



IAPH
International Association
of Ports and Harbors

PORTS HARBORS

Official Journal of the International Association of Ports and Harbors

Informing on piracy

What's happening – at a glance

Ongoing policing

How Gulf of Aden is fighting back

Oil siphoning

Asian 'spike' raises concerns

Piracy hot-spots

Raising awareness

Buying and selling used heavy duty trucks worldwide



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Preis: 239.000 EUR



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D3365
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D3377
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D3362
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D3366
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D3367
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Preis: 79.000 EUR



D3371
Manitou MRT3050
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Piracy – action and reaction

Illustration: Shutterstock, Carolina Lorenzo

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PARTNERS IN PRODUCTIVITY

Towering Higher In Barcelona

The team called the Castellers, pictured above, are the human tower builders of the Barcelona region. They practice the special art of standing on each other's shoulders in order to reach for the sky. If they all stand strong and stable, they succeed; if one falls, they all fall. They remind us of a simple truth, in tower-building and container handling, which is that teamwork is essential to achievement. At **Terminal de Contenidores de Barcelona** such teamwork is also on display every day. A major gateway to southern Europe, the **TCB** team is

currently doubling its TEU capacity while handling, on average, 35 moves/hour. A gold standard port, TCB reminds us that container handling is a business where *every* player matters and *every* player must be reliable and productive, which is one reason why the TCB team also depends today on a fleet of more than 30 Bromma spreaders for their container handling needs. To succeed in this business, you need the right equipment, and you need the right support. You need a partner in productivity.



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PORTS & HARBORS

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Carbon counting

Participating in events, awards or carbon surveys
makes membership more rewarding



Susumu Naruse

Secretary General – The International
Association of Ports and Harbors



International shipping in 2007 was estimated to have contributed 2.7% to the global emissions of carbon dioxide (CO₂). Following its assessments, the International Maritime Organization (IMO) adopted mandatory technical and operational energy efficiency measures (EEDI and SEEMP), which are expected to significantly reduce the amount of CO₂ emissions from international shipping. This year IMO is again carrying out the comprehensive study of the shipping industry's greenhouse gas (GHG) emissions. At the time of writing it was reported that the study determined the global shipping industry has produced only about 2.2% of the world total GHG emissions during 2012, which is a remarkable reduction compared with the previous assessment.

However, I wonder whether it is worthwhile for IAPH to estimate the GHG contribution of the global port sector as a whole. As IAPH has a tool to estimate GHG emissions from ports ('Guidance Document of Carbon Footprinting for

Ports'), it would not be difficult (albeit time consuming) for an individual port to estimate its emission levels and its contribution to the local area. Theoretically, integrating the calculated results of as many ports as possible and assuming the emission levels of the other

“It would not be difficult for a port to estimate its emission levels”

ports would yield the total emissions of the global port industry. It might, though, prove difficult, especially in defining what should be considered port activity. I still hope that one of our technical committees would study it in future.

The Port of Hamburg has successfully completed the selection of speakers from among many entries to make a presentation at the IAPH Conference. On the contrary, we have received only a few entries for five IAPH Awards at the Hamburg Conference to date. I'd like to encourage IAPH members to join the award contests to make your valuable practices known to fellow members.

This year, the IAPH members of the Africa/Europe region are to meet in Mombasa along with the APAC Conference, which discusses emerging African economies and their energetic ports. At the IAPH regional meeting the secretariat will report on the latest development of the discussions on amending the bylaws; in particular, the new election scheme of vice-presidents from regions. If you are members of the region, please do not miss this great opportunity. **PH**

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Port updates

► SEATTLE CEO

Ted J Fick has begun his role as CEO at the Port of Seattle after being appointed by the city's commissioners in August. Describing the port as a "vital economic engine" for the Puget Sound region and all of Washington, Fick said his priorities are to help the team and the port adapt to the new competitive environment and to generate jobs and growth.

► CHAIRMAN HIRED

Port Klang Authority (PKA) has appointed Y Bhg Tan Sri Kong as chairman, succeeding Y Bhg Dato' Dr Teh Kim Poo, who was in the role for three years. His career began as a teacher in 1976 and he has since held high-profile roles such as deputy minister and minister in the Ministry of Science, Technology & Innovation, Ministry of Finance, Ministry of Housing & Local Government, and Ministry of Transport. In 2014, he was awarded the Panglima Setia Mahkota, conferring the title Tan Sri.



► DR CONGO INITIATIVE

The government of the Democratic Republic of the Congo has announced that a consortium of Bureau Veritas' BIVAC BV and SOGET has won a 10-year concession to design and implement a Foreign Trade Single Window – an electronic platform for logistics, administrative, and regulatory processes in DR Congo's import/export business, integrating pre- and post-customs clearance across all modes of transport.

Ports turn up heat on harbour funding

American port and navigation interests have formed a coalition to urge lawmakers to pay for harbour maintenance work at funding levels required by an authorisation bill signed by President Obama in June.

As of 1 October, about 370 groups and individuals had signed a letter to US House and Senate Appropriations Committee members explaining the need for more government money to maintain harbour channels at their federally required depths.

Under the Water Resources Reform and Development Act (WRRDA), ports should steadily take a larger slice of Harbor Maintenance Trust Fund cash, becoming the sole beneficiary by 2025. In 2015, the portion of the fund's expenditure going to harbour maintenance is scheduled to rise to 67%, or \$1.17Bn.

While lawmakers in the House have agreed on this target, the Senate is proposing a figure of \$1.075Bn.

As House and Senate staff began backroom negotiations on the bill, it remained unclear whether the WRRDA's 2015 authorisation levels would be met.

Since the Harbor Maintenance Tax (HMT) started in 1986, Congress has used less than 50% of its revenues for harbour maintenance,

with the rest shifted out of the fund and used to balance other parts of the federal budget.

"Enough HMT revenue is collected each year to meet the nation's annual authorized harbor maintenance needs for harbors of all sizes," stated the coalition letter.

"Unfortunately, harbors and navigation channels are getting narrower and shallower due to accumulating sediment, dredged material disposal area capacity is declining, and harbor structures such as breakwaters and jetties are deteriorating due to inadequate funding."

The coalition pointed out that US exports "compete in a very price-sensitive global market where transportation inefficiencies mean losing business to other countries". Not

fully using HMT revenue "threatens the continued operation of small and medium-sized harbors, and some have closed due to inadequate maintenance", it added.

The economic risk from underfunding ports and harbours may be highest on the Lower Mississippi River – the WRRDA bill includes a provision for deepening it from 13.7m to 15.2m (45-50ft) between Baton Rouge and the Gulf of Mexico: a vital port region for US maritime trade. If lawmakers decide to fully appropriate the roughly \$300M for the deepening, HMT cash would be needed to maintain the channel at the deeper draught.

"The Lower Mississippi serves 31 states – that provides a huge cost-benefit for fully funding the HMT," Port of New Orleans executive director Gary LaGrange told *P&H*. Deepening the river channel to 15.2m would require another \$60M per year to maintain it at that level, he added.

“The Lower Mississippi . . . provides a huge cost-benefit for fully funding the HMT”

Gary LaGrange

Executive director of the Port of New Orleans



Trace Morris/Schaefer

Lines resume operations in Iran

Hyundai Merchant Marine, COSCO, Hanjin Shipping, and Wan Hai Lines are to resume operation at Shahid Rajaei Port after the easing of sanctions against Iran, the country's Ports and Maritime Organization (PMO) announced on 7 October.

The four foreign carriers are set to resume operations at Shahid

Rajaei, PMO Managing Director Mohammad Saeidnejad told local media.

A box ship carrying 6,000teu owned by Taiwanese liner Wan Hai Lines berthed at the port on 22 July, and ships from China, India, and South Korea are scheduled to call, said Ali Jahandideh, PMO's deputy director.

Direct shipments through Shahid Rajaei Port will cut cargo costs by \$40,000-100,000 per tonne, according to Iran's Fars News Agency.

Before the easing of sanctions, ships had to unload cargoes at ports in Georgia, Oman, Turkey, and the United Arab Emirates for transport to Iran.

Hamburg still waiting for dredging green light

Hamburg's decade-long battle to deepen and widen its 130km-long River Elbe navigation channel to host mega container ships has been delayed yet again until at least 2015.

The Leipzig-based 7th division of the Federal Administrative Court (FAC) has postponed any decision until the EU Court of Justice (CJEU) rules on "a pending referral of the interpretive ruling on the Water Framework Directive", the FAC stated in its October ruling.

"The CJEU's decision must be made before the 7th division can make its final decision, but a decision is not expected until spring 2015," said the FAC, which is responsible for waterways law.

In spring 2015 the CJEU is also expected to announce its decision in a similar case involving deepening the River Weser.

Ships up to 16,000teu can currently access Hamburg – Europe's second-largest container port – but they cannot sail to the port fully loaded.

Hamburg wants to widen its channel and dredge it by another metre to allow vessels with a maximum draught of up to 13.8m, or 14.8m at high tide. Widening is critical as two vessels with a combined width of 90m cannot pass each other along about half of the Elbe's length. Mega box ships are typically about 46m wide and 350m long.

Hamburg thought the battle was won in 2012, when all three Elbe federal states – Lower Saxony, Schleswig-Holstein, and Hamburg itself – approved the project, then estimated to cost \$535M. In December that year the EU Commission also backed the project, stating "the adverse effects of the deepening and widening of the ship fairway Unter- and Außenelbe [Lower and



Why Hamburg wants to widen the Elbe

Outer Elbe] to the port of Hamburg are justified by imperative reasons of overriding public interest".

But in 2013 the environmental groups NABU and BUND managed to stall the project at the FAC.

This July, when further hearings began, Hamburg city economy minister Frank Horch was confident the lawsuit would be overturned, as "the European Commission has already approved the navigation channel adjustment following a diligent examination of the project".

In response to the latest decision, which refers the issue to the CJEU, Port of Hamburg marketing executive board members Axel Mattern and Ingo Egloff said: "The FAC also emphasised, however, that while the environmental compatibility assessments in respect of the fauna/flora done for the planning approval exhibit various shortcomings, in its opinion these can be overcome and should not lead to a lifting of the said approval."

Although the fresh delay sent his company's shares down 4%, Klaus-Dieter Peters, chairman of HHLA, Hamburg's biggest container stevedore, was also optimistic.

"What's pleasing is that the court found no shortcomings in

the plan approval, which would have led to the approval being revoked," he said. "We still hope construction will start soon."

Mattern and Egloff added: "We regret that once again time will be lost. More than 10 years of planning and authorisation procedures have been a difficult time for the port's customers, shipping companies, and firms operating in the port. With seaborne cargo throughput of more than 140M tonnes and annual container handling of over 9M teu, Hamburg is Germany's largest universal port and the northern European hub optimally located for handling worldwide cargo flows and transport chains in seaborne foreign trade.

"Over 150,000 jobs are linked with the port," they continued, "and against the background of an increasing number of calls by mega ships, access from the sea via the Elbe is of vital importance for the Port of Hamburg and the companies based there."

In the first half of this year Hamburg handled 4.8M teu, up 6.8% on 2013. By contrast, box traffic at Rotterdam, Europe's biggest container port, nudged up only 1.9% to just over 6M teu, while third-ranked Antwerp posted a 2.9% increase to 4.3M teu.

Port updates

► CHINESE EBOLA CHECKS

All Chinese ports of entry will implement stricter quarantine measures against Ebola, said the National Health and Family Planning Commission. People, vehicles, and goods from infected areas will undergo inspection. Certain restrictions are already in place and high-risk ports will be closed if the epidemic worsens and threatens China, which has yet to report any Ebola cases.

► KAOHSIUNG EXPANDS

Taiwan's Kaohsiung port has completed expansion of Wharves 115-117, opening the door to super container ships and raising its port handling capacity, said the Taiwan International Ports Corporation (TIPC). The upgraded Wharf No.115 is 917m long, 16.5m in depth, and can accommodate two 14,000teu super container ships. The upgraded infrastructure also includes automated handling facilities, said TIPC.

► SHANGHAI STUDY

Shanghai's municipal authorities are looking into setting up an emission control area (ECA) for sulphur in the Shanghai port, according to a draft amendment to the local regulations on vessel pollution. The draft would require fuels used by vessels sailing, berthing, or operating in the waters of Shanghai to comply with national or municipal regulations.

► ARCTIC FIRST

A bulk carrier has become the first vessel to transit the Northwest Passage completely. MV *Nunavik*, the most powerful conventional (non-nuclear) icebreaking bulk carrier in the world, sailed from Deception Bay to Bayuquan in China via Canada's Northwest Passage in September. Fednav, which owns *Nunavik*, said the route is about 40% shorter than the Panama Canal option.

Bought & Sold

► HANDLING MELBOURNE

Cargotec's Kalmar has won a significant contract to deliver container-handling equipment and related automation technology for Melbourne's new container terminal. The order includes 12 automated stacking cranes and 11 automated shuttle carriers worth more than EUR40M (\$36M) and due to be delivered during 2016.



► KIEL UPGRADES

A new portal crane has arrived at Kiel's Schwedenkai Intermodal Terminal for loading and unloading trains involved in rail-ship cargo handling. The equipment, which will replace two reach stackers, is suitable for handling trailers, containers, and swap bodies (standard-sized containers for road and rail transport) and has a lifting capacity of up to 40 tonnes.

► EVERETT INVESTS

The US port is increasing its lifting capacity by purchasing a new 150-tonne mobile harbour crane and three Hyster reachstackers. This investment of \$5.1M will allow the port to better accommodate oversized cargoes and help it compete for new heavy-lift business.

► CRANES AT PUERTO

The Chilean port has ordered seven environment-friendly Kalmar E-One2 rubber-tyred gantry cranes (RTGs) under a \$14M contract with delivery and start-up due in July 2015. The order is part of its capacity expansion project to add 450,000 teu.



The merger of Osaka...

Kobe-Osaka gets underway

On 1 October, Kobe-Osaka International Port Corporation – a new firm set up through merging Kobe Port Corporation and Osaka Port Corporation – began its operations.

This merger of two competing companies – which own container terminals and lease them to shipping lines and stevedoring companies – has been enabled by a central government strategy of strengthening the competitiveness of Japan's major container ports.

Port of Kobe and Port of Osaka are only 30km away from each other and have been competing fiercely for customers for decades.

The main focus of the newly

merged company will be on improving its facilities' international competitiveness and attracting container cargoes from overseas ports through more efficient operations and by providing a set of incentives.

The new firm, set up with

capital of Y450M (\$4.2M), has its office in Kobe. Yasuo Inubushi has been appointed as a representative director and as chairman, while Yoshifumi Kawabata takes the roles of representative director and president as well as CEO.



...and Kobe should attract overseas ports' cargo

Transnet to raise spending by 80%

Transnet Port Terminals (TPT) is set to spend ZAR2.7Bn (\$245M) in 2015 to develop its port terminals infrastructure, an 80% rise on this year's expenditure, to meet the Durban market's demand.

The operating division of the state-owned logistics company is gearing up towards a planned spend of ZAR7.0Bn in 2018. Chief executive Karl Socikwa said TPT's \$26Bn terminal infrastructure upgrade programme has reached "a critical stage".

The expansion is part of the

company's seven-year infrastructure programme in line with a strategy to modernise South Africa's rail, port, and pipeline infrastructure.

Aggressive investment is aimed at boosting capacity ahead of demand. "We expect to see rapid capacity increase in the years ahead," said Socikwa.

Spending will cover purchasing equipment and reconfiguring and upgrading facilities as well as investments in training and wider 'economic commitments'.

Over the next two financial years, the container terminals at Durban Pier 1 and 2, Port Elizabeth, and Ngqura as well as Cape Town will receive a total of ZAR2.97Bn for both equipment and infrastructure.

By 2019, TPT's overall container terminal capacity is set to rise with these investments from its current 4M teu up to 7M teu.

"No other company has undertaken such aggressive investment in growth anywhere in Africa," said Socikwa.

Muscat cargo moved to Sohar

The passing of Oman's 31 August deadline for transferring all cargo from Muscat to Sohar has failed to quash claims that Sohar Port was unprepared for the move.

Congestion is said to focus on Oman International Container Terminal (OICT), where work to add 1.5M teu in capacity is now thought to be insufficient.

The project was announced last year by Port of Rotterdam, which is the Omani government's joint-venture partner in Sohar Industrial Port Company (SIPC).

SIPC CEO Andre Toet told *P&H* that OICT had undergone a \$130M relocation and redevelopment, which had doubled quay length, increased yard space from 28 to 68ha, and added 14 rubber-tyred gantry cranes as well as three Post-Panamax ship-to-shore cranes to the four Panamax cranes already on the quay.

Muscat Port is to be turned into a cruise terminal to serve rising tourism to the Sultanate, while Sohar's recent growth and its location 200km northwest of Muscat suit it to dealing with the overflow.

The *Times of Oman* said on 1 September that businesses were worried about the "operational hurdles" following the transfer of cargo to Sohar.



RTGCs on Port of Sohar's Terminal C quay

Toet told *P&H* that OICT was taking steps to resolve "temporary challenges".

"The transfer of commercial traffic from Muscat to Sohar is by far the biggest moment in the port's history since it was established as a joint venture between the Port of Rotterdam and the Government of Oman in 2002," he said.

"It is also the biggest shift in Oman's shipping industry for 40 years. This brings with it a certain level of expectation and pressure, which has manifested itself in the form of temporary challenges at the container terminal. As a major change in Oman's supply chain, we have been in close contact with all stakeholders and fully

understand and appreciate the issues raised. OICT has and will continue to take steps to rectify the current situation, and has introduced additional manpower and equipment in order to do so."

A main objective behind the move is to consolidate cargo volumes and drive down the cost of doing business in Oman, he added.

"Combining Muscat and Sohar volumes provides an opportunity for businesses to increase vessel size and subsequently will reduce costs by creating scale. This will, of course, be good for all of our tenants and is in the long-term interests of Sohar," he said.

Terminal operations today handle throughput of 50M tonnes a year, said SIPC.

Bought&Sold

► PLOCE BULKS UP

The Croatian port has signed a \$128M contract with Chinese company CNBM International Engineering Co to equip a new 4.6M tonne bulk cargo terminal. The project is part of a public-private partnership plan between Ploce Port and Ploce Port Authority to construct and equip the terminal.

► HANJIN SELLS

Hanjin Shipping, South Korea's biggest shipping company, will sell 75% of its stake in its dedicated terminal in Algeiras, Spain, to a consortium comprising IBK Investment & Securities and Korea Investment Partners for KRW146.1Bn (\$140M).

► GRANGEMOUTH DREDGE

UK marine environmental consultancy ABPmer has identified cost-effective dredging solutions for Forth Ports' port of Grangemouth, Scotland's largest container port, which has experienced increased siltation around its entrance since 2009. As UK's largest feeder port, its operations hinge on maintaining navigable depths and navigational safety.



► OFFSHORE OPTION

Terminal operator Cuxport and Dutch company Ballast Nedam Offshore have developed a technique to transport and install monopiles at the Amrumbank West wind farm. E.ON-owned Cuxport's multi-functional terminal in Germany handles the monopiles, which are transported to the wind farm aboard a setup vessel, lowered into the water by crane, towed to the wind farm by tugs, and erected by floating cranes.

Israel plans to sell state-owned ports

Israel's finance ministry has announced a three-year programme to sell off state assets including its two main ports to strengthen capital market and reduce national debt.

Israel's cabinet has approved the proposal and Prime Minister Benjamin Netanyahu said reforming state assets would enhance transparency for government companies.

"This is another step in stopping the politicisation of government companies and reducing corruption," said finance minister Yair Lapid. Selling up to 49% of state-owned companies would bring an estimated \$4Bn in extra revenue, he added.

In 2015, the Israeli government will seek to sell off the country's second port, Ashdod, as well as a minority stake in Israel Natural

Gas Lines and the state postal company. Companies planned for privatisation in 2016 include the port of Haifa and Israel Aerospace Industries.

While some companies, such as the railway and postal companies, would be sold via the Tel Aviv Stock Exchange, others including the ports would be sold in a single private sale or in stages, said the finance ministry.

Dredging

▶ OTAGO'S DEEPER DREDGE

Port Otago, on New Zealand's South Island, will begin capital dredging this month to allow the current 4,500teu vessels calling at the port to sail with a deeper draught and so carry more cargo. Commercial manager Peter Brown told *P&H*: "We have consent to go to 15m but we will not go beyond 14m without some commercial driver."

▶ GLDD WIDENS FREEPORT

Dredging contractor Great Lakes Dredge & Dock (GLDD) will widen a 7.2km stretch of the Freeport Ship Channel on the US Gulf of Mexico by 61m to allow larger ships to safely navigate the 183m-wide channel. The project was scheduled to start in October and some dredged material will be used to nourish the coastline in Quintana.

▶ GULFPORT DEPTH

Federal dredging started on Gulfport's access channel in the Gulf of Mexico bringing it back to the authorised depth of 36ft (10.97m) from the present 33ft. The shallow channel has hindered clients such as industrial giant Dupont, which has had to offload some cargo to enable ships to call at the port. Restoring the depth means vessels will be able to come in fully laden.

▶ CHENNAI EXPANSION

Chennai port has recently cleared a scheme valued at more than \$1Bn for the privately funded development of an outer harbour. The developer will be responsible for constructing 4.48km of breakwater, dredging the channel to 18m, and using the dredged material to reclaim 90ha for storage and backup.

\$1Bn



PM Modi has called for India's state-run ports to deepen to 18m

Modi calls for deeper ports

Indian Prime Minister Narendra Modi's government has told the 13 state-run Major Ports to deepen their draughts to 18m.

The policy chimes with Modi's aim to boost the country's economy through a port-led development

model, his election promises in April, and the green light in October for the Sagar Mala project.

Draughts at Major Ports generally range between 10m and 12m, so most cargoes for India are routed through transshipment ports, often

in Singapore or in Sri Lanka, where China has invested heavily to build new ports. But efforts to deepen India's Major Ports face challenges.

Kolkata, the oldest operating port in India, is 203km from the sea and has two distinct dock systems – Kolkata Docks at Kolkata itself and the deepwater Haldia Dock Complex. Kolkata Port Trust has struggled to keep the water depth at 12m at Haldia. The Hooghly River and its tributary Haldi River constantly move sediment into the port but especially during the rainy season, which means its depth changes throughout the year.

Jawaharlal Nehru (35km channel), the country's biggest box port, took years to get the money and permission to dredge to 14m.

Dredging Corps of India (DCI) has three new Royal IHC-built dredgers, but the rest of its fleet is old and the state-owned company already has its hands full with maintenance work.

Port expert calls for planning shake-up

Port developers are often misled through forecasting their future needs from past projects, Peter W der Langen, professor of ports and logistics at the University of Eindhoven in the Netherlands, told a recent conference in Copenhagen.

The European Court of Auditors has noted that many EU-funded port investments have fallen short

of targeted throughput, while some remain completely unused, he pointed out during Danish Maritime Days, on 8-10 October.

"We tend to walk backwards to the future," said Der Langen.

"We hold mental maps from the past and we extrapolate to the future. We should stay away from the fallacy of great masterplans that become

obsolete before the ink has dried on them."

Future port development should instead be based on drivers of change in the economy and society, embracing everything from developments in transport and information technology, all the way to changes in the age structure of the population in the hinterland.

Italy's ports present reform proposals

Assoporti, the association of Italian port authorities, has presented proposals to be included in ports reform legislation, which has been delayed by a succession of national governments and an absence of political will.

Resources should be concentrated on investments that will benefit Italian trade, said Assoporti President Pasqualino Monti.

"It is equally important to eliminate red tape from our port authorities and to create the solutions in operational efficiency that the market is asking for," he said.

A lack of political urgency has been blamed for Italian ports taking a falling share of the Mediterranean cargo market over the past decade through failing to invest in more efficient cargo handling.

Assoporti's proposals would

give more financial autonomy to Italian port authorities and – in particular – the hub clusters vital to international trade.

The association is calling for 2% of VAT revenues at those ports to be set aside for infrastructure investment.

Assoporti is also seeking more public-private partnerships and project financing to improve efficiency at Italy's state-run ports.

Be part of the global ports' community with an IAPH membership



The International Association of Ports and Harbors (IAPH) is a global alliance representing over 190 ports in 85 countries. Together, IAPH member ports handle over 60% of the world's sea-borne trade and nearly 80% of the world's container traffic. It is a non-profit-making and non-governmental organisation headquartered in Tokyo, Japan.

IAPH provides a platform to develop and foster good relations and co-operation among the world's ports and harbors through forums where opinions and experiences can be exchanged. It promotes the role ports play in waterborne transportation and in today's global economy.

Benefits of membership include:

- Free copies of IAPH publications including Ports&Harbors, Membership Directory, newsletter and full access to IAPH website
- A voice for your port via IAPH representatives within organisations such as IMO, UNC TAD and WCO
- A chance to influence decisions at IAPH's technical committee meetings
- Networking opportunities at IAPH's meetings and conferences, plus reduced registration fees for these events



To apply for membership please email info@iaphworldports.org or visit www.iaphworldports.org



'The Global Ports' Forum for Industry Collaboration and Excellence'



Port of Palm Beach

The Port of Palm Beach is nearing its 100-year anniversary.

History of resilience

Manuel Almira, executive director of the Port of Palm Beach, looks back at how his port has continued to bounce back from challenges over the past century

The Port of Palm Beach, which joined the International Association of Ports and Harbors (IAPH) in July, will recognise its centennial in 2015. While a 100-year-old port may seem like an infant compared to our friends around the globe, the Port of Palm Beach has risen to many challenges in our history – and we find this reason to celebrate. A hundred years ago, there were just over

6,000 people living in the largest county in the state of Florida. The new city of West Palm Beach, only 10 years old, was starting to grow and the town of Palm Beach had just been incorporated. Getting goods to either place “from up north” was difficult and therefore expensive. It was time to cut into the narrow barrier island and make an inlet to bring ships into Lake Worth.

Drawings were made, the engineering

planned, and in 1919 the new inlet leading from the ocean into Lake Worth was cut across the barrier island. The original port channel was just 1.2m deep and 61m wide. A very modest wooden dock was constructed and the ‘Port of Palm Beach’ was in business.

Slowly, the port began to take shape. In the early 1920s the inlet was dredged to 3.7m and then to 4.9m. In December 1925, the fledgling port welcomed the MV *Lake Chelan*, its first cargo-carrying steamship. Regular cargo service had begun. In the next two years, business picked up with a cruise ship making 13 trips between the port and New York and another taking passengers and cargo to Nassau, Bahamas, and Havana, Cuba.

Bulkheads, warehouses, and rail facilities started to be installed. The first slip was dredged in 1927, with the engineer of record being General George W Goethals, who was in the area on vacation after completing the Panama Canal. The first wooden warehouse did not come along until 1928.

But just as it was starting to look like the port had a bright future, it was hit by a major hurricane in 1929, causing significant

damage. That was followed weeks later by the stock market crash. World War II passed the Port of Palm Beach by: it was of no military significance. Funding went elsewhere and, when the war ended, the port's infrastructure was in disrepair.

What saved the port from becoming nothing more than a Bahamas fishing-boat supply point was the arrival of the West India Fruit & Steamship Company in 1948. It instituted a ferry service to Havana that soon became the Florida Havana Railroad Express. With railcar-capable ferries leaving the Port of Palm Beach every other day, it went on to record cargo tonnage figures and was the biggest trading partner with Cuba of all ports in the United States.

Then came yet another setback: the arrival of Fidel Castro in Cuba and the resulting trade embargo by the US, which significantly hurt Palm Beach's business.

The port rebounded yet again in the mid-1960s, with the development of the tourism business in the Bahamas and the Caribbean. Today, the *Bahamas Celebration*, offering a two-day Bahamas cruise, and the *Island Breeze II*, a coastal day cruise ship, sail from the port.

In 1963, the US Army Corps of Engineers widened the channel from 91.4m to 121.9m and dredged the bottom from 7m to 10.1m. Unfortunately, the inlet remains the same size in 2014. We have been working with the Corps for the past six years on a channel improvement project we hope will start in the next two or three years.

Construction equipment and supplies have become mainstays and agricultural trade has developed with the Bahamas and Haiti. Starting with just a single boat moving construction supplies to the Bahamas, Tropical Shipping has since gone on to

“If you have seen one port, you have seen one port – we are all unique in our own way”

Manuel Almira

Executive director, Port of Palm Beach



Port of Palm Beach

become a major carrier in the Caribbean, with 13 ships and more than a thousand employees. Tropical Shipping's facility can boast of having the highest container throughput per hectare of any port in the US.

As the 21st century began, the Port of Palm Beach embarked on an ambitious facility and infrastructure upgrade programme. A 1km-long bridge was constructed over the port, a new cruise terminal and office complex were built, an additional slip was dug, and hurricane-resistant warehouses were built. The slip that was first dug in 1954 had come to the end of its effective lifespan and was completely rebuilt. In all, over \$100M has been spent in a county that has grown in the past 100 years from a population of 6,000 to more than 1.3M.

While there is an old saying in the port industry – “If you have seen one port, you have seen one port” – we are all unique in our own way. The Port of Palm Beach's uniqueness is that, of Florida's 13 deepwater seaports and – for that matter – all the other ports in the US, we “export” almost 650,000

tonnes of raw sugar each year.

Even the “export” portion of that statement is unique. While the sugar does leave the port in barges, it is not shipped to another country, but instead is sent via the M-95 Maritime Highway (i.e. short-sea shipping) from Florida to sugar refineries in Baltimore, Maryland, and New York City.

A byproduct of sugar cane production is molasses. Over 145,000 tonnes of molasses are brought to the port each year from the sugarcane mills in liquid tank trailers. Stored on port property, it is loaded via pipeline to the dock, where tankers are loaded at the rate of 150 tonnes per hour. The market for this molasses is predominantly in Northern Europe, where it is mixed in with feed and fed to cows.

From its very humble beginnings in 1915 to its present role as one of the 25 busiest container ports in the US, with a very diversified portfolio, the Port of Palm Beach has maintained its proud tradition of service to the cargo and cruise industries and as a significant contributor to local, state, and national economies. **PH**



A century of increased cargo handling



Port of Palm Beach

The ongoing policing of piracy



Security expert, **Dr Dave Sloggett**, looks at the measures being taken in the Gulf of Aden to develop an indigenous capacity to provide maritime security

The rate of attacks labelled as piracy by the International Maritime Bureau (IMB), between January to June this year on merchant ships at sea and in harbours, was down on the same period last year. This confirms a continuing, if gradual reduction, in the rate of pirate attacks across the world.

Of the total numbers of attacks nearly half of the reporting provided by the IMB relates to attacks in the geographically dispersed harbours and anchorages of Indonesia. The scale of these attacks far outweighs those that now occur infrequently off the coast of Somalia and in the Gulf of Guinea. There is also a continuing drum-beat of activity off the coast of Bangladesh and around the Singapore Straits and along the Malaysian Coast. Off South America where a small cluster of attacks had featured in past reporting off the coast of Columbia only a single report was filed of a piracy event in the first half of 2014.

These significant reductions in pirate activity can be attributed to a number of activities. Off the coast of Somalia the combination of an international task force of up to 30 warships and the implementation of a number of point-defence approaches to protecting vessels transiting the area has paid dividends. The placement of onboard security teams has certainly had a marked impact on the levels of pirate activity in the region.

While it is difficult to pin-point the specific contributions of each element of maritime security made available to these areas, the fact remains that none of the small number of attempted attacks in this area resulted in a vessel seizure, and represents a massive shift in fortune for the area.

The scourge of piracy off the coast of Somalia has almost been removed. Yet the question remains if any of the measures taken to create this more secure environment were to be removed would the attacks start again?

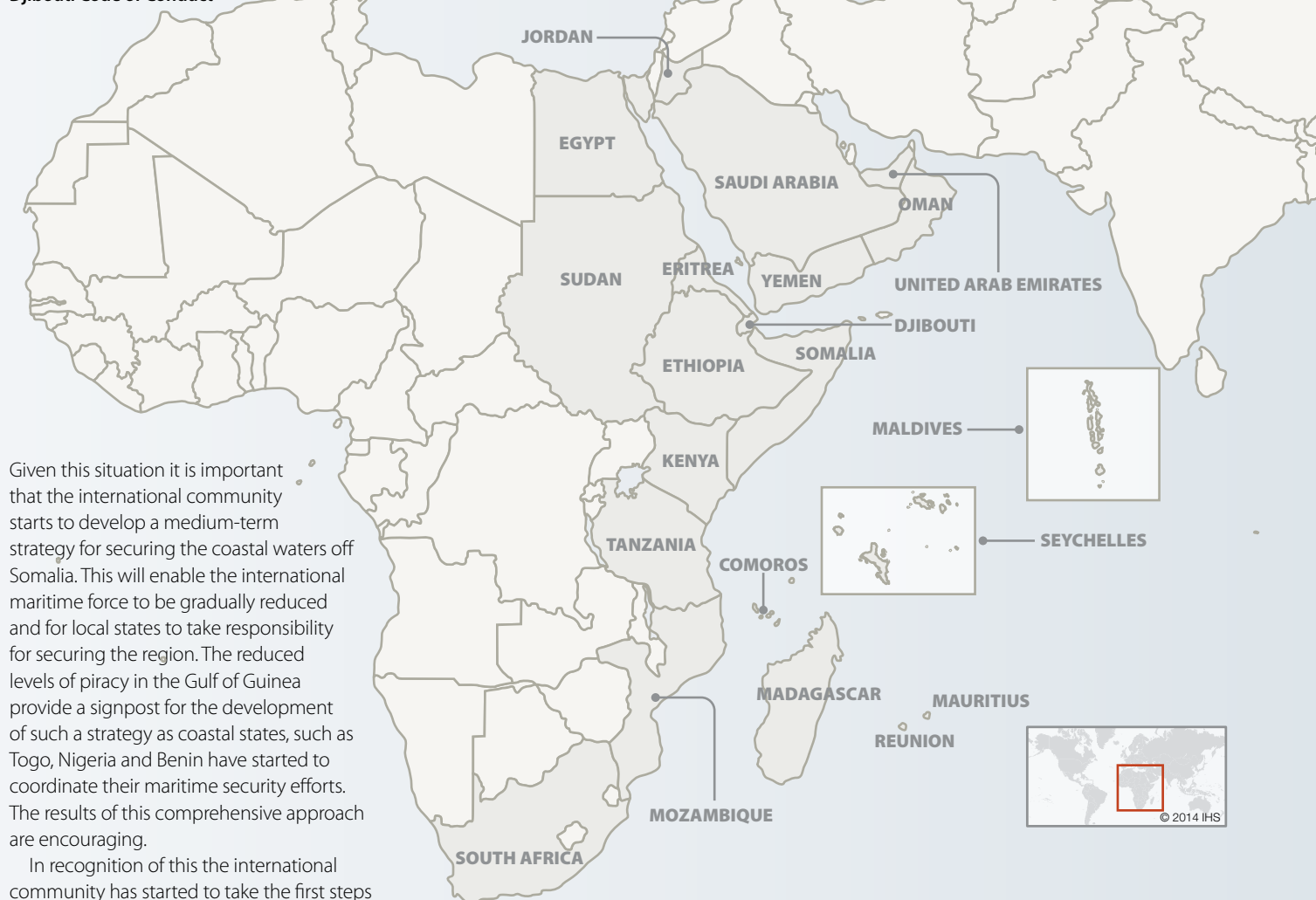
The challenge for the international community in tackling piracy long-term in this region is that the fundamental reasons as to why piracy became so prolific are still there. Pirates originally took to sea to defend their fishing areas. Fish stocks off the coast of Somalia were so ravaged by the large industrial-scale fishing conducted in the area as to make their recovery to their former levels highly questionable. Rumours of large-scale waste material being dumped in the area also continue to surface. In this situation it is difficult to see how the people in the coastal regions of Somalia would be able to eke out an existence.

On the land, fundamental problems also exist with other traditional forms of economic activity. Charcoal burning, an activity long associated with the coastal people of Somalia, is suffering from a lack of raw materials, and the on-going insecurity in the country is making the management of their natural resources on a sustainable basis almost impossible.

This again creates major challenges for people living on the coastal fringes of the country. In such circumstances the potential for people to go back to sea and resume a highly lucrative career in piracy is very tempting. Until the economic fundamentals in the coastal strip of Somalia are addressed there will always be the lingering suspicion that piracy may well return. Attempts to create indigenous coastguards in Somalia have failed as they have fallen prey to becoming involved either directly or on the periphery of piracy.

This failure to stabilise Somalia creates a long-term maritime security problem in the area. The cost of operating an international task force on a long-term basis is simply prohibitive. The merchant shipping industry is already paying premiums for armed security guards on around 40% of the vessels transiting the area. This, and inflated insurance premiums, all add to the general economic malaise that is affecting the operating costs for the 25,000 vessels that transit the area every year.

The 21 countries that are eligible to sign the Djibouti Code of Conduct



Given this situation it is important that the international community starts to develop a medium-term strategy for securing the coastal waters off Somalia. This will enable the international maritime force to be gradually reduced and for local states to take responsibility for securing the region. The reduced levels of piracy in the Gulf of Guinea provide a signpost for the development of such a strategy as coastal states, such as Togo, Nigeria and Benin have started to coordinate their maritime security efforts. The results of this comprehensive approach are encouraging.

In recognition of this the international community has started to take the first steps towards encouraging countries in the area of the Gulf of Aden to develop their own counter-piracy agenda. On 30 May in London this year a meeting at the IMO headquarters agreed a resolution on future work under the framework of the Djibouti Code of Conduct. The resolution envisaged the immediate commencement of activities to seek the implementation of the code in the area of the Gulf of Aden and out into the wider Indian Ocean and Arabian Sea.

This work builds on the initial creation of the Djibouti Code of Conduct in January 2009. Nine countries originally signed and this has grown by a further 11 bringing the overall total of signatories to 20. Only one country that is eligible to contribute remains outside the framework at present.

Through the offices of a Project Implementation Unit (PIU) formed in April 2010 signatory states to the code are helped to improve key areas of governance with respect to maritime security. The effort focuses on four

of the key pillars that enable maritime security namely training, capacity building, legislation and information sharing. Until now, under the banner of the training pillar over 700 people in the region have attended the training course. To consolidate that work a regional training centre in Djibouti, scheduled to open in January 2015, has been working since 2011 without a dedicated facility.

Under the remaining pillars, regional information sharing hubs have been created in Sana'a, Mombasa and Dar es Salam which are linked to spokes or National Focal Points in all participating states. The network currently provides reports on pirate activity feeding information to naval vessels operating in the area through their links into the Maritime Centre at Northwood and in Abu Dhabi.

A specific focus on regional dhow operations is helping build a detailed maritime picture that helps highlight unusual behaviour that may be

worthy of more detailed investigation. Dhows have for some time been used as mother-crafts to transport skiffs into more remote areas to conduct attacks on shipping. Developing an understanding of the pattern of life of such vessels helps spot anomalies. The introduction of coastal radar networks and AIS technologies are also contributing to the development of the recognised maritime picture.

These measures, combined with activities designed to strengthen the legal frameworks in the signatory states will, in time, deliver an improved maritime security environment in the region. Meanwhile the international naval community will have to continue their patrols in the region increasingly working alongside local naval units as they strengthen their ability to stand alone. **PH**

i MORE INFO: www.imo.org/OurWork/Security/PIU/Pages/DCCoC.aspx



Zyrcraft

Spike in oil siphoning raises concerns for Asian waters

Tankers in Asia are a prime target for pirates looking for fuel to resell, reports **Ridzwan Rahmat**

A surge in fuel and oil siphoning from tankers in Asia is being highlighted by the Regional Co-operation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP).

Up to mid-July this year, the Singapore-based maritime piracy watchdog recorded eight incidents – mainly in the South China Sea – compared with three in 2013 and four in 2012.

In an interview with *Ports&Harbors* on 4 September, Yoshihisa Endo, Executive Director of ReCAAP's Information Sharing Centre (ISC), warned that, while product thefts from tankers at sea are nothing new, Asia's recent incidents require a response from private and governmental stakeholders.

"We have to pay careful attention to the situation and exert actions such as enhancing vigilance, increasing patrolling, and enhancing co-operative mechanisms among law enforcement authorities and between law enforcement agencies and private

industries," emphasised Endo.

ReCAAP has attributed the escalation in attacks to rising prices for fuel and marine gas oil (MGO) and a persistent demand for them in "underground markets". "Due to the high market price and taxes imposed on fuel and oil, illegal siphoning has been a lucrative business," said ReCAAP in a special report on recent incidents.

The watchdog also identifies a major contributing factor in the absence of authorities in locations where many attacks occurred. Most siphoning cases in the region have been in areas without clear jurisdiction by the littoral states, such as the South China Sea. Of the seven successful attacks reported for 2014, six were in this highly contested maritime region and the other in the Strait of Malacca.

"The South China Sea is far away from shore and outside the area of jurisdiction of regional authorities, who would require more time to arrive at the location



Zycraft can provide mobile armed vessel escorts from aboard a patrol vessel

of the incident. This worked in favour of the pirates, who could 'buy time' in carrying out their siphoning activities and escaped before the arrival of the authorities," the body noted.

ReCAAP added that most of the incidents occurred during the hours of darkness between 1935 and 0530 hours.

Another emerging area of concern is the perpetrators' modus operandi. Pirates in the region's recent siphoning cases were reportedly armed with handguns and pistols, as well as the more usual choice of weapons, such as knives and machetes. In the last couple of years, firearms have been an unusual element, but they seem to be making a comeback. While weapons were rarely discharged, crew were often threatened, tied up, and locked up, said ReCAAP.

"In the majority of the reported incidents, the pirates or robbers boarded the tankers while underway, tied the crew and locked them in the cabin, took over control of the tankers, and transferred the oil or fuel to another tanker or barge that would come alongside," said the agency.

The increasing violence of siphoning incidents has swelled enquires to private maritime security providers such as Singapore-based Zycraft, which provides mobile armed vessel escorts from manned and unmanned platforms such as Shomari LRV-17 long-range patrol vessels, with a top speed of over 40 kt and a range in excess of 1,500 n miles.

The contractor is helmed by James Soon, a former fleet commander with the Republic of Singapore Navy.

"We are now seeing up to four escorts a month since June 2014 and these are mainly for product tankers," he told *Ports&Harbors*. Before June the company had received few such requests, he added.

"Demand has definitely picked up. People are clearly worried about the situation in this region and they are increasingly coming to us when there are vessels that need to transit the known high-risk areas of the region."

To deter potential pirates, Zycraft has equipped its vessels with thermal cameras, sensors, and radar that can make long-range visual contact with potential intruders even during total darkness.

In addition to equipping its boats with laser dazzlers to deter pirates, the company told *Ports&Harbors* that it also provides an option for the vessels to be armed with small-calibre weapons.

Another private security provider receiving more enquiries is SecuriState. Set up about four years ago in Singapore, the firm provides armed escorts to commercial vessels globally. Unlike Zycraft, the company focuses on providing armed and trained maritime security personnel on board vessels, rather than on accompanying sea-borne platforms.

SecuriState's founder and managing director, Malaravan Ron, told *Ports&Harbors* that his firm now receives about three or four enquiries each month from owners and operators of tankers, who are

increasingly concerned over security in the region.

"We also had quite a number of requests from tug boat owners, small bunker carriers, and bulk carriers from local companies," said Ron. "Currently fuel siphoning is one of the biggest problems that shipping companies are facing."

In his view, the involvement of firearms in fuel-siphoning incidents could be reduced by relaxing laws on the use of weapons by security providers. Local government regulations currently ban firearms from commercial vessels in areas such as the straits of Malacca and Singapore.

"One of the reasons I see [for the rise of armed fuel-siphoning incidents] is the lack of private security companies being allowed to carry arms. As such, the number of incidents in this region is on the rise. The law-enforcement agencies are patrolling the seas – but how much can they cover?" asked the ex-Singapore Armed Forces officer.

"If you look at the high-risk areas for piracy in the Gulf of Aden, you will see that piracy has dropped so drastically and one of the main contributing factors is because vessels there are allowed to be armed," said Ron. "If they allow private security companies with regulated arms movement, the number of incidents in this region will drop drastically."

Ron told *Ports&Harbors* that he was in talks with local authorities, such as Singapore's Ministry of Home Affairs, to allow audited use of firearms by private maritime security providers. However, he said the effort will likely take years. In the meantime, he advises vessel owners and operators in the region to abide by security standards such as the Best Management Practices for Protection against Somalia-Based Piracy (BMP4).

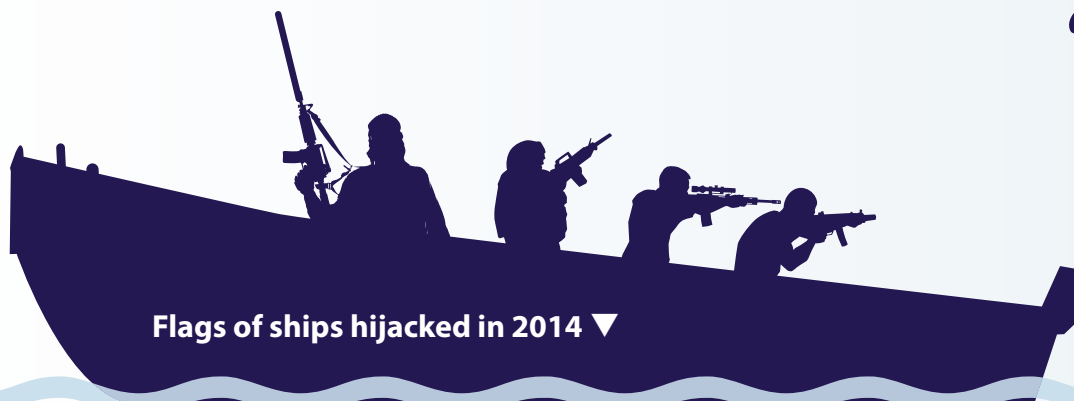
Commenting on the possibility that oil- and fuel-siphoning cases in this region involve insiders, Ron stressed that the onus is on vessel owners and operators to apply robust security procedures. "Shipping companies must do their diligence and background checks on their people. Today the market price for sailors is so low that some of them come very cheap," he said.

Ron warned that saving money by hiring unvetted sailors could bring other, greater costs – and this might be evident in the recent spike of incidents in Asia.

However, ReCAAP's Endo refrained from speculating on the role of insiders in recent oil- and fuel-siphoning cases. "In our assessment these allegations are yet to be verified," he said. "There are some cases which indicate that it is done by insiders but others are not. So we leave it to the further verification by the authorities of the littoral states."

He added that ReCAAP is in close contact with international law enforcement authorities such as Interpol. "I understand that they [Interpol] are carrying out their investigations into some of these cases," he said. "At a certain point of time we will get to know whether these instances are by insiders or not." **PH**

Piracy hot-spots



1 **A** Equatorial Guinea

Ship name: San Miguel
 Ship type: Passenger ship
 Hijacked: 03/01/2014

2 **F G** Liberia

Ship name: Fair Artemis
 Ship type: Tanker
 Hijacked: 04/06/2014

Kerala
 Tanker
 10/01/2014

1 **B** Ghana

Ship name: Marine 711
 Ship type: Fishing vessel
 Hijacked: 04/06/2014

2 **H I** Malaysia

Ship name: Budi Mesra Dua
 Ship type: Tanker
 Hijacked: 07/06/2014

Manyplus 12
 Offshore
 10/06/2014

2 **C D** Honduras

Ship name: Ai Maru
 Ship type: Tanker
 Hijacked: 14/06/2014

Moresby 9
 Tanker
 04/07/2014

1 **J** Nigeria

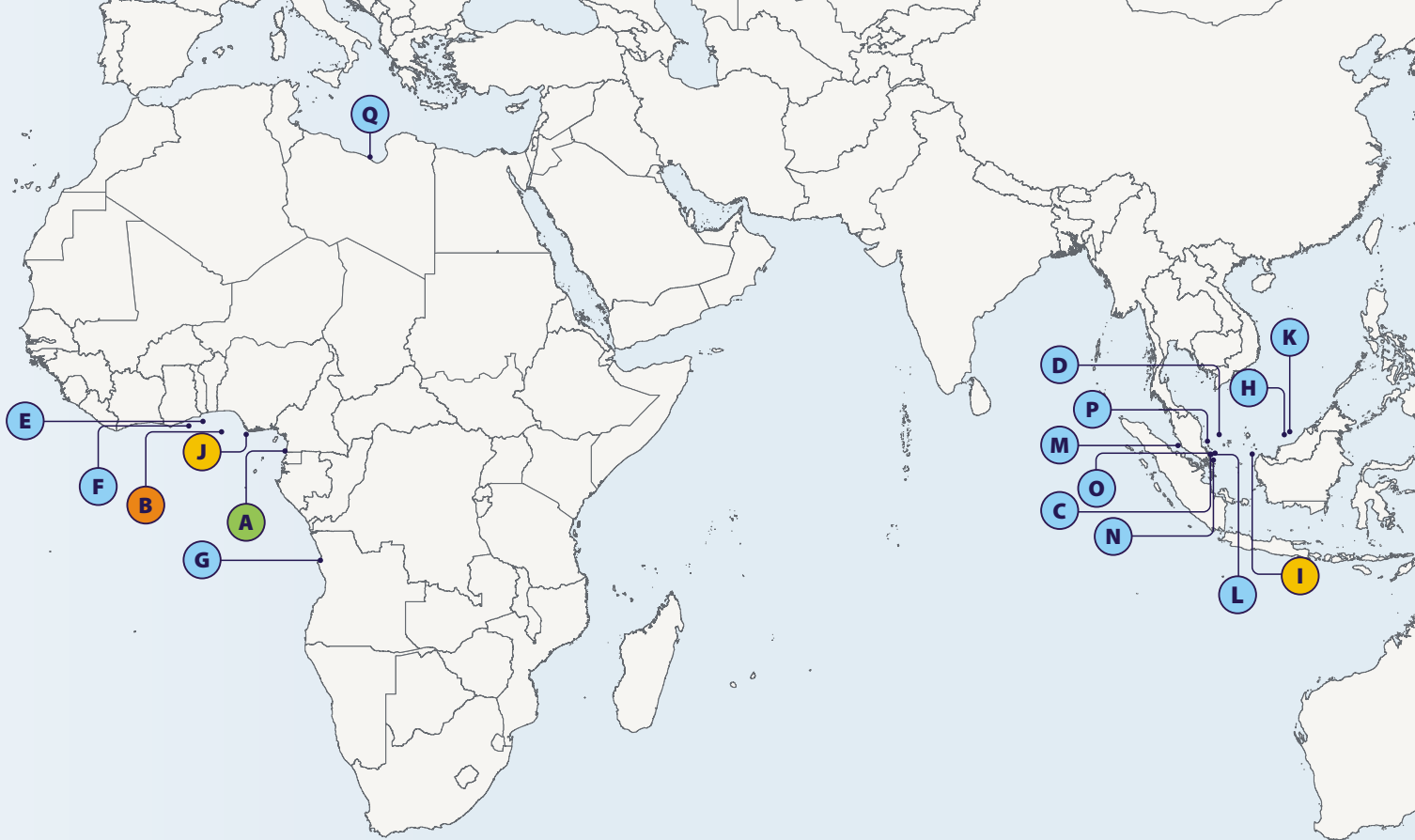
Ship name: Prime Lady
 Ship type: Offshore
 Hijacked: 06/03/2014

1 **E** Kiribati

Ship name: Hai Soon 6
 Ship type: Tanker
 Hijacked: 26/07/2014

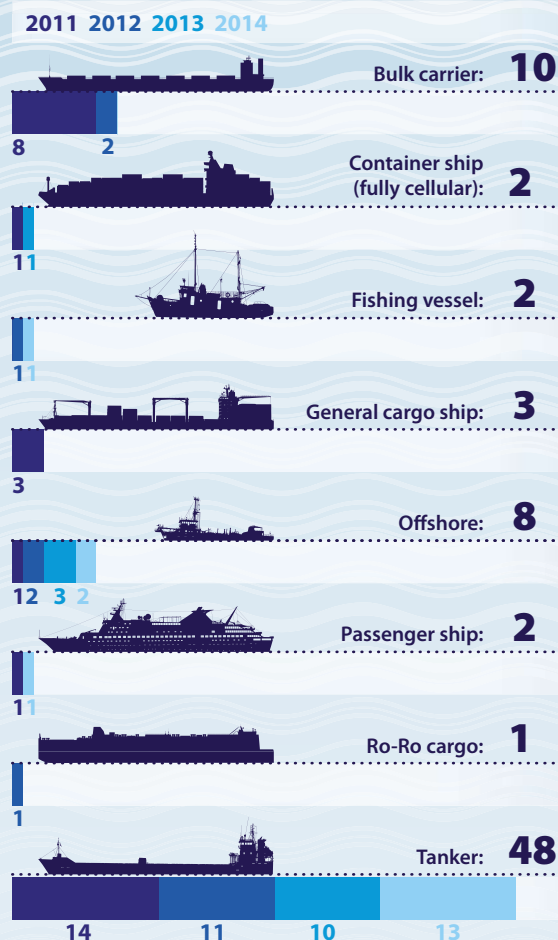
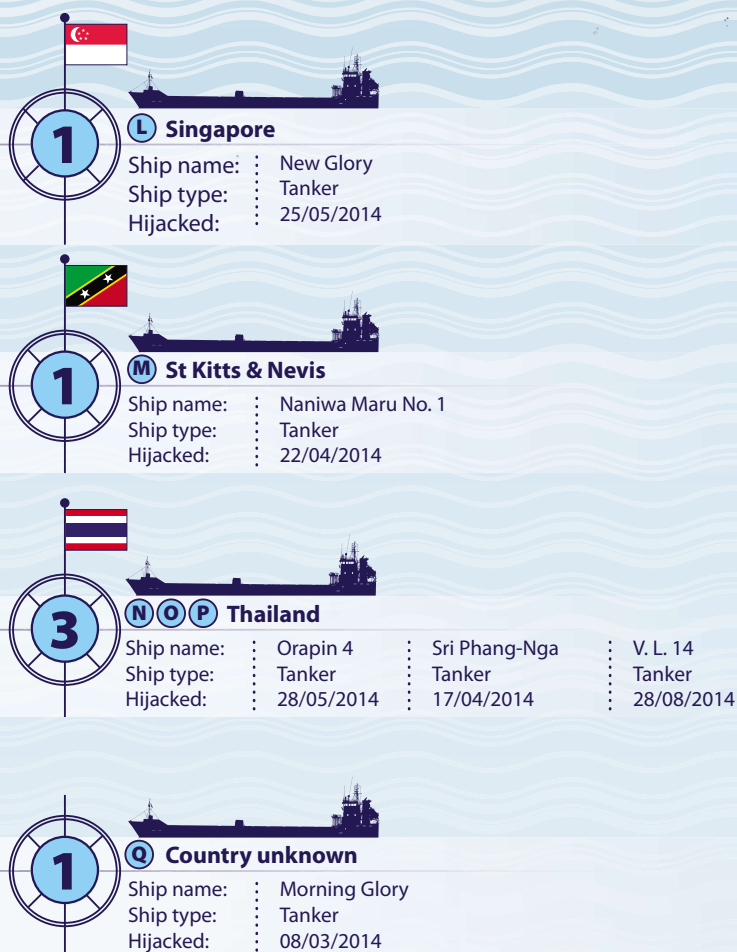
1 **K** Panama

Ship name: Lucas
 Ship type: Tanker
 Hijacked: 31/05/2014



Map showing where the attacks took place ▲

Incidents by type - 2011 to 2014 ▼



Ria Chanter/Shutterstock source: IHS Maritime



Plotting unusual activity

Tracking oil theft in the Niger Delta is no easy feat, but activity within ports can prove useful in theft monitoring. ***Savahna Nightingale*** provides analysis

Oil theft has gained prominence in global media over the past five years, almost exclusively in relation to Nigeria. While Nigeria is not the only oil theft hotspot, the relative transparency of the market and the development of the types of oil theft in the region has made it increasingly visible.

Theft from Nigeria's crude oil pipelines has grown into a major problem for the country, which derives 80% of government revenue from the oil industry.

The hotspots have become concentrated in the local government areas of Southern Ijaw and Nembe (Bayelsa), Warri in the South-West Delta area of Nigeria as well as Bonny, in Rivers State.

While those involved in oil theft in Nigeria do not fit a single profile, they are drawn from ex-militants seeking alternative income streams, local petty criminals and

personnel from energy companies and local authorities with privileged access to oil infrastructure.

Oil theft robs the economy of an estimated \$6Bn a year in revenue and causes pipeline shutdowns since thieves often tap into them directly. The Trans-Forcados, Nembe Creek, Bonny and Escravos pipelines have been consistently vandalised over the years.

Nigeria's minister of petroleum resources, Diezani Alison-Madueke, said in a recent government statement that oil theft remained one of the country's 'biggest headaches'.

An estimated 400,000 barrels of oil is stolen daily of the estimated 2.2M bpd output between Lagos and the Niger Delta and the government claims it has set aside the equivalent of \$94M this year to equip security agencies in the fight against crude theft.

Equally, concerns exist on the vessel side, with six successful tanker hijackings in the Gulf of Guinea since June 2014 with a seventh tanker reported missing in Ghanaian waters on 8 June. On 29 April there was an attempted hijacking of a tanker off Bayelsa, in which a crew member was killed. In May 2014, two reported attempted tanker related robberies took place, leading to the US government imposing a Conditions of Entry



NIMASA patrol boat
at sea

order stipulating certain security requirements for all vessels transiting Nigeria.

Identifying the perpetrators can be a challenge but undertaking satellite imagery analysis to track potential illicit activity can prove a useful tool.

Layering synthetic-aperture radar (SAR) and infrared imagery of hotspots over AIS data in anchorage reveals that large numbers of vessels have their AIS switched off.

There are currently 18 AIS sites in the Niger Delta, 14 of which are in service. A further three sites are awaiting full installation at Warri, Calabar and Brass in Nigeria. Following the launch in June of satellite company ORBCOMM's OG2 satellites, the ability to identify illegal activity will significantly increase. A further 11 satellites are scheduled for launch by the end of 2014 to supplement the existing three.

ORBCOMM is the name of the satellite company that provides us with monitoring and messaging services.

While AIS is not a security system but an open navigation system required under SOLAS, it serves in this instance as a useful security tool. Observed over a timeframe, identifying normal and abnormal behavior becomes clearer.

On its own, SAR identifies key signs and indicators of illicit activity, including suspicious mooring of hollow-hull vessels in proximity to pipelines, oil slicks on creeks, and burned down vegetation typical of bush refineries.

The Nigerian Maritime Administration and Safety Agency (NIMASA), which is responsible for regulating Nigeria's coastal waters, undertakes inspections and provides search and rescue services. However navigating the complex creeks along the rivers of the Delta is in itself a challenge.

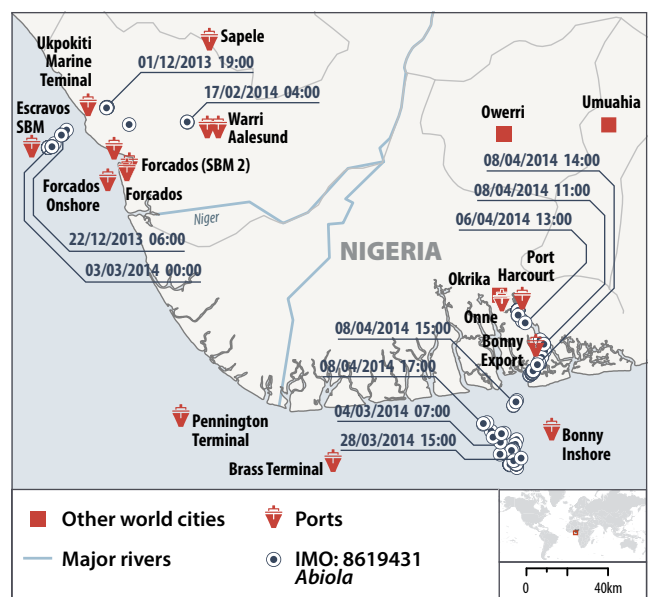
But tracking unusual activity could hold the answers to illegal activity. The Nigerian government acquired two 40,000dwt tankers at the end of 2013 to service the Warri oil refinery in Nigeria. The *Abiola* and the *Igbiosa* carried out seemingly normal activity between November 2013 and the spring of 2014, when activity drastically changed.

AIS tracking shows that both vessels moved east and began operating in and around the Bonny Estuary, appearing to be moving oil to and from the Okrika jetty to vessels offshore.

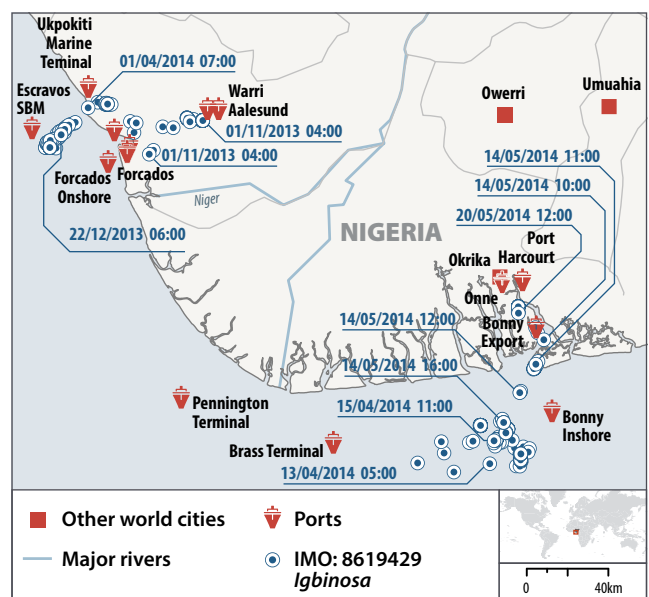
In May 2014 the Okrika jetty caught fire, killing 10 people. It followed a petrol fire explosion in the creek close to the Nigerian National Petroleum Council (NNPC) jetty. While the decision to relocate may be legitimate, its unusual activity fits with a pattern of illegal bunkering.

Both vessels are still trading in the area between Abuloma jetty, also in Port Harcourt, Bonny inshore terminal, and the offshore anchorages.

Similarly, unusual activity recorded through AIS analysis of *African Hyacinth* shows similar results. The vessel, owned by Krishna Shipping and flagged in St Kitts and Nevis, operated between Lagos and Lome in Togo from January 2011 to January 2012. It then



Snapshot of 253 AISLive data 18/12/2013 1:00 to 14/05/2014 13:00



Snapshot of 253 AISLive data 14/12/2013 8:00 to 20/05/2014 12:00

switched to operating in the Bonny Terminal area as *Abiola* and *Igbiosa* have done this year.

The tanker caught fire in October 2012 while carrying stolen crude from the Bomu-Bonny Trunkline in the Niger Delta after the pipeline had been directly tapped.

Tracking energy infrastructure and exploiting data to track unusual activity could hold some of the answers to potential oil theft, the threat, and onward movement of stolen cargo beyond the regions borders. However, recognising the wider settings of oil theft remains an ongoing challenge that governments everywhere need to address. PH

Common ground for EU security



P&H visited Port of Lisbon in June to learn more about the EU SUPPORT project and an AUV specifically designed for port surveillance

A four-year EU security project known as Security Upgrade for Ports (SUPPORT) finished in June this year, part-funded by the European Commission's FP7 Security Research Programme. The project was instigated in part as it was felt that European ports lack common models for security management and training, and all interpret the ISPS code slightly differently.

To address this, the project group of 21 stakeholders has developed a set of port security management models, based on best practice, which can be customised to suit the individual needs of a port. It is made up of three areas of research: access control, port security management system (PSMS) and waterside security. Included in this is a set of training programmes that focus on EU regulation and open standards. The landside element includes development of improved access control, monitoring, detection and surveillance performance – the overall aim being to help upgrade

security in the region.

British maritime engineering consultancy group, BMT Group, sponsored an event at Port of Lisbon in June, to which P&H was invited, to showcase the launch of a new autonomous underwater vehicle (AUV) designed as part of the project, and specifically with ports in mind (see box). BMT is project co-ordinator and a partner in the SUPPORT project.

Port of Lisbon, another partner in the project, can see direct benefits to its facilities. Mário Oliveira, head of division, Safety and Security Division and Maritime Operations at Lisbon, told P&H at the event that the geographical spread of terminals that make up the port along the north and south banks of the River Tejo poses a challenge to ensure security is properly monitored throughout the area.

That is one reason why Lisbon has shown interest in the development of SUPPORT's PSMS model. It offers a set of guidelines including: risk and vulnerability

The AUV (red) is watched over carefully by those in the RIB as it first sets sail, with the Port of Lisbon VTS tower behind



assessments and control measurers; screening personnel and background checks of staff; fencing, intrusion alarm and CCTV systems; and improved security training, awareness programmes and management training.

Another aspect that Oliveira highlighted was SUPPORT's work on landside security, covering access control; access inspections; monitor, detection and surveillance performances; and cargo handling and inspection. Oliveira said, we are "trying to get all terminals on side" to introduce card access for trucks at their facilities. "We expect to do so."

The project has officially concluded, but Luke Speller, senior research scientist at BMT Group, told P&H that elements of it will continue to develop. For example, various aspects of the PSMS are being improved and prepared for commercial availability, he said.

The PSMS is one of two elements of the project that has seen the most interest due to "its practicality and availability for use in ports", said Speller. The other area is the research on AUVs for waterside threat detections. "The AUVs have had interest for addressing emerging threats and their ability to perform otherwise expensive tasks," he said.

Although the project was developed with European ports in mind, and therefore some of the systems' information relates to EU-specific regulations and guidelines, much of the information is "universal and areas such as the PSMS are being augmented to make them available to overseas ports", Speller concluded. **PH**

i MORE INFO:

www.support-project.eu.mypsms.com/default.aspx?articleID=3297

Security in the water

An autonomous underwater vehicle (AUV) designed specifically for ports was presented to the press at Port of Lisbon in June. It is part of the waterside security research – one of three parts of the SUPPORT project – that concluded in June.

Current project co-ordinator BMT – along with Lisbon Port Authority – is looking for interested parties to further the AUV research. Once funding is secured, it should take four years to take the product to market, BMT research scientist Daniel Roythorne told P&H.

The AUV is being developed by BMT Group in partnership with Bristol Robotics Laboratory and SonarSim and is being designed from scratch specifically for ports. It will be able to offer 24-hour surveillance and detect and monitor threats using intelligent algorithms.

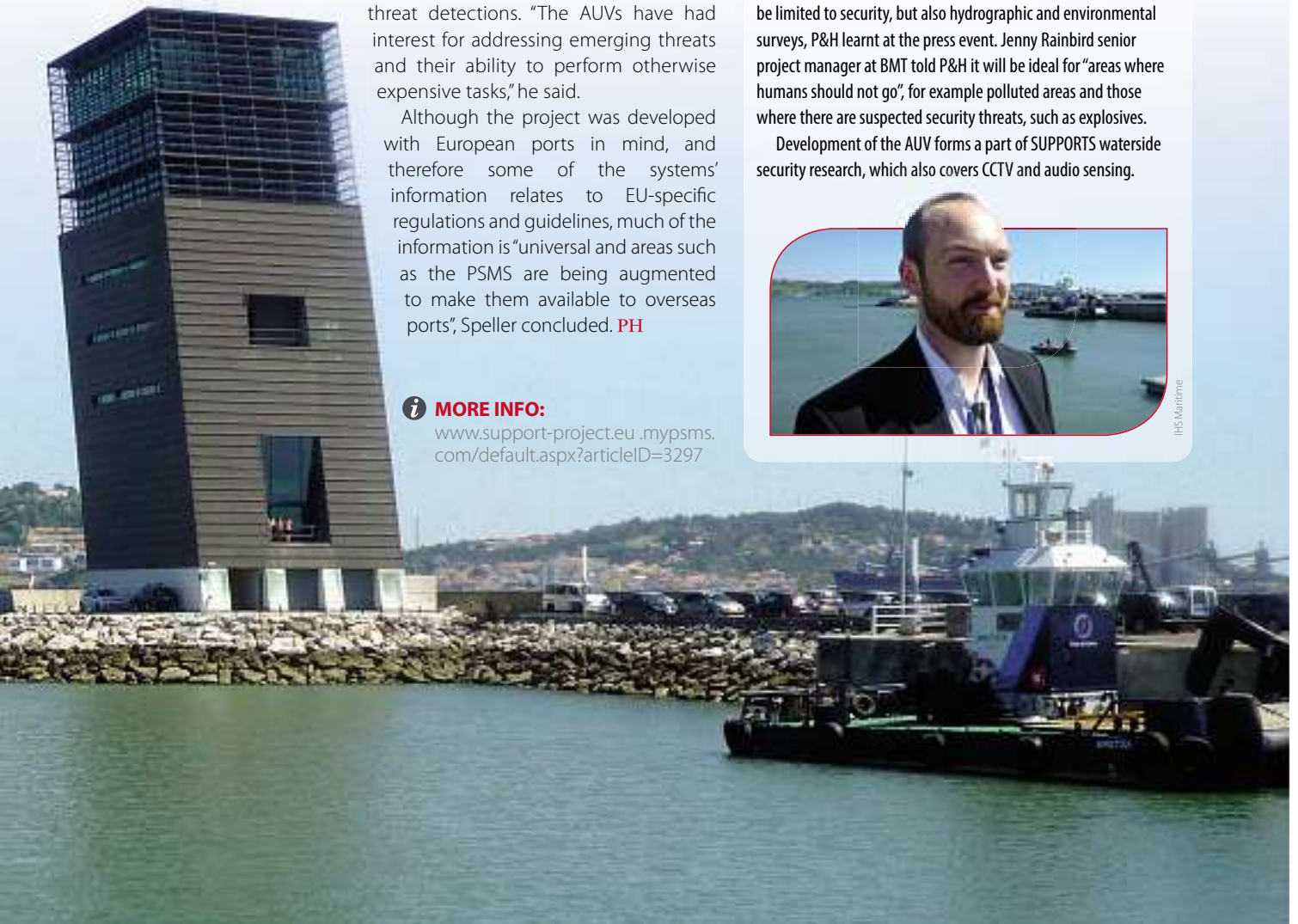
It offers a cheaper alternative to other AUVs currently available and at 1.8m in length and with two thrusters at the front and back, is easily manoeuvrable with a small turning circle, P&H was told. It has a fibre glass shell and a pressure depth of 100m, but in ports it is expected to go no deeper than 18m.

Different sensors could be attached to the AUV, providing a wider range of surveillance options. This means it does not have to be limited to security, but also hydrographic and environmental surveys, P&H learnt at the press event. Jenny Rainbird senior project manager at BMT told P&H it will be ideal for "areas where humans should not go", for example polluted areas and those where there are suspected security threats, such as explosives.

Development of the AUV forms a part of SUPPORT's waterside security research, which also covers CCTV and audio sensing.



IHS Maritime



Cruises skip Jerusalem's ports

Israel's cruise market seems to have taken a hit during the country's conflict with Hamas

An incident on 7 July, when the *AIDAdiva* was hit by rocket debris while leaving Ashdod Port, seems to have triggered a decline in Israel's cruise trade.

Tourists visiting Jerusalem have tended to use both Ashdod and Haifa, which seems to have gained some trade from cruise operators that cancelled calls to Ashdod.

But analysis through IHS Maritime's AIS network







shows that Haifa and Ashdod's combined cruise calls are down, with cruise ship operators and tour organisers apparently reluctant to visit Israel.

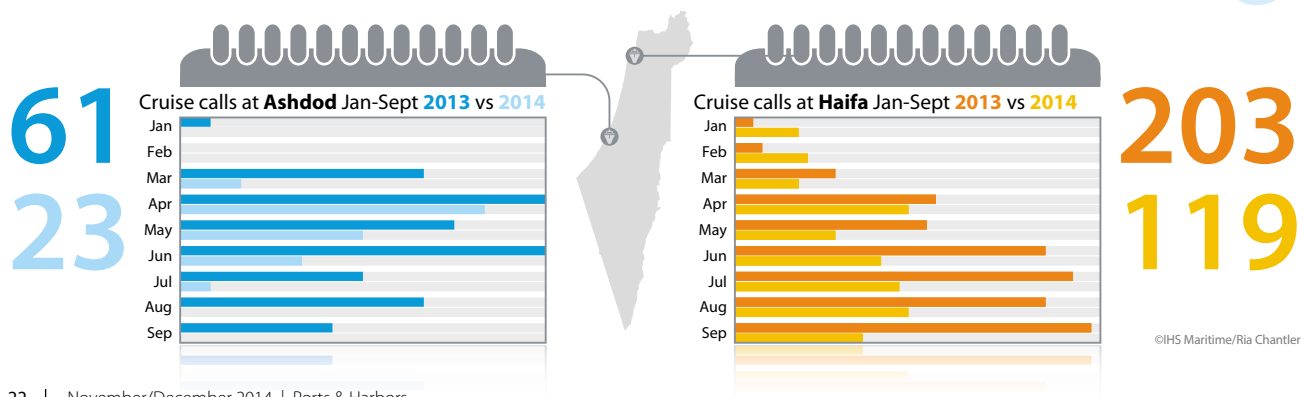
The trend can also be seen in other types of shipping. Data from IHS Maritime's AIS network shows that calls across all cargo-carrying ships at Ashdod dropped to 120 in July and 99 in August.

As the decline was apparent across ship types, the data suggests all operators are looking to divert cargo from a risk zone.

In September, cruise ships continued to shun Ashdod, although its other calls picked up. In October, however, some cruises are scheduled to call at the port. **PH**

Ships calling at **Ashdod** during 2014

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
 Bulk carriers	21	18	21	8	21	18	16	7	22	152
 Container ships (fully cellular)	96	90	88	74	88	88	64	50	79	717
 General cargo	73	59	57	53	49	40	26	31	44	432
 Passenger/cruise	-	-	2	10	6	4	1	-	-	23
 Ro-ro cargo	8	12	12	12	11	15	10	7	12	99
 Tankers	5	7	4	2	3	5	3	4	7	40





ZPMC

From part to whole

After conquering nearly 70% of the world's container crane market, Shanghai Zhenhua Heavy Industry (ZPMC) is making an all-out effort to grow as an integrated solution provider of automated terminals, reports **Titus Zheng**

ZPMC cranes in situ

Shanghai Zhenhua Heavy Industry (ZPMC), the world's largest manufacturer of container cranes, is transitioning from being just a straightforward maker, and has been pursuing a solid footing in automated container terminals for years, the company told P&H.

The Shanghai-based company has been long aware that the global demand for traditional container cranes and other port machinery will no longer reach its highest levels seen in the past decade, with international trade growth slowing down. The changing landscape has prompted ZPMC to set its sight on the automated container terminals.

ZPMC is focusing on the development of the core technologies of automated terminals, which will make the company a provider of integrated solutions for such terminals. Over the past few years, ZPMC has already run tests on the solutions in the Chinese ports of Lianyungang, Caofeidian and its manufacturing base in Changxing Island near Shanghai.

The first application of ZPMC's solutions for automated terminals will take shape at the Xiamen Ocean Gate Container Terminal in October 2014, which is also China's first such box terminal, the company said. The building of the automated terminal in Xiamen started in March 2013, with the project comprising three quay cranes, 16 rail-mounted gantry cranes, 18 automated guided vehicles and an automated loading and discharging system.

According to ZPMC's on-site calculations, the

operation efficiency of the automated box terminal in Xiamen would be at least 20% higher than the current average level of the world's container terminals, with the overall costs of the system 26% lower than traditional terminals. The operation efficiency of the yard would also rise by at least 25% from current levels.

With challenges and difficulties that emerged in the building of the project having been solved by ZPMC in the past two years, the company believes that it would be a market leader in the sector of automated terminals after the completion of the Xiamen project.

The company is also in talks with Shanghai's Yangshan Deep-Water Port and Qingdao Port for the provision of automated terminal solutions. According to Shanghai International Port (Group), the fourth phase of the Yangshan Deep-Water Port is to be an automated box terminal due to the limited land space at the site.

In addition, ZPMC has still made gains in the container crane segment, with new orders for such equipment up 4.6% year on year to \$1.1Bn in the first half of 2014. The company expects that the full-year new orders would amount to \$2.8Bn in 2014.

On 30 July, ZPMC signed a port machinery contract worth \$160M with Peel Ports Group in Shanghai. ZPMC will provide eight quay cranes and 22 automated gantry cranes for Liverpool II automated wharf project, which is affiliated to Peel Group. The equipment will be delivered from September 2015. **PH**

Keep on trucking

Innovative software designed to co-ordinate truck loading and unloading in real time is due to be trialled by three ports in Greece, potentially leading to time and cost benefits and reduced congestion, reports **Stephen Cousins**

Shutterstock/Carolina Lorenzo

Truck congestion within ports and container terminals is a serious global issue that is aggravated by concerns such as calls by increasingly larger container ships, difficulty forecasting when ships will arrive and how long they will take to unload, as well as a shortage of available chassis.

Congestion has been a particular issue at several United States gateways, including the ports of Los Angeles, Long Beach, New York-New Jersey and Norfolk, where it is not unusual to see mile-long gate lines, often resulting in delayed shipments and disappointed customers.

Similar issues, albeit on a smaller scale, have been encountered by the ports of Patras, Alexandroupolis and Piraeus in Greece, which have each chosen to implement the innovative e-transport solution ecoTAURuS.

The software, developed by transport and logistics company Inlecom Solutions as part of the European research and development project EcoHubs, is intended for use by terminal and intermodal operators, trucking companies, truckers and dispatchers. It aims to streamline the drayage process by co-ordinating and optimising real-time truck loading and unloading in multimodal terminals.

EcoTAURuS integrates truck-appointment systems run by various stakeholders around a group of port terminals, consolidating unit-status data from sources including multiple terminal operating systems (TOS) and trucker mobile interfaces. The system runs on the low-cost cloud-based EcoHubs Ecosystem infrastructure and is accessed and operated via an internet browser or a smart phone.

Patras Port Authority (PPA) plays a key role in the multimodal transport chain of the southeast European Corridor, with trucks transiting from Bulgaria, Turkey and the Levant. It chose to adopt EcoTAURuS to boost the efficiency and environment-friendliness of existing terminals and the forthcoming New Port project, being constructed in the southern port area.

A port spokesperson told *P&H* that it expected a "significant reduction in our operational costs but more importantly improvement in the revenue side."

At the moment, said the spokesperson, PPA misses revenue streams from the use of port premises – for example, parking for trucks and for trailers.

"Additionally, a major benefit will come from the effective monitoring of the port premises, including supporting advanced ISPS monitoring and automated business rules," said the port.

There should be cost savings from the trucking companies' perspective too. These will stem from increased asset use. The port notes that movement of traffic through the port is not consistent, with demand higher during the summer months resulting in significant traffic jams.

The port explained to *P&H* that it was currently setting up the operational pilot. "Our team co-operates with the ecoTAURuS implementation team and are working on mapping additional functionalities based on PPA's current workflows and stakeholder requirements," it said.

It is optimistic about the environmental benefits too: "Based on our calculations, the direct effect will be about 4 tonnes of CO₂ on an annual basis only from the idling trucks and without considering the emissions of trucks looping outside the port until their turn comes to enter."

Meanwhile, the smaller Port of Alexandroupolis (PoA), located to the east, close to the border with Turkey, decided to implement the system to help avoid cargo bottlenecks.

Panagiotis Pogkas, technical adviser at the port, said: "A small port like PoA needs to maximise capacity utilisation. When a vessel arrives, we need to synchronise the downstream supply chain in order for the transit operations to take place more efficiently. The limited port space – both sea-side and land-side – requires advanced capacity planning, quick vessel turnaround, synchronised loading and unloading and improved synchronisation between modes."

Environmental concerns and efforts to improve productivity were behind the Port of Piraeus Authority's decision to adopt the system, explained a spokesperson for the port.

"We face challenges in terms of security improvements and environmental performance," the official said. "Our intention is to trial ecoTAURuS with a new access control system relying on advanced information for trucks and cargo. In particular, ecoTAURuS will help us reduce truck traffic from the congested port perimeter, better utilise truck availability, reduce emissions from congestion and reduce nuisance for citizens."

The overarching EcoHubs project involves 14 European partners. EcoTAURuS is one of a range of complementary services, including business and technology innovations, due to be offered on the EcoHubs Ecosystem. **PH**

MORE INFO: www.ecohubs.eu; www.inlecom.com

Making connections:
e-transport software
could help avoid
port loading delays

EcoTAURuS functions

The software includes the following integrated functions:

- Unit order management: retrieving, sending and exposing unit order information from multiple sources
- Integration with multiple terminal and other systems, allowing collection of visit/call IDs, slot availability, TOS generated events etc
- Trip order management: allowing the retrieval updating, sending and exposing of trip order information from multiple sources
- Trucker mobile interface: enabling trucks to receive or accept trip orders from multiple sources, report unit status, receive notifications and transmitting GPS data
- Notification services, such as unit status updates, traffic and terminal operations



Twin hopes for Haiti

Almost a half-decade since the earthquake, Haiti is finally on the verge of launching a competitive port system, reports **Greg Miller**

The Caribbean island of Haiti provides a perfect example of ports' crucial economic role. When the earthquake struck in January 2010, the public terminal in Port-au-Prince – the sole container gateway for the capital region – was destroyed. During the reconstruction phase one of the highest priorities was restoring a port system.

The question became: Should Haiti's government rebuild its facility on the original Port-au-Prince footprint or should a private developer be allowed to construct a greenfield terminal outside the crowded city limits? Or should both options be pursued, creating competition?

The government ultimately decided to reconstruct the public terminal and allow the construction of a competing private terminal called Port Lafito. If stated schedules hold true, from 2015 container carriers serving Haiti will choose from two brand new facilities.

In Port-au-Prince, the \$70M government reconstruction of the North Wharf by APN will encompass 400m of quay and dredging to 11.5m. Construction, which is now well under way, is being handled by Miami-based GLF, a subsidiary of Italy's Grandi Lavori Fincosit. This phase is just the first step in a much larger masterplan to redevelop and enhance the devastated Port-au-Prince site.

About 20km north of the city, the rival private

terminal has secured a licence to handle containers and is also under construction. The Bigio family, one of the island's wealthiest, is developing Port Lafito through its GB Group for \$67M.

It will feature 450m of quay and dredging to 12.5m. Managed by global port operator SSA, Port Lafito will feature a terminal operating system from SSA sister Tideworks Technology.

"The importance of this port project for a nation still recovering from the devastating effects of the 2010 earthquake cannot be overstated," asserted Tideworks Technology president Michael Schwank.

The World Bank's International Finance Corporation has stated that the development of Port Lafito will "increase competition in the market" and "help reduce the cost of transportation by reducing congestion and improving efficiency and productivity".

In the wake of the earthquake, the Bigio family was not the first of Haiti's wealthy clans to mount a plan for a container terminal to compete with the Port-au-Prince pier.

In June 2010, the Mevs family proposed a 120,000teu container facility at its Terminal Varreaux site. That scheme was thwarted when Haitian port authority APN decreed that its temporary authorisation allowing private terminals to handle



**How a developed
Port Lafito may look**

boxes following the earthquake expired on 1 August 2010.

Port Lafito's licence to handle boxes represents a policy change in terms of openness to allowing competition to the public container facility in Port-au-Prince. "In 2010, there was not the political will to open up the sector," GB Group CEO Reuven Bigio told *P&H*. "But the new government has a completely different outlook on how Haiti should be developed. Everybody that has a good project is welcome to go and present it to the government."

Bigio explained that after the earthquake wrecked the terminal in Port-au-Prince, "we wanted to find property close to the water where we could develop the industrial operations required to rebuild Haiti. The [GB] group has been here for more than 100 years and we have always been active on many fronts. We didn't want to put our hands down. On the contrary, we felt a major responsibility. We also wanted to invest in the right things at the right time – we're business guys, after all".

According to Bigio, about half of the 450m pier space should be open for business at the end of December and the rest by March 2015. Construction is being handled by a company formed within the GB Group for this job, he said. Dredging at the port site – which is also being handled in-house – began earlier this year and is scheduled for completion in 4Q14.

Port Lafito will be designed as a multi-purpose port to handle containers as well as commodities such as steel, cement, fertiliser, and lumber. "We've ordered mobile harbour cranes from Leiberr and we have Taylor reach-stackers and top-loaders that are on Haiti already," said Bigio.

The port is part of a broader plan that will include industrial operations, a power plant, a free zone, and a residential area. The 16a residential portion, dubbed Blu Lagoon, is planned for an island just offshore from Port Lafito. "As soon as we finish dredging at the port we will start dredging the marina [at Blu Lagoon] and start doing some work on the island," said Bigio.



**Construction at the
Port-au-Prince
terminal.**

“ Things are going along quite well. GLF is right on schedule and has done a very good job ”

Explaining how the project evolved, he said "it was not our intent [initially] to build a container port. We wanted to have an industrial operation that could benefit from having its own bulk cargo pier. But as time went by, we started planning for a grander project and that's where we are today".

Meanwhile, construction at Haiti's public terminal in Port-au-Prince is on track, said Edouard Baussan, president of the Shipping Association of Haiti.

Since the earthquake, container imports to Haiti have been serviced by three floating barges at the Port-au-Prince site. During construction, one of those barges has been moved, but all remain fully operational.

Baussan told *P&H* that he expects the first 150-200m of the current phase's 400m of berth space on the North Pier to be completed towards the end of 1Q15. He believes the remainder will be completed by early 2016.

Once the first portion is completed, that wharf space will be available for operations, meaning that one of the barges could be relocated to the South Pier, where it could accommodate cargoes such as rice, lumber, and steel that have been lost by the public berths in the wake of the earthquake.

In terminal equipment, the site has a fully operational RTG crane that has been idle since the earthquake, said Baussan. He said a decision should be made soon on the purchase of a new gantry crane, which would allow this RTG to be used as a backup.

A private lobbying effort is seeking to increase the draught to 12.5m – rather than 11.5m – from the current depth of 9.5-10m, he added. "It would give us more flexibility and it's not too late [for the government to make that decision] but it would require an additional budget," he said. He added that decision-makers are viewing this proposal positively.

"Things are going along quite well – GLF is right on schedule," concluded Baussan. "GLF has done a very good job of doing what it has to do with the least impact on and interference with actual traffic, so there have been no [cargo operations] delays linked to construction."

Baussan questioned the need for additional container capacity at Port Lafito in light of the APN site's reconstruction, as the island still has only about 110,000 box moves per year, while the continued pervasiveness of cargo smuggling restricts the market's potential.

But Bigio expressed no concerns about Port Lafito's prospects: "Why would we put our money into something we didn't think would be profitable?" **PH**



Port of Bujumbura

Transforming Bujumbura Port

The landlocked country of Burundi has unveiled a master plan for the phased transformation of the inland Port of Bujumbura, reports **Shem Oirere**

The plan is to turn the inland port of Bujumbura into East Africa's largest dedicated freight facility in the region with financing from Japan International Cooperation Agency (JICA) and other private investors.

Ruhimbi Ndabaniwe Therence, the transport management advisor to the minister for transport and public works said the port transformation plan entails both short term and long term investment over the next 16 years.

Speaking at the 5th East and Central Africa Road and Rail Infrastructure Summit in Dar es Salaam on 27 August, Ruhimbi said that short term investment includes the diversion of the 1.2km long Buyenzi storm water canal, construction of a new container terminal, construction of ship repair facilities, rehabilitation of the existing general cargo berth, installation of container ship-to-shore (STS) cranes fitted with a spreader, and a cargo handling yard. In addition, the port plans to install,

at the earliest possible opportunity, slewing wharf cranes on the break bulk berth, equipped with several types of buckets to handle bulk cargo when necessary.

He told participants at the infrastructure summit that there has been an increase in container cargo volumes from the port of Dar es Salaam, which are transported by the block train service offered by Tanzania Railway Ltd to Kigoma Port before they are ferried by ship on Lake Tanganyika to Bujumbura port and the port of Mpulungu in neighbouring Zambia. The lake is shared by Zambia, Uganda, Burundi, Rwanda and the Democratic Republic of Congo (DRC) and has several other smaller ports.

"The upsurge in container volumes has created demand for modern container handling equipment and more space for handling the cargo at Bujumbura port," he said.

"Bujumbura port is the one that is most ideally suited to transporting cargo to the north and south of Lake Tanganyika for the inland countries of Rwanda, North Eastern Democratic Republic of Congo, Uganda, Zambia and Burundi," said Ruhimbi.

The Bujumbura port development plan's objective is to "improve port facilities, build new ones, and to also repair ships at the port, thereby expanding the freight capacity, reducing transportation costs and improving navigational safety."



Bujumbura has four rail-mounted jib cranes

Ruhimbi said the total throughput at the port of Bujumbura is expected to increase to 151,600 tonnes a year in 2015 before rising to 296,100 tonnes in 2020, 300,900 tonnes in 2025 and 397,900 tonnes in 2030. The port currently receives 110,000 tonnes of cargo a year from Zambia's port of Mpulungu alone.

"The bottleneck relating to the transport capacity between the two ports is caused by the current limit on the cargo loading capacity onto ships at Mpulungu which only has a 20m-long berth and one crawler crane to load and unload cargo to/from ships," he said.

Ruhimbi added that the maximum capacity to handle break bulk cargo at Mpulungu is around 195,000 tonnes per year and even if the berth is expanded to 60m, the demand of break bulk cargo will still exceed this capacity. To improve efficiency, he said, there are plans to introduce cargo containerisation over the next six years.

Currently, 90% of the cargo handled at Bujumbura Port is imports, of which 40% is brought in by trucks. The facility has three wharfs for general cargo, containers and oil. The 400m-long general cargo wharf has four units of five-tonne rail-mounted jib cranes, four warehouses of 2000m² each along the quayside and a 50-tonne revolving crane fixed on the 100m-long container wharf at the opposite side of the general cargo wharf.

However, Ruhimbi said "the crane cannot effectively be used to handle containers because it moves slowly and has no container spreader."

"Most of the cargo received at Bujumbura Port from Kigoma Port is international container cargo which requires both ports to be equipped with facilities and equipment to handle ocean-going containers," he said.

Bujumbura port's concessionaire, Burundi Global Port Services Company Burundi – a consortium of Global Group of Companies (56%), Secomib SA (28%), Government of Burundi (9%) and Afro Lines SU (7%) – says the current port facility is unable to match the anticipated increase in cargo that is expected as early as next year.

Currently, the port has four shore cranes at the general cargo berth but the company says "they should be gradually replaced with new cranes equipped with a shorter cargo boom and lower driver seat for easier unloading operations.

"The new cranes should preferably be multi-purpose for the convenience of the port operations as a whole, and the one for heavy cargo and containers, which was purchased in 1959, is now unusable and should be replaced urgently."

JICA had also expressed its opinion that the anticipated economic growth in Burundi, DRC, Uganda, Rwanda and Zambia could exert too much pressure on the existing cargo and container equipment at Bujumbura port and that it needs to acquire more modern carnage with higher handling capacity.

"With firm economic growth of between three and five per cent in recent years, Burundi is seeing

an increase in import volume of daily necessities, construction materials and other goods," JICA said in a project brief in July.

"In particular, the volume of imports from Southern Africa coming through the Port of Mpulungu in Zambia grew from approximately 57,000 tonnes per year in 2006 to approximately 110,000 tonnes in 2010. With the development of nickel resources, an increase in export volume is expected, and therefore efficient means for transportation are needed to ensure further economic growth."

JICA noted that the volume of goods passing through the port of Bujumbura is expected to increase by 241% on 2012's figures, due in part to planned improvements to the port of Mpulungu and the Tanzania Central Railway between the ports of Dar es Salaam and Kigoma.

"The added efficiency from these projects is expected to reduce container transport costs from the Port of Dar es Salaam by approximately 18%. It is expected that the project for the improvement of the port of Bujumbura will make the transport of goods more efficient and contribute to economic development in Burundi and neighbouring countries."

According to Ruhimbi, who gave a presentation on 27 August in Dar es Salaam, an immediate priority at the port, especially after JICA extended a \$25.7M loan in July, is to divert the Buyenzi storm water canal "to enable the port of Bujumbura to operate economically by reducing the maintenance costs."

"Without diversion of this storm water canal, the quay wall of the container terminal will get shallower and the slipway of [the] ship-repairing facility will get embedded in the sediments," he said.

Around 11.55m³ of storm water runs into the port every second introducing sediments, sand and debris. "Maintenance dredging would have to be repeated to keep the port basin deep enough," he added.

The rehabilitation of the general cargo berth, whose timelines are yet to be confirmed, entails maintenance dredging of approximately 7,000m³ of material, to make it 3.83m deep so that it can accommodate the fully loaded draught of the largest ship of 3.6m. This allows for a 0.6m clearance allowance and a 0.5m allowance for sedimentation in future.

"The deepening of the quay is required as the water depth is about 1m shallower than its designed depth of 3.83m," explained Ruhimbi.

"MV Teza, which has a maximum draught of 3.6m when fully loaded, cannot be accommodated at the berth with appropriate under keel clearance." The 60m-long MV Teza, owned by Batralac SA, is the largest vessel on Lake Tanganyika and has capacity for 40teu.

The Bujumbura Port Master Plan also proposes the construction of a ship repair facility for the inspection and repair of ships.. **PH**

i MORE INFO: www.jica.go.jp/english/news/field/2014/140815_02.html

Singapore embarks on first phase of mega-port construction



City-state prepares to build giant port, report

Moyoun Jin and Crystal Chan

Singapore will relocate its entire transshipment operations to a single terminal at the Tuas industrial zone in the western part of the city-state.

The new port will have 65M teu in annual capacity, nearly double that of today. Phase one of the project is scheduled to open in about eight years, ahead of the 2027 expiration of leases of terminals in the central locations of Tanjong Pagar, Keppel, and Pulau Brani.

Singapore today has five box terminals: Brani, Keppel, Tanjong Pagar, Pasir Panjang Terminal 1, and Pasir Panjang Terminal 2.

"Consolidating our port in one location will enable us to achieve greater efficiency and economies of scale," said Singapore Transport Minister Lui Tuck Yew.

"The port leases for city terminals at Tanjong Pagar, Keppel, and Pulau Brani will expire in 2027," he pointed out. "With this in mind, we have studied the feasibility of

building a consolidated port, as recommended by the economic strategies committee."

Lui said Tuas provides a suitable site with deep, sheltered water and proximity to both major industrial areas and international shipping routes.

Tuas can handle up to 65M teu per year to meet longer-term demand at the global hub, providing the opportunity to introduce even more advanced technology and processes to meet future challenges.

Coastal engineering will be a part of the construction work. The expansion of Tuas Finger One pier has been awarded to a consortium comprising South Korea's second biggest construction firm Samsung C&T, its compatriot Hyundai Engineering & Construction, Japanese construction firm Penta Ocean, and Dutch dredging contractors Boskalis and Van Oord.

Samsung C&T, which will carry out caisson fabrication and installation on a 3.6km stretch of breakwater, explained to *Ports&Harbors* how its expertise helped the consortium to clinch the project.

First, Samsung C&T has two special vessels – floating docks – to carry caissons to the sea. Weighing over 20,000 tonnes, each floating dock is among the largest in the world.

Samsung C&T told *Ports&Harbors*, "As we have the floating docks essential to completing the caisson work, we combine technology with cost competitiveness."

Caissons, which are often used in coastal engineering projects to form a breakwater or underwater foundation, are basically concrete boxes ranging from 2–30m in height.

The caissons, which are fabricated at Samsung C&T's dedicated manufacturing sites in places such as Vietnam, are lowered into the water, filled with sand and stone, and then covered with a concrete lid.

The company said: "We will reclaim additional land which is located near the project site. Caissons will be manufactured on the site.

"Building harbours that can accommodate ultra-large



Samsung C&T Corporation

Moving the caisson onto the floating dock



ships requires the use of massive caissons, [so] being able to fabricate and transport these giant structures gives us a competitive edge in the field of offshore construction."

The company also used caissons to construct a 750m quay wall for Incheon Port's new container terminal and is also doing the same for Son Duong Port in Vietnam.

According to Samsung C&T, there are four major steps to building a caisson. The first is to lay down the re-inforcing steel and shape the basic structure of the caisson; next, the caisson's foundation is formed, then the walls are created using a gantry tower; finally, the last step is to pour the concrete in and allow it to cure.

Once cured, the caissons are transported on floating docks to the project site.

As the caissons are too heavy to be lifted by cranes, the floating docks are anchored next to the manufacturing site and hydraulic movers are used to push the caissons onto the ship.

The company added that it could call on its experience in long-distance sand transportation, having also worked on the Ayer Merbau land reclamation project in Singapore: "We have technology competitiveness which differentiates us from the competitors," it commented.

Every step of project development from planning and design to procurement, construction, operations, and maintenance is managed by the company.

"In order to secure the personnel needed to perform each stage of the job, we send our employees [on] overseas training courses and [to] in-house education centres under long-term plans. For many years we have invested heavily in hiring and nurturing talents while increasing investment in technology, which has enabled us to be at the forefront of the global civil engineering market," it said.

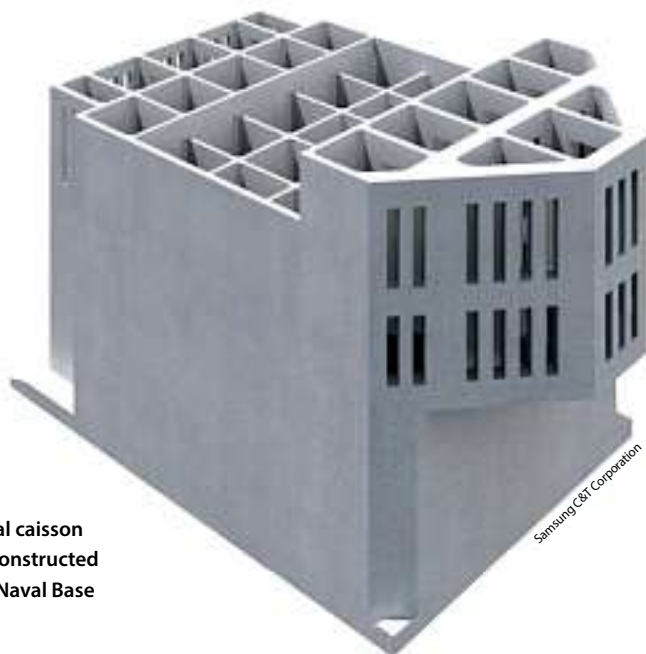
Hyundai E&C, which has a 29% stake in the \$775M project, is the biggest shareholder in the consortium. Penta Ocean and Samsung each have a 28% stake while Boskalis' stake is 15%.

Boskalis told *Ports&Harbors*: "It is expected that the majority of the 24.5M m³ of sand required for this project will be supplied by long distance bulk carriers. The equipment we deploy will depend on the sand supply and where it's deposited."

Hyundai E&C, South Korea's biggest construction firm, estimates the works will take 53 months with completion expected in January 2019. The company specialises in environmental dredging and dredging monitoring.

Although Hyundai E&C would not reveal more about its dredging technology, its 2014 annual report stated that its maritime and port business is among the three growth engines for the company's civil and environmental engineering division.

"The maritime and port business is focused on drastically improving its market leadership in the dredging and port sector, and is therefore intent on establishing mid- to long-term development plans as well as identifying new projects," the report stated. **PH**



A typical caisson being constructed at Jeju Naval Base

EU sets out LNG bunkering timeline



Falck Risc

Firefighters train at the Falck LNG facility in Rotterdam

As part of the EU's efforts to encourage owners to adopt cleaner fuels, on 29 September its member states adopted a directive for creating a basic LNG bunkering port network.

The directive obliges member states to provide infrastructure for supplying LNG and other cleaner fuels at ports.

Member states have two years to draw up an alternative fuel deployment strategy and submit it to the European Commission. These strategies will inform national targets for setting up recharging and refuelling points for a range of 'clean' fuels including electricity and hydrogen as well as natural gas.

Stricter emissions regulations from 1 January 2015 will require commercial ships in the Baltic and North seas and the English Channel to reduce sulphur emissions to 0.1% m/m (weight), either through using cleaning technologies or by burning cleaner fuels such as LNG. Preparations in northern Europe for these stricter regulations are already well in hand.

The commission's original draft directive had set a 2020 deadline for providing LNG bunkering facilities at key EU ports. But member states opted for a more flexible approach that lets them set national targets and gives them more time to

analyse their requirements.

In other clean fuel news, Antwerp Port Authority has launched a survey of potential users of a planned LNG bunkering and filling station for barges.

In July 2014, the port issued a tender for companies to bid for the construction contract and a parallel tender for operating the facility under concession.

The port authority is seeking input on who the facility would serve and what technologies they and operators might prefer. Survey responses will help the authority refine the bunkering station's construction specifications.

In Rotterdam, Dutch company Falck Risc has set up a facility at

the Maasvlakte development to train port and shipping employees on handling LNG safely. Fire crews, employees, and members of company emergency response teams in the chemical and petrochemical industries will learn about LNG's handling characteristics and train in a realistic environment.

The training facility stems from a combined effort by Falck Risc and Rotterdam port's joint fire service, which together won the tender for a safety study commissioned by the EU's Trans-European Network (TEN-T) as part of the LNG Masterplan Rhine-Main-Danube.

"Emergency response organisations in the entire Rhine-Main-Danube basin ranging from Rotterdam to Constanta [Romania] will benefit from this study," said Rotterdam's harbor master, René de Vries.

In collaboration with the port authorities of Antwerp, Mannheim, and Strasbourg as well as Swiss ports, the initiative will generate practical advice and strategy for creating guidelines for safely using LNG as a fuel for inland navigation.

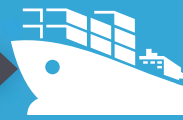
MORE INFO:
wpci.iaphworldports.org



Notable numbers

 130km

of the River Elbe's navigation channel waiting a decade to be dredged



14

additional RTGCs at Sohár to expand capacity to 1.5M teu

IGF Code moves to adoption

An inaugural session of the IMO Sub-Committee on Carriage of Cargoes and Containers (CCC 1) in September has agreed on the draft International Code of Safety for Ships using Gases or other Low flashpoint Fuels (IGF Code), reports IAPH's managing director for Europe, Evert Wijdeveld, .

The code's basic philosophy is to provide mandatory provisions for elements such as machinery, equipment, and systems using low flashpoint fuels such as liquefied natural gas (LNG).

New ships and vessels converted from conventional oil fuel to gases or other low-flashpoint fuels on or after the code comes into force will be subject to its provisions. For cargo ships of less than 500gt, the code will apply on a voluntary basis, based on national legislation.

In addition, draft SOLAS amendments, along with the draft IGF Code, will be submitted to the Maritime Safety Committee (MSC 94, 17-21 November 2014) for approval with a view to subsequent adoption.

As the draft IGF Code focuses initially on requirements for ships using LNG, the subcommittee also agreed a work plan for the next phase of developing the code. This would cover proposals on including coverage of fuels such as ethyl or methyl alcohol and low-flashpoint diesel.

A report is expected to be submitted to the subcommittee (CCC 2), which is scheduled to meet in September 2015.

CCC 1 also agreed:

- Draft informative material



A vessel bunkering LNG fuel: new ships and existing ships converting from conventional oil to gases or other low-flashpoint fuels such as LNG will need to adhere to the IGF Code if approved at the November meeting

related to the IMO/ILO/UNECE Code of Practice for the Packing of Cargo Transport Units (CTU Code), for submission to MSC 94 for approval.

The next set of draft amendments (03-15) to the International Maritime Solid Bulk Cargoes Code (IMSBC) for submission to MSC 95 – scheduled to meet in June 2015 – for adoption after finalisation by the Editorial and Technical Group.

- To invite the Marine Environment Committee (MEPC), at its 68th session in May 2015, to consider a separate set of draft amendments to the IMSBC Code, introducing non-mandatory provision of cargo information relating to whether or not the cargo is harmful to the marine environment (HME), in order to facilitate the implementation of the revised MARPOL Annex V regulations for the prevention of pollution by garbage from ships, which entered force on 1 January 2013. The responsibility for classifying and declaring whether a solid bulk cargo is HME or non-HME lies with the shipper.

- Draft revisions to update MSC.1/Circ.1352 on amendments to the Code of Safe Practice for Cargo Stowage and Securing (CSS Code) and MSC.1/Circ.1353 on revised guidelines for the preparation of the Cargo Securing Manual, based on an IACS Unified Interpretation that reference to container ships means dedicated container ships and other ships specifically designed and fitted for the purpose of carrying containers on deck.

- Additional draft revisions to Annex 14 of the CSS Code, based on an IACS unified interpretation to create a common understanding of the dimensions and arrangements specified in the annex.

A new draft informative section 14 of the IMSBC Code on prevention of pollution by cargo residues from ships was developed for submission to MEPC 68. The new section reproduces relevant sections of MARPOL Annex V and the 2012 guidelines for the implementation of MARPOL Annex V. MSC 95 will be invited to consider the

outcome of MEPC 68 when considering the draft amendments to the IMSBC Code.

The subcommittee also began preparing the next set of draft amendments (38-16) to the International Maritime Dangerous Goods (IMDG) Code and authorised E&T 23, which is scheduled to be held in spring 2015, to prepare the draft amendments. The E&T Group will take into consideration comments made and decisions taken at CCC 1 and the outcome of the UN Transport of Dangerous Goods (TDG) Sub-Committee in order to harmonise the IMDG Code with the 18th revised edition of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations.

The subcommittee discussed the development of the Approved Continuous Examination Programme (ACEP), following development of a pilot database by the International Container Bureau (BIC), and established a correspondence group to determine the extent of barriers to the development and global use of such a database.

The International Convention for Safe Containers, 1972, as amended, requires containers to be inspected and approved regularly through a periodic examination scheme – with not less than five-year intervals – or through the ACEP, where examinations are performed in connection with a major repair, refurbishment, or on-hire/off-hire interchange, not less than once every 30 months. Many container owners and operators follow the ACEP programme.

Contact - wijdeveld@iaph.eu



\$27Bn

the estimated cost of Transnet's 7-year infrastructure programme



18m

the depth to which Indian state-owned ports should dredge



A new standard is being tested to standardise integration of TOS with ECS for equipment such as this Konecranes RTG

Simple software integration

Terminal equipment makers are planning a large-scale trial to test out a new open standard for communications between terminal operating systems (TOS) and container handling equipment control systems (ECS).

The Port Equipment Manufacturers Association (PEMA) launched the open protocol early this year to facilitate integration between TOS providers, equipment manufacturers, and automation suppliers.

Aimed at standardising the logical communication interface between TOS and ECS, the open standard could – if rolled out industry-wide – reduce the time and cost required to implement and integrate the growing number of software components being used in

container terminal operations.

PEMA is now seeking a partner to help set up a project to prove the concept on the ground, said Kari Rintanen, vice-chair of the PEMA technology committee and manager of port technology research at Konecranes.

“Following the launch of the PEMA standard, we are now in the marketing phase, proposing it to end users and TOS providers,” he said.

“But what we really need is a reference case study and an end user to adopt the standard across all their systems. This will help prove the concept to end customers, who are the people who will ultimately drive this initiative, as they are the ones that choose TOS and crane equipment providers.”

PEMA's standard results from a two-year development phase involving major crane manufacturers such as ABB, Cargotec, Kalmar, and Konecranes as well as TOS provider Navis and several IT consultants.

It caters for different architectures, including direct connection between TOS and equipment, messaging directly between TOS and equipment control system, and read/write requests to a common database shared by the TOS and ECS. Messaging formats supported are XML, SQL and binary data.

“The protocol will benefit crane manufacturers, who currently have to duplicate much of the same programming but use slightly different protocols or

programming language to interface with different TOS providers,” said Rintanen.

“There are multiple different computers in cranes connected to TOS systems. Kone [cranes] for example offers automation, navigation, and automatic reporting of containers. It will be much simpler if all companies can utilise and maintain a single interface, rather than five or six different ones.”

The standard could also provide more certainty for end customers in ports, who can find it difficult to estimate the risk and timetable of integrating complex IT systems, he added.

Automated terminals are an important part of the standard. Their advanced features include sharing computerised ‘intelligence’ between TOS and ECS, such as route planning, traffic rules, and deadlock prevention. One example is ‘flexible’ job instruction scheduling.

“Ultimately, our goal was to create a fusion of ‘best ideas’ of different TOS and support all the known intelligent features of different TOS systems in one PEMA standard,” said Rintanen.

“It also defines some advanced features for communicating data between TOS and ECS, making it easier to implement more advanced automation, such as stack collision avoidance or safety checking.”

Looking ahead, PEMA is also planning to publish more guidance on the standard's implementation, which will include compatibility testing of software interfaces.

i MORE INFO: www.pema.org



4

number of shipping lines resuming operations in Iran



67%

the amount of collected HMTF funding to be spent in 2015

Box operators combat climate change

Two leading container terminal operators have initiated a joint campaign highlighting their fight against global warming through reducing waste and greenhouse gas emissions.

In September, DP World and Hutchison (HPH) launched 'Recycling begins & ends with you' at international ports where they both operate. Employees from the two operators collaborated in activities such as clean-up days at terminals, beaches, and other affected areas as well as food waste disposal and composting efforts, e-waste and battery recycling, office recycling, and green transportation.

Joint venues included Laem Chabang in Thailand, Ho Chi Minh City in Vietnam, Busan

in South Korea, and Buenos Aires in Argentina.

The degeneration of the estimated 11.2Bn tonnes of solid waste collected worldwide every year adds about 5% to global greenhouse gas emissions.

"We are both businesses with a global footprint and efforts such as the Waste Reduction

Campaign leverage the synergy between our two organisations to the benefit of the community," said DP World Group CEO Mohammed Sharaf.

"The port business by its very nature has long investment horizons and one of our aims as a company is to build and maintain strong communities for the long

term to ensure a sustainable future for all."

Eric Ip, HPH group managing director, said the collaboration will show "the expanded scope of environmental activities and the impact that the industry can make on global warming issues".

“Strong communities to ensure a sustainable future for all”

Mohammed Sharaf
DP World CEO



DP World

Emissions monitoring made easier

To help ease the administrative burden of monitoring emissions, US-based GreenLink Systems is offering onboard NOx emission monitoring units (NEMUs) that meet the requirements of the IMO NOx Technical Code for onboard maritime engines, including auxiliaries.

The NEMU is installed directly on the engine and exhaust system and its sensors measure to within 0.5ppm (parts per million) of NOx, said the company.

"It remains on the engine to measure, record, and transmit data 24/7, with new updates uploaded every few seconds," said GreenLink.

Constant information from

monitoring units must be stored in local servers accessible at any time on board or from shore,

"with all of it organised to ensure that the proper documentation for each regulatory agency is

immediately available upon request", said the firm.

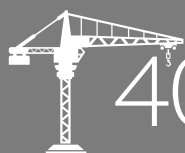
Mark Adair, technical director at GreenLink Systems, said: "There is quite a bit of bookkeeping involved to meet the requirements of all these regulations. It involves monitoring data that has to be collected, stored, and presented. And if a shipping company gets into the extreme case of litigation or fines, they would have the proper documentation and have a better chance of ultimately being found to have been in compliance."

Information from these units is relayed wirelessly via built-in 4G wireless modems to a secure, online database accessible over the internet from any location, said the company.



Dieter Hasenpusch

GreenLink should help ship operators manage their emissions



40 tonnes

lifting capacity of
Kiel's Schwedenkai
Intermodal Terminal's
new portal crane



July 2015

delivery date of
seven Kalmar
E-One2 RTGCs
to Puerto, Chile

City of Hamburg – Calling at the smartPORT

The city of Hamburg is eagerly anticipating hosting a diverse and thought-provoking programme at the 29th IAPH Hamburg World Ports Conference from 1-5 June 2015



Hamburg's City Hall located right in the centre of the Hanseatic city reflects the city's pride in itself.

Visitors to next year's IAPH World Ports Conference can look forward to a comprehensive conference programme that will address intelligent port management. They will also have the opportunity to experience the special flair of the port city of Hamburg. Held under the banner theme of "City of Hamburg – Calling at the smartPORT", the conference hosted by the Hamburg Port Authority (HPA) will feature exciting forums and discussions, complemented by

entertaining evening events where the HPA will take its guests on a journey back in time through the history of Hamburg. Enjoy the benefits of booking early and secure your conference ticket and/or exhibit booth space now.

To balance the needs of business and the environment, the Port of Hamburg has made it its mission to promote intelligent port management. In our times of globalisation and climate change, creativity and alternative actions are required to achieve

sustainable economic growth with as little impact on the environment as possible. During the five-day World Ports Conference the Hamburg Port Authority (HPA) will demonstrate how transparency and innovative technologies enable sustainable port management in Hamburg. In various conference sessions experts from all over the world will speak about and discuss subjects revolving around smart port logistics, the challenges ports are facing when it comes to

alternative energy sources and possible intelligent solutions, developments in the container and cruise shipping industries, and the latest issues and trends in maritime legislation.

The evening events will be held at historic buildings located right in the heart of the Hanseatic city. The Fischauktionshalle (Fish Auction Hall) and the Rathaus (City Hall) are two of Hamburg's most famous edifices that reflect the city's pride in itself. The Fischauktionshalle, built in the style of an ancient Roman market hall and situated directly on the banks of the River Elbe with a view of the port, is the perfect venue for the Gala Dinner of the conference. The Rathaus, the seat of the Free and Hanseatic City of Hamburg's parliament, will be the venue for the official opening of the conference. Built at the end of the 19th Century, it is one of the most magnificent Neo-Renaissance government buildings in Germany. We shall shortly publish further information about other conference venues at www.iaph2015.org.

The trade fair and exhibition area will be as diverse as the conference and evening programme. Conference exhibit booths can now be booked online at www.iaph2015.org/exhibition. Benefit from booking early: not only can you choose the size of your stand, but you can also determine the position of your stand in the conference exhibit area. Conference attendees will also benefit from booking early: register now and enjoy an early bird discount of 10% on the conference fee.



We value your opinions

Do you have strong views about any of the articles in *Ports & Harbors*?

Are there other industry issues you feel strongly about?

Email your views to ph@iaphworldports.org and we'll be happy to include them

A port career is well worthwhile

▶ Women's forum

Justine Camoin, MGI project manager and vice chair of the IAPH Women's Forum, discusses the challenges facing women in the port industry and how the old culture is changing

How did you carve a career that led you to the ports industry?

I actually grew up in a context that helped. Both my parents were freight forwarders, all my uncles were hazardous cargo drivers and even my grandpa was a sailor. I think that it definitely orientated me to choose that industry. I graduated from the Institute of Technology of Aix-en-Provence, France, to pursue a degree in logistics and transportation. After five years working for shipping lines and freight forwarders in France and Ireland, I joined MGI [Marseille Gyptis International], based in Marseilles, four years ago. The best part of working in an IT company that develop Cargo Community System for ports is that you get a 360 vision of the maritime industry as every single profession is represented: port authority, customs, freight forwarders, shipping agents, stevedores.

During the course of your career have you come across any obstacles that you had to overcome due to the fact that you are a woman?

When I started working nine years ago, I had a short-term contract with one of the biggest shipping lines worldwide. I was working in the customer service and documentation department, but also got a chance to work with the vessels shipbroker team. It seemed like a great job, very interesting, and I wanted to get trained for it. However, I got a negative response from my CEO [chief executive officer] who told me that he could not give that position to a woman. The main issue was a legal gap on the fact that when you are on board a vessel, you are in the country of the vessel's flag hence under that country's law which could be dangerous for women.

To be honest, this was something I had never thought.

Is the industry in Europe too male-dominated? If so, do you feel it's changing/has changed?

I do think so. And interestingly, it was proven that other regions such as South East Asia have more women at Executive positions than Europe.

There seems to be a difference between the administrative positions and the operational positions. More and more women are nominated for operational positions but I think we are still far from our goal. This is also the case for port CEOs even though Christine Cabau Woerhel was recently nominated CEO of the Marseilles Port Authority and that I see more and more women reaching such positions.

So I would say that the situation is currently changing, probably because jobs requirements have changed too. If fewer women are nominated for such positions, it has been proven that when they get the job, they do it just as well as men would.

Why is the IAPH Women's Forum important?

The initiative itself is important as the IAPH represents ports from all over the world. It gives us a visibility on every continent and it enables [us] to highlight challenges that women can come across in certain regions but that others will never have to overcome. We open all our sessions to men during our conferences. The goal of the

Women's Forum isn't to gather only women to talk about women's problems but rather discuss these issues in front of a mixed audience.

What advice would you give to women interested in pursuing a career in ports?

When I look back to what I have done since I started working in shipping a decade ago, my main feedback is that it was worth it. I would expect the situation to only get better in the future as women have shown their abilities to occupy the same positions as men. I would also say that now is a great time, especially to witness all the changes that I am sure will occur in the coming years. Last but not least, the maritime industry still has great days to come, several orientations and careers to propose and is a very dynamic and interesting field.



Credit: Justine Camoin



Winners at 2013's IAPH awards ceremony

IAPH Awards 2015 – deadline draws near, but there is still time...

The deadline for entries for the IAPH awards is 31 December. So if you have a good idea that could benefit your port, and that you wish to share with the world ports community, don't delay in sending your entry (in Microsoft Word form) by email to the IAPH Secretariat at info@iaphworldports.org. All entries should be submitted in English.

The five competitions give members the chance to promote their ports at next year's Hamburg IAPH World Ports Conference.

Essay Contest – Akiyama Award and Hamburg Open Award

Do you have a good idea to improve your port or the port industry? IAPH members are invited to submit entries for the 2015 Essay Contest, organised by the Communication and Community Relations Committee.

It is your chance to showcase your ideas such as strategies to increase port efficiency and productivity, and improving the port-community relationship.

Two awards are available – the Akiyama Award and the Hamburg Open Award.

Prizes for the overall winners include \$1,000 and an invitation to the awards ceremony at the

29th IAPH World Ports Conference in Hamburg in June 2015. The Akiyama Award winner will receive a round-trip air ticket, accommodation in Hamburg, and free entry to the conference, while the winner of the Hamburg Open Award will have free entry to the conference.

A merit prize of \$500 for either category may be given if the judging panel believes there is a second outstanding entry that just falls short of the top prize.

Communications, Environment and IT Award

Don't miss the chance to showcase your port's excellence in port communications, port

environment, and IT capabilities.

The Port Communications Award is given to IAPH members' ports that are able to demonstrate a case study or project that has been both planned and implemented successfully over the past two years. It may be your innovative marketing concept or community relations strategy, for example.

The Port Environment Award is presented to IAPH members' ports that can demonstrate an excellent case study in environmental management, environmental protection, or sustainability that has been successfully planned



Photo: Shutterstock

and implemented over the past two years.

The IT Award is given to IAPH members' ports that recognise the benefits of innovative IT in relation to the port itself, its customers and the logistics chain.

Gold, silver and bronze plaques will be presented to the top three award winners.

Schedule for submissions:

- 31 December 2014 – deadline for receipt of entries
- January-March 2015 – initial screening and shortlisting
- April 2015 – final decision
- Awards presentation – Plenary Session at the 29th IAPH World Ports Conference, 1-5 June 2015, in Hamburg, Germany.

MORE INFO:

www.iaphworldports.org/2015.aspx



Annual Report is available online

IAPH's *Annual Report 2013-2014* has been published in digital format and is available to all members on the IAPH website. It highlights the major outcomes and activities of the association over the past year, such as the Conference, Mid-term Ports Conference, technical committees, Women's Forum and WPCI.



i MORE INFO: www.iaphworldports.org

IAPH scholarship is still available



IAPH's Training Scholarship 2014, which can provide up to \$2,500 per individual, is still available.

The scholarship is aimed at giving staff of developing ports the opportunity to attend advanced port training programmes overseas, so they can gain the latest knowledge on port management and operation and expand their network of contacts.

Since the scholarship scheme was set up in 1980 more than 100 people have received financial assistance. Distance-learning programmes are also offered for members who cannot travel.

A typical applicant would be a staff member of an IAPH regular member port whose membership dues fall into the bracket of six credits or fewer. The scheme does not extend to staff employed by a central government. As many as four scholarships can be awarded each year.

Applicants for training scholarships should submit a form to the IAPH secretariat.

i MORE INFO: www.iaphworldports.org

Visiting head office...

Mr Martin Byrne (pictured lower left), chief executive of Port Nelson, New Zealand, visited IAPH Head Office on 15 October, where he was greeted by Secretary General Susumu Naruse and his staff.

Martin is a member of the IAPH Executive Committee (Exco) and vice-chairman of the Communications/Community Relations committee. They exchanged relevant information



and opinions on various Association matters.

2014

2015

2016

Dates for your diary

A selection of forthcoming maritime courses and conferences



November

- 9-13:** 103rd AAPA Annual Convention, Houston, TX, USA
www.aapa-ports.org
- 11-13:** Intermodal Europe 2014, Rotterdam, Netherlands
www.intermodal-events.com
- 16-19:** The 10th PAPC Conference, Mombasa, Kenya
www.papc2014.co.ke
- 17:** IAPH Africa/Europe Regional Meeting (in conjunction with the 10th PAPC Conference), Mombasa, Kenya
www.papc2014.co.ke
- 19:** 8th International Seminar 2014, Amsterdam, Netherlands
www.mcimedia.com
- 24-25:** Environmental Aspects of Dredging, Delft, Netherlands
www.iadc-dredging.com
- 24-26:** ICOPMAS 2014, Tehran, Iran
<http://icopmas.pmo.ir/en/pages/default.aspx>
- 24-27:** Management of a Conventional Terminal, Singapore
www.psa-institute.com
- 25-27:** 5th Gas Fuelled Ships Conference, Stavanger, Norway
www.motorship.com/gfsconference
- 26-27:** The 15th Annual Asia-Pacific Manning & Training Conference, Manila, Philippines
www.informamaritimeevents.com/event/manningandtrainingasia
- Starts from 27:** Certificate in Marine Warranty Surveying, Distance learning
www.ibt-academy.com
- 27-28:** 9th Southern Asia Ports, Logistics and Shipping 2014, Chennai, India
www.transportevents.com

December

- 1-19:** Port Transit-Corridor Policy, Operations & Transshipment Logistics Management, London, UK
www.ttpminternational.co.uk
- 2-3:** Transport Security Expo, London, UK
www.transec.com
- 8-10:** Saudi Transtec 2014, Dammam, Saudi Arabia
www.sauditranstec.com
- 10-11:** TOC Market Briefing: West Africa, Tenerife, Spain
www.toc-marketbriefing.com

June 2015

- 1-5:** 29th IAPH World Ports Conference, Hamburg, Germany
www.iaph2015.org



PortMiami

PortMiami is preparing...

Juan M Kuryla, recently appointed director of PortMiami, in Florida, United States, tells us how PortMiami is getting a fast, reliable service ready for the next generation of bigger ships

“PortMiami will be the only US Atlantic port south of Norfolk, Virginia, at -50 ft.”

US southeast ports are preparing for the larger vessels that will come calling once the Panama Canal's expansion is complete in 2016. At PortMiami, we are working to accommodate the projected increase in super-sized container vessels. PortMiami will be the first port of call ready to extend a warm welcome to the post-Panamax ships, with infrastructure enhancements that guarantee reliable and improved speed to market.

At PortMiami we currently have the infrastructure in place to provide the world's top shipping lines with the best quality of service:

- new super-post Panamax gantry cranes
- a recently opened restack facility
- new on-dock rail service
- a new tunnel linking the port directly to the Interstate Highway System.

Additionally, PortMiami is dredging its main cargo channel from its current water depth of -42 feet to -50/-52 ft. When completed in summer 2015, PortMiami will be the only US Atlantic port south of Norfolk, Virginia, at -50 ft.

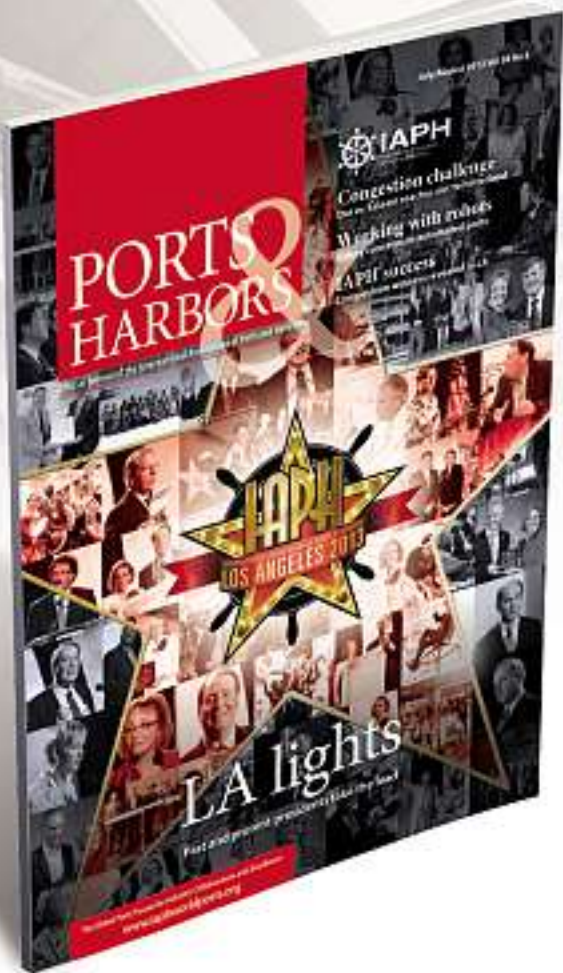
Miami's trade with Asia is expected to double over the next decade, especially as a result of shifts in trade routes to east coast ports and PortMiami's ability to berth deeper draft vessels. With the expanded Panama Canal, shippers will be able to move more cargo to and from the US via all-water routes to reduce fuel costs and reduce emissions, and PortMiami will stand ready with guaranteed fast and reliable service, as the first port of call from the Canal. **R&H**

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A large, stylized handwritten signature in white ink, likely belonging to Juan M Kuryla, is positioned at the bottom right of the page.

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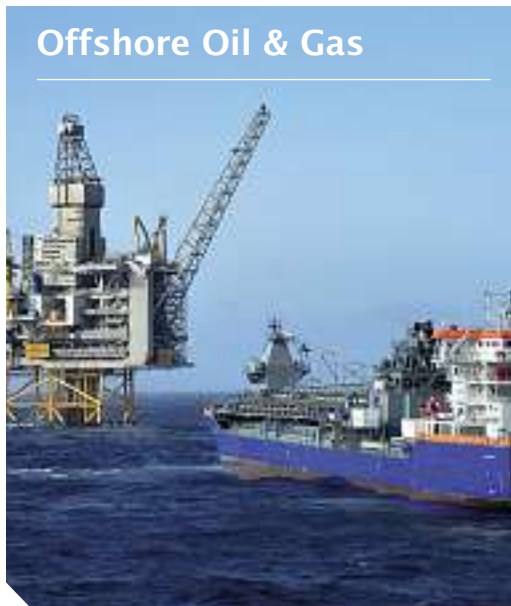


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