



PORTS HARBORS

Official Journal of the International Association of Ports and Harbors

Congestion challenge
Dar es Salaam reaches out to hinterland

Working with robots
Safety concerns in automated ports

IAPH success
Competition winners revealed in LA



LA lights

Past and present presidents take the lead



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container handling and port equipment



D3163
Baoli CPCD
Year of manufacture: 2008
Price: 39,000 EUR



D3237
Fantuzzi CS45KM
Year of manufacture: 2003
Price: 139,000 EUR



D2847
Fantuzzi FDC350RR
Year of manufacture: 2001
Price: 130,000 EUR



D3266
Fantuzzi CS7.5-S6
Year of manufacture: 2006
Price: 99,000 EUR



D3192
Fantuzzi FDC160
Year of manufacture: 2000
Price: 55,000 EUR



DK032
Hyster RS4636CH
Year of manufacture: 2007
Price: 199,000 EUR



D3247
Kalmar DRF450-70S5Xs
Year of manufacture: 2007
Price: 220,000 EUR



D3131
Kalmar DRF450-70C5XS
Year of manufacture: 2005
Price: 195,000 EUR



D3223
Kalmar DRF450-65A5X
Year of manufacture: 2009
Price: 270,000 EUR



D3244
Kalmar DRF450-65S5X
Year of manufacture: 2005
Price: 170,000 EUR



D3243
Kalmar DRF450-65S5X
Year of manufacture: 2005
Price: 170,000 EUR



D3248
Kalmar DRF420-60-S5
Year of manufacture: 2005
Price: 165,000 EUR



D3249
Kalmar DRD420-60-S5
Year of manufacture: 1998
Price: 115,000 EUR



D3171
Kalmar DRD100-52S6
Year of manufacture: 2003
Price: 115,000 EUR



D3234
Kalmar DC845RS5
Year of manufacture: 1996
Price: 69,000 EUR



D3219
Kalmar DCE90-45E7
Year of manufacture: 2006
Price: 95,000 EUR



D3232
Kalmar DCE160-12
Year of manufacture: 2013
Price: 169,000 EUR



D3177
Kalmar DCD70-35E4
Year of manufacture: 1997
Price: 45,000 EUR



E4644
Kalmar ECD90-6L
Year of manufacture: 2001
Price: 44,000 EUR



D3269
Linde C4535-TL
Year of manufacture: 2002
Price: 120,000 EUR



DK006
Linde C4535TL4
Year of manufacture: 2000
Price: 100,000 EUR



D3206
Linde C4234TL5
Year of manufacture: 2005
Price: 140,000 EUR



D3229
PPM FCH45
Year of manufacture: 1997
Price: 83,000 EUR



DK017
SMV SC108TB6
Year of manufacture: 2007
Price: 100,000 EUR



D3174
Svetruck 2812045
Year of manufacture: 1995
Price: 79,000 EUR



D3272
Svetruck 15120-35
Year of manufacture: 1980
Price: 25,000 EUR



D3255
Svetruck 13,6-60-30
Year of manufacture: 1996
Price: 39,000 EUR



D3268
Svetruck 1260-30
Year of manufacture: 2005
Price: 45,000 EUR



DK008
Svetruck ECS6H
Year of manufacture: 2006
Price: 75,000 EUR



D2817
Valmet TD1812
Year of manufacture: 1990
Price: 62,000 EUR



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Delegates were dazzled by a glittering Hollywood-themed IAPH conference hosted by Port of LA

Photos: Aya Fujinami, Hamburg Port Authority, Port of Los Angeles, Shutterstock. Art work: Hannah Kidd

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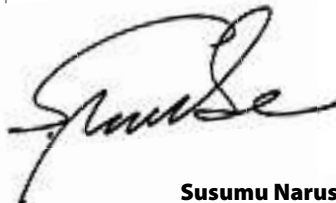
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Thank you Los Angeles

Secretary General Naruse encourages members to take part in technical committee meetings



Susumu Naruse
Secretary General – The International Association of Ports and Harbors



The 28th World Ports Conference in Los Angeles was a great success. More than 500 people in the global port industry gathered in LA to share the latest information and debate views and opinions with their counterparts from the other parts of the world. The line-up of the speakers in the working sessions were superb, which included Captain Richard Phillips, the captain of the vessel hijacked off the coast of Somalia, researchers in the maritime and economic field, and many CEOs of major port authorities.

The IAPH membership unanimously elected Grant Gilfillan, CEO of Sydney Ports Corporation, as president for the next term (2013-15) along with three vice-presidents representing three regions. IAPH also adopted six resolutions, which covered various current challenges surrounding the industry, such as LNG-fuelled ships and ports, passenger ship safety, verification of container weight, piracy, and the ratification of the HNS Convention. By adopting these resolutions and clarifying IAPH's position about these issues, we would like to reach out to the global maritime

industry more aggressively.

IAPH's new logo was presented to the audience on this special occasion. It has been discussed for a long time under the Communication & Community Relations Committee since formulating IAPH's new vision and mission statements in Jerusalem last year. To exemplify this new vision and mission, the logo represents the unity of people in the port industry as well as other sectors in the maritime

society. Like the logo we had used since the establishment of IAPH, I hope the new logo will be loved by the membership.

The IAPH technical committees are starting their new assignments based on new work plans that were approved in LA. Some of them will prove challenging for example, preparing guidelines on safety procedures and port facility planning for accommodating LNG-fuelled ships and fuelling them; carrying out productivity indicators for container terminals study; and to update the effect of the Arctic Sea routes navigability on the port industry. I'd like more IAPH members to consider joining our technical committees, which are the backbone of the association, and share their expertise and experience with others to obtain better results over the next two years. PH

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Meet the change agents

Your past and present presidents look forward to a refocused organisation

President, Grant Gilfillan

Compared to many of you, I have only been involved with IAPH for a relatively short period of time – about five years. However, in 2008 I was asked to become active in IAPH and I made the decision to give some of my time to the association. IAPH is a very special organisation with a phenomenal heart and an enormous intellect. Its members – the knowledge we carry – is the knowledge of our industry and it is so valuable.

The IAPH conference in Los Angeles started off with a discussion about what we need to do to keep moving forward. We discussed the need to refocus on what we want to do more of and whether changes are needed to ensure we remain a prominent voice in our industry. My commitment to you is that I will help us to find this renewed focus and help deliver change.

I believe we need to raise our profile on a few issues that we feel are important to us, for example, overweight containers. We need to be seen as leaders of those issues. I know that we can count on the full support of the IAPH Secretariat as we move the organisation forward. Each of the recent presidents, and

especially Geraldine Knatz, have contributed a great deal towards energising IAPH and the message is that we need to continue this process while exploring new ground.

To do this I need you to be open and share your views with me. We may in time have to make some difficult decisions and this will be on our agenda for the next two to six years.

I look forward to the next two years as your president as we make a tangible and positive difference to the association. I am a change agent and I enjoy the challenge of trying to make something which is good, even better. I also value tradition and above all else I understand the importance of people feeling good about their involvement with IAPH. **PH**



Photos: Port of Los Angeles

Past president, Dr Geraldine Knatz

When I took on the role of IAPH president two years ago in Busan, a big part of the mission I set for myself was to promote how important a forum IAPH is for global ports. We made a lot of progress, but there is still much more we can and should do to promote our collective work. As business people, we have all seen companies that over-promote themselves and overstate their successes. Well, on the contrary, it's the opposite with IAPH. Together, we do ground-breaking work, but it is promoted very modestly. We need to keep working on that, not only for the publicity, but also to grow our member base – which is something we very much need to do so we can continue to affect positive changes in the industry.

We have much to be proud of. Two years ago we were formalising our Environmental Ship Index (ESI) so that ports on every continent could tailor it their specific needs. Since then, Los Angeles has proudly joined ESI. At the LA conference in May, we continued to develop global port industry positions

on piracy and overweight containers, while also pursuing new areas of advocacy that address the need for more passenger vessel safety, more attention towards developing LNG bunkering and handling standards, and more ratification of the HNS Conventions.

There's a tongue-in-cheek saying that our modern-day maritime industry represents 500 years of rich history unmarked by progress. Well, this organisation dispels that perspective. We stay the course and build on our successes. Now more than ever we have strong wind in our sails. We have momentum and we have great initiatives to share with the world. **PH**



Port updates

BRAZIL BILL

Brazilian President Dilma Rousseff's port reform bill finally passed Congress, after months of strikes and heated negotiations. The \$26Bn bill introduced in December 2012 aims to open up the industry to reform by easing restrictions on existing and future ports. Major tenets of the new bill include allowing privately owned port terminals to handle third-party cargo and that future terminal concessions will be awarded to the "lowest tariff to user," according to Drewry Maritime Research.

EC PORT INITIATIVE

The Port of Rotterdam Authority and Deltalinqs (the association of port industries in Rotterdam) "are afraid that the European Commission's proposal to appoint an independent supervisor for ports in every member state will lead to a lot of unnecessary procedures and delays". The proposal forms part of the new port initiative that the EC said "will help port operators upgrade their services and facilities, as well as [provide] more financial autonomy".

POLA LEASE EXTENDED

Los Angeles mayor Antonio Villaraigosa announced that marine transport company Yang Ming has extended its current lease at Port of LA – due to end in 2021 – to 2030. The extension represents additional port revenues of \$365-\$525M, depending on cargo volumes. On a recent trade visit to Beijing, Villaraigosa also signed a MoU to expand and modernise the Yang Ming terminal facilities which will see PoLA invest \$122M in construction of a new 384m wharf.

BAYONNE BRIDGE LIFT

New York's plan to raise the Bayonne Bridge took a major step forward with the awarding of a \$743M construction contract. The Port Authority of New York and New Jersey approved a joint venture in April between Skanska Koch and Kiewit Infrastructure to lead the \$1.3Bn project. Work will begin on the elevated roadway later this year.

Gioia Tauro, Italy's largest container port saw throughput drop between 2010-11



Photo: Medcenter

The Italian shipping industry has given a cautious welcome to positive remarks by Vincenzo De Luca, who has been put in charge of transport infrastructure by the new government, led by Enrico Letta, which took office in April.

Italy's shipping organisations are lobbying the government to give urgent priority to a long-delayed ports reform bill, which is intended to allow the country to recover its lost share of the Mediterranean container market.

Shortly after his appointment, De Luca told journalists: "I want to make an appeal to all those with institutional responsibility to begin to discuss those projects that have been suspended but should be implemented. I am available to everyone. The way I want to work is this: [reviving] the economy and cutting red tape."

In the two decades since the last major ports reform legislation, Italy has seen its estimated share of the Mediterranean container market fall from 20% to just above 15%. A lack of government support has meant Italy's container ports have failed to keep up with their regional rivals in terms of investment and infrastructure.

In the case of Italy's biggest box port, Gioia Tauro, container throughput actually fell between 2001 and 2011 (see box), although the consortium that runs the terminal – consisting of APM

2011 Italian container port throughput (teu)

Main ports	2001	2011
Gioia Tauro	2,488,332	2,304,987
Genoa	1,526,526	1,847,102
La Spezia	974,646	1,307,274
Livorno	501,912	637,798
Taranto	197,755	604,404
Cagliari-Sarroch	25,908	603,236
Naples	430,097	526,768
Venice	246,196	458,363
Trieste	200,623	393,186
Total (all container ports)	7,272,001	9,528,629

Source: Assoporti

Terminals, MSC, and Contship Italia – has promised further investment if the terminal manages to achieve increased productivity of 3.6M teu in 2014 by means of efficiency measures.

A draft ports reform bill was tabled during the previous legislative period but shelved by the crisis administration of Mario Monti because of the austerity measures needed to save Italy from financial meltdown.

The major weakness that the draft bill was intended to answer is the lack of financial autonomy of Italy's port authorities and their overreliance on central government approval for port infrastructure improvements. Other structural deficiencies include a lack of transparency in

procedures for awarding terminal concessions and a failure to acknowledge the importance to ports of the whole transport logistics chain, which was a concept still in its infancy when the previous port reform legislation was enacted two decades ago.

The draft legislation would put port authorities in charge of essential improvement projects and give them a say in shaping vital road and rail infrastructure in their hinterland.

The increase in container vessel size will inevitably result in fewer regional calls by deepsea liners, so it is vital for Italian ports to achieve operational parity with their regional rivals quickly, to ensure their future growth and competitiveness.

Felixstowe unfazed by UK rival's launch

Hutchinson Ports' celebration of Felixstowe being named the Best European Container Terminal at the Asian Freight & Supply Chain Awards in May in Beijing is a timely warning to rival terminal operator DP World that it faces stiff competition for deepsea carriers when its UK flagship terminal, London Gateway, opens later this year.

The UK's premier container terminal at Felixstowe is unfazed by the prospect of a container 'superport' near London and is confident it can continue to offer a superior alternative to shippers and deepsea liner services serving the UK and the nearby continent. "Felixstowe is still the best-located UK port for deepsea container ships serving North Europe," said a spokesman for Hutchison Ports (UK), which runs the Felixstowe facility.

"It offers deepsea liners the shortest North Sea deviation and the greatest flexibility, without a long river passage that is costly to lines both in terms of time and fuel consumption."

"This applies even more so to the new generation of bigger ships, since for them the deviation costs are even greater. We also have the capacity to handle the extra box volumes those ships will bring, having opened two further berths [8&9] in 2011 capable of handling ships of 18,000teu or larger," he told *P&H*.

Depending on customer demand, in terms of future proofing Felixstowe will be able to bolt on a further super-post-Panamax berth next to the current two, which are designed to be dredged to a maximum depth of 18m.

Across the estuary it already has UK government consent for the building of a new container terminal at Bathside Bay, which if required would bring the total annual capacity of Harwich

Haven's container operations up to 8M teu.

The port has addressed recent criticisms made by UK cargo rail operators of insufficient rail capacity out of Felixstowe by announcing that, ahead of London Gateway commencing operations in the fourth quarter of 2013 (4Q13), the terminal will add a third rail terminal in June, running longer trains.

The £35M (\$55M) terminal, co-financed by the EU's TEN-T infrastructure improvement programme, will be able to handle up to 1M teu of rail cargo when fully developed. It will have three Liebherr rail-mounted gantry cranes and provide nine working roads, crucially allowing longer trains to be bundled without the requirement to split and shunt.

The current two rail terminals handle trains with a standard length of 24 wagons.

"We are imminently going to increase our daily rail freight movements to 60-30 in and out," the spokesman announced. "The third terminal will allow us to run longer trains of up to 35 wagons as opposed to the current standard length."

These improvements will allow us eventually to double our rail capacity," he said.

"Felixstowe has the UK's largest scale of rail and feeder services in terms of destinations and frequency, which is very attractive to shippers. We are also only 65 miles from London yet outside the congested area near the M25 [London orbital motorway].

In terms of transit times, Felixstowe believes its road connections to the north of England and the so-called Midlands 'golden triangle' – from where much of the UK's logistics distribution is conducted – are extremely competitive and certainly superior to the road infrastructure of ports based near the congested London conurbation. "One of the UK's national infrastructure priorities – the A14 – comes right to our front door," the spokesman pointed out.

London Gateway may be more convenient for boxes destined for the London catchment area, but for the rest of this decade it is likely to be playing catch-up with Felixstowe with regards to distribution to UK destinations north of the capital.



Felixstowe's berths for mega box ships

Photo: Hutchinson Ports UK

Port updates

CHINA PLANS PORTS

China plans to open or expand 28 ports in 2013, according to its State Port of Entry Office. Fourteen of these will be land ports, including nine newly opened and five expanded, with 14 water ports, two new, and 12 expanded. Port of Taiping in Dalian will be opened this year, the office added. Its Development Program of National Ports of Entry calls for the opening or expansion of 50 coastal ports between 2011 and 15.

EXTENDED LA LEASE

Terminal operator Ports America has won a five-year contract to take over cruise operations at the Port of LA. The agreement, announced in May, includes two five-year options. In addition to managing the terminal, Ports America will be responsible for maintenance and repairs, security, special event management, and collecting dockage, wharfage, and terminal fees. Ports America also operates container, break bulk, and ro-ro terminals at the port.

DHB CHIEF EXEC RESIGNS

Dover Harbour Board's (DHB's) chief executive, Bob Goldfield, stood down from the position on 31 May. Commenting on the announcement, Goldfield stated: "Those 11 years have been, in turn, exciting, demanding, and challenging." The port's chief operating officer, Tim Waggott, was appointed as acting CEO on 1 June. Goldfield will carry out other duties for DHB in advance of his September departure.

EMISSIONS ADMISSION

Tanger Med would join an emission control area if the IMO expanded its current proposed ECAs in northern Europe to include the Med. "If the Moroccan government ratified a future international accord creating an ECA in the Med, then Tanger Med would be obliged to implement the ECA rules," the port authority's general manager Najlaa Diouri said. IMO regulations enforcing a reduction in sulphur content in bunker fuel emissions are due to come into force in the Baltic and North seas by 2015.

Cash & Cargo

CAPACITY AND COSTS

Vessel overcapacity and rising costs in the trans-Pacific box trades is pressuring liner operators to push for another round of rate increases. The Transpacific Stabilization Agreement recommended on 28 May that its 15 carriers increase rates by \$400/feu from Asia to the US West Coast and by \$600/feu to all other destinations, effective from 1 July. The Asia-US box liner forum claimed the increase is essential to staying financially viable and maintaining service levels amid sluggish demand and new vessel capacity entering the market.

APMT STAYS LEVEL

APM Terminals saw first quarter net profit drop 27% to \$166M but said the reduction was largely due to first quarter profits last year having been boosted by asset sales. First quarter results last year were buoyed by \$73M from the sale of Maersk Equipment Service in the US and a half of the company's stake in Xiamen terminal in China. The number of containers handled by APM Terminals in the first quarter this year stayed level with last year at 8.6M teu.

HPA SEES FALL

Hutchison Port Holdings Trust posted a 16% fall in net profit during the first quarter this year mainly due to one-off costs from the acquisition of Asia Container Terminals. Profits fell to HK\$380.3M (\$49M) against profits of HK\$450M in the same period last year, the group said in a filing at the Singapore exchange. HPH Trust's container throughput in HIT fell 7.4% due to weaker-than-expected transshipment and EU cargoes.

ICTSI INCREASES OPS

ICTSI has inked a deal to provide stevedoring services at four berths in Tanjung Priok Port for 15 years. The Philippines port operator said the agreement was undertaken through its Indonesian indirect subsidiary PT PBM Olah Jasa Andal. It will handle berths 300, 301, 302, and 303, which have a total of 600m quay length, 7ha container yard, and an estimated capacity of 400,000 teu a year.

Long Beach prepares for more grain exports



Photo: Port of Long Beach

Grain is to be exported in boxes at TTI's terminal (in the far background) at Long Beach

A container terminal operator is raising the stakes for its plan to make better use of empty containers by increasing its grain-handling capacity at the Port of Long Beach. The plan, proposed by Total Terminals International (TTI) in 2010, is meant to improve the balance of cargo moving through TTI's container facility by exporting grain in boxes that would ordinarily be shipped back empty to China.

However, the plan had to be revised in May to accommodate changes in the time allowed for rail unloading before incurring demurrage fees from rail operator BNSF. The new rules reduce rail unloading to 15 hours. To allow for quicker rail unloading, TTI had to increase grain silo capacity to provide additional buffering between rail unloading operations and container loading operations.

Those changes, in addition to accommodating an increase in the size of BNSF's hopper cars, have

increased the maximum throughput of the facility to 27%, from 2.2M to 2.8M tonnes per year.

"Roughly half the containers at the port are sent back overseas empty anyway, so this gives our tenant better utilisation of their equipment," Port of Long Beach spokesman Lee Peterson told *P&H*.

The grain transloading facility would be built on 4.7ha (11.6 acres) adjacent to TTI's 156ha (385-acre) container terminal at the port's Pier T. TTI would be able to transfer grain and dried distillers grains with solubles, known as DDGS, which is a high-quality cattle feed. The facility would use existing rail infrastructure and require the same frequency of vessel calls.

Peterson conceded grain exports moving out of the US West Coast typically move through the Northwest ports such as Seattle and Portland, Oregon. "That's been the tradition for ag exporters, but we would like to see more of that

come this way. Dried grain is not the most perishable commodity, so it's not time sensitive" to longer rail transit times, Peterson said.

Vessels destined for China typically have faster transit times out of the Pacific Northwest as well.

"But we would argue that once they get here, the rail capacity connecting to the rest of the country is more robust in terms of frequency," Peterson asserted. "Ultimately business demand is going to determine how well this works, and we think the demand and transportation rates will make grain exports work here".

Construction time under the revised plan increases from 14 to 18 months to accommodate a third silo and additional rail storage. TTI estimates construction will start in September 2013 and end by February 2015, depending on completion of approvals and permits.

Savannah plans dispute settled

Georgia port officials have agreed to pay \$36M and transfer 810ha (2,000) acres of salt marsh to environmental interests to clear the way for their channel-deepening project at the Port of Savannah. The mediation settlement, approved at the end of May by a US federal judge, also requires that the US Army Corps of Engineers increase their oversight of oxygen injection systems to better monitor the effects of dredging the Savannah River.

This ends a nearly 18-month dispute over permitting the \$652M project, in which the Georgia Ports Authority (GPA) is seeking to deepen the river to 14.3m (47ft) to accommodate large post-Panamax vessels.

The river forms part of the border between South Carolina (SC) and Georgia, and green groups have

challenged SC's approval of the project, arguing that the environmental mitigation plan was insufficient.

The Army Corps, which was also involved in the dispute, is a federal agency that technically has jurisdiction over states when it comes to navigational issues, according to Army Corps' Savannah District spokesman, Billy Birdwell.

However, "we chose not to pursue that," Birdwell said. "Litigation takes time, so we entered into agreement we all thought was amicable."

The US Senate version of the Water Resources Development Act, passed in June, approved funding for the deepening. Similar legislation must still be approved by the US House of Representatives before it can be signed into law.

Port developments spark debate

An agreement between nine Myanmar businesses and three Japanese companies – Mitsubishi, Marubeni, and Sumitomo – to set up the Myanmar Thilawa SEZ Development Public Company (MTSDPC) was inked on 25 May. Construction of the first phase of the economic zone, situated near the business capital of Yangon, should start in October.

The Thilawa site already has a port but the plan is now to develop it as a 'two-class' port, a report on the Eleven Myanmar website said. Class A will include car and electronic factories as well as a residential area with schools and hospitals. The other class is not yet specified.

The project covers an area of over 2,000 hectares showing how modest the initial development of 400 acres is. Japanese government money in the form of a long-term,

low-interest rate loan of \$250M will help development.

Another project is an almost-finished crude oil terminal at Kyaukphyu, which will be the transfer point for oil brought in from the Middle East and gas taken from Myanmar's Shwe field. These will then be transferred up through Myanmar and across the border to the Chinese provincial capital of Kunming via huge pipelines.

The oil pipe is reported to have a capacity of 12M tonnes of crude per year, with the gas pipeline's annual capacity put at 12Bn m3. The deep seaport at Madaya has 12 crude oil tanks with a capacity of 0.3M tonnes. Myanmar Port Authority (MPA) was not available to confirm these facts.

Myanmar's non-governmental organisations (NGOs) are campaigning to defend their communities against China's

need for energy and quicker access to it and the land grabs that have occurred in Myanmar to facilitate it.

"Beginning from this year Madaya Sea Port will be filled with massive Chinese oil tankers transporting crude oil from the Middle East and Africa. If any oil spill occurs from these tankers in the Madaya and Kyauk Phyu coastal area, the major sources of our livelihoods, including our sea, agricultural lands, rice farms, and mangrove forests, will be destroyed," the residents of Ramree Island said in a widely circulated statement.

Their demands included access to information, clean ups, and full compensation. "We also demand that all projects' activities in Kyauk Phyu be postponed until our demands are met," said their statement. This talk is backed up with demonstrations and arrests.

LA approves \$1.1Bn port budget

Port of LA, the largest box port in the US, plans to spend \$400M over the next year to improve cargo flow in the face of increasing competition. The capital spend plan, announced in June by the Los Angeles Harbor Commission, is part of a \$1.1Bn budget for FY13-14 (beginning 1 July), and a 40% increase over the \$286M budgeted for capex last year.

"Capital improvements are essential if we're to maximise cargo flow as well as maintain our position as the nation's number one container port," said Harbor Commission President Cindy Miscikowski.

More than \$99M is to be spent to help automate and provide on-dock rail at the TraPac container terminal. Once completed, it will result in all the port's container terminals having on-dock rail, according to the port.

Another \$96M will be allotted for installing alternative power stations at major container terminals, including APMT, APL, Evergreen, Yang Ming, and China Shipping. The facilities allow containerhips to plug in to shore-side power instead of running on diesel, thus reducing emissions.

Cash & Cargo

ORE TO CHINA

China saw its iron ore imports from Australia's Port Hedland make a month-on-month increase of 21% in May, data released by the Port Hedland Port Authority on 6 June showed.

One shipment to China stood at 23.3M tonnes in May, an increase of 4M tonnes from 19.3M tonnes in April. A total of 27.9M tonnes of iron ore was exported from the port in May, noted Reuters.

GPA LOOKS UP

Georgia Ports Authority moved 2.4M tons of cargo in April, a 4.7% increase – or 108,532 tons – over the same value 12 months previously. This figure was boosted by a strong performance in containers, bulk, and ro-ro cargo, said the port. "Our total tonnage makes April the highest volume month on record," revealed GPA executive director Curtis Foltz. "And with companies like Haier appliances, Kent bicycles, and Pep Boys recently choosing the Port of Savannah, our drawing power for cargo is only getting stronger."

GROWTH AT ANTWERP

Port of Antwerp handled 46,997,502 tonnes of freight in the first three months of this year, an increase of 1.4% compared with the same period in 2012, it said in a statement. The volume of liquid bulk in particular showed strong growth, with petroleum derivatives being the main driving force. The amount of liquid and dry bulk together rose by 13.4% to 17,766,141 tonnes. Container volumes declined over the past quarter, with 2,126,254 teu handled, 2.8% less than the same quarter last year.

BP IN IRAQ

BP is to build a new import/export terminal for refined oil products at the Iraqi port of Khor al-Zubair, IHS Energy reports. The move follows a five-year deal with the Iraqi General Company for Ports that will eventually see the old facility replaced in phases to boost capacity.

Bought & Sold

KONECRANES HELPS

Port of Georgia, Savannah port received four Konecranes super post-Panamax container cranes with an outreach of 61m – the second part of an order that included 20 already-delivered rubber-tyred gantry cranes. “Exports are driving growth at the port,” commented Georgia Port Authority, “which boasts a uniquely balanced export/import ratio. It handled 12% of all US containerised exports in 2012, a total of 1.6M teu, and is the fastest growing container port in the US”.

STRADDLE CARRIERS TO NZ

Kalmar has received an order to supply two diesel electric Kalmar straddle carriers to New Zealand container-handling operator Port Otago. The straddle carriers will be delivered to Port Otago by the end of 2013. Port Otago has also purchased Kalmar SmartFleet – a system that captures information from all equipment, Kalmar says, making it available remotely to supervisors, who can then maintain the equipment more quickly and efficiently.

PERU ORDERS CRANES

Terminales Portuarios Euroandinos in Paita, Peru, has ordered one super post-Panamax ship-to-shore crane and two RTGs from Liebherr, all due for delivery at the end of this year. The ship-to-shore crane has a safe working load of 55 tonnes under a twin lift spreader, an outreach of 51m, a back reach of 17m, and a span of 30.48m, says Liebherr. The RTGs have four wheels per corner, are capable of stacking one over five high, and span seven containers.

NEW CRANES FOR TEMA

Konecranes has sold five rubber-tyred gantry (RTG) cranes to Meridian Port Services' container terminal at Port of Tema, Ghana. Joining an existing four RTGs, the new models are all-electric, 16-wheel cranes, stacking one-over-five containers high and come with 'AutoSteering' technology – “a driver aid that keeps the crane on a pre-programmed, straight path,” said Konecranes in a statement.

Maasvlakte 2 is on schedule and below budget



Photo: Aeroview-Port of Rotterdam

Photo: Bart Maas, Port of Rotterdam

Maersk Tukang is the first ship to enter

The first phase of the 700ha expansion project at Port of Rotterdam – Maasvlakte 2 (M2) – opened in May, with the area now accessible by road, rail, and water. The construction of the two container terminals operated by Rotterdam World Gateway (RWG) and APMT is on schedule, according to the port. Melanie Schultz van Haegen, Dutch minister for infrastructure and the environment, said at the opening: “Today we are clearing the way for international shipping and trade.” She added: “The port’s grown 20% larger and container capacity has

doubled. Thousands of direct and indirect jobs will be created.”

CEO of Port of Rotterdam Authority Hans Smits added: “We have succeeded in constructing this phase of M2 according to schedule and well inside budget. The project has turned out approximately €150M (\$196M) less expensive than estimated. From today, Maasvlakte 2 is an integral part of the port area – now accessible by road, rail, and water.”

He pointed out that the two terminals will be operation at the end of 2014, “but there will be other activity in the short term as

well: in the second half of this year, the port authority will invest approximately €10M (\$13M) in placing poles in M2’s inland lake for ship-to-ship transfer. There are also advanced plans for developing an industrial park for the [bio-based] chemical industry on the site next to Lyondell”.

Boskalis and Van Oord, as joint venture PUMA, have sprayed 240M m3 of sand, constructed a 3.5-km hard seawall with 7M tonnes of stone and 20,000 concrete blocks from the old seawall, built several kilometres of quay wall, and laid down roads and railway lines.

Nigeria plans rail development

Lagos plans to build trans-state highways, along with its deepsea port scheme. “In developing trans-state highways and high-speed train networks, we will be able to move fuel, farm produce, and goods cost-efficiently across the country,” Asiwaju Bola Ahmed Tinubu, former governor of Lagos state and head of the opposition All People’s Congress, said in June. He added that this development would then aid and support Nigeria’s international trade.

Speaking at the African Partnership Development Conference at the UK House of Commons, he said the new roads would connect the state’s north, south, east, and west. David Lammy, a UK politician, said he recognised the need for greater intra-Africa trade and

trade exports, adding: “There is a need for a ‘one-Africa, a united Africa’ to make this happen.”

Tunde Alabi, head of the African Partnership Development, told delegates: “Nigeria’s infrastructure development is very slow, and a lot of what we have is now dilapidated. This opens the window for investment opportunities and foreign investors looking to deploy their resources in the development of roads, rails networks, and water transport systems”. Tinubu’s administration and the House of Assembly for Lagos state have developed the Lekki Free Trade Zone, which has already had significant impact. The zone has attracted more than \$1.1Bn from 48 investors, Adeyemi Ikuforiji, speaker of the Assembly, told P&H.

Mombasa expands to accommodate future growth

Construction of the second container terminal in Mombasa is progressing, Kenya Ports Authority (KPA) has said, with phase one – consisting of two berths – scheduled for completion in 2015. When the project is complete the new container terminal will have three berths, giving the port an annual capacity of 1.2M teu. “Its main objective is to expand container-handling capacity of the port of Mombasa in order to match future trends, stay competitive in cargo handling, and facilitate economic development in the Eastern and Central Africa region,” said the statement. Dredging is being carried out at the main length of quay to 15m.

The two berths being built as part of the first stage of works will be able to receive post-Panamax vessels of up to 60,000dwt.

“With these new projects, the port has put into consideration the transport issue to and out of the port,” the port told *P&H*. Currently, the main mode of transport to and from the port is by road and about 95 to 96% of cargo that reaches the hinterland in this way. Railways transport about 4 to 5%, it said.

However, there are plans to revamp the transport infrastructure. “The entry and exit gates have had new

lanes opened to allow faster movement of cargo. The second terminal has, in its designs, included independent railway sidings and two roads that connect the port to the Mombasa – Nairobi road away from the city. These roads link to the Mombasa Southern Bypass which will be built to link south mainland to the Nairobi- Mombasa highway,” the port explained to *P&H*.

It also noted that the government, through Kenya Railways Corporation, has launched a plan to overhaul the current railway line with major repairs already started. “The aim of the Kenya Railway Expansion is to construct a high-capacity standard gauge railway network in Kenya with connections to the East Africa region,” it said.

In 2012, Port of Mombasa handled a total of 21.92M tons up from 19.95M tons in 2011, at a growth of 9.9%. Container traffic rose to 903,463teu from 770,804teu handled in 2011, an increase of 17.2%. In the same period, transshipment traffic saw growth of 18.4%, registering 6.63M tons from 5.6M tons in 2011. KPA projects that it will handle close to 1M teu by the end of 2013 with a total throughput of about 22M tons.

Trinidad's energy port starts to take shape

Trinidad and Tobago's National Energy Corporation (NEC) expects to see its new port at Point Galeota completed by December. The port, in southeastern Trinidad, will act as a base for energy companies working offshore eastern Trinidad and for deepwater exploration offshore Guyana, Guyane and Suriname. Design and construction work is being carried out by Miami-based GLF Construction.

The \$80M project began in 2008, but work was suspended for three years, only restarting late 2011. In the current Phase I, Port Galeota will comprise four berths dredged to 7.6m plus one berth, with a depth of 5.6m, for coastguard vessels to replace an existing pier with an alongside depth of only 3m. Storage, including a warehouse, is provided on 8ha of

ground behind the quays, of which 3ha is reclaimed land.

Facilities and services will include rig supply operations, rig and boat repairs, bunkering, and tank farm storage for drilling muds. The port will avoid the need for overland transport of supplies from Port of Spain and Point Lisas, which are both costly and potentially hazardous, NEC maintains.

The Environmental Management Authority approved the project on the condition that NEC built a fish landing station on 0.7ha of reclaimed land at the nearby village of Guayaguayare. Carried out under the company's corporate social responsibility programme at a cost of around \$5.6M, the facilities include vending stalls, fish storage space, freshwater supplies, and phytosanitary provisions.

Phase II of Port Galeota is dependent on energy companies' needs in the light of new deposits being found, but an NEC feasibility study issued in June 2012 envisages it eventually replacing Port Chaguaramas. Additional dredging would take Galeota's depth to 9.6m, a further 7ha of land would be reclaimed, 700m of quay constructed, and two helipads built.

“It is not just a port,” claimed energy minister Kevin Ramnarine, speaking in parliament earlier this year and quoted by the *Trinidad Guardian* newspaper. “Galeota could become a city.” Much of the region's energy exploration is planned in Trinidad's capital, Ramnarine pointed out, adding: “Port of Spain is becoming the Houston of the Caribbean.”

Dredging

GOING DEEP FOR GAS

Uruguay has awarded French gas and power group GDF Suez a contract to build a liquefied natural gas (LNG) regasification plant in the country's main port of Montevideo. The project will require port dredging and connection to the country's gas pipeline network. It is slated to have a processing capacity of up to 10M m3 when it comes on stream, potentially in 2015.

DREDGERS FOR ARABIA


IHC Merwede has secured new orders for cutter suction dredgers worth €125M to Huta Marine Works for dredging on both sides of the Arabian Peninsula. The vessels will be purpose-built for working in the specific conditions associated with these waters, said the company in a statement. The total installed power of the 122.5-metre dredger will be 23,545kW, and it will feature a dredging depth of 28m and a cutter power of 3,500kW.

CRANEY EXPANSION

The US Senate has approved an amendment to the Water Resources Development Act that clears the way for the 245ha eastward expansion of Craney Island – including the dredged material management area owned and operated by the US Army Corps of Engineers (USACE) – to be conveyed to Virginia Port Authority (VPA) when the agency determines the time is right for construction of a fourth state-owned marine terminal. In partnership with USACE, VPA is currently engaged in a multiyear project to develop the terminal.

OFFSHORE IN FRANCE

Ports of Normandy Authority has begun construction of a \$52M quay expansion at Cherbourg, together with rail and road improvements, to support windfarms and tidal energy projects. The construction contract went to Soletanche Bachy and the project's first phase includes underwater blasting, rock excavation, and dredging in preparation for the extension of the Quai des Flamands terminal by 320m.



The city of Dar es Salaam sits close to its port...TPA is addressing how it reaches its hinterland

Tackling the congestion challenge

The Tanzanian port of Dar es Salaam has implemented a series of plans to address its overcapacity issues. **Abel Moyo**, senior operations manager at Tanzania Ports Authority, tells *P&H* about its approach

Dar es Salaam is one of three seaports operated by Tanzania Port Authority that can receive deep sea vessels and it handles about 85% of the country's international trade. Its location on the east coast of Africa is convenient for freight links to east and central Africa, the Middle and Far East, Europe, Australia, and America. It is well positioned to serve a large hinterland, including the landlocked countries of Malawi, Burundi, Rwanda, Uganda, Zambia, and the Democratic Republic of Congo. It is the only port in Tanzania that handles transshipment traffic.

The port's capacity is 4.1M tonnes of dry

cargo and 6M tonnes of liquid cargo per year. Overall cargo vessel traffic has been increasing by 8.3% each year since 2001 and in 2006 the port started to experience overcapacity and congestion.

From 2008 onwards TPA introduced a number of measures to improve efficiency at Dar es Salaam and provide a better service to its customers. No shipping agent wants to see its ships sitting at anchorage outside the port waiting for a deepwater berth to become available. Our plans included new facilities, a reorganisation of existing facilities and the introduction of penalty tariffs.

We, as a port authority, talked to our private operators and encouraged them to treat their storage areas as a port extension. This led to the introduction of inland container depots (ICDs) and in 2010, 10 such facilities had been licensed by TPA with a combined capacity of 15,550 teu. Four car freight stations have also agreed to store vehicles in their storage yards with a combined capacity of 5,850 vehicles, freeing up space in the port.

But this is a two-way street. We have managed to negotiate additional capacity with our operators, but we also need to ensure that containers and vehicles are not left at the port for extended periods of time. To that end, TICTS (see box) has introduced a tariff of \$40 per teu per day for containers left at the port for more than 21 days. Tariffs were also introduced that penalise ship agents who delay submission of their cargo manifests. We have also conducted workshops



Photo: Shutterstock

“ We have introduced a tariff for containers left at the port for extended periods of time ”

Abel Moyo

Senior operations manager, Tanzania Ports Authority



Photo: Masood Mluchi

berths (numbers 13-14) that should be able to accommodate some of the biggest ships afloat. We also plan to upgrade berths 1-7 and widen the entrance channel to allow big ships to enter and berth.

Looking long term, the plan includes the development of a new port at Mbegani Bagamoyo at Mwambani in the coastal Tanga region.

When TPA expresses its commitment to improving its ports' performance we cannot neglect the hinterland that is related to it, as a smooth-working inland transport system contributes to the performance of our ports. The port is obliged to transport 70% of its hinterland cargo by rail and our railway has its challenges. The two rail lines we have – Tazara and Central Railway Line – run on different gauges and, therefore, cannot link to each other. The Central Railway Line is of advanced age and has been destroyed by heavy rains and needs big investment to rehabilitate it. This line had been operated by private partner, Rites, but it failed to develop the railway and so the government decided to terminate the contract. No new investor has been found to date and so it is operating under public ownership, but is limping through. The Tazara railway is also a publicly owned, but jointly, by the governments of Tanzania and Zambia. It is struggling for lack of wagons and is at

the centre of a conflict between the workers and the railway's management.

The roads are also in need of investment. For example, during the rainy season each year from December to April food cargoes get stuck in the Rukwa region in the west of the country, as roads cannot be passed. Also, road trucks do not have as big a capacity as train wagons and so are not as efficient. Trucks also create congestion at the port making it more difficult for the port to carry out its operations efficiently, and as the cargo piles up in port, it becomes an easier target for thieves.

These issues aside, TPA has managed to improve congestion over the past three to four years. Despite an increase in container traffic of 272,700teu in 2006 to 476,786teu in 2011, dwell time has reduced from 22.2 days in 2006 to 8.8 days in 2011.

As well as the measures already mentioned we also operate 24 hours a day, are continuing to invest in public-private-partnership opportunities, new and modern equipment, and are working with our staff to build a motivated workforce. We also understand the value of a simple documentation process and we are in the process of computerising our activities. We see this as a first step to setting up a good port community system to promote efficiency and transparency. We also plan to invest in new wagons and trains for railways to facilitate the smooth transfer of goods.

The government is also committed to improving existing roads and building new ones to ease transport problems.

Like most ports today, Dar es Salaam does not exist in a vacuum and has to rely on a logistics chain, much of which is outside of our control. But we are working on the things we can control, and trying to influence the things we can't as best we can, as we aim to improve the port's competitiveness and attract more traffic, including transshipment. **PH**

More info: www.tanzaniaports.com

with our stakeholders to reduce dwell times at the port and the ICDs.

Additional storage capacity is also required. We, therefore, have a medium-term plan to construct a multi-store car park and use the freed-up space for container handling. Plus, a new container terminal with two further

Fact box

Total quay length:	2000m
General cargo berths:	7. Numbers 1 to 7. Total quay length is 1293m.
Container berths:	4. Numbers 8 to 11. Privately operated by Tanzania International Container Terminal Services (TICTS). Total quay length is 725m.
Passengers terminals:	1. Used to transport local passengers between the island of Zanzibar and mainland Tanzania.
Jetties:	1. Kurasini Oil Jetty for handling liquid cargoes.
Single buoy mooring:	1. Situated at Ras Mjimwema, about 5km from the access channel, and handles crude oil.
Depth:	14m



IAPH heads to Hollywood

The organisation returned to Los Angeles 58 years after its first inaugural meeting. *P&H* went to the heart of downtown LA to find out more

Below and below:
Delegates and their
partners caught a
glimpse
of LA at the
evening and
partners' events

Around 500 delegates gathered in Los Angeles to discuss the environment, global economy, and piracy, to catch a glimpse of the famous Hollywood sign, and much more. The venue was at the JW Marriott at LA Live – only here could you discuss trucking logistics in the afternoon with some of the most important port personalities from across the globe, and then bump into the coach of the Miami Marlins baseball team in the bar afterwards. His team was due to play the LA Dodgers later that week.

The first day of the four-day conference was kickstarted by Dr Geraldine Knatz, executive director of the Port of Los Angeles and then IAPH president. Knatz enthused about the importance of IAPH and commented that "it's a lot easier to change regulation as a group than on your own". The Port of Los Angeles hosted the event, and Knatz took

the opportunity to thank senior communications director and then conference vice-president Arley Baker and Theresa Lopez, director of public relations, for their hard work in organising this important event in the IAPH calendar.

LA is a city "where the world comes together", said the Honorable Antonio Villaraigosa, mayor of the City of Los Angeles, adding that 44% of goods coming in to the US are handled in LA. With these kinds of volumes, LA has had to set high targets for reducing its emissions, and he said "nearby residents are now breathing easier". He added: "If we want to grow our ports, we have to be better neighbours. If we want to grow our ports, we have to be like LA."

Mario Cordero, second keynote speaker and chairman of the Federal Maritime Commission, spoke next, drawing attention to the World Ports Climate Initiative (WPCI), which was inaugurated

Photos: Port of Los Angeles



IAPH 2013



Images: Jora Hackemann / Shutterstock.com / H.Kidd





“I hope that the Women’s Forum takes the next step”

Susumu Naruse
Secretary general, IAPH



Above right:
Delegates enjoyed a variety of sessions, from an update on the global economy to the usage of LNG as a fuel

in 2008 (see page 34). “Your respective countries have done great things,” he said, urging individual nations to take corporate social responsibility forward.

Next to speak was Secretary General Susumu Naruse, who thanked the Port of Los Angeles for its hospitality. He reminded delegates that the first meeting of IAPH was held in LA, commenting that the organisation is about to start a new era. Optimistic about the quality of the speakers and the wide range of topics, he highlighted the Women’s Forum session: “I hope that the IAPH Women’s Forum will be taking the next step here in Los Angeles as it was created last year under the strong leadership of our president [Geraldine Knatz]”. He concluded: “Let’s enjoy the conference together.”

The last of the keynote speakers, Armando Duarte, chairman of the American Association of Port Authorities (AAPA), drew attention to the Port of Los Angeles’ sustainable policies and behaviour. People are a port’s main asset, he said, although he acknowledged that new technology is also beneficial for ports. Finally, he concluded that “California wines are really very good”.

Duarte was followed by a keynote address from Captain Richard Phillips, who was master of the *Maersk Alabama* when he was taken hostage by pirates off the coast of Somalia in 2009. Captain Phillips described how he helped the pirates leave on the ship’s lifeboat to get them away from the rest of his crew, only to be taken hostage for four days. He was eventually rescued



by US Navy SEALs. Three of the four pirates were killed during his rescue. Captain Phillips told delegates how important it is to maintain proper safety drills on ships. “When everything goes well on a ship,” he said, “it’s easy to get fat, dumb, and happy.”

Global economy

Then began the first of seven sessions. Moderated by Knatz, it focused on the global economy’s new realities. Dr Sung Won Sohn, vice-chairman of clothing retailer Forever 21, discussed where to invest \$1M. Manufacturing is coming back to the US, he said, as China is becoming costlier, while Michelin is building a plant in South Carolina and GE Appliances is moving much of its manufacturing back to Kentucky. He also acknowledged the increasing age of the population across the globe. He said that by 2050, the average age in the US will be 40, in China 39, and in Japan 52. So where to invest that \$1M? Sohn advised 70% should be made in the US, with 30% overseas and a significant portion of the overseas allocation in China.

Next came speaker Chang Dechuan, president and chairman of China’s Qingdao Port (Group) Co. Of the ports with the biggest throughput in million tons in 2012, he said seven are Chinese, including Qingdao. But moving forward, he does not expect to see “big growth” in cargo volumes at Chinese ports, as ports need to evolve into logistics hubs. Describing what he termed “hard power”, such as port facilities and technology, he claimed that without a port community system (PCS), “the port will be left behind”. “Soft power” includes people, training, and the environment, he said, citing a number of environmental projects at Chinese ports, including dust suppression walls, covering stacks of iron ore, and vehicle washing. He also drew attention to Qingdao’s deep draught, its ability to accommodate the largest 16,000teu vessels, and the fact that it’s also “ready for 18,000teu”. Dechuan believes that intermodal transport is imperative to “provide door-to-door [transport] to reduce costs”.

Next, Dr Walter Kemmsies, chief economist at Moffatt & Nichol, considered economic trends as a result of the Panama Canal expansion. Describing the project as important for South American growth but not dependent on it, he said, “Latin America has

“70% should be invested in the US”

Dr Sung Won Sohn
Vice-chairman, Forever 21





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Above: Bollywood dancers opened the conference

resources [such as oil and water] that are wanted by the rest of the world," but added that while its exports are growing, its share of the domestic GDP is still low. Investment in infrastructure is required, as is a focus on turning raw materials into manufactured goods, he claimed. Some countries have invested in oil exploration but oil prices are still high due to the scarcity of logistics to transport the cargo, not the scarcity of oil, he explained. Both inland transport and port infrastructure are elements of the logistics chain that need a lot of work, he added.

In South America, Colombia is diversifying its trade and moving towards manufacturing, said Kemmsies, who considers it "an emerging economy" rather than a developing one. Kemmsies said the sign of an emerging economy is one whose workforce can afford to buy the goods it manufactures. He said: "China is raising its salaries so they can buy what they make rather than rely on exports." He believes Colombia is the South American country closest to achieving this.

Patrick Verhoeven, secretary general of the European

Sea Ports Organisation (ESPO), asked whether ports should sell fully to the private sector. The idea was considered in Greece, he said, but it decided to "keep strategic positions in public hands". His presentation centred on port governance issues in Europe and questioned whether policy should stay with member states or be decided at EU level. For example, short-sea shipping has been driven at an EU level, but environmental issues affect the globe.

Stormy weather

The second half of the session was chaired by Captain Jennifer Williams, deputy sector commander at the US Coast Guard at Los Angeles and Long Beach. She stressed the importance of planning for the unplanned, while Richard Larrabee, director of port commerce at the Port Authority of New York & New Jersey, described the port's response to and recovery from Hurricane Sandy, which caused \$2Bn worth of damage. He said it was the first time the port had to fully close. "It did a great deal of damage very quickly," he said, adding that some warning allowed them to evacuate the port of all but essential personnel the night before. During the storm, he said, little could be done other than keep staff safe and "hunker down".

The disaster caused 3-5ft of flooding in buildings, power outages, destroyed security fencing, road and rail damage, and toppled container stacks, lost containers, while flooding and fire wrecked vehicles. An assessment was conducted the next day, and four days later, the port received its first vessel, opening fully eight days after Sandy, he said. Fuel and electrical power were key to restoration, he said, and he believes keeping personnel away until the storm blew over was effective, "as it allowed us to quickly get refocused".

Continuing on the theme of natural disasters, the deputy director general of the Ports and Harbours Bureau in Japan, Takashi Owaki, said the earthquake

Port of Miami director and then IAPH 3rd VP Bill Johnson at a technical committee meeting



Photos: The Port of Los Angeles



that struck northeast Japan in March 2011 damaged 29 ports, and the dead and missing toll as of April stands at 18,564. Owaki cited a number of lessons learned and countermeasures that have been put in place, including a better evacuation system, more resilient structures, improved liquefaction evaluation, earthquake-resistant berths, and strengthened cargo-handling equipment. He also said the breakwaters helped minimise the tsunami's damage, adding that although Kamaishi port breakwater collapsed, it delayed the tsunami's overflow time and cut its height and inundation area.

Last to speak in this session was Lucile Jones, science advisor for risk reduction on the SAFRR project at the US Geological Survey, who claimed that most of the damage caused by tsunamis is preventable.

Reducing emissions

After welcoming delegates to the second day of the conference, Knatz introduced Jared Blumenfeld, regional administrator for the Pacific Southwest, US Environmental Protection Agency (EPA). Setting the scene for the first half of the second session, which

centred on zero emissions strategies, he asked how benefits and synergies can be found when considering environmentally friendly solutions.

Yu Wang, deputy director of the Science, Technology, and Information Division at the Shanghai Municipal Transport and Port Authority, said Shanghai is cutting emissions by taking trucks off the road. They've opened canals for inland transport and dredged waterways to promote water transport, although he acknowledged that they see little rail transport. Other initiatives include replacing 200 yard trucks with liquefied natural gas (LNG)-powered trucks, shoreside power, clean air monitoring devices, and energy-saving light bulbs. The port authority's commitment to these initiatives is supported by the Shanghai Municipal Government, said Wang, and he hopes to "share experiences with LA and other ports" to reduce emissions.

Next up was Michael Christensen, Port of Los Angeles' deputy executive director, who highlighted the authority's Clean Air Action Plan, which was adopted in 2006, updated in 2010, and by 2014 aims to reduce diesel particulate matter (DPM) by 72%, NO_x by 22%, and SO_x by 93%. Goals for 2023 are DPM by 77%, NO_x by 59%, and SO_x by 93%.

Christensen said this plan has brought about 900 LNG trucks serving in the ports of Los Angeles and Long Beach. But, he commented, we have "already picked the low-hanging fruit" to reduce DPM, NO_x, and SO_x, and the required "reductions are aggressive".

The port also created a zero emissions road map two years ago, he said, so it needs to focus on zero emissions technology for trucks, cargo-handling equipment, and rail. It has also established a shoreside power standard and nine berths at the Port of Los Angeles are fitted, with another 19 to come online in eight months. In addition, two terminals now have electric, rubber-tyred gantry cranes. Other initiatives include a hybrid diesel-electric tug boat, electric yard trucks, and hydrogen-powered trucks.

Next to speak was Jens Meier, managing director of Hamburg Port Authority (see page 22), who delivered an overview of smartPORT from Hamburg's perspective. He said there are many parties in the logistics chain and beyond who all need to work towards the same goal.

Cavotec's group chief executive officer, Ottonel Popesco, delivered the business case for investing in shoreside power. Airlines, he said, don't like trucks near the planes, so to minimise damage, infrastructure to fuel planes is embedded in the tarmac at the terminal. It is also much cheaper to install shipside power equipment on ships during the build stage rather than as a retrofit, he noted.

LNG infrastructure

Moderated by Erik Neandross, principal at Gladstein, Neandross & Associates, the second half of this session focused on LNG. Dana Lowell, senior consultant at M.J. Bradley & Associates, spoke first, saying there are a number of things to consider when choosing a fuel:

IAPH unveils new logo

At a meeting of the Communication and Community Relations Committee, the Port of Los Angeles presented a choice of two fresh and exciting logos and invited feedback from those present. The logo below was chosen by vote. The majority of members believe the interlinked figures making up the ship's wheel represent a positive coming-together of people, both from an organisational and individual port perspective. Delegates commented that the ship's wheel featured in the old logo still has a strong presence and continues to represent an organisation that is moving forward while remembering its past.





Top: The IAPH 2013 exhibition is opened
Above: Dr Geraldine Knatz with Chang Dechuan, president and chairman of Qingdao Port Group

Can it support the mission? How much does it weigh? How much space will it require? Is it widely available? Are there any safety concerns? What are the capital and fuel costs? Is it clean? Will it be efficient?

Compressed natural gas is not practical, he said, as it takes up four times more space than residual fuels, with LNG taking up twice as much space as residual fuels. Sulphur reductions driven by the EPA in the US and International Maritime Organization (IMO) globally will force shippers to invest in either scrubbers or LNG as a fuel, he noted.

If a vessel is spending a third or more of its time in an emission control area (ECA), then now is the time to think about LNG as a fuel, said shipping line Totem Ocean Trailer Express (TOTE) project manager Ben Christian. By making a long-term commitment to LNG as a bunker fuel, TOTE has responded to the reduced sulphur emission limits both inside and outside of ECAs that are due to come into force in 2020. In late 2012, TOTE ordered two LNG-fuelled container ships from General Dynamics NASSCO, and in early 2013 it awarded a contract to retrofit two of its diesel-electric trailer ships to LNG with the same yard. Christian added that partners also need to make long-term

commitments. "Now is the time for LNG," he stated.

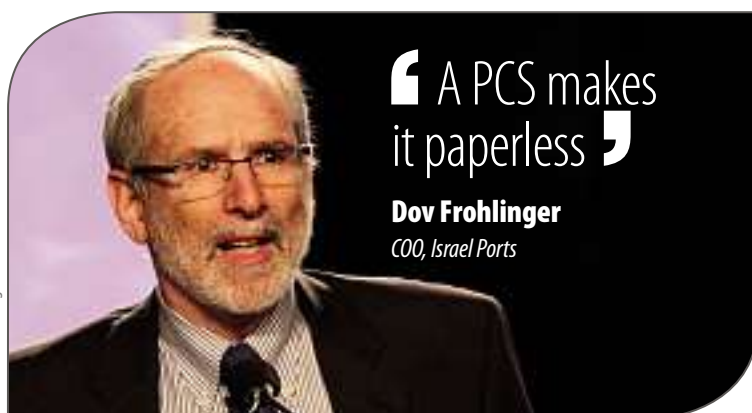
Taking the stand next was Andrew Clifton, general manager of the Society of International Gas Tanker and Terminal Operators (SIGTTO), who noted there are currently "38 vessels using LNG as a fuel". He claimed they have a very good safety record, although concern exists that some new entries in to the industry lack experience and knowledge, although these are in the minority. "Inconvenient codes and standards are being re-written," he said, "to fit in with business needs."

Tessa Major, senior technical manager at Port of Antwerp (see page 34), agrees with Christian that other partners need to get onboard, as ships "need to be able to bunker at all ports along a route." She asked: "What can we do as ports to facilitate the take-up of LNG as a fuel?" Major said ports need to harmonise their approach to developing rules and regulations for LNG as fuel and create LNG awareness.

Port community

Patrick Burnson, executive editor of *Logistics Management and Supply Chain Management Review*, moderated working session three, part one, on trucking logistics. The then IAPH first vice-president Grant Gilfillan, and chief executive officer and director of Sydney Ports Corporation, gave an overview of the Port Botany Landside Improvement Strategy (PBLIS). The strategy financially penalises truck companies for early, late, no-shows, and cancelled slots for cargo delivery and pick-up from the port. The aim, said Gilfillan, is to make operations more consistent and transparent and move towards 24/7 operations, resulting in truck turnaround times dropping from 45 to 50 minutes to 30 minutes. The company's 24/7 operations have also increased, he told delegates.

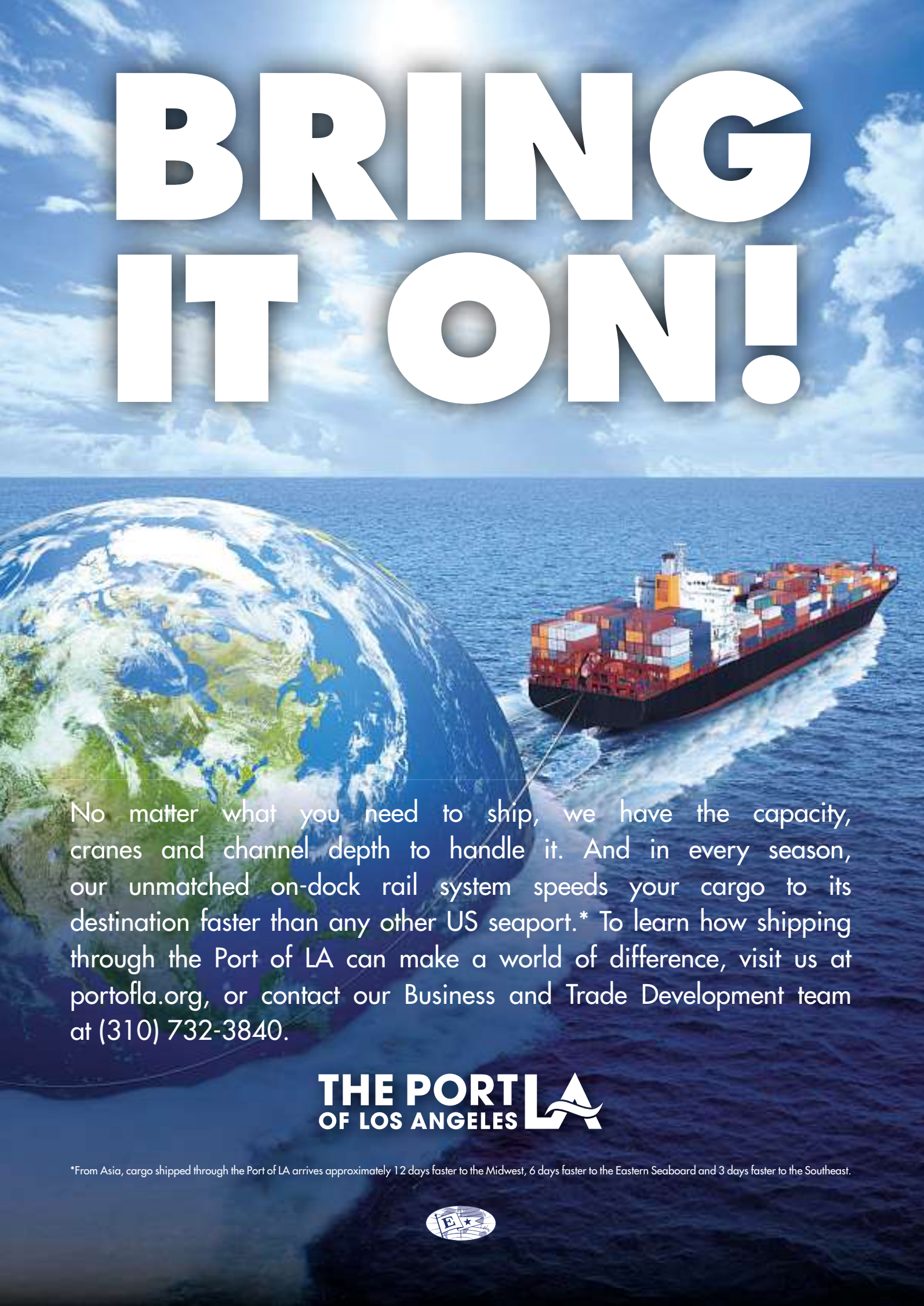
"Ashdod Port has also reduced its turnaround times," claimed Dov Frohlinger, COO of Israel Ports Development & Assets Company, "meaning that trucks can make more trips". Prefacing with an overview of



"A PCS makes it paperless"

Dov Frohlinger
COO, Israel Ports

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Delegates gather for the conference



Photo: The Port of Los Angeles

Above: Naomi Kogon-Steinberg was the first associate member to become an honorary member of IAPH

the Israeli Gate Development Project, he supported the implementation of a port community system (PCS) (see opposite). Previously, there were 40 documents per shipment, he noted, but a PCS makes it paperless.

Christopher Lytle, executive director at Port of Long Beach, spoke of challenges as they work towards implementing a chassis that can be used by all ocean carriers: a "grey chassis fleet". Long Beach has more than 100,000 chassis across 14 terminals and 11,000 trucks. With carriers requiring different chassis, many resources are wasted moving them around, he said. A Chassis Operation Group has been put together, including carriers, terminal operators, truckers, railroads, and the port authority. Looking forward, Lytle said he hopes the group will find an "industry-backed solution that will allow those who want to participate to join in and see if the system works for them".

Piratical activity

Focusing on the subject of piracy, the last session of the day was moderated by Captain John Holmes, deputy executive director of the Port of Los Angeles. First came a definition of piracy from Hugh Williamson,

lead investigator of the Dalhousie Marine Piracy Project at Dalhousie University in Halifax, Nova Scotia, Canada. Williamson said piracy takes place on the high seas between two ships. A warship is the only vessel that can arrest a pirate vessel, he noted, and private security companies do not have warship status. He explained the legal restraints when arresting and prosecuting a pirate, such as competing international laws, whose responsibility it is, and who pays.

Speaking next about piracy trends, Dr Donna Nincic, professor and director at the ABS School of Maritime Policy and Management at the California Maritime Academy, California State University in Vallejo, said pirates mostly targeted the waters in around Asia before 2005, and then in 2007 some Africans, particularly Somalians, started entering the game. She said pirates usually start out as small-scale, petty thieves who are introduced to large criminal gangs that steal ships and attack crews. She added that when they stop being pirates, they usually continue a life of crime ashore.

Nincic attributed the decline in piracy off the coast of Somalia to the following:

- work of the International Task Forces (CTF 151, EU Operation Atalanta, NATO Ocean Shield)
- best management practices and armed guards
- pirate kingpins retiring
- African Union gains against Al-Shabaab
- French attacks on pirate ships
- amnesty being negotiated for under-18s.

"Don't be alone," was the first message to crew from Jakob Larsen of the Baltic and International Maritime Council (BIMCO) maritime security office. Instead, he suggested sailing in convoys, adding: "Do not be detected, do not be surprised, do not be vulnerable, do not be boarded, do not be controlled." Larsen suggested a number of ways to stop pirates boarding a ship, and how to regain control if they do, such as



Photo: The Port of Los Angeles

“The only way to go forward is by cooperating with men”

Karin Orsel
President, WISTA



PCSS can offer valuable services to their communities

Santiago Garcia Milà Lloveras
Deputy managing director, Port of Barcelona



using citadels and safe rooms, barbed wire and water sprays, and zigzagging. At about \$35,000 for six days, armed guards are expensive, Larsen cautioned, and standards of service are variable, so shop around as there are now a lot of providers.

Single window

On the final day of the conference, sessions ran parallel. In the morning, a session highlighting PCSS was chaired by Pascal Ollivier from the European Port Community System Association. Ramón Gómez-Ferrer, managing director of Port of Valencia, gave his port's perspective. You need to get all members of the port community around the same virtual table, he told delegates, explaining that 475 companies are linked to the port authority's PCS. "Technology is nothing without improving efficiency," he said, adding that a PCS helps local and global integration and facilitates the growth of port clusters.

Using Port of Le Havre as a case study, Jerome Besancenot, information systems manager, presented the French port 'single window,' explaining that some of the challenges of developing a national single window include:

- stakeholders' varying interpretations of the directives
- telematic versus electronic interchange
- whether ports or a central entity collect the data
- re-use of the existing systems, in particular PCSS, and custom computer services
- privacy.

Next up came a perspective from Port of Cotonou in Benin (see box above). Kassim Traoré, the port's director general, said the transit time for containers and invoice-producing time had dropped significantly since the port implemented its PCS in August 2011. He said: "With a successful port unique window and the modernisation of its infrastructures, the Port of Cotonou now [has] valuable tools [with which] to truly play its role as Benin's economy lung" and as the region's port.

Traoré also noted that the port has supported this technical investment with fresh infrastructure, such as a new quay, cranes, and pilot boat.

Another perspective from Europe was presented

Cotonou wins IAPH IT Award

The Port Authority of Cotonou, Benin, won the IAPH Gold IT Award. Cotonou port's director general, Kassim Traoré, received the award for the implementation of a Port Single Window – an electronic PCS to improve trade facilitation. All business processes, including those linked to customs, terminal operators, and freight forwarders, are streamlined through the system. Traoré told *P&H* that he hopes the system will bring more customers to the port.

He explained that the authority tried to implement a PCS 20 years ago but resistance from the port's main players was too great. But the authority continued to impress that the PCS was in all the players' interests and, in 2011, the port authority signed a contract with Bureau Veritas (BV).

"Since then the customers have accepted to join us and, when the customers joined, the other actors followed," Traoré explained.

The ten-year concession to operate the PCS was given to BV and PCS operator SOGET, which together have created SEGUB, a private public partnership. The project was implemented from 2011 to 2012 and involved not only the integration of software but also the support and training of the port's private and public stakeholders. "The project is a real milestone in the modernisation of the country," wrote BV in a statement.

by Santiago Garcia Milà Lloveras, deputy managing director of Port of Barcelona. With Barcelona's PCS operated by Portic, he said, "Many PCSS have consolidated their role in operating ports where they can offer valuable services to their communities."

Women in the workplace

Running parallel with this session was the IAPH Women's Forum, moderated by Anne Sigrid Hamran, director at Port of Oslo. Here, delegates discussed the challenges of encouraging women into the port sector and how to support female recruits. Marcia Ferranto, president and chief executive officer of WTS International, said "women are mentored and men are sponsored" across all industries, not just ports. She advised, "Be purposeful. Men sponsor a woman. Women pick a sponsor."

Next in line was Karin Orsel, international president of the Women's International Shipping & Trading Association (WISTA), which she advocated as a great organisation through which to network and find business opportunities. She also commented, "The only way to go forward is by cooperating with men."

Susan Wise, harbor commissioner president at Port of Long Beach, then briefed the delegates on the plight of the region's women trying to ingratiate themselves into port-related positions. She said it's important that "at conferences there continues to be a conversation like this".

Value to business

The afternoon brought two further sessions, again in parallel. At the session on port projects and infrastructure, delegates were asked if they really want it. Moderating was Kathleen Brown, Goldman Sachs' chairman of investment banking in the Midwest region, who told delegates to "think global and



Photo: Hamburg Port Authority



Photo: Hamburg Port Authority

Top and above:
Delegates danced
the night away to
a Beatles tribute
band in the shadow
of the *Endeavour*
at Hamburg Night

IAPH 2015 in Hamburg

'Calling at the smartPORT' will be the theme of the 29th IAPH World Ports Conference to be hosted by Hamburg Port Authority (HPA) in June 2015. Delegates in LA got a taste of what Hamburg holds in store as they danced the night away to a Beatles tribute band and enjoyed German beer, all in the shadow of the space shuttle *Endeavour*, which was on exhibit at the California Science Center.

smartPORT Hamburg is a project that processes the vast amounts of data collected from a wide range of participants and passes it back to them in a more tailored, user-friendly format. "Up until now, users had to make multiple entries of data to meet their own specific needs," a port official told *P&H*. "This is no longer necessary. Once the data is consolidated, interfaces allow each user to access the data as required." She continued, "Through smartPORT, HPA enables decision-makers and project participants to get an overview of the port as a whole, jointly use the data, and do away with repetitive entries. This will increase the efficiency of the port, benefit the environment, and save costs. The deployment of innovative technologies is a must."

act local". The first speaker was Peter Mollema, head of environmental management at Port of Rotterdam. He described a criteria that the port applies to all prospective projects, taking into account their costs and value to the market.

Other considerations are whether the project fits the port's master plan and its environmental impact. "We invest in public projects where we lose money," he said, "if it brings value to the business". One example is the cruise terminal, as it maintains "a good relationship with City Hall".

"It boils down to portfolio management," Mollema said. "The decision criteria must be used for any new projects," but it only influences the decision-making process. "It does not decide."

Martin Byrne, chief executive of New Zealand's Port Nelson, was next to the podium, saying we "cut our cloth according to our means. We must be sustainable". Projects differ in size across the globe," he noted, "but the principles stay the same." As at Rotterdam with its master plan, projects at Port Nelson should link to the company's objectives and have a clear-cut financial criteria. Again, it's not all about money, he stressed. "Trade facilitation [is] always a critical factor, along with maintaining competitiveness."

A US perspective came next from John Wolfe, chief executive officer of Washington state's Port of Tacoma. He said the port set itself 10 targets for the next decade. These targets range from increasing teu and bulk cargoes handled at the port, boosting its operating margin, cleaning contaminated land, and cutting diesel pollutants in cargo operations. Wolfe said the port invests in roads and other infrastructure. "We don't own them," he said, "but our customers are heavy users, and this brings value back to our customers." It is "hard to quantify this investment," he added, "but we know it's needed. Our discipline to key financial measures is what makes us successful."

“We invest if it
brings value to
the business”

Peter Mollema

*Head of environmental management,
Port of Rotterdam*

Photo: The Port of Los Angeles



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Above: The Ports of Korea stand at the exhibition

Opposite:
Keynote speaker
Captain Richard Phillips brought the piracy issue to delegates' attention

Cruising forward

Kathryn McDermott, deputy executive director for business development at the Port of Los Angeles, moderated a session that examined the growing cruise industry. John Stoll, Crystal Cruises' vice-president of land and port operations, spoke first, citing reputation and destination as the driving forces behind customers' reasons for choosing a Crystal Cruise. This, he said, is set against rising fuel prices that have edged up significantly since 2010 and "represent a very large proportion of our product delivery costs".

John Tercek, Royal Caribbean Cruises' vice-president of commercial development, highlighted some of the challenges facing the cruise industry:

- new ships continue to get bigger, which places increasing requirements on port infrastructure. He said 12 out of 18 ships scheduled for delivery through 2016 will exceed 120,000 gross tons
- customers have more diverse itineraries, which means the deployment of more ships beyond the Caribbean and Mediterranean
- the targeting of non-US customers, which increasingly necessitates taking the ships to these markets.



Grant Gilfillan gave an overview of Sydney's two cruise facilities: the Overseas Passenger Terminal and White Bay Cruise Terminal. In 2010 there were 116 cruise calls, he said, but this is forecast to increase to 600 by 2040.

Finally, Garcia Milà Lloveras from Port of Barcelona outlined some of the obstacles facing cruise ports in the Mediterranean. He cited shoreside electricity, LNG bunkering facilities, lack of port waste facilities, and visa restrictions for Asian markets, but admitted these issues can be resolved through EU directives and working at the European level with Asian authorities.

The sessions were followed by the plenary session and closing, at which awards were presented and the president handed over the title to the first vice-president for the next two-year term (see page 38). Delegates then danced the night away at the gala dinner hosted by the Port of Los Angeles. **PH**



“Cruise calls to Sydney will reach 600 by 2040”

Grant Gilfillan
*CEO and director of Sydney Ports
and then 1st VP of IAPH*



LNG-fuelled agenda for 2013-15

The new logo, its recently formed Women's Forum, success stories seen through WPCI, and the recently formed Finance Committee prove that IAPH is expanding its scope and outlook

These changes have been driven from within the organisation by the secretariat and the technical committees that form its backbone. Their work programmes reflect the major issues that affect port authorities. Any IAPH member can get involved in one or more of the technical committees.

One project looking for more participants is the LNG-Fuelled Vessels Working Group (see page 34), which is part of the World Ports Climate Initiative (WPCI).

In the first of two presentations given during the Port Environment Committee meeting, Kjell Karlsson, head of infrastructure at Port of Stockholm, explained that a transport chain has been developed to move the LNG required for cruise ship *Viking Grace* (see *P&H* May/June 2013) from the LNG plant in Nynäshamn, 65km south of Stockholm, to the vessel's terminal in the city. LNG arrives by tanker at Nynäshamn and is then moved by road to Loudden, the oil harbor in Stockholm, he explained. It then takes a 6.1km journey to the ship on dedicated bunkering vessel *Seagas*.

Tessa Major, technical environment manager at Port of Antwerp, spoke next, stating, "Harmonisation of the approach for LNG as [a] fuel for shipping between ports is one of the crucial factors for the success of LNG."

Major, who is championing the project, gave an overview of the three areas on which the group is working. The first, SWG 1, involves the development of a series of bunker checklists outlining the extra requirements of ports with regard to LNG bunkering operations in a port environment, including truck-to-ship, ship-to-ship, and shore-to-ship. These checklists were opened up to feedback in 3Q13, she explained.

The second area, SWG 2, focuses on guidance to create a harmonised approach to risk perimeters of different LNG scenarios within a port.

The third area, SWG 3, is LNG awareness, which aims to help ports choose an "LNG-fuelled future", Major said, through the dissemination of clear, objective information. It also aims to provide guidance to ports facing issues with the public's perception of LNG. Looking forward, the committees created tentative work plans. Sitting for the first time in LA, **The Port Finance & Economics Committee's** work plan is as follows:

- to monitor, collect, analyse, and disseminate information relative to port accounting principles, budgeting, project financing, financial instruments/lending, economic feasibility studies, port economic contributions studies, tariffs, and other issues relating to port finances and economics
- to collect industry-wide financial and economic statements to be made available in the IAPH library
- to prepare an industry-wide list of chief financial officers and their contact details
- to collect best practices with regard to concession tenders and contracts.

Below is a sample of other committees' plans.

The Port Safety & Security Committee: monitoring developments of supply chain security at ports and analysing their implications, focusing on authorised economic operators introduced by different countries.

The Legal Committee: updating and expanding the *Introduction to Maritime Law for Port Officials* and the IAPH legal database.

The Port Planning & Development Committee: monitoring the effects of automated container-handling on port planning and further updating of *Effects of the Arctic Sea Routes (NSR and NWP) Navigability on Port Industry*.

The Port Operations & Logistics Committee: preparing an introductory report on productivity indicators of container terminals. Also, studying the impact of mega vessels on ports from the viewpoints of human resources, port equipment, and other important matters.

The Port Environment Committee: sharing best practices via WPCI, including the following projects: Carbon Footprint Inventory; Yard Equipment; Environmental Ship Index; Onshore Power Supply; Sustainability in (Terminal) Lease Contract; LNG-Fuelled Vessels; plus new ideas, such as research into volatile organic compounds.

The Trade Facilitation & PCS Committee: preparing an exhaustive list of port community systems (PCS) around the world and launching a study on possible cooperation between ports towards PCS standards and interoperability.

The Group for Communications & Training: helping to promote and implement the many award schemes offered by the organisation and formulate a communications plan for IAPH. **PH**

Below: The Port of Los Angeles' Arley Baker, with Israel Ports Company's Dov Frohlinger, and Frans van Zoelen, head of the legal department at Port of Rotterdam, prepare for a technical committee meeting



The game changers

P&H examines the technological advances achieved at ECT's original Delta Terminal at Rotterdam and its new APM Terminal at Maasvlakte 2

It may be hard to believe, but June marked 20 years since the world's first fully automated container terminal debuted at the Maasvlakte port development in Rotterdam. When it opened in 1993, the Delta/Sea-Land Terminal run by Europe Container Terminals (ECT), now more commonly known as the Delta Dedicated North Terminal, was a giant technological leap forward for the industry, and an operation involving automated guided vehicles (AGVs) and automated stacking cranes (ASCs) was then a world first.

For many years visitors flocked to the terminal to watch the driverless machines miraculously transport containers across the quay, and even today many ports have still to implement the systems it pioneered.

Although Delta Terminal is 20 years old, the concepts behind its design were devised in the 1980s in a very different world from today, says Jan Waas, director of technology and engineering at ECT. "It was the days of the mainframe with limited possibilities in terms of software development and interconnectivity, IT understanding was limited and the integration of business and IT had just begun," he stated. "Thus, ECT decided its first terminal should only automate the stacking area and waterside, but even this was pioneering and required ECT to invent and integrate the solutions."

A greenfield site was chosen at Maasvlakte, designed to provide shipper Sea-Land with capacity for 600 box moves per crane per day, whilst also reducing the terminal's manual labour requirement.

The as-built system incorporated eight quay cranes, each equipped with ECT's patented container guide system, designed to ferry containers between the AGVs and the crane. The container stacking yard comprised 25 stack modules serviced by a single rail-mounted high-speed ASC. A team of AGVs ferried containers between the quay cranes and the container exchange interfaces at each ASC module.

On the land side, diesel-electric straddle carriers were deployed to shuttle containers between the stacking yard and road trucks, and to move rail and barge containers to a marine transport system (MTS) for longer distance movements to the railhead and barge terminal.

One major challenge was finding reliable manufacturers for the unique and untried equipment and components, particularly the AGVs, which had to be designed to run outdoors with 50,000 lifetime running hours and handle 40-tonne loads.

Suppliers from heavy truck businesses delivered

quotes for the contract, but it was Gottwald that won out with its prototype vehicle comprising a Daf diesel engine and two-stage Voith variable transmission. The manufacturer delivered the prototype in 10 months and had engineered the vehicle automation system and its various control functions.

Since Delta Terminal opened, Gottwald has developed the AGV concept, increasing carrying load weights from 40-60 tonnes, equivalent to two 20ft containers, and introducing cleaner diesel-electric engines. Today ECT runs a total of 360 AGV vehicles across several automated terminals, including a trial sustainable hybrid diesel-electric vehicle supplied by Dutch producer VDL.

Many of the lessons learnt during the design and implementation of Delta Terminal still hold true today, says ECT's Waas. "We learnt that IT can't be an isolated solution that supports a business process, it must be integrated into the whole operation," he explained. "Integrated responsibility for programme management is also needed to avoid conflicts between different disciplines. And even in a highly automated terminal, people still make all the difference, from the operator to the software engineer, so proper training and quality standards are a prerequisite for success."

Considering the advances made at Delta Terminal, it is appropriate that today's most cutting-edge automated terminal will also open at the Port of Rotterdam in November next year. APM Terminals' 2.7M-teu annual throughput capacity terminal at the Maasvlakte 2 development aims to be the most advanced and environmentally sustainable container terminal in the world, breaking several automation records.

The operator has set ambitious targets for overall productivity, aiming for a 25-50% increase in boxes handled per hour by 2015, compared with today's conventional automated terminals.

This will be achieved using a variety of hi-tech equipment, including remotely-operated ship-to-shore gantry cranes, supplied by Kalmar, which



Artist's Impression: APMT



APM Terminals at Maasvlakte 2... the yard is one of the easier parts of a terminal to operate

Photo: APM

Photo: Gottwald



ECT at Rotterdam where the automation story for ports began

will be run by operators 1.5km away at APM Terminals' main building. These double-trolley cranes will be capable of reaching across 25 containers on the largest, Triple E-class vessels and handling twin lift as well as tandem lift with Bromma spreaders.

The joystick-operated system will employ cameras mounted on the crane's spreader and hoist mechanism, plus intelligent systems such as ship profile scanning.

APM Terminals will also be the first client to implement 37 of Gottwald's battery electric powered lift AGVs (LAGV) for streamlining container transport and storage, says Frank Tazelaar, managing director for APM Terminals Maasvlakte 2: "The LAVG's integrated container lifting mechanism enables it to place containers directly onto the stacking crane rack, which increases productivity by decoupling the operation between AGVs and cranes. The units will also serve an on-dock rail terminal, something that has previously only ever been performed manually in terminals."

In March APM Terminals received the first of 26 prototype automated rail-mounted gantry cranes (ARMG) built by Austrian firm Kuenz. The 30m-wide units will use a fully automated system to load/unload containers from truck chassis and onto the LAGVs, then shuttle them to and from the berth and rail terminal.

The LAVGs will also service an innovative on-dock rail terminal, initially with four tracks, but later expanded

RFID tags boost Trinity...

An advanced radio frequency identification (RFID) electronic tagging system has enabled Trinity Terminal at the UK's Port of Felixstowe to improve rubber-tyred gantry (RTG) scheduling and streamline container loading and unloading.

Trinity Terminal is the largest container handling facility in the UK, regularly handling over 170,000teu each month. The terminal's operator, Felixstowe Dock & Rail Company, requested a solution that would give it real-time information on RTG movements within the container yard to ensure efficient scheduling and direct all 36 cranes on a pre-programmed route.

Electronic equipment supplier Avonwood Developments was contracted to install a series of 500 Eureka 311 Active RFID tags, which were buried in the ground along the channel where the RTGs' wheels run. The container yard is laid out in a matrix of rows and columns, each of which was identified by a separate tag.

The 36 RTG cabs are fitted with an antenna under the mesh floor. The tags in the ground operate as a miniature radio frequency read-only transponder, and when they come within range of the radio frequency field produced by the RTGs' antenna, the tags are activated and transmit their location data back to the cab antenna. This information is then processed by a decoder within the cab and transmitted over a radio data link to Felixstowe Dock & Rail Company's main computer room. Information from all 36 RTGs provides the terminal operator with a complete picture of RTG movements and locations within the terminal yard.

The radio frequency communications to and from the tags utilise low frequency inductive coupling, a technology that can function through most non-conductive materials, allowing the tags to operate in difficult or harsh environments. The small amount of power needed to transmit data from the tag and to maintain its data memory is provided by a long-life lithium battery.

when the terminal is fully built, says Tazelaar: "At existing automated facilities, such as HHLA Container Terminal Altenwerder in Hamburg and Euromax Terminal Rotterdam, interaction between the stack and the rail terminal is carried out using manual-operated transport, but we will automate that part of the process."

APM Terminals has formed a dedicated team for process mapping the terminal and associated software to enable the new equipment to run automatically.

Taken together, these pioneering technologies mark the next stage of the journey. "The first generation of automated terminals didn't have the technology available to us today, our aim has been to build on automated systems that have been implemented elsewhere and take each a step further," concludes Tazelaar. All of which begs the question, where might we go in the future? **PH**

...and help improve worker safety

In the first ever adaptation of radio frequency identification (RFID) technology to boost safety in ports, APM Terminals has installed a ZoneSafe Proximity Warning system in its yard equipment at the Port of Callao in Peru.

The \$300,000 installation, supplied by UK-based Avonwood Developments, aims to prevent blind spot injuries, caused when equipment such as reach stackers or forklifts collide with port workers.

These terminal workhorse vehicles are known to suffer from certain 'blind spots' that prevent operators from easily

seeing nearby activity. The system works by transmitting automatic alerts to equipment operators if personnel move within close proximity of their machinery and are considered at risk. To ensure effective operation, all yard personnel must wear a small RFID tag, which continuously transmits their location to antennae installed in reach stackers and forklifts.

The system can automatically disable live equipment and restrict machine operations or generate alarms, while specific user profiles associated with each ID tag provide control over events that occur when a tag is identified. User IDs include

those for drivers, operators and general personnel.

APL Terminals chose to install the system following extensive testing, and its investment is part of a \$749M initiative to modernise the Port of Callao.

"We started our R&D last year to understand whether this technology could be applicable in a port environment, and after a comprehensive testing programme we are now installing the ZoneSafe system in all of our reach stackers and heavy-lift forklifts [at Callao]," said Henrik Kristensen, managing director of APM Terminals Callao.

Small-scale automation

The level of investment required does not have to be huge, meaning that small to medium-sized ports can move towards partial automation

Full automation is ideal if a terminal is handling a large number of containers

Large automated terminals with robotic driverless equipment may attract the media spotlight, but for the majority of smaller container facilities, full automation is simply not an affordable option. However, cheaper automated processes do exist that can help them achieve similar operational benefits.

Port consultant Seaport Group recommends that operators of smaller facilities first invest in more advanced IT and in IT training for planners and dispatchers to better utilise systems for automation.

"Automated gates can also help streamline operations for limited investment," explains Kent Busk, principal at Seaport. "Slowly phasing out existing handling equipment and introducing new automated handling equipment is also a very good option."

The general message is be realistic about what your port needs. Dr Jürgen Sorgenfrei, director of consulting services, Maritime & Hinterland Transportation at IHS, sees the benefits for most terminals in automating certain elements, such as AGVs. However, he notes that going beyond this automation is only beneficial if minimum throughput targets are exceeded and it is a medium or large scale port. "As a rule of thumb, terminals below 100,000teu annually throughput should not even think of further automation; the costs per unit are too high," he told *P&H*.

According to a recent white paper published by port technology provider Identec, process automation applications and technologies related to identification, locating or positioning and 'sensing' (telematics) can drive significant gains in efficiency and productivity for smaller facilities without high capital investment.

The automated capture of ID data in terminals can help to streamline various processes, Identec claims. Optical character recognition (OCR) technology can be used to read alphanumeric identification information on the sides and top of containers and convert it into usable digital data that can be fed to the terminal operating system or an automated gate system. Radio frequency identification (RFID) technology, which comprises a chip able to transmit and/or receive information from a tagged person or a port asset, such as a truck or terminal tractor, can provide accurate and real-time location data and ensure the more efficient movement of vehicles. Satellite-based Geospatial Positioning Systems (GPS) are relatively cheap and can be used to track equipment and personnel in the dock or container yards to an accuracy of up to 2.5cm.

Many activities on a typical terminal involve data capture to measure equipment performance metrics, such as tyre pressure, fuel levels and battery life.



Photo: Kalmar

“Slowly phasing out existing handling equipment and introducing new automated handling equipment is a very good option”

Kent Busk, principal, Seaport

Today there are a range of wired and wireless sensing technologies available to automatically gather large amounts of real-time data, meaning terminals can capture asset information at a lower cost and use it to extend the life of assets and/or keep assets functioning at a higher level of utilisation.

"Process automation removes the inefficiencies from processes, sometimes only saving mere seconds, but resulting in significant savings on a yearly basis," says Jorma Tirkkonen, senior vice-president of automation at equipment supplier Kalmar. "These solutions allow terminals to become more efficient and even handle large vessels in the same amount of time as big automated terminals. The attractive part is that process automation only requires a moderate investment and starts paying dividends almost immediately."

Sorgenfrei notes that automation in ports began in the Netherlands, a country with high labour costs. However, not all of Rotterdam's terminals are automated, he explains, as others rely on conventional methods. "This shows that a number of factors need to apply at the same time: a huge number of containers on the selected terminal, high labour costs that could and should be substituted, a predilection for technical solutions, and – essential, especially for privately-owned operations – the ability to invest in operations with for sure long ROI (return on investments)-periods. This is why port automation is only a solution for selected terminals." **PH**



Photo: Kalmar

A Patrick terminal... the stevedore says automation has reduced accidents

Port automation going global

Once confined to hub ports like Rotterdam, automation is now taking off in Spain's Catalunya, California's Long Beach and Australia's Port Botany, writes **Zoe Reynolds**

Automation is going global and stevedores are trumpeting higher productivity, improved safety and reduced labour costs. In Australia, Patrick has led the pack with automated straddles. It maintains the technology is also suitable for smaller 2M-teu ports, such as Sydney.

Alistair Field, Patrick's director of Terminals and Logistics, told *P&H* that the AutoStrad technology has been operating in Brisbane since 2005 with great success, improving onsite safety and service delivery.

"In the first year of automation at our Brisbane AutoStrad Terminal, we achieved a 75% reduction in safety incidents, increasing to 90% reduction

in following years," he said. "Recently our Brisbane operation reached a 500-day LTI (lost time injury)-free milestone, an achievement that is testament to the hard work and efforts of all our employees. We are committed to achieving similar outcomes at Port Botany to ensure all our employees go home safely every day."

Hutchinson, the new starter in Australia, says it will move to automated stacking cranes like those already in use at its Hong Kong terminal, and DP World is also following suit. Unions, however, while agreeing automated landslide operations may be safer, warn that shipboard work is still a hazard.

"Underneath all this automation, we've still got people like ants, lashing and unlashng containers," Paddy Crumlin, president of the International Transport Workers Federation, said at an international conference on automation held in Sydney in May.

"If you drop a 26-tonne container on someone there's nothing left. Productivity is a wonderful thing, but it's not happening in a vacuum. There are still real people involved, real flesh and blood out there. Automation means more speed, more risk, more damage when things stuff up. Negotiated agreements are critical to safety," he added.

Addressing the conference of 160 union representatives was Anthony Otto, president of Orient Overseas Container Line's US\$4.6Bn, 3M-teu, Long Beach Container Terminal in LA. OOCL will start the rollout of its fully automated \$1.2Bn 300-acre, 3.3M-teu 'port of the future' in 2015. He told *P&H* that while there would be an erosion of some traditional jobs, automation will also allow for new, more highly skilled jobs. "We were at the conference to make it clear we plan on fulfilling our commitment to bring the [union] along with us," he said. Also attending the Sydney conference were representatives of the US ports West Coast employer group Pacific Maritime Association and Ports America. **PH**

Productivity is a wonderful thing, but it's not happening in a vacuum. There are still real people involved, real flesh and blood out there

Paddy Crumlin: *president of ITWF*

Asian ports seek automation move

But ports automating first will not necessarily reap first-mover rewards, says Anthonie Versluis of Roland Berger Strategy Consultants. **Arianne Perez** reports

Major Asian ports are not resisting change as far automation in their terminals is concerned; the concept is simply seen as a 'no brainer' towards improved business productivity and efficiency.

This move is not driven by financial arguments, but rather bigger visions and bigger dreams, Anthonie Versluis, managing partner, Malaysia, of Roland Berger Strategy Consultants, tells *P&H*. He notes that all Asian terminals, with the exception of some small and remote terminals in the region, are now all partly automated and "moving towards expanding automation all the time".

Berger said: "[With automation], there is less uncertainty and more reliability. In theory, it makes life simpler. This is a global movement since we all want to be efficient and productive, with the expectation that you would need less land for the same result."

Yard cranes, prime movers or trailers and quayside cranes, are the areas being automated. The first two are relatively easier to automate, but, "the berth quayside cranes have a much longer swing, they are more susceptible to winds so the contour of the swing and the contour of the manoeuvring of boxes is more sensitive and complicated – that's why that area will be automated last," he said.

Meanwhile, among the most aggressive of ports working towards increased automation, according to Versluis, are Port Klang, Singapore, Port of Tanjung Pelepas (PTP), and some in China. "But the first one out of the gate is probably PTP," he said, revealing it is planning its next expansion phase, with construction

likely to start next year. The port plans to utilise automated guided vehicles (AGVs).

"Singapore will also be a little bit ahead of the game as they are re-developing Tuas [industrial hub] and so I believe they will push it further, in terms of technology," he added.

Others examples includes HPNT at Port of Busan which has automated many elements of its operation including at the gate and in the yard, and includes 38 automated transfer cranes (ATC), port operating system and remote control RFID system. And in Japan, Port of Nagoya has automated certain elements, but has also introduced remote operation, which allows operators to sit in comfortable surroundings away from the yard.

In June, Philippines port operator ICTSI announced in a statement it had appointed Hamburg Port Consulting (HPC) to apply its automation expertise to a number of its projects, "including new business opportunities, where the deployment of high end automation is a logical step to raise operational efficiency and lower costs".

However, Versluis warns that the fastest movers may not necessarily win first-mover advantage. "The fastest movers will have the higher barrier of cost of automation against the lower barrier of basic infrastructure costs. So being the first out of the block can be a dangerous game because technology is lesser proven and relatively more expensive. If you wait a little bit, then it's relatively cheaper and less risky, but also, waiting too long might also be dangerous."

He explained, for example, that AGVs are still very expensive compared with conventional trailers. This difference in cost is only likely to reduce in the longer term.

Nevertheless, Versluis believes there will be no stopping the move towards increased or full automation "because they are part of a global supply chain, they're not stand-alone. Many of the terminals are owned by international operators, the boxes are part of an international business, the cranes and trailers no longer locally made." Versluis believes full automation remains a relatively distant concept, noting that this would require even the ship-to-shore cranes to be automated. "We won't even want to consider it [not having any human operators] because it is simply not practical and it feels so unnatural." **PH**



“Being the first out of the block can be dangerous because technology is lesser proven and expensive. If you wait a little it's cheaper and less risky but waiting too long might also be dangerous.”

Anthonie Versluis: managing partner, Malaysia, of Roland Berger Strategy Consultants

Photo: Roland Berger

Corridors of power

As Kenyan and Tanzanian ports compete for access to East Africa's landlocked countries, **Stephen Spark** considers the role of transport

East Africa is expanding. Not physically, of course, but the economy of this region of 140M people is growing by nearly 6% a year. Kenya's main port, Mombasa, is a convenient barometer: traffic rose from 9.1Mteu in 2000 to 19.6Mteu in 2011.

However, with growth comes growing pains, and it's the ports – or, rather, their customers – that are feeling the worst of them. There are two main gateway ports for landlocked Democratic Republic of Congo, Uganda, Rwanda and Burundi, and it's a moot point whether the delays are worse in Dar es Salaam or Mombasa. Ship operators and shippers regularly complain in the region's media about chronic congestion, high port and customs charges, Byzantine bureaucracy, and inadequate road and rail links to the hinterland.

A recent World Bank report, *Opening the Gates*, revealed that in Dar es Salaam ships can wait 10 days to berth and in some cases a further 10 days to unload goods, clear them through customs and get them out of the port. It estimated that port inefficiency costs the Tanzanian government \$1.76Bn a year.

Onward transportation is another major contributor to costs; jammed single-track roads mean it can take 20 days for a container to travel the 470km from Mombasa to Kenyan capital Nairobi, according to the World Bank. The poor state of the investment-starved railway, including the narrow track width (1m compared with the standard gauge of 1,435mm), unreliable motive power and aged rolling stock, explains why only 5% of goods leave Mombasa port by rail. Movements by rail from Dar es Salaam have dropped to one-third of the level five years ago for the same reasons.

To some extent, this is the price of success. After years of internal and cross-border conflict affecting one country after another, the region is now largely peaceful. Somali piracy, which imposed high insurance and fuel costs and erased Indian Ocean ports from cruise operators' itineraries, has been largely suppressed. Peace and stability have released a pent-up demand that can only realistically be served through the few existing capacity-challenged ports. Demand can escalate quickly, but the infrastructure needed for ports and

railways takes longer to put in place.

Mombasa made a start last year with a Japanese-financed, Sh28Bn (\$330M) second container terminal, partly built on 100ha of reclaimed land. At the groundbreaking for the Kilindini terminal, Kenyan President Mwai Kibaki said: "The Port of Mombasa has experienced unprecedented growth in cargo volumes. This growth has outstripped the capacity of the current container terminal, which was designed to cater for 250,000teu." Last year Mombasa handled 903,000teu, so an extra 1.2Mteu capacity will come as a major relief when Kilindini opens in 2016. However, it appears the terminal is being built with transshipment business in mind rather than serving the local market directly.

The Tanzania Port Authority (TPA) is pressing ahead with a \$400M Chinese-funded project to build two new berths and to turn a single-point mooring into a multi-purpose facility. It is also developing an inland container port in an attempt to decongest Dar es Salaam port.

However, TPA's major port development focus is away from the port. Near the border with Mozambique lies Mtwara. It was built in the early 1950s to export peanuts (groundnuts), but the plantations failed, port traffic dwindled and the connecting railway became derelict. The port still functions but is underutilised, TPA admits. Throughput capacity is 400,000teu/year, although this could be nearly doubled if container-handling equipment were to be introduced.

It is the burgeoning offshore oil and gas sector that has breathed new life into Mtwara. There are high hopes that Tanzanian waters will prove as valuable as those off Mozambique. TPA announced in August 2012 that it intends to develop a 110ha freeport at Mtwara. According to the newspaper *Daily News*, the authority has undertaken a feasibility study into a major port expansion on 2,600ha, chiefly to serve the energy companies that currently lease land from the authority.

In the far north, by the Kenyan border, is the Port of Tanga, another relatively underemployed facility, which specialises in imports of liquid bulk and break bulk cargoes, machinery, vehicles and chemicals. The key to expansion here is construction of a railway from Tanga to Musoma, where goods will be placed on barges and ferried across Lake Victoria to Port Bell in Kampala. The new route would compete for Ugandan business with Mombasa and its overland route via Nairobi.

However, the biggest contest for new business – and for funding – will be between two ambitious port projects. TPA hopes Bagamoyo, 75km north of Dar es Salaam, will solve its capacity problems. The Kenyan government, meanwhile, has high hopes for Lamu, 110km south of the Somali border.

In past centuries, Bagamoya exported slaves and imported missionaries, but it is the need to improve communications to the landlocked countries and serve the energy sector that is driving today's \$11Bn Chinese-financed scheme. The complete



project encompasses a port with deepwater berths for 10,000teu vessels with a 15m draught, an export processing zone and a 65km-long railway connecting to the Tanzania-Zambia Railway, TAZARA. China Merchant Holdings plans to start work in 2015 and should complete the first phase in 2017. Eventually, the port will be bigger than both Dar es Salaam and Mombasa, with a capacity of 20Mteu/year.

Kenya's Lamu scheme comes with a \$25.5Bn price tag and, if built in its entirety, will be East Africa's biggest infrastructure project. At its heart is a \$5.3Bn port, which will have 32 post-Panamax-size berths by the projected completion date of 2030. The start is a little more modest: China Communications Construction Company is to build three berths

for bulk and box traffic, primarily to allow project materials to be delivered to site.

From the port a road, standard-gauge railway and oil pipeline will all run 1,500km northwest to South Sudanese capital Juba, with a branch from Isiolo to Addis Ababa, Ethiopia. The pipeline will terminate in a refinery at Lamu, able to refine 120,000bbl/day.

The complete package is known as the Lamu Port and South Sudan Ethiopia Transport (LAPSSET) Corridor. The 'corridor' concept is central to every region's port developments, for in Africa a port's hinterland extends well beyond national boundaries and penetrates deep into the continent's interior. It appears likely that in the coming decades overland connectivity will be critical, not just to the success of a port but perhaps even its survival. **RH**

LNG interest keen at IAPH 2013

There was great interest in the liquefied natural gas (LNG)-fuelled vessels working group from port representatives attending the IAPH World Ports Conference in Los Angeles in May, according to the group's chair Tessa Major.

"Seventeen ports expressed an interest in finding out more about LNG as a fuel and are being sent details of the issues we're tackling in the working group," Major told *P&H*, adding that she was keen to hear from other ports interested in joining the dialogue on using LNG.

Issues being discussed by the WPCI working group include harmonised bunker checklists that can be used at all ports, a harmonised accreditation system for LNG bunkering companies, establishing guidance towards the harmonisation of risk perimeters of LNG bunkering operations in a port environment and steps to produce clear and unbiased information about LNG as a fuel and as such create LNG awareness in the port community.

Seventeen ports expressed an interest in finding out more about LNG

Tessa Major

Senior technical manager environment, Port of Antwerp

LNG complies with IMO regulations enforcing a reduction in sulphur emissions from bunker fuel that are due to come into force in 2015. The SOx content will be reduced to 0.5% globally by 2020.

Major, who is senior technical environment manager at the Port of Antwerp, said that the first of these issues – checklists for the various types of bunker operation – would be discussed by the working group at its next meeting in Antwerp on 8 October.

The working group will consider

feedback from an industry reference group before finalising three different checklists: truck-to-ship, ship-to-ship and shore-to-ship operations. She said a harmonised checklist was essential to reduce the potential confusion caused by having different bunkering rules and regulations at different ports.

At a later stage, guidelines on accreditation for LNG bunker companies will be agreed, mirroring as much as possible existing accreditation systems

already being used by such ports as Gothenburg and Antwerp and the findings of other LNG working groups. The accreditation would include requirements on training, minimum safety levels, and emergency response procedures. As with the checklists, the aim is to ensure that such a system is universally accepted, ensuring a good safety record for the LNG industry.

Major said that by the end of the year the group hoped to go live with a LNG website linked to the main WPCI site that would function as a one-stop shop for all questions relating to LNG that ports are likely to ask.

- Ports and industry stakeholders interested in finding out more about the project may contact Tessa Major at tessa.major@portofantwerp.com
More info: www.iaphworldports.org



IADC journal welcomes contributions

The International Association of Dredging Contractor's (IADC) magazine *Terra et Aqua* is hoping to expand its readership and attract a wider range of contributors from within the ports industry. *Terra et Aqua* is described by the organisation as "a platform for sharing dredging research and technology," and it notes that "port development cannot take

place without dredging. And dredging cannot take place without intensive research and development," which is ultimately the focus of the journal.

Recent *Terra et Aqua* articles include an overview of OpenEarth – a free and open knowledge exchange system that was developed by Delft University of Technology and Deltares as an

alternative to *ad-hoc* approaches to acquiring data, models and tools. OpenEarth aims to reduce frustration caused by time- and cost-consuming, project-to-project investments in data research.

Also recently featured is the research and development conducted at Port of Rotterdam's Maasvlakte 2 project that has resulted in new technologies,

surveying techniques and purpose-built equipment.

Terra et Aqua is hoping to expand its base of contributors, welcoming articles and research papers from dredging and maritime construction experts, as well as students and young professionals. All articles are peer reviewed. The journal is published quarterly and distributed as a service free of charge by IADC.

More info: www.terra-et-aqua.com

Notable numbers

17

number of ports that expressed interest in the LNG working group at IAPH 2013

4

number of pirate attacks that took place off the Lomé anchorage over 12 days in May this year

Container weight debate intensifies

Checking container weights prior to loading aboard ships sounds simple enough but shippers warn that the cost of implementing the measure will be excessive. The debate about misdeclared container weights is set to come under the spotlight as the opposing parties prepare to do battle at the DSC (Dangerous Goods, Solid Cargoes and Containers) sub-committee of the International Maritime Organisation in September.

The meeting promises to be a decisive one in a debate that has been inspired by a series of accidents involving container ships in recent years where incorrectly declared container weights have been, or perceived to have been, to be a factor.

An alliance comprising IAPH, Denmark, the United States, the International Chamber of Shipping (ICS), the International Transport Workers' Federation (ITF) and the World Shipping Council (WSC) made a formal proposal to the sub-committee in 2012 to make the weighing of containers mandatory prior to their being loaded on to ships.

The proposal has run into opposition, however, from the European Shippers' Council (ESC),



The crush on *Annabella* in 2007 was caused in part by overweight containers

which claims that container weighing is a "false remedy" for container safety issues, which can also be caused by poor "lashing", non-respect of shipboard stowage plans and poor "stuffing" of cargo inside containers.

ESC chairman, Denis Choumert, admitted in a recent press interview that calls for mandatory container weighing were justified from a purely theoretical standpoint. "Certainly, there are people who cheat," he said, "but does the risk justify the major cost increases? Doubtless, no."

The way forward, he said, was to improve the chain of certified information regarding container weight and contents rather than to add an additional physical operation to the maritime freight supply chain. The ESC was encouraged in its efforts to prevent the DSC sub-committee voting in favour of mandatory weighing by the decision of the Dutch government, one of the sponsors of the original weighing proposal addressed to the IMO, to reverse its support for the measure in March.

It said that at the time that it would be looking to convince other governments to follow suit in time for the September vote at the IMO.

The indications are, however, that proponents of mandatory weighing intend to stand by their original argument. ICS secretary general Peter Hinchliffe told *P&H* that he accepted that there were other issues to be addressed in the field of container transport safety and security, but that mandatory weighing was still necessary.

"It seems to us that the first simple step is to somehow find a means of requiring that terminals should at least assure themselves before the container is offered up to the ship that the actual weight of the container matches what is on the manifest," he said.

As to the likely outcome of the DSC sub-committee meeting, he said that it was too early to say what it was likely to be, since submission papers for the meeting were still coming in. "Once we have got these submissions, we will start to understand where governments are coming from and what alternative proposals are going to be put forward," he said.

European money to get to root cause of piracy

The European Union (EU) is to provide more than \$49M in fresh funds to support efforts to stamp out piracy in eastern and southern Africa, it was announced in May. The European Commission (EC) noted that piracy attacks and hijackings in the region had fallen in 2012 and 2013 but said that the

reduction remained reversible.

It said that the new financial support was based on a comprehensive approach to helping countries in the region, aimed at dealing with the causes of piracy as well as its symptoms. It would go towards strengthening the legal systems and

financial controls of the countries concerned, as well as towards the training of young men in activities that could serve as alternatives to piracy.

Development commissioner Andris Piebalgs said that the new investment showed that the European Union had a

continuing commitment to combating what was a complex problem.

"Strengthening security in the maritime routes is crucial for us because it will help boosting trade and growth in the region, which would enormously improve people's lives," he said.

50,000

tonnes – amount of bio-fuel Maersk will buy if project proves successful

500

approximate number of delegates that went to IAPH 2013 in LA this year

Togo Navy impacts piracy

After a period of five months in which no pirate activity occurred in the Lomé anchorage off the coast of Togo, a spate of four attempted attacks took place in May 2013 over a period of 12 days, piracy expert Dr Dave Sloggett told *P&H*. Each of the four attempted attacks off the coast of Togo in May 2013 was thwarted by the efforts of on-board security guards or the attendance at the scene by the Togo Navy, Sloggett said. In the case of the first attack the navy dispatched two patrol vessels within 20 minutes of receiving the call.

This surge in attacks is similar to the pattern in the same waters during 2012 when a total of 14 attacks were reported to the International Maritime Bureau (IMB). After three quiet months at the start of 2012 an upsurge in

activity started on 4 April. Over the following three weeks three attempted attacks were aborted by the pirates, one vessel was boarded and a product tanker hijacked. Following the usual pattern of pirate attacks in the Gulf of Guinea it was released a few days later. Similar brief surges occurred in July, August and at the end of November and early December, he said.

The last time a vessel was hijacked in the anchorage was in the early hours of the morning on 28 August 2012 as the vessel was at anchor 17nm off the port of Lomé. The Togo Navy responded to calls for assistance. After a brief exchange of gunfire with the pirates the navy was unable to prevent the Greek-owned product tanker crossing the boundary into

Benin's territorial waters. The Isle of Man-flagged vessel was released two days later. Ten days earlier another product tanker had also been hijacked just before midnight in the same area, Sloggett said. It was released on 23 August.

Providing security for the Lomé anchorage is something the Togo Navy has been developing. Its strategy is based on two prongs, said Sloggett. The first is to deploy small armed detachments – typically four armed ex-servicemen who provide the armed guards on the vessels – on board vessels in the anchorage. The second is to rapidly send coastal patrol vessels when notified of an incident.

Despite only having four coastal patrol vessels in service and a total

force of around 200 people, Sloggett told *P&H* that the Togo Navy is having an important effect on piracy in its territorial waters. While the coastline of Togo is only 56km long and the area in which the pirate attacks occur is around 300km² mounting standing patrols is not easy, he said. It is vital that the Togo Navy is able to respond quickly once a call has been received if pirate attacks are to continue to be halted, said Sloggett.

Joint training with other regional navies helped by the United States and European navies under the auspices of the African Partnership Station has also helped, he said. At a time when the overall trends of pirate attacks in the Gulf of Guinea are a cause for concern the approach taken by the Togo Navy is one that shows just what can be achieved even with relatively small resources, Sloggett concluded.

US ballast water reporting reviewed

Foreign vessels entering US waters would see their ballast-water management reporting burdens reduced under a proposed rule. The proposal, published in June by the US Coast Guard, would allow vessels entering the United States outside the Exclusive Economic Zone (EEZ) to submit ballast-water reports after arrival at the port of destination. Current rules require vessels to submit ballast-water management reports 24 hours before arrival and predict their ballasting operations, a procedure that requires owners and operators to later revise and resubmit their reports with the

The proposed rule would reduce the administrative burden



Photo: Dietmar Hasenpach

actual ballasting information.

The Coast Guard estimates that an average of 10,717 reports are amended and resubmitted every year due to the timing of submission. The new procedure

would greatly reduce the need to file amended reports, and would save the industry approximately \$184,868 in administrative costs per year, according to the proposal.

The proposal would also

amend existing ballast-water management reporting and recordkeeping requirements for US-flag vessels operating exclusively on voyages between ports within a single Captain of the Port Zone. The rule would require owners and operators to submit an annual report of their ballast water management practices for three years because the agency "does not currently collect ballast-water management information on this segment of the maritime population".

This part of the proposed rule would apply to approximately 29 tankers and 117 non-tank commercial vessels, with a total cost of \$137 per vessel for the three-year period.

Notable numbers

8.3%

the yearly rate at which Dar es Salaam's vessel traffic has been increasing since 2001

15

number of hours being allowed for grain unloading from new Long Beach rail facility

Maersk's sulphur challenge

Faced with ship emissions restrictions, the only option in the short term for the world's largest container ship operator is to switch to diesel, Maersk's head of environment and carbon reduction strategy said at the recent Multimodal event in Birmingham, United Kingdom.

However, Jacob Sterling said switching to low-sulphur diesel would increase the price of bunkers significantly. "Sulphur is a big issue for shipping compared to road or rail transport and the emissions are quite significant on a per shipment basis," he said at a seminar on modal shift and carbon reduction. The other current solutions proposed to reduce sulphur emissions were both unsatisfactory: "Scrubbing technology is not yet mature and retrofitting the Maersk fleet to

Sulphur a big issue for shipping

Jacob Sterling
Head of environment, Maersk



Photo: IHS Fairplay

burn LNG is too expensive," he explained.

Sterling sees a possible future in biomass, but there are currently no biofuels being tested in land-based industries that are suitable for shipping and they are far too expensive, too. He said Maersk was currently engaged with various

biofuel developers to create an organic bunker fuel tailor made for shipping – low-grade, cheap and sustainable. Biofuel does not contain sulphur, so would mean zero sulphur emissions.

Maersk is known to be involved in two projects to design biomass-based marine fuels using lignin.

Lignin is a form of biomass currently burnt for process heat in both the paper and ethanol industries. With falling gas prices, the value of lignin as a heating fuel is set to drop even further.

One of the projects involves a partnership with Dutch automotive research institute Progression Industry, and the other involves Danish universities and companies such as renewables group Dong Energy. Maersk is reported to have promised that if Progression Industry can create a lignin-based fuel that meets its criteria for a sustainable marine fuel, it will make an initial commitment to buy 50,000 tonnes.

Maersk is also evaluating the results of tests on an algae-based fuel it carried out in 2012 in association with the US Navy. The fuel was used in the auxiliary test engine of the container ship *Maersk Kalmar*, using blends ranging from 7% to 100% biofuel.

Keeping flexible in times of chance

The Flexible Port is a dissertation that promotes a range of flexible and adaptive plans, designs, procedures and policies that can help deal with exogenous developments, "so that a port is robust under conditions of uncertainty", said the author. "Ports being designed and constructed today will be in service for 50 or more years, stretching into 2060 and beyond. The shifting functions of a port, as well as the many logistical, technological and economic uncertainties under which it must operate, make the planning of these complex socio-technical infrastructure so that they can stand the test of time, very

challenging. The traditional techniques of port planning, infrastructure design and project appraisal prove inadequate under uncertainty," said author Poonam Taneja in a press release, who is a lecturer at UNESCO_IHE at Delft University.

She believes that a 'flexible' port has the capability to change and evolve so as to be functional under new, different, or changing requirements, with minimal extra investment, while maintaining its service quality. The dissertation proposes adaptive port planning (APP) – an approach that bridges the gaps in the traditional practices

of port planning, to systematically guide the user through a planning process from the time of conceiving a plan through to its implementation, so that the result is a robust infrastructure. It considers the uncertainties and flexibilities associated with a project by employing appraisal methods that evaluate a project with greater accuracy, she explained. This, in turn improves decision making.

The dissertation also looks at the various steps in APP, said Taneja, which include identifying critical uncertainties in a plan, preparing actions to make the

plan robust in either the current planning cycle or at a later stage, establishing the cost-effectiveness of these actions, making a selection from different alternatives and setting up a system to monitor critical uncertainties.

Real-life case studies from the port sector are included and address issues such as spatial planning under uncertainty and energy transition, she said.

It concludes by making suggestions on how to integrate APP into the practices of the organisations involved in port planning and design.

More info: <http://dx.doi.org/10.4233/uuid:a9f0c128-d4c3-41a2-8790-13aec89dca63>

90%

The reduction level of safety incidents at Brisbane Auto-Strad automated terminal

\$1.9Bn

cost of first phase of Maasvlakte 2

Night and day in LA

Delegates saw the glamorous side to LA through an enjoyable programme of evening activities

It wasn't all work at IAPH 2013. Delegates were wined and dined at some of Los Angeles' most iconic landmarks.

After a busy first day of technical committee meetings, IAPH members travelled to Griffith Park

to see LA from above and take in views of the iconic 'Hollywood' sign on Mount Hollywood. The park is also home to the Griffith Observatory, where delegates were given a lesson in astronomy and, in a separate lecture, learnt

how a planet is born.

The next evening delegates had a night off to explore LA on their own. This was followed by Hamburg Night (see page 22) where a Beatles tribute group drew delegates to the dance floor.

The Fab Four made their name in Hamburg in the 1960s, adopting their signature hairstyles for the first time there. Hamburg Night was a prelude to what IAPH delegates should expect at IAPH 2015 in two years' time.



Photo: Port of Los Angeles



Photo: Port of Los Angeles

Above left: Port of Los Angeles' Arley Baker and Geraldine Knatz, along with Sydney's Ports Grant Gilfillan pose with Hollywood stars of past and present. Above right: delegates take the opportunity to enjoy the iconic Griffith Observatory situated on Mount Hollywood



Photo: Shutterstock

The final evening of entertainment was gala night and took place at the conference hotel. In keeping with the 'showbiz' feel of the event, IAPH members were encouraged to take to the dance floor to learn basic dance routines to such songs such as 'Gangnam Style'. Geraldine Knatz was amongst those many delegates that showed off their dancing skills. Members were also amazed at the star-studded attendee list that gala night had drawn in – or at least, that was the first impression you got.

On closer inspection you saw lookalikes of well-known Hollywood stars such as Elvis Presley, Marilyn Monroe, Johnny Depp and Charlie Chaplin mingling with guests, adding more glamour to the glittering last night.

After a sumptuous evening, members woke next day and took to the water for a boat tour of the USA's largest container port. It started with a landside demonstration of the port's security facilities, including its container scanning equipment and the sniffer dogs used to

detect explosives and drugs. Delegates were impressed by the dogs' ability to detect contraband from a range of different bags.

Next it was all aboard a boat where members enjoyed a sail around Port of LA's many terminals. They also visited the sea lions that hang out around the old fish terminal, and seem to know when a free meal might be tossed into the sea for them.

Equipment manufacturer Cavotec gave a demonstration of its on-shore power system. Port of LA has invested in this

technology and delegates appreciated seeing the system in action.

Delegates then stepped back onto dry land where they were treated to a picnic lunch and got the chance to wander through the many booths and stands at Crafted at the Port of Los Angeles.

A lively accompanying person's programme was held throughout the week, and included tours of Hollywood, Downtown LA, the Getty Museum, and Exposition Park. For delegates and partners alike it was an informative week, for all that took part.

▶ Women's forum

Path to the port

Sabine Stüben became the IAPH conference VP in LA. She has been head of marketing and communication at Hamburg Port Authority since 2009

"I have always been in love with our port," Stüben told *P&H*. But the path that led her to the Port of Hamburg took her via a number of other industries first. Stüben trained at a Hamburg import and export company that was "steeped in Hanseatic (a historic north German alliance) traditions". During this time she prepared customs declarations, negotiated freight rates and inspected goods at bonded warehouses and this triggered her fascination with the port.

After gaining experience in the metal and electronics industry as well as at an international software company, it had become clear to her that the combination of complex logistics processes and

being part of an international network was what really appealed to her. She deepened her knowledge of the global supply chain at KLU an independent, state-accredited, private university focusing on logistics and management.

She then took a position in contract

management and insurance at an international contract logistics company and later in the legal field, too. Stüben pointed out these are not necessarily fields that you associate with logistics, but they do play an important role in ensuring smooth organisational processes. Above all, she notes, there is a need for clear and comprehensive communication, which she said prepared her well for her next professional challenge – Hamburg Port Authority.

Her team of ten qualified professionals come from the fields of communication, public relations and marketing. Keeping around 1,800 employees up-to-date poses a real challenge, she said, and the citizens of Hamburg keep a keen eye on the port given its location and historical relevance. She also handles media relations, online communication and represents the port at trade fairs.

Her team received the Gold IAPH Communications Award in LA for the TV format 'Hafen TV' – a fortnightly documentary presenting news from the port, produced in collaboration with a local television channel.

Sabine Stüben
has been with HPA for four years

“I’ve always been in love with our port”



IT Award 2013 1st: Rabih Halabi from Bureau Veritas, Kassim Traoré, CEO of Cotonou Port Authority with the award, Santiago Garcia-Milà Lloveras, deputy managing director of Port of Barcelona Authority, Pascal Ollivier, director of corporate development at Soget

This year's **winners** are...

This year saw the winners of two new awards being announced as agreed two years ago in Busan. The Port Communications Award and the Port Environment Award are offered to a port and join the long-standing IT Award. The Essay competitions recognise two individuals through its Akiyama and LA Open awards. All the awards were judged according to a previously-agreed uniform scoring system



IT Award 2013

A panel of judges was established within the Trade Facilitation & Port Community System Committee, headed by chair Frédéric Dagnet from Grand Port Maritime de Marseille, France. The following winners were selected out of 17 entries submitted from 15 IAPH member ports in 12 countries.

Gold

The **Port Authority of Cotonou, Benin** took gold in this category with its paper on the introduction of a port community system (PCS) (see page 21). The project began in 2011 and was rolled out by the public private partnership SEGUB. In its paper, the port stated that its single-window platform has been designed to handle information and data across the logistics chain for all import, export, and transshipments, and for all types of cargo handled by the port. It writes that it faced opposition and challenges but that it needed to overcome these, to reduce the transit time of goods, improve transparency during the clearance process, and secure customs revenue for the Republic of Benin. The award was received by **Kassim Traoré, CEO, Port Authority of Cotonou**.

Silver

Maritime & Port Authority of Singapore came second in this category for its paper on its *Maritime Legislation Management System*.

Bronze

Port of Miami, USA took the bronze with its paper on its *Fully Integrated solution to Seaport's Revenue Management*.



Port Communications Award 1st: Jens Meier managing director of Hamburg Port Authority receives his award from Geraldine Knatz at Hamburg Night



Port Communications Award

The Communication and Community Relations Committee was responsible for the evaluation and selection of the winners of this new award. Eight entries were received from eight IAPH member ports in eight countries.

Gold

The overall winner was **Port of Hamburg, Germany** for its 'Hafen TV – The TV Format of the Hamburg Port Authority' project. Hafen TV is co-produced with a local Hamburg TV station. "The television programme presents news from the Hamburg Port Authority and the port industry as well as developments and expansion projects of wider-ranging importance," said the port. The port considers it to be an

important communication tool. "Hafen TV aims to communicate to the public even complex subjects in an illustrative and comprehensible way," it said. The award was received by Hamburg Port Authority's managing director, **Jens Meier**.

Silver

Port of Stockholm in Sweden received this award with its Port Vision 2015.

Bronze

This prize went to two ports: **Port of San Diego, USA** for its project the Big Bay Website – thebigbay.com; and **Port of Montreal, Canada** for its Free Wi-Fi for Seafarers project.



Port Environment Award

A panel of judges for this new award was established within the **Port Environment Committee** headed by **Captain David Padman** from **Port Klang Authority, Malaysia**. Ten entries were submitted from ten IAPH member ports from across nine countries.

Gold

Port of Hakata, Japan took the top prize in this category for its paper on *Environmental initiatives and measures to keep the terminal operational in times of disaster at Hakata Port International Container Terminal*. The port explained in its paper that it wanted to make Hakata Port a world-class eco facility. To achieve this the Kyushu Regional Development Bureau of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) led a demonstration in technological developments for cargo-handling facilities. For example, it showed that crane technology could reduce CO₂ emissions, and how antiseismic technology can enable operations to continue in the event of an earthquake. The award was received by **Kazuo Egashira**, president, Hakata Port Terminal Corp., Ltd.

Silver

Port of Amsterdam, the Netherlands came second in this category with its focus on its *Sustainability Fund*.

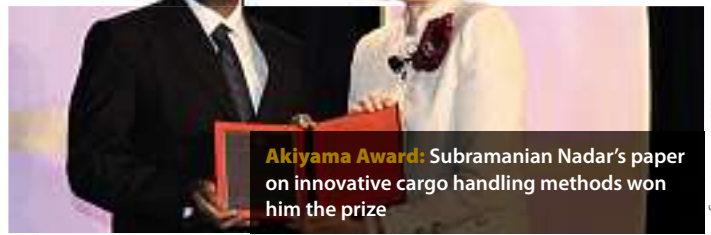
Bronze

The bronze award was given to two ports: **Port of Valencia, Spain** for its paper on *Energy and climate change – CLIMEPORT*, and **Port of Antwerp in Belgium** for *Creating space for port development by proactive nature management*.



Port Communications Award 1st: Hakata Port Terminal Corp president Kazuo Egashira receives the award from Geraldine Knatz

Photo: Aya Fujinami



Akiyama Award: Subramanian Nadar's paper on innovative cargo handling methods won him the prize

Photo: Port of Los Angeles



Essay competitions

A panel of judges was established within the **Communication & Community Relations Committee** and headed by Chair **Monica Bonvalet** commercial director at **Grand Port Maritime de Marseille, France**.

Akiyama Award

This award is offered to young staff working for an IAPH regular member in a developing country. This year the committee received 11 entries submitted from across 10 IAPH member ports in six countries.

Subramanian Nadar, deputy manager, Operation, Adani Port & SEZL in India won the prize for his paper, *Productivity increases by design changes in grab ship unloaders (GSU)*. Nadar received a certificate, a cash award of US\$1,000, an international flight to and from LA, hotel accommodation, and conference registration fee. This award is sponsored by the Japanese Foundation for IAPH.

In his paper, Nadar suggests that a vessel's port turnaround time can be reduced if "innovative cargo unloading methods are employed for large bulk [Capesize] carriers". He considers new designs in GSUs and says that in order to improve productivity an attachment should be built that "connects to the hopper of the GSU. It is expected that this attachment will significantly reduce vessel turnaround time as well as reduce the deployment of additional resources by stevedores by reducing the grab cycle time".

Ashan Shanthirathne, from Sri Lanka Ports Authority, and **Arief Yarmanto**, Human Capital & General Affairs supervisor from Gresik Port at PT Pelabuhan Indonesia III, were both chosen as runners up for the award and received merit prizes of a certificate and \$500.

Los Angeles Open Award

Judges received four entries this year from four IAPH members from across the same amount of countries. **Saut Fransiswoyo Siagian** from PT Pelabuhan Indonesia I won the award for his entry *Port cluster strategy to face challenges at the Port of Belawan*. He was awarded a certificate, a cash prize of US\$1,000, and conference registration fee, all sponsored by IAPH.



Los Angeles Open Award: Saut Fransiswoyo Siagian receives his award from Geraldine Knatz during the plenary session

Photo: Aya Fujinami

Your new officials for 2013-15

Officers

- **Grant Gilfillan**, CEO of Sydney Ports Corporation, Australia, takes over the presidency of IAPH for the next two-year term from Dr Geraldine Knatz
- **Santiago Garcia Milà Lloveras**, deputy MD, Port of Barcelona Authority, Spain, steps up to 1st VP for the Africa and Europe Region
- **Bill Johnson**, port director, Port of Miami, USA, steps up to 2nd VP for the Americas Region
- **Dr Priyath Wickrama**, chairman, Sri Lanka Ports Authority, joins the officers as 3rd VP for the Asia and Oceania Region
- **Sabine Stüben**, head of Marketing & Communication at Hamburg Port Authority in Germany, takes the position of conference VP in preparation for IAPH 2015
- **Dr Geraldine Knatz**, executive director at Port of LA, USA, stepped down as president after her two-year term, to become immediate past president
- **Susumu Naruse**, IAPH, Tokyo, continues as secretary general
- **Leonids Loginovs**, CEO of Freeport of Riga Authority, Latvia
- **Bisey Uirab**, CEO of Namibian Ports Authority (NAMPORT), Namibia
- **Javier Gesé Aperte**, deputy director of Presidency at Puertos del Estado, Spain

Asia/Oceania

- **Tai-Hsin Lee**, president of Taiwan International Ports Corp. Ltd.
- **R. J. Lino**, president director of Indonesia Port Corporation II, Indonesia
- **Atsushi Fujii**, director for Management Strategy Unit at Yokohama Port Corporation, Japan
- **Beom-Gou Kang**, deputy minister for the Office of Logistics and Maritime Affairs at Ministry of Land, Transport and Maritime Affairs, Korea
- **Capt. David Padman**, general manager, Port Klang Authority, Malaysia
- **Le Cong Minh**, director general, Saigon Port Company Limited, Vietnam
- **Martin Byrne**, CEO of Port Nelson Limited, New Zealand
- **Captain Abdul Wahab Diwani**, director, UAE Marine Inspection and Survey Dept. at National Transport Authority, Abu Dhabi, UAE

Executive Committee

Africa/Europe

- **Eddy Bruyninckx**, CEO of Antwerp Port Authority, Belgium
- **Jean-Claude Terrier**, president of the Executive Board and CEO of Grand Port Maritime de Marseille-GPMM, France
- **Dov Frohlinger**, COO of Israel Ports Development and Assets, Israel

Americas

- **Curtis J. Foltz**, executive director of Georgia Ports Authority, USA
- **Ing Alberto Díaz**, president, National Port Administration, Uruguay
- **Ashley Taylor**, president of Point Lisas Industrial Port Development, Trinidad and Tobago

Membership notes

The IAPH Secretariat is pleased to announce that the following have joined the association

Regular member

Permanent Secretariat of IPC I, II, III and IV

Address: Jalan Pasoso No.1, Tanjung Priok, Jakarta 14310, Indonesia
 Telephone: +62-21-43911710
 Fax: +62-21-43911704
 E-mail: ciptopr@indonesiaport.co.id
 Website: www.indonesiaport.co.id
 Representative: Cipto Pramono, head of Permanent Secretariat

Representative: Narikuni Nakao, chairman
 Nature of business activities: Encouraging port engineers in Japan to participate in IAPH

Pacific Tycoon Ltd

Address: Level 11, Admiralty Centre Tower 2, 18 Harcourt Rd, Admiralty, Hong Kong, China
 Telephone: +852-58080130
 Fax: +852 36567927
 Email: contact@pacifictycoon.com
 Website: <http://pacifictycoon.com>
 Representative: Michell Dela Cruz, president
 Nature of Business Activities: Container leasing

LADORCON S.A.

Address: Baquerizo Moreno 1119 y Avenida 9 de Octubre, Edificio Plaza, Piso 7, Oficina 707, Guayaquil EC090103, Ecuador
 Telephone: +593-4 6044047
 Fax: +593-4 5000528
 Email: gonzalezgonzalezr60@gmail.com
 Website: www.lognetsolutionsconsultores.com.ec
 Representative: Roberto Gonzalez, CEO
 Nature of business activities: Private corporation engaged in educational and research activities related to port function in transport and supply chain

Associate members

Japanese Society for IAPH

Address: 7th South Tower New Pier Takeshiba 1-16-1, Kaigan, Minato-ku Tokyo 105-0022, Japan
 Telephone: +81-3-5403-2770
 Fax: +81-3-5403-7651
 Email: takami@kokusaikouwan.jp
 Website: www.kokusaikouwan.jp/Jkaigi/index.html

Mr. Marouf Alli (CEO, SOMABIZ)

Address: 01 BP 1540 Cotonou, Benin
 Telephone: +229 21314690
 Fax: +229 21314690
 Email: mat@dophia.net
 Nature of business activities: Transit, logistics, performance of service

Wendy R. London

Address: 16 Hunter Street Hawera 4610, New Zealand
 Telephone: +64-21-687-364
 Email: haweranz@gmail.com
 Nature of business activities: Ph.D. student at South Cross University in Australia. Also a consultant to the cruise tourism sector and director of start-up, Cruisebubble.com





Photo: Port of Los Angeles

Knatz and Gilfillan were amongst those members that agreed the resolutions

IAPH resolves

IAPH members adopted three new resolutions in LA this year: one on LNG-fuelled ships, another on passenger ship safety, and a third urging ratification of the HNS Convention, which is concerned with hazardous and noxious substance pollution from ships. The three join other previously-agreed conventions.

LNG-fuelled ships: this new resolution relates to the WPCI project (see page 34) and calls for all ports, especially those located in ECA waters, to plan to introduce LNG fuelling facilities, along with any necessary safety precautions, for ships calling at their ports. It calls upon IMO and other international organisations to continue to develop safety guidelines and encourages governments to introduce these regulations. And it highlights the environmental and economic benefits of LNG over traditional bunker fuel.

Passenger ship safety: IAPH recognises that the cruise industry provides significant economic stimulus to cruise ports and to their local areas through generating a wide range of cruise-related business and job opportunities.

It adopted this resolution to encourage cruise companies' staffs to adhere to international safety rules and requirements, as well as those laid down by the individual cruise lines. It also urges states to ratify conventions that cover compensation schemes for passengers such as the Athens Convention.

Piracy: this resolution was originally ratified in June 2010 and

updated in LA as it is still a concern for ports and shipping. In it IAPH recognises the work of the naval forces already deployed to known piracy hotspots and calls upon states to upgrade their naval presence in these areas and establish relevant policies on treatment of privately contracted armed security personnel on board ships in ports.

IAPH also encourages ports to adopt a practical attitude with regard to permanent and non-permanent means of deterrence and protection on board vessels.

Verification of container weight in the supply chain: previously members had ratified a resolution on the safety of containers in the supply chain. The revised resolution places emphasis on the shippers' responsibility to accurately declare the weight of a container at the origin of transport.

It also encourages ports to consider how best to to prepare for improved safety and efficiency under the verified weight certificate scheme.

Urging ratification of HNS Convention: this new resolution promotes the financial compensation and liability scheme for the damage due to accidents while transporting HNS cargo. The resolution notes that IAPH appreciates the continuous international efforts, made by IMO and its member states to introduce a mechanism for compensation of damages.

The final resolution expresses appreciation to the Port of Los Angeles for hosting IAPH 2013.

Dates for your diary

A selection of forthcoming maritime courses and conferences



July

Commences 17 Fundamentals of Port & Terminal Security – distance learning

www.ibt-academy.com/FLR2347IAPH

17-19 Port Security Seminar and Exposition – Baltimore, USA
www.aapa-ports.org

August

12-16 Container Terminal Performance and Planning with a Simulation Technique – Malmö, Sweden
www.wmu.se

September

2-13 Port Environmental Policy & Technology – Antwerp, Belgium
www.portofantwerp.com/apec

11-12 2nd Black Sea Ports and Shipping 2013 – Istanbul, Turkey
www.transportevents.com

Commences 16 Fundamentals of KPIs for Ports & Terminals – distance learning
www.ibt-academy.com/FLR2353IAPH

16-20 Morphological modeling using Delft3D – Delft, Netherlands
www.unesco-ihe.org/Education/Non-degree-programmes/Short-courses/Morphological-modeling-using-Delft3D

16-27 Port Logistics – Antwerp, Belgium
www.portofantwerp.com/apec

18-20 Coasts, Marine Structures and Breakwaters Conference 2013 – Edinburgh, U.K.
www.ice-conferences.com/ICE-Breakwaters

23-27 PIANC Smart Rivers 2013 – Maastricht, Netherlands
www.pianc.org

24-26 Seatrade Europe – Hamburg, Germany
www.seatrade-europe.com

24-27 NEVA 2013 – St. Petersburg, Russia
<http://neva.transtec-neva.com>

November

20-22 IAPH Africa/Europe Regional Meeting – Amsterdam, Netherlands
www.iaphworldports.org



Acting regionally, thinking globally

Your new IAPH 3rd VP **Dr Priyath Wickrama**, chairman of Sri Lanka Ports Authority, looks at the future of his country's ports

First, I'd like to thank the IAPH membership for unanimously electing me as its 3rd vice-president for the 2013-15 term. I have been actively involved in IAPH activities since 2005 and I intend to study the issues encountered by the members in our region. My many years' of experience and dedication to the organisation should enable me to make a worthwhile contribution to the development of the maritime industry in the Asian Oceania Region in particular and maritime world in general.

We are all aware that Asia will be the focal point of growth in the future. South Asia is home to 22% of the world's population and the rapid growth of China, India, and Sri Lanka will position these countries to become the ideal location to develop regional centres in various sectors to derive benefits of economic development.

My country, Sri Lanka, has more than 2,500 years' of history and was used by mariners in the past when they travelled from west to east via the 'silk route' in their sailing vessels. Sri Lanka's location at the tip of India places it almost 'in' the busy east-west sea route.

Sri Lanka Ports Authority has the mandate to develop, promote, maintain, operate, and manage all of the country's seaports. Our corporate objectives are to develop and maintain state-of-the-art facilities and maintain cost effective, efficient, reliable, and high levels of productivity in port services to ensure a speedy turnaround of vessels. Sri Lanka Ports Authority has set its vision to serve as the maritime hub of the South Asia region. We have been able to maintain higher productivity levels in all port activities with the introduction of centralised service centres in the Port of Colombo. We have strengthened our fleet of equipment at container terminals. Internal port roads have been widened to facilitate the smooth transfer of export and import containers, and a separate container stacking area has been set up to

clear import containers within the shortest time possible. We have introduced an online payment and clearing system and back office operation to ease the clearance of cargo.

The Port of Colombo expansion project has been launched to develop Colombo South Harbour and, once complete, capacity will increase to 13M teu. The first berth at the South Terminal became operational this month (July) and the first berth at the East Terminal will come online by the end of 2013. We expect to have all berths of both the terminals operational by 2014.

Magam Ruhunupura Mahinda Rajapaksa Port in Hambantota is expected to provide world class infrastructure to facilitate manufacturing. The aim of this port is to serve as a logistics hub with excellent rail and road connectivity. It aims to serve as a 'one stop shop' for investors and port users.

Sri Lanka Ports Authority aims to deliver the highest levels of customer service through our well-established management, operational systems, and procedures. We are committed to meet the current and future needs of Sri Lankan, regional and global stakeholders. **RI**

“ Sri Lanka Ports Authority has set its vision to serve as the maritime hub of the South Asia region ”

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Eric Olafson
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