurance products that will insure against the wind not blowing as predicted.

SGS has been supported by the European Space Agency to develop artificial intelligence-based weather routing in collaboration with Dr James Mason and the University of Manchester. We are developing a whole system solution. Along with our wing sail, we will provide wind prediction and optimization tools to maximize the energy output from FastRig.

FastRig is designed to be recyclable and so we reduce the amount of embedded emissions in the technology. This lifecycle analysis is not currently measured, but we are confident that as the emission reductions to meet climate goals get increasingly stringent, FastRig is future-proof.

Pictured: Panamax refitted with a sailing rig.

There is a great deal of public support for wind-assist, and the public like it much better than toxic alternative fuels. Cargo-owners also find it an attractive near-term option to reduce their supply chain emissions and enhance their brand.

The technical side

At this stage, FastRig is mostly suited to dry bulkers and tankers with clear deck space. The technology is in its late-stage test and

development phase. Our route-to-market is a 37 m land-based test where FastRig will be installed in 2023 on the banks of the River Clyde in Scotland – an exceptionally windy position where we can put the mechanical systems, hydraulics, and manufacturing processes through their paces and

begin collating real-world performance data.

The following year, we will install a smaller FastRig on a ship for sea trials and fuel-/GHG-saving verification. This is in preparation for producing a catalog of different size solutions for multiple ship types and sizes. Working with shipowners and class socie-

ties, SGS recently went through a hazard identification workshop to identify any technical and operational issues that concern the market, such as deck/wing interface, systems integration, safety, operations, crew training, loading/discharge/port interface, damage limitation and management, and maintenance. Our test and development program will systematically work through all of these technical and operational challenges with our industry partner ahead of our ship-based test in the real world.

We will be transparent about implementation challenges and how to overcome them, measuring and verifying fuel and GHG emissions savings and, in work that is not being done elsewhere, begin to understand the science of the impacts on the hydrodynamics and ship performance when a lot of wind power is retrofitted. We will also develop virtual reality (VR)-based crew training systems to make that easier.

Using those same VR headsets, we can allow potential customers to inspect our FastRig in action. The Institution of Mechanical Engineers produced a policy position paper on wind-assist, which concluded that wind-assist is a no-regrets option. Install it now – it works with fossil fuels – and in future, it will work just as well with alternative fuels – mitigating some of the cost, quality, and availability uncertainties these new fuels bring with them. ■

“Wind-assist is the only clean power available to shipping in line with climate science”

DIANE GILPIN
Smart Green Shipping

FEATURE PORT WORKER STRIKES

Fighting for recognition

As economies across Europe and in the United States feel the pinch from skyrocketing energy and food costs, dock workers have taken to picket lines demanding higher wages to match inflation, with serious impacts for maritime trade and congestion in ports

STEPHEN COUSINS AND INES NASTALI

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he global surge in inflation since the COVID-19 pandemic, exacerbated by the Russia-Ukraine conflict, pushed up consumer prices to record highs in 2022 as people found themselves struggling to pay for basic necessities, including energy and food.

Prices across the 19 countries in the eurozone increased at an annual rate of 10.7% in October 2022, according to official estimates. Inflation in Germany, Europe's biggest economy, rose to 11.6%, while the United Kingdom's reading of 11.1% was a 41-year high.

The United States has been on its own economic rollercoaster, with consumer prices hitting a high of 9.1% in June, the biggest yearly increase since 1981. Prices have since dipped slightly as a potential indication that pressures may be starting to ease. The cost-of-living crisis across developed markets precipitated a series of labor disputes in ports as dock workers demanded higher wages to counter falling standards of living.

The UK's largest container port, Felixstowe, was hit by two eight-day walkouts in late August and September.

Walkouts during the summer in German ports culminated in a 48-hour strike involving violent clashes with police.

Meanwhile, worker grievances over low wages and increasing automation in US ports have fractured negotiations between unions and employers with no deal currently in sight. The industrial action increased disruption in already-congested terminals and many carriers took steps

Pictured: Striking Unite union members and dockworkers wave placards at passing truck drivers leaving the Port of Felixstowe in Felixstowe, UK, on Wednesday, 24 August 2022.

Photo: Chris Ratcliffe/Bloomberg via Getty Images







to divert vessels away from those affected. If the economic strife continues into 2023, it could trigger a further wave of strikes. “The steep rise in the rate of inflation is equivalent to a real-term pay cut for port workers, and if employers fail to address this in wage negotiations, then we expect to see further disruption in 2023,” said Eleanor Hadland, senior analyst for Ports and Terminals at maritime research firm Drewry.

Terminal operators that agree to boosting wages will have to add the costs to steep increases in fuel and electricity costs, and the resulting damage to operating profits may force them to pass them on to carriers and shippers.

“With freight rates now in rapid decline, we expect shipping lines will be more resistant to tariff increases at the end of 2022 compared with 2021,” said Hadland. However, it may be an easier sell for liner companies, which posted record profits in 2021, she added, in which case “terminal operators will be pushing hard to ensure that stevedoring tariffs keep pace with inflation.”

British boycott

The widening gap between workers’ earnings, corporate profits, and soaring inflation rates in the UK has driven unionized workers in various industries to go to the picket line. Strike action hit the Port of Felixstowe in Suffolk, which handles almost half of the United Kingdom’s container trade over the summer as members of the union Unite called for wage increases to match inflation.

Some 1,900 dockers walked out for eight days in August, then for a further eight days at the end of September, after Unite rejected an offer by port operator Hutchison of a 7% increase in pay plus a US\$600 lump sum.

Supply chain visibility firm project44 found that both strikes drove up import and export dwell times at the port. However, the second strike cleared container backlogs faster with export container dwell times peaking at 14.87 days on 3 October, compared with 17.68 days at the end of August.

Pictured: Dockers protest near the main gate of Felixstowe Port, UK, as an eight-day strike, called by the Unite trade union.

Photo: Guy Smallman/Getty Images

The total vessel TEU capacity calling at Felixstowe dropped by 55% and 62% during the first and second strikes, respectively.

Paul Davey, head of corporate affairs at Hutchison told the government’s Transport Select Committee in October 2022 that the industrial action had not caused “any real significant impact” on supply chains, partly because a slowdown in retail sales meant most of the customers already had enough stock for Christmas, while “COVID-19 and other issues meant customers had become used to dealing with delays.”

An unprecedented wave of strikes at the Port of Liverpool in 2022 finally ended in early November 2022 after workers voted “overwhelmingly in favor” of pay rises negotiated with Peel Ports. About 600 employees of Mersey Docks and Harbour Company initially took to the picket line for two weeks in September 2022, followed by a week in October, after negotiations between Unite and Peel Ports failed to reach an agreement.

After the second strike, Unite accused Peel Ports of “fudging the numbers” with its final offer of a 10.2% average pay increase, claiming it was “based on the maximum someone could earn if they work overtime on top of their weekly contracted hours,” and that the real offer amounted to just 8.3%. Further action was due to take place on 14 November but was averted when workers voted in favor of a deal that included a 9% increase in basic pay, with a total value of between 14.3% and 18.5%, depending on job type.

According to Project44, export dwell times in the port reached a maximum 14.2 days after the first strike, in late September, the second strike in October saw them peak at 15.8 days at the end of the month.

Josh Brazil, vice president of Supply Chain Insights at project44 told *P&H*, “The number of port strikes in the UK was unprecedented in 2022. Not only has inflation and

the cost of living contributed to the real wage drops dock workers are facing, but it comes on the heels of some of the most profitable years in shipping industry's history. Shipping companies' financial gains juxtaposed against the dock workers' losses creates an especially potent recipe for industrial action."

Walkouts in Germany

Food and energy inflation in Germany has been particularly hit hard by Russia's invasion of Ukraine, catalyzing one of its longest-running labor disputes in decades over the past summer.

The United Services Union (ver.di), which represents about 12,000 workers including at the major Northern ports of Hamburg, Bremerhaven, and Wilhelmshaven, initially called two strikes in June 2022, the first lasting for four hours, the second for 12 hours.

When ongoing collective bargaining agreement negotiations with the Central Association of German Seaport Companies failed, another 48-hour strike, the longest in four decades in the country, was called in July.

The strike turned violent on the second day when it left five demonstrators and five police officers injured. Employers went to Hamburg's labor court to have the strike termed illegal, but the court rejected the move and instead required the two sides to set three further dates for negotiations while strike action was suspended.

The issue was finally resolved in late August, when mutual terms were agreed, including an average 9.4% wage increase for workers in container operations, plus retroactive bonuses, and a smaller 7.9% increase for workers at general cargo operations, plus bonuses. A further 4.4% wage increase will be assigned to all workers from June 2023, which could be extended to 5.5% depending on the rate of inflation.

The two-day strike in July caused container dwell times to climb and, according to data from project 44, Bremerhaven hit a peak of 9.1 days on 17 July, up 112% from 4.3 days on 11 July.

Further analysis by Drewry, published in October 2022, revealed a significant increase in pre-berth waiting times in German ports during the summer, especially in Hamburg, where larger mainline vessels incurred an average four-day wait to enter the port in July and August.

Even after the wage agreement was finalized, Drewry said labor availability remained challenging, particularly on weekends, and continued high yard occupancy was impacting productivity, resulting in extended call durations.

Action on automation

While the cost-of-living-crisis dominates the headlines in Europe, port automation sits at the heart of an ongoing labor dispute in the United States where the future of some 22,000 dock workers, whose contracts came to an end in July 2022, still hangs in the balance.

Talks on new worker contracts between the International Longshore and Warehouse Union (ILWU) and the Pacific Maritime Association — representing about 70

employers, including ocean carriers and cargo terminals at 29 ports on the West Coast — began in May 2022 and were due to have concluded in recent weeks.

However, a series of disagreements and setbacks have delayed a sign-off on a deal leading to fears of large-scale strikes and disruption to trade. Importers have already diverted some goods away from the West Coast to Gulf Coast and East Coast ports due to labor availability concerns.

In the latest setback to negotiations reported in the Wall Street Journal, the ILWU walked out of talks with a separate union, the International Association of Machinists and Aerospace Workers, over which workers should get certain jobs at the Port of Seattle's cargo-handling terminal. Officials told the paper that when bargaining resumes it will take many more months to resolve issues such as wages and the use of automated machinery.

A key flashpoint in talks is automation. Terminal operators and ocean carriers claim that more automated technology is needed in ports to keep the United States competitive and ease bottlenecks. The ILWU argues that automation is killing off jobs, disempowering workers, and not increasing productivity. It wants ports to agree to stop further use of automated cranes, self-driving vehicles, and other equipment. Globally, the port sector is already highly automated, but according to Dr Andrew Grainger, director of Trade Facilitation Consulting, it is also very specialized and still requires many different professions to interact and collaborate.

"In the case of containerized shipping you find that much of the labor-intensive physical handling takes place many miles away from the port — for example at warehouses and distribution centers," he said.

The future of worker movement

All these disputes show that workers stand up for themselves and demand acknowledgment for their work.

With the maritime industry facing a skilled worker shortage and competing with other transport and engineering sectors, it is important to show career perspectives to the staff to keep them in the sector.

McKinsey's research into the value of work experience and job moves in the United States, Germany, and the United Kingdom, for example, shows that "moving into a new role pays off — and even more so when someone lands a new position that stretches their capabilities or represents a match that better utilizes their skills".

The report further states that "For people without educational credentials who start out in low-paying positions in particular, movement is critical to boosting their earnings."

Employers should also note McKinsey's finding that "more than 80% of the role moves observed in our dataset involved someone moving from one employer to another."

Consequently, "to ensure that proven employees don't have to go elsewhere to advance, organizations should set the expectation that part of a manager's job is developing people who will go on to other things." This includes continuous training and mentoring. ■

"The number of port strikes in the UK was unprecedented in 2022."

JOSH BRAZIL

Vice president, project44

Across the world, fundamental rights to strike — protected under Article 11 of the European Convention on Human Rights, as well as via core International Labor Organization conventions including No. 87 and No. 98 and the Maritime Labor Convention 2006 as amended to provide similar and complementary rights for all workers and specifically those in the shipping industry — are under attack, not least from the UK government.

Global audiences will doubtless be struggling to keep up with who is running the shop these days but UK PM Rishi Sunak looks set to follow through on the threats of his erstwhile predecessor with more anti-trade union legislation, including the ability for employers to bring in agency staff during strike action, further restrictions on the right to strike, and for minimum service obligations in transport.

In the middle of a cost-of-living crisis, the like not seen for a generation, it is hard to see these measures as anything other than an attempt to distract attention away from the suffering being inflicted on society. Desultory pay offers to workers at a time of significant profitability is an insult, especially for maritime key workers who kept ports open and trade moving during the global pandemic at great physical risk to themselves. One minute we applaud their dedication, the next we offer them a pay cut.

The case of P&O Ferries

Maritime professionals deserve respect and to be appreciated in their workplaces. In the United Kingdom, these workers are faced with weak employment protection — fire-and-rehire is one example of a practice that has become prevalent in many sectors. The maritime industry can provide some shocking examples of the shoddy treatment of its global workforce, but nothing prepared us for the P&O Ferries firings. In March 2022, it sacked 786 seafarers without notice or consultation via a prerecorded video message. The company simply calculated how much it would need to pay when it chose to unlawfully sack its employees.

Now P&O Ferries relies on agency workers flown in from around the world. It pays them less than UK minimum wage and requires them to work longer hours and extended tours of duty without access to shore leave. We believe this crewing model is turbo charging a race to the bottom in social and employment conditions, but it is also unsafe because of the increased risks of crew fatigue.

We know that safety is a challenge in all sectors and in

maritime, we are not exempt. Data from UK trade body Port Skills and Safety reveals that most fatal accidents in UK ports happen during the ship-to-shore interface. Fatigued seafarers are most at risk during cargo loading and unloading, which can happen up to 20 times per day on a ferry that plies the Dover-Calais route, which is among the busiest shipping lanes in the world. It simply is not acceptable for any employer to knowingly put its workers and its passengers' lives at risk to cut costs and boost profitability. P&O Ferries CEO Peter Hebblethwaite, early this year voted Europe's worst employer, openly acknowledged to a committee of UK parliamentarians that he had not undertaken a risk assessment for the new operational model. That is quite some admission.

Companies such as P&O Ferries must be dealt with and we believe that the pendulum must swing back in support of workers' rights and of trade unions that seek to guarantee and enforce those rights.

In July 2022, Nautilus alongside the International Transport Workers' Federation (ITF) and the Dutch union Federatie Nederlandse Vakbeweging secured a favorable outcome in a legal case in the Netherlands that sought to compel employers to comply with a collective bargaining agreement, which stipulated that vessel lashing in port must be done by qualified dock workers, and not seafarers. The Dutch court has now ordered shipowners to comply in the Port of Rotterdam and other ports or face hefty fines.

At Nautilus, we support the ITF to ensure that human and trade union rights are upheld within the maritime supply

chain, including a guarantee to repatriation, freedom of movement, and freedom from forced labor, the denial of which hundreds of thousands of seafarers endured during the COVID-19 pandemic.

To that end, the ITF launched a human rights due-diligence toolkit backed by the UN Global Compact representing some of the world's largest corporations. It seeks to help cargo owners ask the right questions to suppliers to ensure that social and employment rights of seafarers are upheld. We believe port operators should support this work and take responsibility to support and commit to those rights for all our maritime workers.

The business of maritime works best when we all work together to ensure sustainable, good quality employment, and a fair deal for all. Let's protect our maritime key workers and give them the respect they deserve. ■



MARK DICKINSON
Secretary general, Nautilus

Wake-up call

In this new section, we make space for an open debate related to the edition's feature. Trade union Nautilus kicks things off commenting on the recent global port worker strikes



Closing the gaps

In this new section, engineering companies will share their experiences of collaborating with ports and how to close engineering gaps. Patrick King of Jacobs makes a start

Q&A

Q: Please give us a brief introduction of your role and how you interact with ports

A: I am Jacobs' director for Ports and Maritime (P&M) and Global Transportation business. I have more than 30 years of experience in delivering projects across the globe for a wide client base, including port authorities, government agencies, private developers, cargo terminal and cruise operators, as well as some of the world's leading naval forces. I lead a global team of more than 500 P&M specialists who provide our clients with expertise in all aspects of the sector, including containers, coastal infrastructure and resilience, dry bulk, break bulk ro/ro and general cargo, shipyards, energy, and intermodal operations, among others.

Q: How do you see the state and potential of the port infrastructure market?

A: Ports will continue to play a vital role in enabling commerce, economic benefit, and connectivity globally, and most importantly in the world's decarbonization. We expect that ports' role will change from purely a gateway for importing and exporting goods to becoming a central enabler for our transformation into a low- or no-carbon society. Ports provide key enabling infrastructure for our energy transition, including offshore wind farms, hydrogen hubs, or other energy production centers.

In terms of bunkering, this will obviously change, and fuel switching will open new opportunities for port organizations.

As far as digital infrastructure is concerned, if we think of all the challenges that the port sector is currently facing – decarbonization, decline in world trade, spiking energy prices, rising resource costs, and a constrained resource and labor supply – digital solutions offer to positively disrupt these events and build toward the smart port cities of tomorrow.



PATRICK KING
VP, Jacobs

Q: What do ports need to do now to prepare for a changing infrastructure landscape, and what advice would you give ports to close the gaps?

A: We need to recognize the challenges that ports face now, with an imperative to green their operations and meet their environmental targets, while maintaining a successfully operating business and improving a variety of key performance indicators, such as financial, societal, and health and safety.

Ports must plan for the decarbonization of their operations and make longer-term decisions on their wider business direction and commitments. Fuel and energy switching are a key focus area over the next couple of years, as this will have a significant impact on ports' performance, cost, commercial advantage, and market share. This is a potentially great opportunity not only benefiting port operations, but also positioning ports to accommodate new cargoes and revenues as we enter the next decade in our net-zero transformation. These include becoming energy hubs, establishing manufacturing/staging/operations and maintenance bases for offshore wind, and serving as import and export facilities for project and breakbulk cargoes

required in the construction, operation, and maintenance of all types of renewables.

At Jacobs, we have seen a trend in US ports of not greening operations through electrification and digitization but focusing on capturing new business and throughput from offshore wind components, such as monopiles, nacelles, cables, and other required infrastructure. Similarly, offshore wind and renewable ambitions are translating into opportunity for European and Asian ports, albeit the technical and regional challenges may be very different.

Current challenges for port operators include large swings in shipping rates, the beginnings of a decline in trade, geopolitical events, increasing energy prices, a tight labor market, and rising interest rates.

These can make it harder for ports to establish a firm business case to develop, expand, and modernize, especially when they have so many decisions to make regarding decarbonization that all require additional financial investment. These challenges mean that it is even more important for ports to make the right decisions now and plan their future purposefully.

Q: What kind of cooperation would you like to engage with ports?

A: We very much like to work with clients as a trusted adviser and partner from the beginning of their projects, bringing integrated solutions that draw on our multidisciplinary capability, long-term experience in all ports and maritime sectors, and collaboration with chosen industry partners. As well as our domain expertise in P&M, Jacobs provides strategic advice to clients on business planning, investment decisions, and productivity enhancements across all modes of transportation and across the build and digital environments. ■



Le Thi Thu Thuy

Four years after setting out on its car manufacturing journey, Vietnamese VinFast is breaking into the western market with a clear vision of who to partner with

INES NASTALI

VinFast is branching out. What in 2019 started as a national company in Vietnam building internal combustion engine cars based on BMW chassis, is now a company seeking to make and bring fully electric vehicles (EVs) to Europe and the United States.

VinFast is a subsidiary of Vingroup, a company founded in the post-Soviet Ukraine of the 1990s by expatriate Vietnamese Pham Nhat Vuong. He started off by selling instant noodles and later became Vietnam's first billionaire through Vingroup's portfolio of communications, real estate, and hospitality. Well, and cars.

To make VinFast's exploration of the market successful among a time of supply chain crisis and offshoring of production sites, it has partnered with semiconductor companies in South Korea and Japan, but there are also concrete plans to build manufacturing plants for cars and buses in North Carolina, United States, and Germany as well as to establish a battery manufacturing site in the United States.

Further, the company has partnered with T-Mobile for vehicle connectivity. This is especially important as one of VinFast's self-proclaimed unique selling points is its after-sales service that includes smart service features that need reliable access to the internet to update firmware and notify the driver of any services needed.

"VinFast has built a global network of partners and strategic partnerships with suppliers to establish a sustainable supply chain that shares information and solves problems in the spirit of cooperation and furthering relationships. Therefore, VinFast has minimized the negative impacts of global issues. In addition, we are working with partners to promote the local supportive industry system to reduce dependence on external sources," Vingroup vice chairwoman and VinFast global CEO Le Thi Thu Thuy told *P&H*.

Moving abroad

While the plans for Germany still have to be firmed up, the \$6.5 billion investment in North Carolina will see cars being built from 2024 on.

The state of North Carolina offered a \$1.2 billion incentive for the company to set up its plant in the east coast state.

"We will manufacture and assemble our vehicles at the North Carolina factory. In the first phase, we will have the press shop, the body shop, the paint shop, and the general assembly shop at the factory, with a capacity of up to 150,000 vehicles per year for the first phase," Le Thi Thu Thuy explained.

The VinFast CEO added that the company's current key global markets, apart from the United States and Germany are Canada, France, and the Netherlands.

"The roadmap to end the sales of gas-fueled cars and switch to electric vehicles in these countries represents an excellent opportunity for VinFast," said Le Thi Thu Thuy.

She added that, "These are also huge markets, with open-minded consumers, strong development potential, favorable economic conditions, policies, and infrastructure for electric vehicle development."

Seeking new partnerships

Bringing the product closer to the customer is a vital strategy for Le Thi Thu Thuy in a post-COVID-19 supply chain.

This development is contrary to western companies setting up shops in Asia to lower production costs but gives the relatively small newcomer in the competitive EV market a chance to connect with the European and US markets over their competitors from South Korea and Thailand, for example.

The company currently imports its two models for the European and US market from Vietnam. The first 999 vehicles were delivered to the United States in December 2022 with a second shipment expected in January 2023.

The SUVs were transported on car carrier *Silver Queen*, which VinFast chartered

and painted with its logo. They left the Vietnamese port of Haiphong for California in late 2022.

While the western manufacturing plants will help to increase the company's footprint and accelerate its supply chain movements, the VinFast CEO leaves it open if the company would make use of freeports, for example. "This will depend on each market and its specific conditions," she said.

The same goes for other cooperation with ports. "We will choose appropriate ports, with advantages in terms of distance, time, and cost, for our logistic activities," she told *P&H*.

At the same time, the VinFast CEO has a concrete list for ports to make them attractive to the car manufacturer.

"Since electric vehicles are still new to the market, the infrastructure of some ports is still limited to accommodate the operation needed for

"The infrastructure of some ports is still limited to accommodate the operation needed for electric vehicles"

EVs," said Le Thi Thu Thuy. "We would prefer to work with port operators that are well-equipped with an up-to-date system to support the pre-delivery inspection process, educated chargers suitable for electric vehicles, network systems to facilitate upgrading to the latest software prior to the delivery, and strong power connections suitable for portable charging equipment to speed up the charging of vehicles."

Apart from those credentials, VinFast is after the usual business cooperation that includes convenient infrastructure and transportation from the ports to facilities and vice versa as well as good pricing and flexibility to support its policies.

To complement the move to the west, in December 2022, VinFast also filed an initial public offering to be listed on the Nasdaq, making it the first Vietnamese company to be listed on the US Stock Exchange and thus confirming its intention to expand further west. ■



NorthStandard — The new name for North and Standard Club

North of England Protecting and Indemnity Association Limited and The Standard Club merge

On 20 February 2023, The North of England Protecting and Indemnity Association Limited (North) and The Standard Club will merge to form NorthStandard, a new single legal group with oversight of the marine insurance activities of both organizations.

The merger will make it possible for all the companies within the NorthStandard group to provide significant benefits for members through increased scale, enhanced financial security, and service expansion.

What is changing

As part of creating this new entity, North will become the group's parent company and change its registered corporate name to NorthStandard Limited. There will be no change to the underlying insurance business.

Apart from North, all other businesses within the NorthStandard group will continue to use their existing names and provide their current services. In short, in England, North will be renamed NorthStandard Limited but the company registered as North of England P&I in Ireland will not change its name; meanwhile The Standard Club UK Ltd, The Standard Club Asia Ltd, and The Standard Club Ireland will not change their names.

Uninterrupted cover

The merger of North and The Standard Club will not impact any cover already in place.

All existing insurances, certificates, blue cards, guarantees, undertakings, powers of attorney, and other insurance or legal documentation bound or issued by insurance underwriting entities in either North or The Standard Club prior to

20 February 2023 will continue uninterrupted in accordance with their terms.

For the avoidance of doubt, the change of name of North will not affect the validity or enforceability of documents issued under that name.

Continuity of contact

Starting 20 February 2023, NorthStandard will continue to provide timely guidance, continuous support, and efficient claims handling.

Over the coming months we will keep members and other market stakeholders updated on the progress around the merger. In the meantime, where documentation includes contact information for North, The Standard Club, or correspondents or agents authorized by either organization, relevant parties should continue to contact them in the usual ways. Any documentation issued after the merger date will include a relevant NorthStandard contact.

The merger of North P&I Club and The Standard Club is expected to yield significant benefits for members through scale, enhanced financial security, strategic investment, and service expansion.

For more information on NorthStandard, please visit www.nepia.com/topics/north-and-the-standard-club/.

For more information on our contacts, please visit: www.nepia.com/about-us/our-people/.

For inquiries relating to planned changes to the wording in certification, please get in touch with your usual contact, or email namechange@nepia.com.

NorthStandard

The new name for **North** and **Standard Club**
The same **exceptional service, flexible solutions**
and **global scale.**



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Providing thought leadership on the role of ports in a connected world

Ports & Harbors is the official magazine of the International Association of Ports and Harbors (IAPH) - and the 2023 World Ports Conference.

Climate and energy | Data collaboration | Risk and resilience

S&P Global

ports
& harbors



ports
& harbors

Learn about partnership
opportunities.



Mixed. review

In the third edition of the World Ports Tracker, IAPH and S&P Global data show an increase in vessel calls, a decline in port moves, and expectations of further growth

THEO NOTTEBOOM AND THANOS PALLIS

The World Ports Tracker relies on a combination of two sources: survey-based results on cargo and passenger markets in ports as well as container port performance data from S&P Global.

This third edition of the IAPH World Ports Tracker combines survey-based results with container port performance data for the first time.

Analyzing the index-based data

The nonsurvey part of the IAPH World Ports Tracker uses index-based changes in container ports per region for all of the four indicators – vessel calls, port moves, and vessel and call sizes.

The index-based evolution of the vessel calls per region reveals that in the third quarter of 2022 and on a year-on-year basis, three regions show double-digit growth in the number of container vessel arrivals compared with the calls of third quarter 2021 in Africa, Northeast Asia, and Southeast Asia. In all other parts of the world, container vessel calls saw only minor changes in the third quarter of 2022. The strongest declines are observed in Northern Europe (-13%), the Mediterranean (-3.8%), and North America (-3.7%).

At the same time, Northern Europe and North America recorded a 10% increase in average call sizes, while Africa, Northeast Asia, and Southeast Asia show a drop of around 10% since the third quarter of 2021.

The picture looks very different when focusing on medium-term changes compared with the first quarter of 2019, showing major increases in the call sizes, particularly in North America (+41%), Latin America (+27.7%), Northeast Asia (+27.4%), and Northern Europe (+25.6%). The increase in call sizes was less considerable in the African and Mediterranean ports, while the Middle East and India saw no change over the past three years.

The regional data on port moves per hour demonstrates that most of the world's port regions had to accept a decline in the third quarter of 2022 compared with the same quarter in 2021. While one might expect otherwise, the deployment of larger vessels and the higher call sizes did not go hand in hand with higher terminal productivity in all regions.

Analyzing the survey data

The survey part represents the analysis of data collected in November 2022. The survey was sent out in late October 2022 to all regular IAPH members. A total of 78 valid answers were received, slightly below the 96 replies received for the June 2022 survey. North Europe, the Mediterranean, and Southeast Asia and Oceania are the leading regions with 14, 13, and 12 responding ports respectively, making up half of all replies. The Sub-Saharan African port region, and Latin America and the Caribbean offered the fewest responses.

Compared with the June 2022 survey, there are slightly fewer cargo ports reporting year-on-year growth in the number of vessel calls across all vessel types: up to 43% of respondents in the third quarter of 2022 compared with up to 47% in the second quarter of 2022, confirming the mixed results of the year-on-year change of the index report.

However, except for container traffic, ports around the world are, on average, slightly more optimistic than three months ago about the expected traffic evolution in the next 12 months: 52% of ports expect a growth of at least 2% in the container, dry bulk, and liquid bulk throughput, while this figure amounts to 47% for all other cargo.

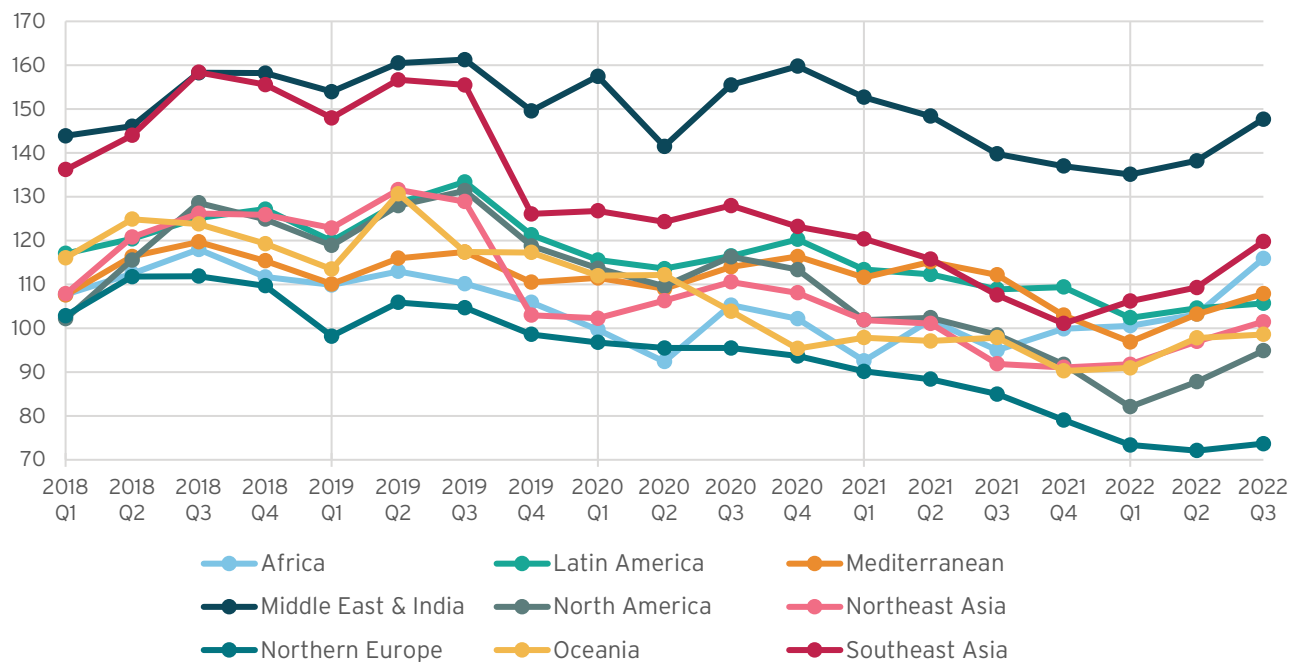
The situation in warehousing and distribution facilities shows no change for containerized cargo compared with second quarter 2022. However, the share of ports reporting underutilization of facilities or capacity shortages has dropped in the other cargo segments, with the strongest decrease observed in the dry bulk market.

The overall results show that 17% of respondents expect a year-on-year annual growth rate in container volumes of more than 5% for the next 12 months. About 32% of ports do not expect major changes in the handled TEU volume, while about 17% are preparing for a volume decline.

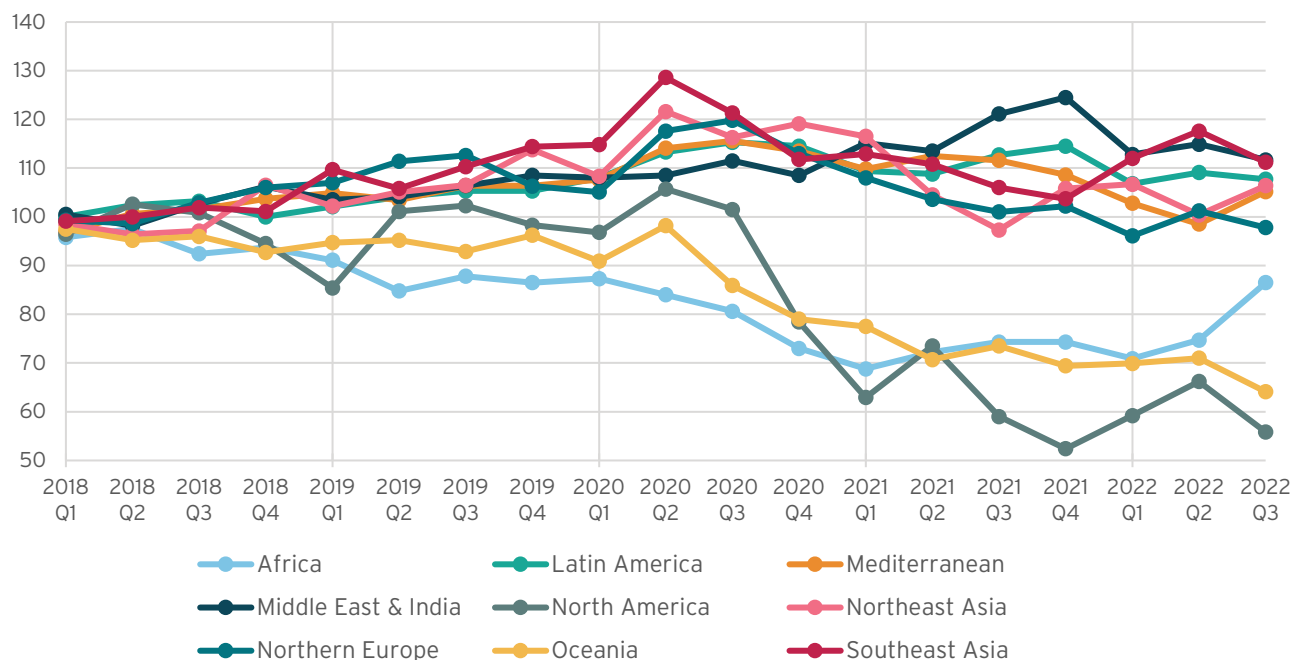
The results for the dry bulk market are noteworthy: One-quarter of the ports expects a growth in calls over 5% with 1 in 10 ports forecasting a mostly modest volume decline. For liquid bulk and other cargo flows, 21% and 19% of ports forecast growth of more than 5% in the next 12 months while at the same time, 18% and 14% predict a volume decline, respectively. ■



Vessel calls per region (index-based reporting with Q1 2017 = 100)



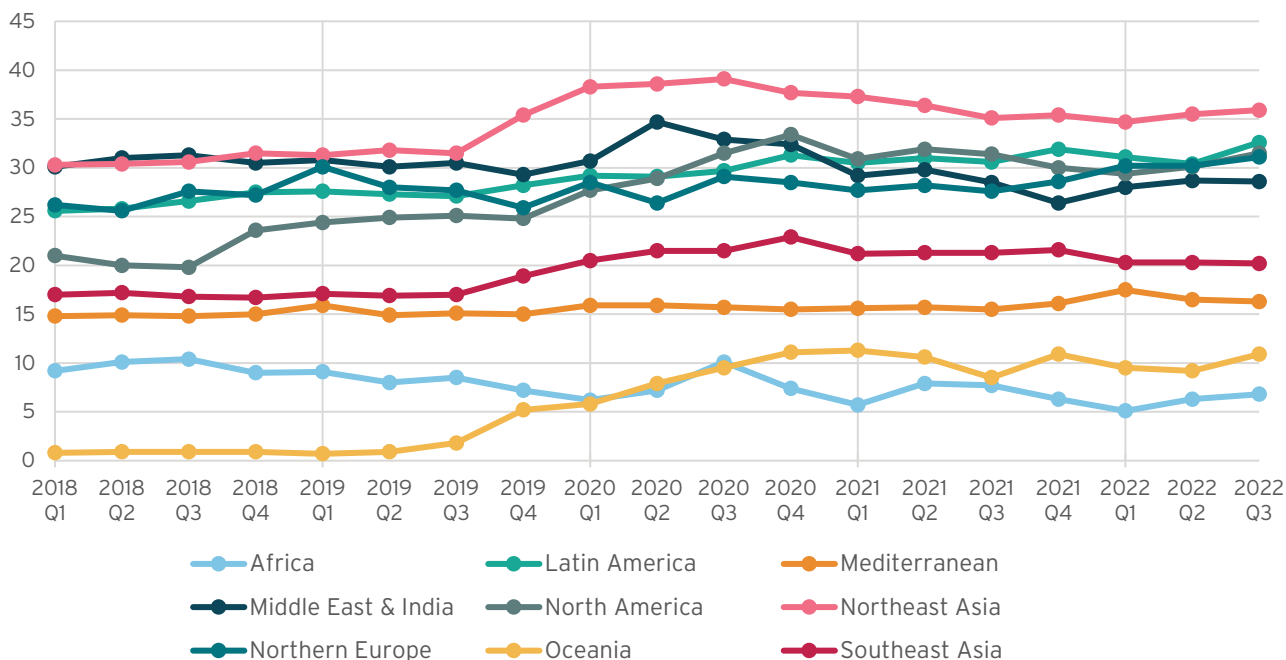
Port-moves-per-hour (PMPH) per region (reporting quartile development, index-based with Q1 2017 = 100)



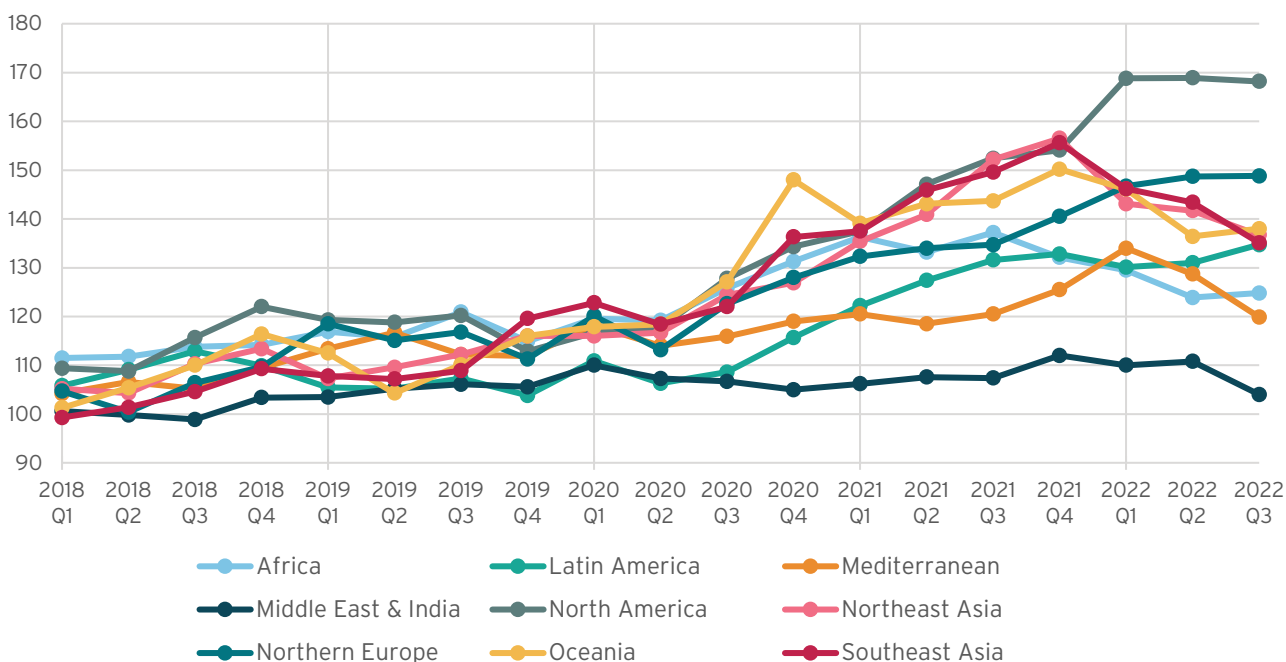
Port-moves-per-hour (PMPH): Total moves recorded divided by total port hours recorded over the period.



Evolution of vessel size per region (reporting share of 8,501 TEU + vessels in total container vessel calls, compared with Q1 2017)



Evolution of call size per region (reporting quartile development without call size band reference, index-based with Q1 2017 = 100)





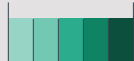
Excerpt from the IAPH World Ports Tracker (Q3 2022)

0% 100%



Interpretation:
Higher % is better

0% 100%

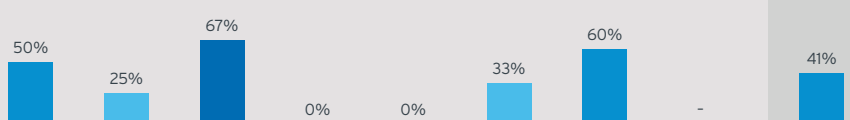


Interpretation:
Lower % is better

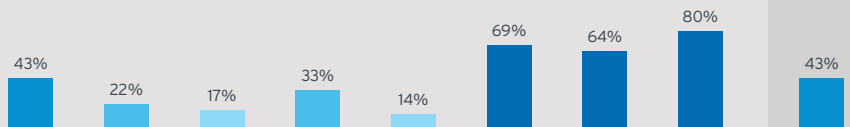
Number of vessel calls:
Percentage of ports with >2% growth
Q3 2022 vs. Q3 2021

Container vessel

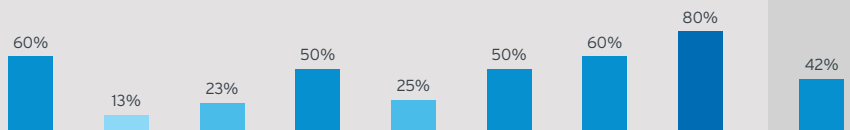
Central & South America East Asia Mediterranean Middle East & Central Asia North America North Europe Southeast Asia & Oceania Sub-Saharan Africa Weighted average of all regions



Bulk carrier



Tanker and gas carrier

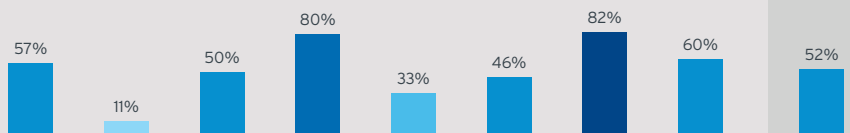


Traffic volume expectations:
Percentage of ports with >2% growth
expectation in the next 12 months

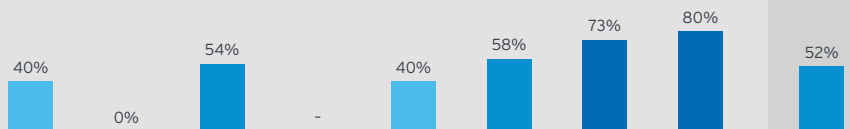
Containers (TEU)



Dry bulk (tonnes)



Liquid bulk (tonnes)



Hinterland transport:
Percentage of ports with delays (6-24h),
major disruptions (>24h) or discontinued
operations

Container truck



Warehouses/distribution facilities:
Percentage of ports with underutilised
capacity or capacity shortages

Containers (TEU)





PADDY RODGERS

Director, National Maritime
Museum, Greenwich, UK

THE COLUMN

The master and the medium

When the differential between the price at which an object can be bought in one place and sold in another is greater than the cost of moving the object between the places, then the object will be moved. This is the law of markets known as an arbitrage.

The ocean connects all ports and harbors subject only to the restrictions of draft and navigation. The market is the master, while the ocean is the medium.

As decarbonization progresses, there is a lot of focus on engineering and technology. No less important, however, are the social structures and organizations that will deliver change. The foremost will be the market.

The social structures and organizations post-Second World War have changed little, notwithstanding huge change in the economic balance of power, demography, and global means of communication. This leaves the market in primacy of position as there are no fora or legislative structures with global reach that can impose rules, or settlements. Treaty negotiations are slow and have no immediate teeth.

Nothing demonstrates this more clearly than COP. Without a regulatory and administrative framework, how can it deliver on its pledges? The skeptics among you might think it cannot and it will not, but let us think about shipping.

The market force is strong

Ports and harbors are land-based and will be regulated by their national authorities. Flag states will regulate ships through class societies. Nations, whether port or flag states, will move according to their national priorities and perceived advantage.

A market will emerge, a market of regulation where differentials in cost of

compliance and performance will drive trade and shape cargo movements. Cargoes move ships, arbitrage moves cargoes and the pricing of regulation can create arbitrages — as an example by taxing emissions in one jurisdiction and not in another.

In retail shipping, like containers, a push for a green marketing movement will give a marketing advantage. In finance, the Poseidon rules will have an impact.

Business-to-business trades will each have their own value pressures. LNG has always

burned cleaner fuel but is now seen as a transition technology. Coal should be out of the question and oil has surely peaked.

Perhaps the future will be a patchwork quilt of stitched-together regulations and market forces that will change trading patterns and routes.

The European Union and IMO set rules to phase out single hulls, but commercial imperatives ran ahead of legislated phase-out dates, a tipping point was reached and the single-hull ships were obsolete economically long before their regulatory obsolescence. Ironically, the move to double hull started in the United States with national legislation following the *Exxon Valdez* oil spill; nevertheless, the last real international single-hull trade was between the Middle East and Gulf and the US Gulf!

Ports need to keep a weather eye open because the market will be changed and routes may become obsolete. ■

“Business-to-business trades will have their own value pressures”

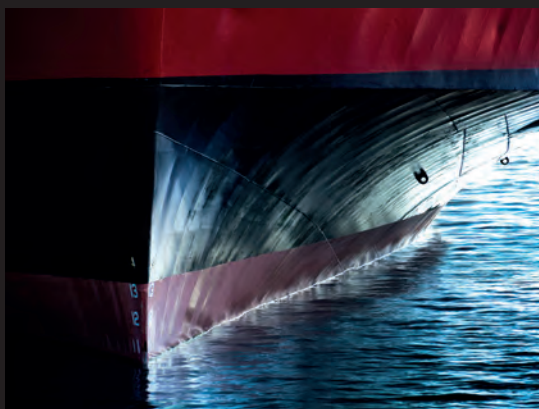
ABOUT THE AUTHOR

PADDY RODGERS is the director of the National Maritime Museum in Greenwich. Before taking up this role, he led tanker company Euronav for almost two decades.

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PROJECT FOCUS AFRICAN ISLAND STATES

Developing the future

Ports in African island nations must embrace decarbonization and digitalization if they are to remain competitive

NAMRATA NADKARNI

The maritime world is undergoing rapid change, with alternative fuels and new digital technologies gaining traction as the IMO and EU-led decarbonization deadlines approach. While a lot of focus is placed on developed nations that are not only technologically advanced but also have more generous budgets to support the transition, it is vital that developing countries and small island nations are given support and the resources to undertake the journey themselves. This is not only because fighting climate change is a global issue that requires a united response, but also because a just transition requires an equitable allocation of resources – an important factor given that developing countries are less responsible for the creation of global emissions. In addition, digitalization and optimization can have a greater impact in developing countries, which are heavily reliant on manual labor.

Pictured: Stone Town harbor and port, Zanzibar Africa.

Photo: Friedrich Stark/Alamy Stock Photo



Pictured: Traditional Dhows in Stone Town harbor, Zanzibar Africa.

Photo: Kumar Sriskandan / Alamy Stock Photo

“We know that compared with the rest of the world, Africa has a very low-carbon footprint,” Mfon Ekong Usoro, managing partner at Paul Usoro & Co and ex-secretary general of the Nigerian Maritime Administration and Safety Agency told *P&H*. “The low percentage of greenhouse gas emissions is a reflection of the level of industrialization in Africa, whose emission level is nothing compared to developed countries.”

Financing the gap

She acknowledges that action to tackle decarbonization remains slow across the continent, but attributes this to a lack of local demand for the solutions. “Even where there is a well-articulated policy, investment in clean energy or decarbonization in shipping will not trend if there is no demand for the products,” she explained adding that this is a prime consideration for investors. “The banks will like to know the source for repayment and cash flow is critical.”

Usoro warns that success will rest on three factors. “Transition to clean or renewable energy and reduction of greenhouse gas emissions require availability of technology and efficient infrastructure. Technology is the driver for the design, construction, and provision of efficient infrastructure, renewable, or clean energy needs. And we need financing to drive the two. In these respects, I think the challenges are common to African nations generally. We have to understand and design solutions that addresses the linkages between these three fundamentals.”

She believes that the answer lies in public-private partnerships, which are very common place in African countries. These partnerships not only offer seed money to invest in new technologies but can also draw in suppliers that can implement cutting-edge technologies. Furthermore, many stakeholders from the private sector are already aware of both, the necessity and business case to decarbonize – making this an attractive investment opportunity.

Digitalizing decarbonization

Bruce Mills, business development lead for ports at Wärtsilä Voyage, believes that African ports in particular are ripe for investment. He observed that there has been a post-pandemic “surge in investment and infrastructural development in Africa’s digital economy, with the European Commission and the African Union highlighting digital technology as a priority for economic and social development in Africa.”

He pointed out that although ports are an extremely important part of the maritime ecosystem and crucial to the world economy, digitalizing operations can be a complex venture, particularly for smaller operators. However, he believes that the benefits of upgrading technology will reap rewards. “If a port is able to offer a safer, more secure, efficient port for vessels, not to mention at a lower cost, then they are more likely to attract more customers than neighboring ports who are not able to offer the same benefits,” he said, adding that a more optimized environment will also reduce CO₂ emissions. “Holistic and seamless technological solutions are critical to ensuring that ports, and the maritime industry more broadly, are ahead of the curve in terms of supply chain modernization, that operations are future-proofed, and that data underpin decisions.”

In June 2022, Wärtsilä Voyage and contractual partner Fortris Company completed the digitalization of Malindi port in Zanzibar in Tanzania with a new vessel traffic services system and VTEK Technology’s terminal operating system. The port, which was built in 1920 and has one berth capable of receiving a 130 m ship, anticipates significant increases to its profitability – with predictions as high as a doubling of revenue – as a result of the new equipment that will transition the port away from manual, paper-based systems.

Just in time upgrades

The upgrades to the port equipment prime it for just-in-time arrival of vessels, which hinges on appropriate digital infrastructure. The ability to synchronize the arrival of a vessel with berth availability not only reduces the time spent waiting in harbors – and associated emissions – but could also al-

low vessels to slow steam and thus reduce fuel consumption. A recent study from the IMO-Norway GreenVoyage2050 project found that optimizing speed over the entire duration of a ship's voyage offers a mean fuel saving of 14.16% per voyage, but can still yield savings of 5.90% if the speed is optimized in the last 24 hours prior to arrival and 4.23% if optimized 12 hours before arrival at port.

While critics may question the business case for Malindi port to upgrade its infrastructure, Mather Al-Ali, head of sales – MEAI Region at Wärtsilä Voyage believes that the changes were vital for the port to remain competitive. “Zanzibar Ports Corporation realized it had an inefficient manual-paper based process that was causing several challenges for its customers. For example, the cost of doing business was rising with customers experiencing significant delays in coming into Malindi port. Developing and modernizing the port's infrastructure – in turn reducing costs to do business with the port, increasing speed and efficiency, and improving safety – were crucial for Zanzibar Ports Corporation to remain competitive and increase its market share in the region. Both of which are a priority for the operator,” he explained.

Usoro believes that more African ports must embrace the digital wave. “There is no escape or alternative to digitalization if a port aims to remain competitive. With the integration of Africa's market through the AfCFTA, the need for competitive service from ports has been heightened. Terminal operators have stepped up in physical renovation and digitalization of operations,” she said, adding that supportive policies that facilitate funding of new technologies should be designed in a manner to encourage growth.

Knowledge sharing is key

The answer to funding may come in the form of assistance from bodies such as the IMO – through its Department for Projects and Partnerships – or the World Bank, which have already supported a number of decarbonization projects at small ports. In virtually all such projects, stakeholders in developing countries receiving the assistance are connected to reputable technology providers and are given guidance on the creation of infrastructure to guarantee success.

Not only do these bodies offer policy advice and interest-free loans or grants, but they also fund feasibility studies, which can provide port authorities and other stakeholders with bespoke guidance and identify potential issues ahead of beginning work on a project. Furthermore, knowledge sharing is a condition for the funding, meaning that other nations replicating the project can better harness resources and deliver quicker results.

This was the intention behind a recent knowledge-sharing exercise by the Mauritius Port Authority (MPA), which has distributed the terms of reference for a World Bank-funded feasibility study, completed in May 2022, on how to make Port Louis Harbour into a green port. The information, which was shared with Cape Verde and the Seychelles, is expected to fast-track the appointment of a consultant to ensure that new developments at the ports are as green as possible.

MPA senior manager for technical services Kailash Dhunoo explained that the port authorities were able to secure this study through the assistance of the Indian Ocean Commission (IOC). “The IOC works in close partnership with local stakeholders, in this case the port authorities of the



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respective islands, for local actions that can have a regional impact. The terms of reference for the study, which were prepared by the MPA, are being shared with the other island states and suitably modified by the latter to reflect their local situations. The experiences gained during the conduct of the study and its salient features have also been communicated by the IOC in a dissemination workshop organized by the latter in June 2022 after the study was successfully completed at Port Louis Harbour.”

The MPA is also working to incorporate the findings from the study, which include a recommendation for the installations of onshore power supply and the use of photovoltaic (PV)-generated electricity. “A small solar PV plant has already been installed at our oil jetty,” Dhunoo continued, adding that three sites have been identified for the installation of solar PV panels on the rooftop of buildings, which are expected to proceed apace once funds have been secured.

Moving forward

Ports in developing nations may gain greater access to private capital in the near future as the investment world embraces environmental, social, and governance criteria for funding. But in the short term, the answer may continue to lie with funding from international financial institutions. Ports keen to increase their chances of a successful application should follow guidance from the IMO's Gyorgi Gurban published in *P&H* May/June 2022 issue. ■

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Playing it safe

Ports Australia publishes updated wharf structure assessment manual

Ports Australia members, along with Royal HaskoningDHV, have worked collaboratively to produce the updated Wharf Structures Condition Assessment Manual (WSCAM). The manual is a tool to help asset owners with consistent and repeatable inspections of a wide range of asset types including, but not limited to, wharves, piers, jetties, walkways, breakwaters, revetments, embankments, and other fixed assets. It contains a condition inspection framework and visual assessment tool, both of which are flexible for user customization.

After speaking with asset owners and inspectors, the WSCAM was recently updated to:

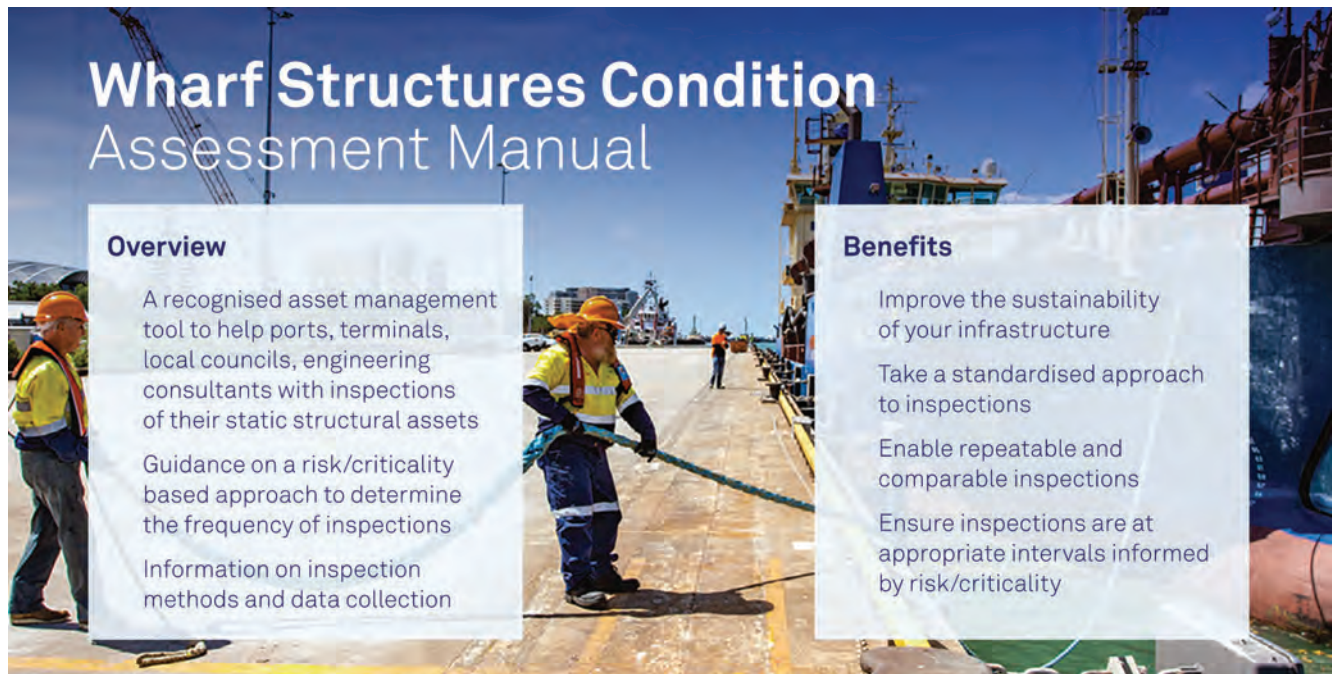
- Expand the scope of the manual to all port fixed structures excluding buildings
- Rationalize inspection approaches resulting in a single assessment tool that is flexible for user customization
- Provide guidance on a risk/criticality-based approach to determine the frequency of inspections
- Cover more materials and technology used in assessments

The benefit of using the WSCAM is that inspection results are consistent and repeatable. Without the WSCAM, one might have 10 inspectors assess the same structure and there could be eight different assessments, depending on their experience and expertise. With example imagery and formulae for calculations, assessments can be made more consistent. This is the power of the WSCAM — it can deliver consistent inspection results of your assets even considering a variability of different inspectors.

Ports Australia Engineering and Asset Management Working Group Chair Carsten Varming said for businesses investing in a tool like the WSCAM is a no brainer. "This allows businesses to be more sustainable. It helps keep existing assets functioning for longer avoiding unnecessary replacements, which reduces environmental, operational, and capital impacts and is in turn more economical for businesses," said Varming.

Regardless of having been made in Australia, the WSCAM can be utilized around the world, having been tried and tested in locations with completely opposite climate and variables. Ports Australia CEO Mike Gallacher said the WSCAM has been developed with the port industry in mind to maintain structures. "However, the WSCAM isn't only for the port and terminal industry. This tool can be used across a range of other industries such as engineering firms, local councils, and state government departments," said Gallacher.

The WSCAM can be purchased via www.portsaustralia.com.au or for more information, email info@portsaustralia.com.au.



Wharf Structures Condition Assessment Manual

Overview

A recognised asset management tool to help ports, terminals, local councils, engineering consultants with inspections of their static structural assets

Guidance on a risk/criticality based approach to determine the frequency of inspections

Information on inspection methods and data collection

Benefits

- Improve the sustainability of your infrastructure
- Take a standardised approach to inspections
- Enable repeatable and comparable inspections
- Ensure inspections are at appropriate intervals informed by risk/criticality

To purchase WSCAM or for more information, contact
Ports Australia:
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info@portsaustralia.com.au
<https://www.portsaustralia.com.au/resources/wscam>







LOOKOUT LNG TERMINALS

The gas bubble

The floating storage and regasification unit *Hoegh Esperanza* arrived at Germany's first LNG terminal in mid-December 2022, marking another pivot away from the country's reliance on Russian natural gas imports and confirming the global trend of LNG as intermediary energy fuel.

The new terminal is one of five new floating LNG terminals in Germany that have been commissioned in 2022 and will come online in 2023. Chancellor Olaf Scholz spoke of the new "Deutschland Tempo," with which new energy security projects will be built to cover one-third of the country's gas usage.

It is not only Germany that seeks out LNG for its energy supply. According to data provider Statista, "In total, there are 29 operational LNG terminals and an additional 33 LNG import terminal projects under construction or in the planning stage in Europe." Overall, "European countries plan to double the bloc's LNG import terminal capacity in response to Russian gas supply disruptions," research from NGO Global Energy Monitor (GEM) shows, criticizing the continued reliance on fossil fuels. Outside of Europe, Asia is set to take on the majority of LNG terminal developments. "About 65% of new developments globally, and enough to theoretically absorb the entire global LNG trade of 2021," according to GEM.

The main export hub is the United States, with other terminal developments in Africa under way. "Intended not for domestic consumption but rather to correct Europe's short-term energy crisis resulting from Russia's invasion of Ukraine," the NGO said.

In line with the increase of LNG terminals being built is the number of LNG carriers under construction. According to Clarkson Research, 170 LNG carriers were ordered in 2022, up 95% on the 2021 full-year orderbook. ■

In anticipation of increased LNG bunkering provided at ports, the IAPH Clean Marine Fuels Working Group has released a checklist to cover ship-to-ship and truck-to-ship bunkering:

🌐 www.bit.ly/IAPHLNGBunkering

Pictured: The opening of the first LNG terminal in Germany.

Photo: Abdulhamid Hosbas/Anadolu Agency via Getty Images



PERSPECTIVE MACHINE LEARNING

Unlocking greater efficiencies

Our increasingly digitized world is characterized by an increasing amount of digital information. These can seem inconspicuous owing to their lack of physical presence. However, today's most valuable companies, such as Google, Amazon, Microsoft, Apple, or Meta, are those whose raw materials are no longer oil or gas, but data. So how does pure data become a growth enabler of the future? What role do aspiring technologies such as artificial intelligence (AI) play? What does this mean for the future-oriented management of the maritime economy?

Tapping into the digitalization potential

To overcome those uncertainties and identify growth potential through new technologies, our research has been focused on maritime digitalization for two decades. The Fraunhofer Center for Maritime Logistics and Services (CML) in Hamburg, Germany, supports companies in researching those future trends and implementing new

technological standards. In various research projects, the challenges of the maritime industry are worked on through scientific findings and targeted concepts.

Great potential for maritime logistics arises from the use of AI-supported image recognition or computer vision for short. The COOKIE project, for example, uses this technology to develop a visual damage detection and image-based repair prognosis of empty containers. For this purpose, artificial neural networks are trained using deep learning and historical image material. The resulting intelligent systems then automatically identify and classify container damage based on new image data. This not only complies with applicable safety standards, but also makes inspection processes at the terminal more efficient.

Furthermore, automatic speech recognition using AI offers decisive application possibilities within the maritime domain. Project ARTUS represents an intelligent system that transcribes very high-frequency

radio messages and localizes the radio participants using positioning systems data. Through a further developed AI-based speech-recognition system, even multilingual radio transmissions that are disturbed by environmental influences can be correctly transcribed. This technology supports personnel involved in complex maritime search-and-rescue operations and can therefore save human lives.

Through anomaly detection, AI opens proactive maritime after-sales. Machine learning, a sub-form of AI, detects patterns in huge amounts of data that remain hidden to human observers. Within the MARIA project, machine learning is used to evaluate numerous sensor readings in ship operations in real time, identify anomalies, and predict malfunctions of machinery at an early stage. As a result, critical failures are detected early and countermeasures are proactively initiated.

However, AI also offers great potential in management challenges.



ABOUT THE AUTHOR

JOSHUA MÜLLER, who holds a Master of Science degree, is a research scientist in the field of ship and information management with a strong focus on artificial intelligence at the Fraunhofer Center for Maritime Logistics and Services in Hamburg, Germany.

The FLEXIKING project is developing an intelligent system for collaborative and flexible time slot booking in intermodal freight handling. This system considers the preferences of all logistics participants equally, forecasts relevant logistics events, and suggests optimal handling time windows based on them. This significantly minimizes waiting times or underutilized equipment in ports.

AI and machine learning are establishing themselves as key technologies in digital research and development projects. Automated processing of huge amounts of data, the recognition of patterns and the resulting insights, as well as the ability to predict future events, significantly increase process efficiencies and open new value creation opportunities.

The limit of digitalization

Constantly growing data volumes and the continuous and new development of methods offer new types of value creation opportunities. However, digital innovations and the applications of AI primarily require high-quality and structured data. Future digital challenges can only be solved based on a high-quality available database. Thus, if low-quality data are made available, no high-quality result can be expected.

Fundamental progress must be made in data transfer. Although a steadily increasing data bandwidth can be assumed on the high

seas, this must also be used in a targeted manner. In maritime logistics, numerous players and companies interact in a competitive environment. Limited transparency thus initially appears profitable. However, in the case of a digitized supply chain, this lack of transparency means that only local optima can be tapped into.

In addition to data collection and transfer, there is a need for legal action in data handling. This is particularly relevant in the maritime domain with its many stakeholders. For example, if data are collected in ship operations, the question arises as to who owns this data or is authorized to use it. Are the recorded operating data of a ship's engine the property of the manufacturer, the shipowner, or the charterer?

For digital innovations to be usable, suitable data management is also required. The technological prerequisites are in place, but appropriate methods are underutilized in the maritime industry. Challenges exist in the collection and provision of large amounts of data, inconsistent data standards of the internationally oriented industry, and knowledge gaps of the responsible personnel complicate this endeavor.

With increasing data volumes, security-critical use cases and data transfer, and cybersecurity are increasingly coming into focus, especially in ports that represent complex cyber-physical systems.

Disruption of cyber systems caused by human actions or environmental influences can result in enormous economic and personal damage.

To new heights on a solid foundation

Constantly advancing digitization is opening up value creation potential through data, as well as making way for efficient processing methods such as machine learning. These will have a lasting impact on the maritime industry and open a new level of efficiency.

However, tapping into these higher levels requires a solid foundation that can meet the challenges of digitization. The Mission project provides such a foundation. Within the project, a consortium developed an innovative information management system for maritime transport chains. At the heart of the project is a platform through which interfaces and standards are shared. Pilot applications demonstrate the added value of this concept by optimizing handling and transport processes in practice.

The cards in the maritime industry are being reshuffled as digitization progresses. External research partners, such as Fraunhofer CML, provide expert and methodological knowledge to support companies and institutions from the shipping, port, and logistics industries in initiating and implementing forward-looking technologies and processes. ■



ABOUT THE AUTHOR

SIMON BARNES is a business development manager for EMEA at security solutions provider Genetec.

How to

...keep your port secure

Securing a large geographical area that comprises a mixture of public-facing areas and highly restricted zones is challenging. Ports that are located adjacent to open land or industrial areas particularly, expose them to intruders and organized criminal activity.

In such high-risk environments, ports must rely upon automation and data-driven solutions to support their security teams with the processes required to understand and respond accordingly to what is happening in their environment.

This is best delivered through a unified platform that can ingest and intelligently display information from a multitude of different sensors such as radar, LiDAR, automatic number plate recognition system, and transponders.

Here are 10 ways a unified security solution can help maintain port security. ■

N°1



Ensure flexibility and scalability

At its core, unified security is a suite of products developed as one unit. You can turn on or off different modules, but you cannot break the connections because there are not any. Integration is when you connect one system to another, but maintaining multiple systems can often present compatibility challenges when trying to upgrade or expand the security needs. A unified solution supports your long-term growth needs by facilitating the flow and management of data across your security activities. This makes it easy to add licenses and modules as needed, without the compatibility issues.

N°2



Prioritize health and safety

Managing security systems with hundreds if not thousands of cameras can be difficult. It is one thing to have a system in place and another to ensure the insights it identifies are being monitored and used effectively. Video analytics can be useful in automating alerts for perimeter security breaches as well as entry into restricted areas, for example, people in areas where machinery or autonomous vehicles are operating. Such incidents not only lead to health and safety risks but also slow down operations when machinery may be forced to stop.

N°3



Simplify day-to-day operator tasks

Moving away from the traditional approach of having multiple independent systems allows operators to take advantage of a user interface that displays all possible physical security functions as one seamless experience. It analyzes security data to identify incidents that require attention, reducing false alarms along the way. It then guides operators and automates responses to achieve faster resolution, so your activities are not affected.


N°4





Enhance landside perimeter coverage


A unified perimeter detection system encompassing multiple mixed technologies such as fence detection systems, radar, lidar, motion sensors, and CCTV video analytics can enhance an operator's understanding of a potential intrusion event and reduce false alarms. Providing the operators with a dynamic but defined standard operating procedures can guide them through specific actions to take to address the threat. The advantage of mixing technologies also allows operators to continuously track intruders once a breach has taken place. Intrusions also negatively affect operational flow of a port and can put staff at risk of confrontation with criminals and trespassers.


N° 5		
<h3>Visitor management</h3> <p>Managing visitors is an essential aspect of access control traditionally achieved through paper logs and guest books. Deploying a visitor management module within the security systems allows organizations to manage visitors and site security activities in a seamless way. Tracking and allocating official escorts and ensuring that visitors also follow health and safety policy keep them safe while on site. Returning visitors can also be processed more efficiently while also keeping a record of any that are restricted.</p>		

N° 6		
<h3>Leverage body-worn cameras</h3> <p>In general society, we are used to seeing more public-facing staff wearing body-worn cameras (BWC). While this is a disappointing sign of the times, they are serving their purpose by not only collecting evidence if the need arises, but also most often their use has been proven to calm down potential conflicts. A unified security center can combine BWC images and general CCTV to give a complete situation overview and record of events.</p>		

N° 7		
<h3>Streamline waterside monitoring</h3> <p>Modern security centers can also integrate their perimeter detection with maritime automation identification system (AIS) to overlay vessel details including course, speed, and other data. This helps a security operator to identify then ignore or validate waterside perimeter detections. By geofencing berths and approaches, an operator can be alerted to intrusions from criminal, protesters, and any other unauthorized activity.</p>		

N° 8		Control entries and exits
<p>Physical access control systems are the first layer of security to the site through either a pedestrian or vehicle gate. The ID card or token used in many cases is the first weak point in a site as many legacy tokens can be easily copied. Adding additional security layers such as a PIN or biometric reader will ensure that real identification can be assured. From that point, a modern system will validate if that person is allowed access and initiate any associated processes. For example, if a staff member's certification for operating specific machinery needs to be renewed, the system can prompt them and their managers and/or deny access in a case of noncompliance. Access control is not also just for gates and doors. Equipment cabinets and plants can also be unified into a seamless access control system overcoming the need for keys and the time taken to manage such items. Access can easily be added or revoked at the touch of a mouse by authorized users.</p>		

N° 9		
<h3>Maintain cybersecurity</h3> <p>Many ports today employ the use of video surveillance cameras, but legacy and some manufacturers hardware can pose a potential entry point for threat actors to gain access to networks. Devices such as video surveillance cameras, access control readers, and alarm panels are simply small computers that run on software and may contain cybersecurity vulnerabilities that can be exploited by attackers as a beachhead for all kinds of malicious actions. A unified security solution is an essential part of a resilient cyber-physical security framework, ensuring that only trusted devices are integrated in the network and are subsequently configured, updated, and managed throughout their operational life.</p>		

N° 10		Automate ISO container reading
<p>Combining automatic ISO container reading technologies with number plate readers and links to port databases can help track and match booking information to speed up operations. At the same time, a recorded visual record from associated cameras of a container's condition on arrival and departure from a port is provided. Such integrations have helped reduce false claims for damages and speed up the processing of valid ones.</p>		



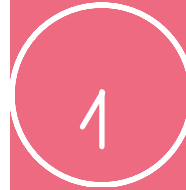
ABOUT THE AUTHOR

PROFESSOR SERGIO PRETE is the president of the Port Network Authority of the Ionian Sea at the Port of Taranto, Italy

6:30



7:30



8:00



9:30



Nine to five

Professor Sergio Prete is the president of the Port Network Authority of the Ionian Sea in Italy. He is responsible for the operations at the Port of Taranto and shares with *Ports & Harbors* what this entails on a day-to-day basis



My role makes me pay utmost attention to everything that revolves around my working day. Even before the obligatory coffee, my musical alarm clock – strictly a rock one – gives me the right energy to face the numerous back-to-back meetings and appointments scheduled in my agenda every day. This is a secret but winning combination to get ready for the working day with a positive and focused approach.









Before going to work, the journey from home to the office has a fixed stop: I take my son to school every day. Along the way, the phone starts ringing for work affairs. It often happens that I have to manage those even before arriving at the office. It is quite normal and also beneficial for the structuring of my workflow, taking into account that I have always wanted to keep an open and dynamic approach with my interlocutors, both the internal staff and port stakeholders.



Every morning, once in the office, I read the national and international press. I also write a list of matters to be dealt with urgently. This time is spent organizing my working day, by checking emails and meeting schedules. The key moment of this hour is the daily briefing with the secretary general of the port as it is the most suitable time to organize the activities of each division of the authority. It is important to share views and matters to be aligned in terms of operational strategy.



The day is officially operational! My role involves attending various meetings at local, national, and international levels. Living in a post-COVID-19 world, we were forced to change the way we live and work and a huge number of meetings has moved into the virtual sphere. Playing an institutional role, I keep a constant and direct connection to the Ministry of Transport to which I periodically report the progress of the objectives assigned to me as a president.

 <p>This time slot is dedicated to verifying official acts and documents or to sign off key projects that require my approval. It is often necessary to convene with managers and staff to carry out internal checks that ensure we implement the institutional strategies of the authority. The new three-year operational plan of our port authority pinpointed five main strategic objectives to be achieved by 2022: innovation, port and territory, sustainability, physical infrastructure, and competitiveness.</p>	 <p>This hour – sometimes less than an hour – is when I usually stop for a lunch break, which I often share with the secretary general. It is also the best time to take a short walk where I physically step away from my desk. The best lunch break is one that can improve the mood and help me handle the stress at work better.</p>	 <p>At this time of the day, I often have another briefing with the secretary general on the objectives agreed in the morning and to verify that there are no critical issues to manage. Together, we have set up a strategic and inclusive vision to lay the foundation for a sustainable growth of all port works and activities, wishing to shape and renew the image of our port as a greenfield platform for giving life to a project intended to push the local and national economies.</p>	 <p>Meetings and briefings are always around the corner. Nowadays, the Port of Taranto is experiencing a period of exceptional change in the framework of its global relaunch; we are working on strengthening the role of Taranto in the Mediterranean area to take advantage of the considerable opportunities coming from efficient and intelligent infrastructure. To achieve this aim, we are constantly striving to improve services and activities that increase competitiveness and drive growth and innovation.</p>	 <p>Part of the correspondence addressed to the port authority is directed to my attention so that I can authorize or give specific directives and guidelines to the interested parties. We also keep an ongoing dialogue with local and international stakeholders – such as specialized associations and cruise lines – to promote tailor-made itinerary solutions that can meet the needs of a specific segment of guests interested in exploring and discovering our cultural heritage.</p>	 <p>I try to leave the office at this time. Before I do, I usually prefer to meet the secretary general for a quick briefing on the activities to start or complete in the following day or during the week. Very often, even after 6 pm, I am invited to evening conferences or institutional dinners and the working day is longer than usual. In general, it is at this moment that I also get back in touch with my private life and with my family, despite the fact that on many occasions, I take my work home.</p>
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CREATIVE SIDE PORTS, PAST AND PRESENT

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he Irish Sea connects the southwest of Wales with the east of the Republic of Ireland. It not only connects the two countries but five ports and their various communities.

The Ports, Past and Present project, run by the University College Cork, Aberystwyth University, University of Wales Trinity Saint David, and Wexford County Council, "seeks to enhance engagement among port town communities with their own rich heritage and that of the Irish Sea, and to use that heritage in promoting tourism and deepening a sense of shared identity".

Dublin Port, Rosslare Harbour, Holyhead, Fishguard, and Pembroke Dock and their communities on either side of the sea are being promoted through over 200 online heritage stories, documentary films, creative commissions, community-focused events, as well as tourism networks, including a free heritage tourism training, and an accompanying app.

"There has been a huge amount of activity during 2022. We have been exhibiting the work in each of our ports, the show is currently in Holyhead until January 2023, and we have also made a booklet, which is an anthology of the work created," Martin Crampin of the University of Wales Center for Advanced Welsh and Celtic Studies told *P&H*.

In the documentary films, which are available to watch on YouTube, former and current staff – or their family members – of ferry services, local librarians, historians, and politicians are interviewed. They talk about their connection to the sea, the ports, and the maritime industry.

The heritage stories feature local families who went to investigate their roots in the maritime community.

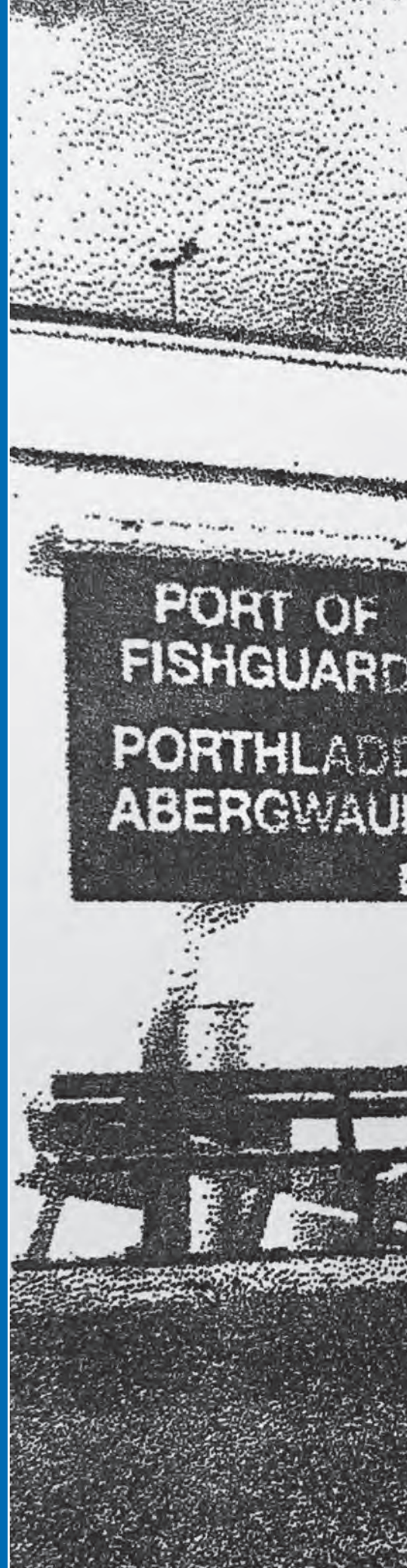
With the project, the universities and other project partner do valuable work to connect the maritime sector to the local port community, which also serves as an inspiration for other maritime clusters to go and look at the many families who are intertwined with the local ports and trade sphere. ■

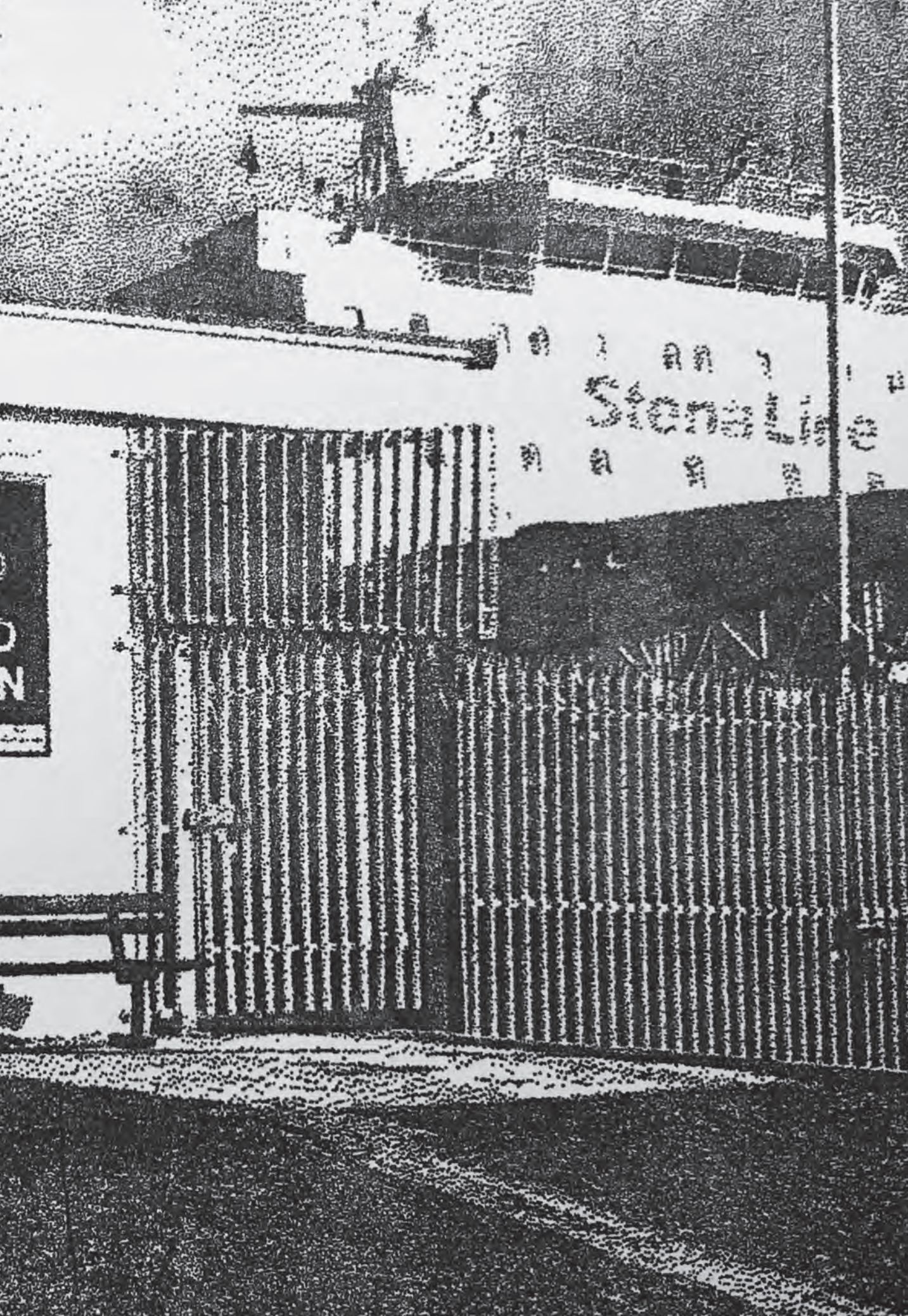
Explore the manifold stories of Ports, Past and Present on www.portspastpresent.eu

Pictured: Julie Merriman's port postcards for the Ports, Past and Present project.

Image: Julie Merriman

Connecting memories





Membership notes

We are pleased to welcome as new regular and associate members of the association:

Regular member

North Tyrrhenian Port Network Authority

- 📍 Italy
- ☎ +39 0586 249411
- ✉ c.capuano@portaltottirreno.it
- 🌐 www.portaltottirreno.it
- 👤 Luciano Guerrieri, president

Associate members

Portall Infosystems Private Limited

- 📍 India
- ☎ +91 98 2026 7094
- ✉ manishj@portall.in
- 🌐 www.portall.in
- 👤 Manish Jaiswal, president

Flexens Oy Ab

- 📍 Finland
- ☎ +35 84 0504 3183
- ✉ szilvia.haide@flexens.com
- 🌐 www.flexens.com
- 👤 Szilvia Haide, energy specialist

AMET University

- 📍 India
- ☎ +91 44 2744 46231
- ✉ vc@ametuniv.ac.in
- 🌐 www.ametuniv.ac.in
- 👤 G.Thiruvassagam, vice chancellor

Eranda Kotelawala elected Southeast Asia and Oceania vice president

We are pleased to announce that Eranda Kotelawala, CEO of Solomon Islands Ports Authority, was elected as vice president for the Southeast Asia and Oceania region by a vote of confidence. Eranda succeeds Jay Daniel Santiago, general manager of the Philippine Ports Authority, who terminated his mandate last summer.

Based on the provisions of the IAPH Constitution, Eranda's mandate will last until the 2023 Annual General Meeting, at which time a new board will be installed, following a general election to be held in spring 2023.

In response to his election, Eranda expressed his gratitude for the confidence bestowed upon him as vice president for the Southeast Asia and Oceania region. He is committed to provide his best efforts to achieve the organization's overall vision and objectives while doing his best for the region, working in close collaboration with his fellow board members, management, and the entire IAPH team. ■



IAPH vice president for the Southeast Asia and Oceania region

ERANDA KOTELAWALA
CEO of Solomon Islands Ports Authority
Photo: Solomon Islands Ports Authority

IAPH leadership team met in London

Members of the IAPH Board and Council gathered at the IMO headquarters in London in late November. Board members met with IMO secretary general Kitack Lim and his leadership team, exchanging views on international regulatory priorities regarding decarbonization of shipping and the introduction of the maritime single window. The IMO secretary general expressed his appreciation for the proactive role IAPH plays in supporting the IMO agenda.

Board members then held an internal meeting to discuss and approve the budget for 2023, including for the IAPH Environmental Ship Index. They also discussed the initial findings of a benchmarking exercise, comparing the financial and organizational structures of IAPH with those of a peer group of related trade associations in the maritime field. A final report is planned for February. The meetings were preceded by a visit to the River Thames, hosted by the Port of London Authority, and an informal dinner with representatives of the international shipping community, including the International Chamber of Shipping, BIMCO, the Cruise Lines International Association, the International Associations of Dry Cargo Shipowners and of Classification Societies, and IAPH's events and media partner S&P Global. ■

EVENTS TIMELINE 2023

18

JANUARY (18-19)

IMO-IAPH-BIMCO symposium
A hybrid event on the maritime
single window
🌐 www.iaphworldports.org

8

FEBRUARY

IAPH Automation Group
An internal
virtual meeting
🌐 www.iaphworldports.org

26

FEBRUARY-MARCH (26-1)

TPM
The container shipping conference
in Long Beach, US
🌐 www.events.joc.com



IAPH's newly chosen regional representative to India, Ennarasu Karunesan, shares his thoughts on how the cooperation between the association and India will look like and what IAPH members can expect from the relationship in the near future

Q&A

ENNARASU KARUNESAN
Maritime and ports expert

Q: Can you briefly introduce yourself?

A: I am a versatile mechanical engineer and postgraduate in management with more than 33 years' leadership experience in the maritime and ports sector. I have held prominent chief executive-level posts at ports and terminals in Asia and the Indian subcontinent as well as at the Indian ports of Mumbai Port Authority and Chennai Port Authorities' Container Terminals. I currently serve as an adviser to the Indian ports.

Q: Can you describe how you work with the IAPH?

A: The 21st century is the era of the internet. The world has now become a global village with borderless trade. Thanks to information technology, the entire business landscape has changed.

You might be aware, India is poised to become a \$5-trillion economy in the next five years and plans to emerge as one of the fastest growing economies in the world by becoming the global manufacturing hub in this region.

For me, working with India's EXIM trade and other stakeholders on the recent globalization impact for creating values in the supply chain system and positioning IAPH as part of contributing to the global EXIM trade will be paramount. I will act as a trade bridge between India and the global countries in the sphere of maritime and ports.

Q: What are the core focus topics, chances, and challenges for ports in India?

A: Indian ports have been labor-intensive organizations for more than 100 years, where their primary function is to provide employment services to society.

However, this is entangled with trade union activities, bureaucratic procedures, and hierarchical systems. Now, the landscape has changed toward public-private partnerships and landlord ports. In addition, a lot of reform measures have been put into place for the past eight years, such as the implementation of the new Major Ports Authority Act, the Maritime India Vision 2030 document, and digitalization of maritime, ports, and logistics through port community systems, the National Maritime Portal, and the National Logistics Policy.

Therefore, the need of the hour is for the IAPH to work closely with them on digitalization and sustainability, risk and resilience, data collaboration, and climate and renewable energy sources.

India is spearheading various measures to work with global countries on these areas. The IAPH, together with the Indian ports and their stakeholders, will act as a global bridge between India and the global ports system to raise the standard of India ports to global ones.

Q: How would you like to develop the relationship with the IAPH further?

A: I have relentlessly made efforts to work with Indian port communities, making them aware of happenings around global ports, walk the talk with them in various national and international forum. The India leadership is keen to bring major changes by redefining the role of the maritime, ports, and logistics sector into a success story for global EXIM trade. Collaboration with the IAPH will be a game changer for India to introduce global best practices to Indian ports. ■

IAPH INFO

Photo: Ennarasu Karunesan

13

MARCH (13-17)

IMO Facilitation Committee 47

Regulatory meeting to discuss trade

🌐 www.imo.org

3

JULY (3-7)

IMO MEPC 80

Regulatory meeting to discuss the marine environment

🌐 www.imo.org

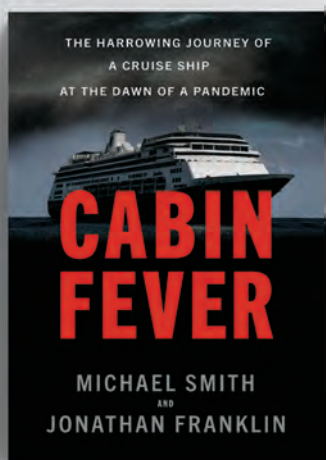
31

OCTOBER-NOVEMBER (31-2)

IAPH 2023 World Ports Conference

The IAPH flagship conference in Abu Dhabi

🌐 www.worldportsconference.com



THE REVIEW

Cabin Fever - Trapped onboard a cruiseship when the pandemic hit

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Cabin Fever is a recent history book. It chronicles the situation onboard cruise ship *Zaandam* during the first outbreak of COVID-19 in 2020 when ports in Chile, Ecuador, and the United States refused to let the ill-fated ship in.

Based on first-hand accounts, authors Michael Smith and Jonathan Franklin, have put down on paper what occurred onboard when the world - and eventually the ship itself - went into lockdown. The result is a gripping, fast-paced read weaved into an easy to follow narrative, crucial considering all the different threads that needed connecting and especially as the stories in the book are those of real people. While crew and passengers were happy to share their accounts, they "gave the cruise lines and their executives ample opportunity to comment on material events, without success," the authors said.

Negating themselves the chance to take responsibility and voice what went wrong when cruise lines had to coordinate with ports, health authorities, and other stakeholders to get COVID-19 infected passengers off the ships would have proved very insightful lessons for future pandemic outbreaks. For example, how to navigate maritime authorities changing lockdown stipulations with half an hour notice - leaving the *Zaandam* with no option to call at a port and end

the cruise. While cases of COVID-19 on cruise ships had been known since January 2020, when the *Zaandam* left Buenos Aires on 9 March 2020, no screening for the virus had taken place, neither tests - labeled unreliable at the time - were taken onboard the ship's medical facility. This was also partly because of "the commitments that we had from the ports," according to Orlando Ashford, president of the Holland America Line, owner of the *Zaandam*.

That said, the crew tried its best to keep the passengers comfortable but the sheer number of ill passengers on the ship and the many unknowns around the virus rendered their efforts void. Additionally, maritime staff along the *Zaandam*'s route tried to help with in the confines of maritime regulations.

It was not only the maritime industry that needed to pull together, with countries in lockdown and airspaces shut, getting the passengers home after the ship finally docked in Florida, was another issue - as told by an Argentinian couple that stayed on three cruise ships before they were finally allowed to return home after 50 days at sea.

Many seafarers did not have that choice during the pandemic, so the book is also a reminder for the industry to lobby governments to recognize maritime as a vital contributor to world trade - in any situation. ■

ABOUT THE AUTHORS



MICHAEL SMITH is a Miami-based investigative reporter at *Bloomberg Businessweek*. He's written about financial crimes, corruption, narcotics and human trafficking, and environmental and labor abuses in supply chains. *Cabin Fever* is his first book.



JONATHAN FRANKLIN is a journalist and TV commentator based in South America for the past 24 years. Franklin writes about conservation, organized crime, and survival at sea.

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