January/February 2012 Vol 57 No 1



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ports are finding new ways of galvanising

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ISSUE 01 VOL 57

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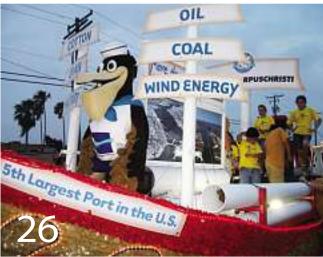
## REGULARS

Comment: Secretary General Naruse appeals to ports to 3 re-examine the fundamentals of their operations in 2012 **News:** Gothenburg wins award; Los Angeles launches CO<sub>2</sub> calculator; exploding reefers; successes of French port reform 4 Open Forum: International pilots' chief Nick Cutmore 10 warns of a shortfall in skilled mariners wanting to be pilots **Cover Story:** Ports are finding ever more inventive ways of involving their local communities, generating more jobs and 22 creating a better place to live and work Maritime Update: ECDIS mandatory soon for new 32 vessels; WPCI 2011 review; China takes the lead on pirates IAPH Info: Israel showcases gate technology; Asia-Oceania meeting; President Knatz in Japan; scholarships available 36 Last Word: Port Nelson CEO Martin Byrne asks members 40 to give IAPH greater exposure and help raise its profile

## FEATURES

ECDIS alert: A retired hydrographer warns that current e-charts lack sufficient detail for optimal navigation in ports 12 Hydrographic surveys: *P&H* discusses the pros and cons of unmanned craft operating on and under the water 16 Worried about weight: A TT Club insurance specialist highlights the dangers of misdeclared and overweight boxes 18 Check your cover: Lawyers spell out the indemnity implications of the Rotterdam Rules, which may soon be law 20 Port flood alert: Two climate change researchers identify those port cities most vulnerable to sea level rise and extreme weather events and discuss what measures they can take 28 Watch out below: The chief executive of the UK lifting equipment engineers body offers tips on maintaining equipment and helps terminal operators plan for safety and efficiency 30









1

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# PORTS HARBORS

#### Official Journal of the International Association of Ports and Harbors

#### **PORTS & HARBORS**

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#### PUBLISHER

Susumu Naruse Secretary General, IAPH info@iaphworldports.org

#### EDITOR Penny Thomas

penny.thomas@ihs.com

ACTING EDITOR Jem Newton iem.newton@ihs.com

SUB-EDITOR

#### HEAD OF SALES Adam Foster

adam.foster@ihs.com

#### DESIGN Roberto Filistad, Hannah Kidd, Matt Ramsdale, Karen Frazer

**PRODUCTION** Sarah Treacy, Elisa Hembry, Kriss Holliday and Martyn Buchanan

#### IMAGE SERVICES MANAGER Jo Agius

EXECUTIVE EDITOR G. Paul Gunton paul.gunton@ihs.com

EDITOR-IN-CHIEF

Tony Slinn tony.slinn@ihs.com

#### ASSOCIATE EDITOR Aya Fujinami

IAPH ph@iaphworldports.org

#### EDITORIAL & PRODUCTION IHS Fairplay

Sentinel House, 163 Brighton Road, Coulsdon, Surrey CR5 2YH, UK Tel +44 (0)20 8700 3700 Fax: +44 (0)20 8763 1007 Web: www.ihsfairplay.com

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# A hard look at the basics

Secretary General Naruse says 2012 is an opportunity to review port fundamentals



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

> happy new year from Tokyo! I hope you all saw in a joyful New Year. Looking back at 2011, it seems we have seen more negatives than positives. Although port throughputs grew rapidly during the first half of the year, that tempo was greatly reduced or even turned negative in the latter half, due to financial turbulence.

> Moreover, we had many natural disasters and political unrest: the Great East Japan earthquake, which paralyzed the society and economic activity of the world's third-largest economy; and regime change in Egypt, Libya and other countries, which hit regional port activities badly.

According to the IMF's World Economic Outlook, global economic growth is expected to reach 4% during 2012: 2% for advanced economies and 6% for developing economies. Given weak overall growth and the uncertainty that lies ahead, we

# We should not expect too much growth in 2012

should not expect a large increase in port throughput in 2012. However, I want to give it a positive spin: rather than expanding capacity to meet demand, it would be good to look again at our industry's fundamentals, which include safety, security and environment control.

IAPH has been concerned about container safety since overweight or

incorrectly declared container cargo could endanger the safety of port operations. IMO is now considering amending SOLAS to create a new legal obligation requiring containers' actual weights to be verified prior to loading aboard a ship. In principle, IAPH supports the IMO initiative on condition that shippers are responsible for weighing containers and this procedure does not greatly disrupt port operations.

To put forward our official position at the next IMO subcommittee meeting in September 2012, we need to discuss this thoroughly after carrying out a survey among member ports about their current container weighing operations and views on the IMO initiative. We cannot expect much larger volume demand in ports this year but we can improve operational quality and find business opportunities even in tighter economic environments.

I wish you a prosperous and happy year. PH

#### **Port updates**

#### **VALENCIA TOS**

Total Soft Bank announced that Mediterranean Shipping Company Terminal Valencia (MSCTV) has chosen CATOS as its terminal operating system. MSCTV, the second-largest container terminal in Valencia, achieved 1.2M teu in 2010 and said that 2011's figure will show steady growth and substantial volume increase. As a western Mediterranean hub port, Valencia's transhipment traffic increased 17.4% in 2010.

#### **LNG FOR CANADA**

Royal Dutch Shell and three partners plan a major LNG export terminal in northwest British Columbia. Shell, Korea Gas, Mitsubishi and China National Petroleum said that they have acquired a terminal on Douglas Channel, the sea inlet that serves the privately owned port of Kitimat, where the partners plan to build the terminal. At present the terminal, owned by Cenovus Energy, is used to import condensate for use by Alberta's oil sands sector.

#### DANDONG EXPANDS

Dandong port, on China's border with Korea, is to expand its annual capacity from 60M to 100M tonnes under a new government plan. China will spend Rmb45Bn (\$7.1Bn) over five years to expand the port and cement its role as a transport hub in northeast Asia, connecting the Korean peninsula with Eurasia. Dandong port provides bulk cargo, container and passenger transport services to more than 70 ports in 50 countries.

#### **VIETNAM TOP FIVE**

Vietnam is making Lach Huyen one of its top five northern ports thanks to a \$25M development loan from the Japan International Co-operation Agency. A Vietnam Ports Association spokesman told *P&H* that Lach Huyen is one of four main deepwater ports in the north and will be a major contributor to Vietnam's development. He added that links with Haiphong, its largest northern port, are being improved as part of a push to address Vietnam's biggest shipping problem – poor connectivity.



# LA launches carbon calculator

The Port of Los Angeles has officially launched a valuable tool to help other ports calculate and reduce their overall carbon footprint. Working with technical experts from a handful of ports worldwide, Los Angeles has developed a carbon calculator that enables a port to estimate the greenhouse gas (GHG) emissions produced by its operations and explore reduction strategies.

Ports can use the free calculator to compute the quantity of CO<sub>2</sub> emissions from sources associated with their operations, including port-specific sources such as cargo handling equipment and harbor craft. Armed with that information, they can focus on how best to reduce their carbon footprint through the calculator's reduced emissions scenarios feature.

"The carbon calculator is a powerful tool to help each port chart its own course toward reducing greenhouse gases," said port executive director and IAPH President Geraldine Knatz. "Having a consistent methodology among ports will help us to assess our global impact."

The calculator is a software package that allows ports to

estimate existing CO<sub>2</sub> emissions from direct, port-owned sources such as fleet vehicles, cranes, harbor craft and cargo handling equipment, plus indirect sources such as electricity purchased for port-owned buildings and operations. It also serves as a planning tool that ports can use to assess the benefits of replacing or retrofitting equipment with systems or machines that run on green power.

The calculator is a project of IAPH's World Ports Climate Initiative (WPCI), which is dedicated to identifying and promoting effective, sustainable practices and strategies for ports to improve air quality while remaining vital economic engines. Facilitated through IAPH, more than a dozen port authorities and organisations have collaborated on this project through the WPCI carbon footprinting subgroup.

Future projects under consideration by Los Angeles include a similar calculator for terminal operations and a goods movement calculator to estimate GHG emissions of cargo from point of origin to point of delivery.

In a separate move, Los Angeles

has started working on an incentives programme for shipping lines to reduce diesel exhaust pollution. Port executives presented an outline of the Environmental Ship Index programme – a system that rewards shipping lines whose vessels exceed environmental standards and regulations – to the Harbor Commission in November, with specific recommendations expected to be delivered to the commission in 2012.

Ships pose the toughest challenge to the port's air pollution strategy, because they represent the single largest source of such emissions from port operations and are regulated by international convention.

Five years ago, the port adopted the Clean Air Action Plan, which has since helped reduce air pollution from port-related sources in and around the San Pedro Bay by as much as 76%, according to port officials. While in port, many ships now shut down all diesel engines aboard, including those for generating electricity, and use onshore power. For more on WPCI, see the 2011 review on p32

## Sydney's Port Botany tightens up landside

Sydney's Port Botany has launched a landside improvement project after developing an operational performance system in collaboration with US terminal software developer Advent. The OPS integrates stevedore processing data with carriers' tracking data to provide an independent and comprehensive data record of landside operations.

The port can now measure the performance of all parties in the

landside interface and identify bottlenecks in traffic and congestion management. The software can also calculate where operators have failed to meet performance benchmarks, as detailed in the port's regulations and mandatory standards.

Advent has already had great success developing similar systems for the ports of Los Angeles, Long Beach and New York/New Jersey. "The biggest challenge during implementation of the system has been in obtaining accurate and high-quality data from the stevedores and their vehicle booking system provider," a Sydney Ports spokesman told *P&H.* "Obtaining data has been the key to delivering on the [scheme's] objective of transparency. The other three objectives are efficiency, consistency and a transition to 24/7 operations."

# LA ports to drop pollution fee

Container-hauling trucks with an engine year of 2006 and older have been banned from the ports of Los Angeles and Long Beach from 1 January 2012, as part of the ports' clean truck programme.

Of about 11,000 vehicles doing business at the ports, pre-2007 trucks account for just "a handful at most", according to one port official. Accordingly, both ports will soon be dropping the \$35/teu and \$70/feu fee for older, dirtier trucks.

The clean truck programme has been "an overwhelming success", Port of Los Angeles spokesman Phillip Sanfield told *P&H*. "The trucking industry stepped up to the plate and has played a major role in reducing diesel particulate matter from truck-related pollution" by more than 80%, Sanfield noted. More than 95% of gate moves at the Port of Los Angeles are done by cleaner trucks, he added.

After implementing the ban on older trucks in 2007, both Los Angeles and Long Beach were able to achieve their 2012 goal of 80% emissions

reductions from their overall drayage operations three years ahead of schedule.

The two schemes were not identical, however. Representatives from large trucking companies challenged an initial requirement that banned independent owner-operators from the ports, forcing them to become company employees.

The ban, which was backed by the Teamsters, a truck labour union, would have opened the door for the union to organise intermodal drivers, because it is illegal to organise non-company employee drivers. Box carriers, along with trucking companies, warned that such a scenario would have increased supplychain costs at the ports.

The Port of Long Beach ended up dropping the requirement, but the Port of Los Angeles fought the American Trucking Association's opposition to the ban. In September, a federal court ruled in favour of the ATA, allowing independent drayage owners to continue working the port.



#### **Port updates**

#### **BROMMA EXPANDS**

Stockholm-based Bromma has now won contracts for nearly 300 allelectric crane spreaders for service in automated or semi-automated terminal environments. In 2011, the largest of these orders were for automated operations in Khalifa port in Abu Dhabi and Terminal Catalunya in Barcelona. Most recently, Bromma won orders for a total of 12 all-electric spreaders for service in semiautomated operations in Brisbane and Sydney, Australia.

#### ΜΙΑΜΙ ΜΟυ

Another major agreement has been reached between the Panama Canal Authority and the Port of Miami, which have renewed their memorandum of understanding to promote trade opportunities and share best customer practices. As the closest major US port to the Panama Canal, Miami will be the first port of call for the post-Panamax vessels that will begin traversing the expanded canal in 2014.

#### **NEW PETROCHEM UNIT**

Stolt-Nielsen, the London based chemical carrier, tank terminal and tank container group, has announced the opening of a petrochemical terminal at Tembusu on Jurong Island, Singapore. It also plans for a total of 300,000m<sup>3</sup> of storage to be built in the next two to three years.

#### **OAKAJEE SALE**

Murchison Metals announced a deal to sell its stake in Western Australia's troubled Oakajee Port and Rail Project to joint-venture partner Mitsubishi. Murchison signalled earlier in 2011 that it was seeking a buyer for the stake. Under the deal, Murchison will sell its stakes in the Oakajee project and Crosslands, which owns the Jack Hills iron ore project, to Mitsubishi for a total of A\$325M (\$318M).

#### **VLISSINGEN FIRST**

Vlissingen has become the largest dedicated reefer port in the Netherlands for the import and export of vegetable and fruit products. The expansion is the result of a contract between NYKCool and Kloosterboer.

### Dredging

#### DCI PROFITS SURGE

India's government-owned dredging company reported a 238% increase in profits for 3Q/2011. Dredging Corporation of India said its net profits for July to September were Rs98M (\$2M). It had previously reported huge losses after a failed attempt to dredge the Sethusamudram ship channel, but said profitability is slowly improving.

#### **CADIZ BOX PORT**

The European Investment Bank has approved a €60M (\$80M) loan to finance the construction of a new container terminal at the Spanish port of Cadiz. The three-year project includes reclamation of about 22ha of new terminal area, building 590m of quays, dredging a deeper access channel, widening the turning basin and deepening berths to 16m depth alongside.

#### **INDIA'S DEEPEST**

In its quest to be the best port in India, Krishnapatnam has increased its depth to 17.5m. It now aims to become the deepest port in the country. It has three cutter suction dredgers and three trailer suction dredgers undertaking capital and maintenance dredging. By early 2012, the draught will be increased to 18.5m, which would achieve that deepest port ambition.

#### **CHILEAN TERMINAL**

The Chilean port of Lirquen is to build the Puerto Central terminal at the former San Antonio public pier. The project calls for the terminal basin to be dredged to a depth of 15m and construction of 700m of wharfage in two 350m phases to create 1M teu/ year of capacity, said Puerto Lirquen CEO Juan Manuel Gutierrez. The first and second phases should take place before 2015 and 2018 respectively.

#### **SMALL HARBORS BOOST**

Small harbors in the USA would get more money to maintain draught levels under a proposed law. Rand Paul, a Republican senator from Kentucky, introduced the Harbor Equity Act in December to give harbors handling less than 1M tonnes/year higher priority for dredging work.

# Port of Gothenburg wins an award for onshore power

The Port of Gothenburg in Sweden has won the prestigious Energy Globe Award for its work on onshore power connection for vessels at berth.

The award and €10,000 (\$13,000) were presented at a ceremony in Austria in November.

"It is incredibly gratifying and an honour to receive this prestigious award," said Susanne Dutt, Port of Gothenburg's sustainability manager, as she accepted it. "The fact that we have been so successful with onshore power supply can be attributed to the close collaboration between the port and our customers. Hopefully, the attention this will attract will contribute to more ports and shipping companies investing in onshore power supply."

The port was the winner in the Air category.

In 2000, Gothenburg was the first port in the world to offer high-voltage onshore power. In that year, wood products maker Stora Enso connected its vessels to landside power. Last year, a further step was taken towards cleaner shipping when Stena Line inaugurated a completely new facility for onshore power for its new ferries on the Germany route.

During a 10-hour stopover, the diesel engines of one vessel can generate up to 20 tonnes of CO<sub>2</sub> emissions. Shutting down the engines and using shoreside power instead offers considerable environmental benefits. In total, one-third of the vessels that put into the Port of Gothenburg –

which leads the IAPH World Ports Climate Initiative onshore energy project – have the opportunity to shut down their diesel engines at the quayside and use a landbased power supply.

The Energy Globe World Awards aim to promote clean, renewable energy sources and are awarded in five categories: Earth, Fire, Water, Air and Youth. The awards have been presented since 1999 and are now one of the world's most prestigious environmental awards.



## Fertiliser terminal gets under way at Riga

Russian mineral fertilisers producer Uralchem and Latvia's Riga Commercial Port (RTO) have announced that construction has started on a new fertiliser terminal at the port, which will have a capacity of 2M tonnes a year and will cost €45M (\$60M) to build.

In a statement at the start of building work, Robert Klavins, board member of the joint-venture company leading the Riga Fertiliser Terminal project, maintained that it will be the safest and most modern of its kind in Europe.

He added that much of the investment would go into "advanced cargo handling and storage technologies that are environmentally safe and internationally recognised".

Uralchem CEO Dmitry Konyaev said the terminal was "one of the company's priority projects. We deliver our export shipments by sea, so creating our own transhipment facilities on the Baltic Sea will enhance the company's position in the global market and optimise our logistics flows, reduce transport costs and ensure greater flexibility to meet the demands of end consumers."

Why was Riga chosen over other suitable ports in the Baltic states, such as Latvian rival Ventspils, Lithuania's Klaipeda or Estonia's Tallinn? "We chose Riga because it was closer to our plants in Russia in terms of logistics and had the pre-existing areas and infrastructure we needed for construction of the terminal," Aleksey Ismailov, a spokesman for Uralchem, told *P&H*. "Klaipeda is located a lot farther from our plants, which means additional transportation costs compared with Riga, and Klaipeda is also not suitable for our product line."

He added that the situation was much the same even in the case of Ventspils, whose "spare capacity does not meet our requirements".

Riga Fertiliser Terminal is one of five developments planned on Riga's Kundzinsala Island before 2020, at a total cost of  $\in$ 239M. The other projects are a container terminal, grain terminal, logistics park and cold storage facility.

# We are not just moving goods, but we are also moving our country forward <sub>r</sub>



Transnet National Ports Authority is the largest port authority in southern Africa, with a mandate to manage and control all eight commercial sea ports on the 2 954km South African coastline. We've invested more than R2.0 billion during the past year to improve the efficiency of our eight ports. We've deepened, and widened the entrance channel of the Port of Durban; constructed additional liquid-bulk facilities at the Port of Richards Bay; provided a four-berth container terminal at the Port of Ngqura; and re-engineered the Port of Durban's container terminal. The 194.6 million tonnes of cargo handled by the eight South African seaports annually represents 98% of the import / export volumes of this country. Recently we have produced the first three black female

pilots through the School of Ports and obtained new tugs for the ports of Durban, Ngqura and Richards Bay. We are committed in investing to make South Africa the hub of African Trade. We are the backbone of the economy and we will stop at nothing to keep everything moving.



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#### People

#### **RBCT HEAD RESIGNS**

**Richards Bay Coal Terminal chairman** Imogen Mkhize has confirmed that CEO Raymond Chirwa has resigned. She said Chirwa, who was appointed CEO in 2009, has resigned for personal reasons to pursue other ventures and said the management team in place would build on his efforts. Terminal general manager Alan Waller will act as CEO until further notice.

#### **FOYE FOR NY-NJ**

Patrick Foye has been approved by the Port Authority of New York and New Jersey as executive director, taking over from Chris Ward, who now acts as an adviser. Foye's most recent role was as adviser on economic development to New York governor Andrew Cuomo. Productivity is expected to be a major part of Foye's remit and he will monitor forthcoming contract talks with the ports' labour force.

#### LYTLE FOR LONG BEACH

The Long Beach Board of Harbor Commissioners has voted unanimously to name J Christopher Lytle as its new executive director. Lytle joined the port in September 2006 as one of four managing directors, overseeing the port's trade relations and port operations bureau. He had been the port's deputy executive director and COO since March 2008.

#### **GDYNIA REPAIR**

Andrzej Szwarc, former development director of Polish private shipbuilding company Crist, has been appointed head of the Gdynia-based Nauta ship repair yard. He said his aims were to diversify the plant's operations, enter new markets and ensure that the vard returns to profitability within two years.

#### PD PORTS ROLE

PD Ports has appointed Geoff Lippitt as business development director. Lippitt also joins the company's executive committee team. The remit of his commercial business development activities include taking over responsibility for PD Ports' commercial personnel reporting lines and seeking new areas for growth.



# Australia increases spill fines tenfold

Owners and charterers with ships in Australian waters now face much larger fines if there are spills from their vessels, following changes to legislation backed by environmental groups.

Laws passed by the Australian parliament in November last year increased the maximum fine for those who "commit the strict liability offence of discharging oil, or an oily mixture, into the sea" from A\$1.1M to A\$11M (US\$10.6M). Previously, only owners or masters could be charged with the offence, but now charterers have been added as liable parties.

The potential costs do not end there. The legislation also imposes a requirement on shipping companies to contribute to cleanup costs.

The changes were in response to two recent incidents that resulted in oil being spilled off the coast of Oueensland.

In March 2009, general cargo ship Pacific Adventurer spilled more than 270 tonnes of heavy fuel oil off Cape Moreton.

It resulted in a costly cleanup operation that took two months and involved 2,700 people.

In April 2010, bulker Shen Neng 1 released about 4 tonnes of fuel oil after it hit the Great Barrier Reef just east of Queensland's Great Keppel Island.

Both incidents damaged parts

of some of Australia's most treasured natural areas, prompting a swift response from state and federal politicians. The laws regarding spill fines are the latest of several to be initiated after the incidents. Others included the extension of reef traffic monitoring and improvement of navigation aids in the region.

The federal government maintains that increasing penalties is the key measure, in order to "further deter shipping companies and their crews from engaging in unsafe and irresponsible actions at sea, particularly near environmentally sensitive marine ecosystems".

According to a briefing note from Australia's parliamentary library, there are "over 25,000 voyages by ships to and around Australia. An appropriate balance is required between this shipping activity and the protection of environmentally sensitive marine ecosystems in Australian coastal waters, such as the World Heritage-listed Great Barrier Reef".

The reef is particularly at risk because it lies between many of Australia's key bulk export ports and the open sea.

Australian Marine Conservation Society director Darren Kindleysides told P&H: "It was needed because we've often seen a gap between the cost of the cleanup and the size of the fines."

## United on maritime security

Countries bordering the Indian Ocean have agreed to cooperate on maritime security, particularly to counter the threats to trade and security from Somali piracy and seaborne terrorist attacks.

The pledge was made at the 11th meeting of the 19-member Indian Ocean Rim Association for Regional Co-operation (IOR-ARC), which took place in Bangalore on 15–16 November.

Dubbed the Bangalore Declaration, it commits member states to share information and best practices and to offer technical assistance to stabilise Somalia, combat piracy, protect against maritime terrorism, and address the threats of oil spills, tsunamis and other natural disasters. Human trafficking, arms smuggling and illegal fishing were also identified as common regional problems.

Incoming IOR-ARC chairman SM Krishna, the Indian foreign minister, pointed out that piracy increases the direct cost of trade and also indirect costs through higher insurance premiums.

"Our port and customs authorities, as well as our shipping firms, need to address issues of transport infrastructure and connectivity that hinder trade," he said.

While Krishna called on member states to "build functional relationships between our navies and coast quards". Oman's chief of economic affairs. Talib Miran Zaman Al-Raisi, warned: "Piracy will not be deterred by the grey ships of navies. It is better handled by coast guards, which need to be strengthened. Piracy can be considered a symptom of a much wider malaise - that of persistent maritime disorder."

The IOR-ARC association was founded in Mauritius in 1997 and now has 19 members.

## APL acts to allay reefer box concerns

Singapore-based NOL's liner unit APL has taken 103 reefer containers out of service so they can undergo detailed inspection, noting "reports from competitors that at least four of their refrigerated containers exploded during 2011".

APL made no specific reference, but Maersk Line withdrew 844 reefer boxes after three exploded in recent months in Vietnam and Brazil. Each blast killed one person. A fourth Maersk reefer box self-ignited at an Oakland repair yard, although no-one was injured.

Maersk said investigations showed the explosions were caused by contaminated gas in the cooling units of the boxes, which underwent repairs by certain vendors in Vietnam.

Although APL does not use those particular repair facilities, it has removed from service all the boxes that were repaired in Vietnam this year, even though it has not experienced any problems. It has also imposed measures that include ensuring the refrigerant used in all its reefer containers meets the specifications of equipment manufacturers and placing new restrictions on where the containers can undergo refrigerant system repair.

APL's vice-president for global refrigerated trade, Eric Eng, said: "We have reviewed our inspection records and procedures and are fully confident that our refrigerated containers are safe and in cargoworthy condition. But to allay concerns, we are adding new requirements, stepping up our inspection programme and strengthening maintenance procedures."

APL said it will continue to conduct pre-trip inspections of refrigerated containers. Inspections include plugging in refrigerated units before sending them to customers. The boxes are monitored to ensure safe operation.

But questions about reefer box safety generally are still prompting concern. US port workers have refused to handle reefer boxes that were serviced in Vietnam and European ports are expected to follow suit.

The North of England P&I Club has issued a statement saying that several of its members have recently experienced problems with reefer containers exploding after maintenance or pre-transportation inspections in Vietnam. It said: "The cause of the explosions appears to be as a result of incorrect or contaminated gases being used in the reefer plant.

"Members who have identified reefer units which may be affected are recommended to implement suitable reefer quarantine procedures," it added.

# French port reform bears fruit



Port reform has brought increased productivity at Marseille

French ports are anxious to tell the world that they are back in full competition with their European counterparts after completion of the French government's mid-2011 port reform programme.

This applies particularly to the Port of Marseille, still France's leading cargo port ahead of Le Havre, and arguably the port that suffered the most serious disruption that resulted from long-running industrial disputes over the reform.

Under the terms of the reform, the port authority transferred 411

employees from its own payroll to those of terminal operating companies in an operation that marked its exit from commercial cargo-handling.

It also sold 15 items of cargohandling equipment to the terminal operators.

These are early days but, according to port and operators, the first results already provide evidence of improvements in terminal performance. At Marseilles-Fos deepwater port, container terminal operators can offer up to five gantries per ship, compared with three previously. Waiting time has been reduced almost to nil, compared with three or four days at the height of the battles over port reform a year ago.

In Marseille's older eastern docks, container handling rates have been brought up to international standards for the first time. Operators at the Mourepiane terminal claim to have achieved a rate of 23 moves an hour, compared with 14 previously.

The icing on the cake is going to be the opening of the port's longawaited Fos 2XL container hub, scheduled for the end of the first quarter of 2012.

The new facility, which will accommodate two terminals, will increase available total berth length from 1km to 2km.

Frustratingly for the port community, however, its newfound productivity has coincided with a slowdown in international trade. The port of Marseille claims that it is nevertheless starting to reap the first fruits of its improved operating performance.

### Cash & cargo

#### TMM GETS BOOST

Mexican ports, shipping and logistics group TMM has reported sharply higher profits as a result of the falling peso. NYSE-listed TMM posted net income of \$91.6M for 3Q/2011 versus losses of \$27.2M in 3Q/2010. The turnaround was driven by a \$109M exchange-rate gain in the most recent period compared with \$25.6M in losses the year before.

#### **PIPAVAV TURNAROUND**

India's Gujarat Pipavav Port has reported a \$4.7M turnaround in its third-quarter profits. The APM Terminals-owned port said that India's strong foreign trade boosted its quarterly profits to Rs132M (\$2.7M) against a loss of Rs98.3M (\$2.7M) in the same quarter of 2010. A Mumbai analyst said foreign institutional investors and local brokerages are bullish on Pipavav, as they expect good grow in coal and fertiliser cargoes.

#### **GEORGIA GROWS**

Georgia Ports Authority executive director Curtis Foltz announced that the ports group saw a growth rate of 5% in the first quarter of FY2012 (October-December 2011), moving 6.5M tonnes of cargo. In the same period in FY2011, the port moved 6.2M tonnes. The positive quarterly container results were aided by an early peak shipment of holiday goods during September, delivering 11.1% teu growth for the month.

#### **MELBOURNE RECORDS**

Total trade through the Port of Melbourne grew 7.3% in October 2011 over the same period in 2009, setting a monthly record of 7.81M revenue tonnes, the port announced. Underpinning the performance was an 11.3% rise in container traffic, setting a new Australian record of 241,478teu.

#### **HELSINKI RECOVERS**

The volume of unitised cargo traffic passing through the Port of Helsinki was 8.5M tonnes for the period January–October 2011. Compared with 2010, this represents an increase of 4%. Import volumes have now reached the level achieved in 2008.

# Maintaining pilot standards

The shortage of competent seafarers is resulting in a smaller pool of potential pilots, as *Nick Cutmore*, secretary general of the International Maritime Pilots' Association, tells *P&H* 

here are about 2.5M acts of pilotage across the globe every year and yet bumps in which a pilot is involved are rare. The low accident count is directly linked to the high level of expertise required of a pilot. They are experts in local maritime knowledge such as port approaches and conditions, plus they have supreme ship manoeuvring skills, usually acquired after a long stint at sea, often sailing with a master's certificate.

A skills-set of this calibre cannot be gained merely by taking a short course: it takes five years to become a class 1 pilot at a difficult port, on top of whatever length of sea time the port deems appropriate.

This level of training and experience is fitting given the weight of responsibility placed on a pilot once he steps onto the bridge. A pilot lacking sufficient training and experience can place in jeopardy the ship, its cargo, the lives on board and the port environs through which the vessel is sailing. The *Cosco Busan* incident in the USA in 2007 and *Sea Empress* in the UK in 1996 both show how a pilot's mistakes can seriously damage a port's reputation and cause considerable harm to the environment.

Now questions are being raised about whether or not this high level of expertise can be maintained. Over the past 10 years, concern has been growing that too few well-trained crew are coming ashore to fulfil the essential role of piloting. This is a reflection of the decreasing standards of ships' crews – an issue that is being discussed around the world by the wider shipping community.

Pilots, too, have noticed reduced levels of competency when they arrive on the ship's bridge. Some have reported to IMPA that they are greeted on the bridge by a very fatigued master and are then left with only the helmsman for company. Technically, the master is always in charge of his vessel and the pilot's role is to offer advice. Once the pilot is aboard, however, the master and officers often try to get some rest before reaching the terminal where they will be required to oversee the busy schedule of cargo loading and offloading.

Pilots have also reported that they have to check every action made by the helmsman. For example, if the pilot requests that the helmsman turn to starboard he has to check that he has turned right, because he cannot trust the seafarer's competency.

These competency issues are compounded by a lack of young people choosing a career at sea in the first instance, further limiting the pool from which pilots can be recruited. Some countries are therefore considering other

A pilot's mistakes can seriously damage a port's reputation and cause considerable harm to the environment



recruitment options. Australia, for example, is setting out alternative entry and subsequent training paths for potential pilots, including recruitment from the Royal Australian Navy. It should be noted, however, that warship officers do not get much sea time, which means they have relatively little experience of ship manoeuvring. Warships also handle differently, tending to be faster and more responsive to commands than merchant vessels.

Nevertheless, there is much merit in this solution. Most Chilean pilots are recruited from its navy and they are first-class pilots. Potential pilots from a military background just need the correct training to make up for any gaps in their experience.

Germany, too, is considering alternative recruitment routes. The River Elbe has only 65% of the number of pilots needed, so existing pilots need to work longer rosters to ensure they can still provide a quality service. German authorities are working with naval colleges to develop a two-year hybrid master/pilot course to attract graduates with a maritime degree. To accommodate this qualification the country's legislation will have to be changed, with the first batch of students becoming ready to enter the pilot profession two years later.

Many maritime training institutions and ports have invested in simulators, which have been heralded as a modern training tool for both the aviation and marine industries. There is definitely a place for simulation training, but in this profession there is no substitute for hands-on experience. Nor can experienced pilots be replaced by technology.

ECDIS has been around for some time now, given that IMO approved performance standards in the 1980s, but full implementation will not take place until 2018. It is undoubtedly a useful tool on the bridge in a similar fashion to radar and GPS, but it is far from being a universal panacea. ECDIS should not be considered an acceptable substitute for a well-trained ship's crew.

The level of detail available in a port ECDIS (see pages 12–14) leads some to think that it represents the first step towards remotely manoeuvred ships, doing away with the bridge, officers and pilots. IMPA, however, is confident that technology won't deliver. When manoeuvring a large vessel of several thousand tonnes, with an under-keel clearance of less than 1m, you have to be riding the beast to know what's going on.

IMPA has always supported Intertanko's campaign for regulators to adopt the use of marine diesel oil (MDO) as a fuel. With 0.2% sulphur content, MDO is considered a more environment-friendly form of energy than fuel oil and meets the requirements of California's

Nick Cutmore, secretary general, IMPA

clean air regulation, for example. IMPA's concern is the problems associated with switching fuels, which can lead to power blackouts, with the attendant risk of steering and propulsion failure.

Some vessels are running up to three sets of bunkers and most masters are required to switch over fuels as late as possible before they enter the clean air zone – sometimes at about the time the pilot boards and therefore very close to port. In IMPA's view, a fuel switchover should take place earlier in the voyage, because when a pilot joins a vessel it is in its final and most difficult stage of the voyage.

In the main, pilots have very good relationships with the ports. They want the port to be a success, so it is one of IMPA's aims to ensure that they remain an independent party that can navigate and manoeuvre vessels with the highest regard for safety, rather than concerning themselves with commercial implications. In turn, ports should support the pilots that bring vessels to their berths, because a low incident rate and professional service can only benefit a port's reputation. **PH** 

The International Maritime Pilots' Association (IMPA) is a friendly organisation of IAPH. More info: www.impahq.org

hoto: IMPA/H Kidd

The currently available electronic chart for Tower Wharf on the River Thames (far right), has less topographic and depth detail than the Port of London Authority's cell of the same area



# Ports chart a future path

Port authorities are developing detailed, high-resolution electronic charts designed to replace the official ECDIS charts that some ports say are inadequate when navigating port waters. *Stephen Cousins* reports

etailed and accurate digital chart data is vital for ports, particularly those located in shallow or tidal environments, where narrow approach channels and confined berthing areas make it difficult for vessels to manoeuvre.

It is frustrating, then, that the official maritime electronic nautical charts (ENCs) used in electronic chart display and information systems (ECDIS) are failing to deliver the required levels of detail and accuracy to allow vessels to operate safely and efficiently in local waters. In particular, there is a need for more bathymetric and topographic data and chart object data, among other attributes.

In an effort to improve the situation, several port authorities, including Hamburg, Rotterdam and the Port of London, are carrying out pioneering echarting work that is designed to gather detailed survey source data and employ it to produce highresolution port-specific electronic nautical charts (PENCs) for use in ECDIS systems. PENCs – also known as Port ECDIS – go far beyond the current standards. If the system were to be rolled out worldwide it is hoped that they will bring greater clarity and standardisation to navigation within ports.

Hamburg Port Authority produced the first complete PENC dataset for the Port of Hamburg in 2009, using detailed survey data collected by four of its survey vessels. The initiative, which formed part of the European Union-funded Effective Operations in Ports (EFFORTS) project, was designed to identify ways of improving the safety and efficiency of navigation in busy ports that have restricted manoeuvring space. The work was carried out in collaboration with digital navigation specialist SevenCs and geospatial software developer Caris.

A major concern was the lack of precise topographic

data in official maritime ENCs, explained Dieter Seefeldt, retired head of hydrographics at the Port of Hamburg and leader of the project.

"The topographic information was not accurate enough for large vessels like container ships and cruise liners performing manoeuvres that require accuracy, such as turning and docking. We believe chart data should have an accuracy of better than 10cm, but some measurements on the official ENCs were out by over 20m," Seefeldt explained.

Rather than rely on the existing charts, Hamburg recorded its own topographic source data, using GPS and tachymeter positioning systems, in combination with high-resolution digital aerial photography. Bathymetric surveys were carried out daily, equivalent to around 1,500 surveys a year, using four survey vessels equipped with multi-beam echosounders. The data was combined to produce highly accurate PENCs that conform to the S57 ECDIS charting format of the International Hydrographic Organization (IHO). The charts are regularly updated and used by pilots and the port's traffic control centre, where results are displayed on a large monitor to help the harbor master route and plan manoeuvres.

"Today Hamburg can guarantee an accuracy of better than 10cm – a figure that can easily be achieved at other ports," said Seefeldt. "The problem is

The survey data is coming from the data originator and is better than the official charts

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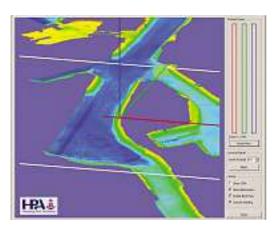
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Left: A view of Hamburg's Port ECDIS showing absolute depth in 3D Right: A view of Hamburg's Port ECDIS showing safety depth in green



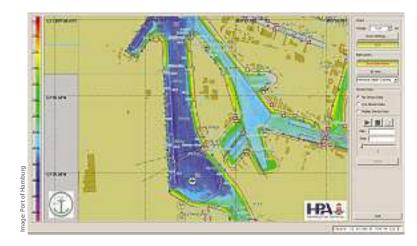
that many ports don't have their own survey division and rely on being able to buy charts, but no-one yet is distributing these PENCs."

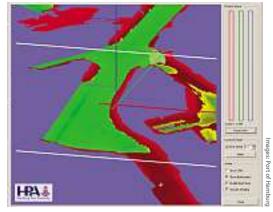
The Port of London Authority (PLA) is also dissatisfied with the quality of official maritime ENCs and has produced two of its own PENCs, covering a stretch of the lower River Thames from Erith in the west to Thameshaven in the east. PLA intends to extend coverage farther east to Sea Reach, off Southend.

The super-scaled charts are several times the size of existing charts – 1:2,500 scale compared with 1:25,000 – and were developed for use by ship operators and pilots as a berthing aid, said John Pinder, head of PLA's hydrographic department. He explained: "The UK Hydrographic Office still produces ENCs based on digitised data from paper charts, and while the scale of these charts is adequate for navigating large ships up to the Thames Barrier, the level of detail is insufficient for use in many areas of the Thames."

The PLA's charts also include real-time depth contours that make it easier to monitor safe vessel draught in ECDIS. Pinder explained: "ECDIS systems allow users to set a safe depth contour to ensure adequate vessel clearance. Deep-draught vessels on the Thames tend to draw down between 12m and 13m, but official charts only include 10m and 15m contour lines. The safe depth marker in ECDIS will automatically snap to the shallowest contour, so 10m is not giving a realistic indication of the hazard. Our PENC charts generate contours at a much greater density, which means greater accuracy of actual clearance."

A view of Hamburg's Port ECDIS showing gridded bathymetry





With the carriage of type-approved ECDIS scheduled to become mandatory for every merchant vessel and passenger ship of more than 10,000 tonnes by 2018, the race is on to ensure that PENCs are harmonised under a single standard for use by masters, pilots and harbor masters worldwide.

At present, ports such as Hamburg and London are unable to get their PENCs distributed to mariners because the IHO does not yet recognise their charts as an official data source.

It's frustrating, Pinder told *Ports & Harbors.* "Even though the survey data is coming from the data originator and is better than the official charts, the ECDIS system still won't accept it. At present, the only way we can get round this is to make the charts available to pilots via their carry-aboard portable pilot units," he said.

The ports hope that the introduction of the IHO's geospatial information registry, S100 – a new charting format – will be a step in the right direction, because it has been designed to free up ECDIS systems to run a range of charting products, not just the all-encompassing maritime ENC.

The move comprises just one component of a general push to bring variety to e-navigation – that is, navigation using electronic equipment – noted Michael Bergmann, director at ENC-provider Jeppesen. "In my view, we can easily accommodate PENCs in the S100 data specification, using a separate domain, like the IALA [International Association of Marine Aids to Navigation and Lighthouse Authorities] domain currently being built."

Bergmann went on to say that this port-specific information could include the many types of data needed for port navigation, including pilotage and port maintenance, "combined with more generic ENC data coming from hydrographic offices".

In preparation for the new multi-format ECDIS, Bergmann expects the IHO to set up a harmonisation working group, which is currently under discussion. He explained to *Ports & Harbors*: "By 2015 or 2016 we could have a new set of e-navigation standards, including those for port ENCs; in [the] next three to five years the first PENC test trials could take place using real data on real ships; then in five to eight years' time we could have a solid PENC standard able to go into production," he concluded. **PH** 



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# Study in depth

Great advances have been made in technology to measure water depths. Surveyor **Paul Newman** looks at the range of survey vessels now available to ports

ASV's unmanned surface vehicle USS 6300 athering data to measure water depth and detecting obstacles to the safe navigation of vessels are the main activities carried out by hydrographic surveyors. Hydrographers use manned surface vessels for the vast majority of projects, but unmanned platforms of various types are available, which may be used either as an alternative to, or in parallel with, a manned craft. Unmanned platforms may be used for safety reasons or to enable a survey to be completed in a tight weather or operational window. They operate either on the water surface or beneath it, and are known respectively as unmanned surface vehicles (USVs) and autonomous underwater vehicles (AUVs).

Some ports are affected by silting that restricts the available depth, so partial resurveys are needed every few weeks. Dredging should always be preceded by an accurate survey. Once dredging has started, a survey vessel will need to perform regular progress surveys to ensure accuracy, followed by a postdredging survey. Surveys are also required both before and after any construction operations to ensure the location has been returned to its original state.

Pipes, cables and other debris on the seabed need to be located and identified before dredging starts. In particular, the consequences of a dredger striking unexploded munitions washed inshore during a storm could be disastrous.

Depth data is gathered using echosounders that emit and receive pulses of acoustic energy. Two primary forms of echosounder are in common use: those that provide a range to a single point (single-beam echosounders) underneath the survey platform, and those that provide ranges to 200 points or more across the track (multi-beam echosounders). Employing multi-beams permits much smaller features to be identified than is possible with a single-beam, but single-beams normally make fewer demands on the equipment budget than do highend multi-beams.

Manned survey vessels are not normally required to perform operations 24 hours a day and the necessary post-processing is undertaken either on shore or on the vessel when alongside. Single- or



multi-beam echosounders are mounted either permanently or temporarily on the hull, or on a pole that can be raised after the survey. Manned vessels are positioned using high-precision GPS techniques, with vertical referencing made with respect to the water surface and a tide gauge or, increasingly, with advanced GPS techniques such as real-time or postprocessed kinematic.

Autonomous underwater vehicles have been used to gather survey data in deep water. AUVs used in port surveys are battery-powered vehicles programmed to follow survey lines with only minimal contact with the surveyor. They offer the opportunity to 'fly' multiple sensors on one platform without having to waste time performing the line turns necessary with towed sidescan sonar and maintaining the sensors at a constant height above the seabed.

AUVs can be used to perform routine and rapidresponse surveys with a minimum of logistical support, especially as they can often be launched from a vessel or harbor wall. They use an initial GPS position fix at the surface before and after each dive. Intervening positions and depths are calculated using a combination of inertial navigation system (INS), onboard acoustic systems known as Doppler velocity logs (DVLs) and pressure sensors. In general, smaller AUVs would not have an INS and would instead rely on a combination of dead-reckoning and DVL.

It is possible to supply additional positioning information for AUVs using external acoustic systems based on buoys, vessels, harbor walls or the seabed. If the AUV is used in parallel with a manned survey vessel or USV, acoustic positioning hardware mounted on the vessel or USV can be used to help position the AUV.

Unmanned surface vehicles are powered by battery or diesel-electric motors and are based on a variety of hull types. Most of the non-security-tasked vehicles currently on offer are suitable only for very calm conditions and some are simply conventional craft fitted with a remote-control system. Semisubmersible USVs have greatly improved vertical motion (heave) characteristics over other designs and this has benefits for data quality.

USVs can utilise the same high-precision techniques for horizontal and vertical positioning as manned vessels and can relay acquired data in real time using





Multibeam sonar image taken from a pre-dredge survey during the Botafoc port extension at Ibiza, Spain

radio telemetry and also log it securely on board. It is possible for USVs to be autonomous in terms of survey line navigation, but direct supervision is usually required. However, the range over which control and telemetry can be provided for a USV is far greater than is possible for an AUV.

All unmanned systems are relatively expensive, but much of the cost is accounted for by the survey and navigation hardware that allows the vehicle to produce surveys of equal or better quality than a manned vessel. USVs potentially offer greater economies to port operators because they can use diesel-electric propulsion and can have much lower fuel demands than an equivalent manned vessel.

What is the future for unmanned systems? Hydrographic units around the world are examining the relative benefits of AUVs and USVs. The usefulness of a survey will depend on the choice of positioning and sensor payload carried by the survey platform, as well as the selection of the right platform for the task at hand. The case for unmanned vehicles is not clear-cut, especially in busy ports where it is likely to be hard to provide a vessel-free area in which to work safely. However, an unmanned system could easily work in parallel with a manned vessel, thereby increasing the area covered. Unmanned systems offer distinct advantages where a manned vessel might be at risk of grounding or in flood situations when there may be a great deal of debris in the water or on the seabed. Unmanned systems are also versatile, for USVs also perform security and patrol work.

In short, each unmanned system has its own strengths. USVs perhaps offer the best combination of speed, endurance, positioning quality, payload flexibility and real-time telemetry and control, whereas AUVs have great benefits in deeper waters where they can operate at the best height for their sensors. **PH** 

Paul Newman is an experienced hydrographic surveyor, and product development manager for ASV Ltd. More info: www.asvglobal.com

# The weight worry

Misdeclared container weights and incorrect packing have plagued port operators for some time. TT Club's risk management director **Peregrine Storrs-Fox** highlights the dangers

he recent IAPH Resolution on the Safety of Containers in the Supply Chain is to be welcomed. There is a fundamental need for stricter control over the packing of cargo within containers, the way they are stowed on board ships and their declared weights.

It is increasingly apparent that loading an excessive amount of cargo into containers is a serious problem. In 2007, the survey of the boxes on the *MSC Napoli* showed that for 20% of the vessel's deck cargo there was a difference of more than 3 tonnes between the container's declared weight and its actual weight.

It is also clear that the responsibility for declaring the container's weight correctly lies with the shipper – a fact that is already recognised in the IMO's SOLAS Convention. TT Club is very keen to note that the existing guidelines will be further strengthened by the IMO's Maritime Safety Committee, which has agreed to develop measures to clarify the information required to verify container weights.

The latter will no doubt strengthen shippers' obligations and should act to energise the supply chain community. Shippers may complain that it is hard to ensure that containers are accurately weighed, but in many cases it is relatively simple. Logically, it should be easy to calculate the weight of a uniform cargo in a container: multiply the weight of one item by the number loaded on a pallet, plus the weight of a pallet multiplied by the number of pallets used, plus dunnage and the container itself.

That this process is not yet standard is attributable to 40-plus years of tolerance of estimated or inaccurate weights. Quite simply, people have allowed it to continue because, unfortunately, not one stakeholder has faced sufficient pain as a consequence of misdeclaring container weights. Nor, until recently, has there been any focused analysis of the issue.

The incidence of accidents caused by badly stowed or overweight containers continues, and they do not just pose a threat in ports and on ships, but also represent a significant risk to life on inland modes of transport, particularly roads. One obstacle to getting this message across has been lack of information: an absence of objective data covering the number, geographic coverage and severity of incidents.

A degree of change has become more likely since a group of the largest container shipping companies introduced the Cargo Incident Notification System (CINS) in September 2011. The organisation is currently structuring the database (see Maritime Update, p34). It is encouraging to see more liner companies signing up to CINS and using the database, as it will provide a key stimulus to sharpening the focus on incident trends and the types of cargo and packing methods that may be creating undue safety problems.

It is clear that misdeclared weights and poor stowage are more prevalent among certain cargo types and in particular parts of the world. One example that has come to the TT Club's attention recently is the use of 20ft dry van containers for the carriage of marble blocks, which formerly would have been carried as breakbulk or on flat rack containers. But with the increasing penetration of container operations into new cargo trades, an increasing variety of goods are transferring and giving rise to new concerns.

In one instance, a 20ft container on a trailer towed by a terminal vehicle suddenly overturned. Upon inspection, it was discovered that the container was loaded with two large blocks of marble that together exceeded the maximum payload of the container by 2.9 tonnes. The blocks had also been loaded to one side of the container, so it was unbalanced. Given that the overall weight was well within the vehicle's capacity, that it was mechanically limited to a maximum speed of 30km/h and that there were no physical obstacles to driving in the terminal, the logical conclusion was



## Weighing up the options at IMO

Container weighing is being discussed at IMO, as *P&H* reported in the November/December 2011 issue, page 36. The Sub-Committee on Dangerous Goods, Solid Cargoes and Containers discussed the issue at its latest session, DSC 16, and called for amendments to the SOLAS Convention. Best practice proposals put forward by the International Chamber of Shipping and World Shipping Council have had no visible effects, hence the move by IMO to have regulations included in SOLAS.

# ▲ There is little doubt that certain cargo types, and certain parts of the world, are more prone to misdeclared weights or poor stowage

that the accident was caused by a combination of the weight and stowage of the cargo.

The container was a write-off, 10–20% of the cargo was damaged and the terminal vehicle also sustained substantial damage.

Generally, the major multinational shippers that load hundreds of containers every day do get it right most of the time. It is rare to find such shippers either misdeclaring or incorrectly stowing containers. It is with the smaller and occasional shippers that problems are more likely to arise, and also with containers of consolidated cargoes from several shippers.

Naivety cannot automatically be attributed to such cases – we have heard anecdotal reports of shippers who, having had a shipping line reject their container for being overweight, then call round other lines in the hope that one of them will accept it. This is something more than negligence.

Marine terminals play a crucial role in the issue. While we do not believe there is any necessity to impose a legal requirement on ports to weigh containers, an additional checkpoint at the port node would inevitably give much greater clarity. An ideal place to carry out such a check would be at the port's in-gate, where the container is lifted off the truck or railway wagon. If the box arrives by sea at a port the obvious weighing point would be during the lift by the ship-to-shore gantry crane.

A weight-checking regime of this sort raises two questions: first, what is the port supposed to do with a container that is dangerously overweight or eccentrically packed? Second, do national agencies have sufficient resources to enforce legislation and establish such checks (assuming there is an agreement at the IMO level on the issue)? In the UK, for example, public spending cuts have already resulted in a 20% reduction in staff and resources in the Marine Accident Investigation Branch.

To some extent the safety problems associated with overweight boxes might be mitigated by the actions of shipping companies keen to limit their exposure. However, no matter what new SOLAS regulations are introduced, they will be meaningless if enforcement of the necessary verification procedures proves impossible. **PH** 

More info: www.ttclub.com

# Cover for a new century

Maritime lawyers tell *P&H* that port operators need to check their indemnity cover, since their liability may increase when the Rotterdam Rules become international law

Steady progress is being made towards the ratification of the Rotterdam Rules, which one day will be given the force of international law, perhaps before the end of this decade. 'The Rotterdam Rules' is the short name for the UN Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea.

This is a good time to look at the insurance implications of the rules, especially where they change the scope of liability of what the convention calls the "maritime performing parties". These include not only cargo carriers but other companies that "perform any of the carrier's obligations" at the port of departure or arrival. They may include the terminal operator that loads or unloads under carrier's instructions, stevedore companies and even port authorities.

The chairman of IAPH's Legal Committee, Frans van Zoelen, was on the steering committee that helped launch the rules in 2009. While the rules do not address insurance issues explicitly, the liability of the carrier, and thus of other maritime performing parties, will become stricter when the convention becomes law, he said.

"In practice, this means an insurer of cargo will be able to take recourse against the carrier more often, so it is hoped that cargo interested parties, including senders and shippers and their insurers, will become aware of the new implications," he told *P&H*.

Van Zoelen, who also heads Port of Rotterdam's legal department, explained that while a standard marine insurance policy covers damage to goods despatched, it does not cover many of the other obligations of the shipper or sender of the goods. "The possibility that these goods cause damage to other goods or the ship itself is often forgotten, or that wrong information given by the shipper with respect to dangerous goods can cause damage. For these issues the insurance market has to create new modules to cover liability."

He confirmed that under the rules there would be joint and several liability affecting both the carrier and terminal operators. It is common for terminals to have an indemnity clause in their contract with the carrier.

"Such a clause might have the following scope: first the carrier indemnifies the terminal for claims of third parties, such as consignees, regarding damage to goods. Or a clause like the first, but only if the liability of the terminal exceeds the amount of its insurance, or only if and in so far as the terminal would be more liable than it would be towards the carrier," he explained.

### 'The sooner we get a move on, the better'

The UK Chamber of Shipping's Donald Chard called on port authorities and operators to urge their governments to press ahead with incorporating the 'Rotterdam Rules' convention into their domestic legislations as a preliminary step to ratifying the convention and achieving the 20 acceptances needed to bring it into force internationally.

Chard — who was a member of the working group that developed the Rotterdam Rules during the period up to 2008 — pointed out that there was an urgent need to update the rules covering the international carriage of goods. "When the Visby Protocol was adopted in 1968 containerisation was still in its infancy and electronic trading was still in the future," he told *P&H*. "We are very keen as a shipping industry to push ahead this particular process and get as many countries as possible to sign up to a 21st-century convention."

"These conventions only come along once in a lifetime, so there won't be another opportunity for a long time. I would like to think it will secure sufficient ratifications to come into effect before the end of this decade, so the sooner we can get a move on, the better," he said. Check each clause of your contracts

Frans van Zoelen Chairman, IAPH Legal Committee

> He advised that these indemnification arrangements could continue in the context of the Rotterdam Rules, but each clause should be checked to ensure it is viable for each claim that could be brought on the basis of the rules.

> "Furthermore, it would be convenient if carriers and operators make procedural arrangements in case a claim is brought against both of them under the Rotterdam Rules. Arrangements deciding who takes the lead in such cases leads to legal efficiency. In other words, terminal operators and carriers should consider their contracts carefully with regard to indemnity clauses," van Zoelen said.

Terminal operators may have stricter liability for cargo when the Rotterdam Rules come into force Last but not least, he added, in most cases an indemnity clause has to be approved by the insurer beforehand, because it implies an increase in the liability of the insured.

Van Zoelen warned that the rules would change where the balance of proof would lie in establishing who is responsible for damage or loss. "At the moment, the terminal operator working for a carrier is liable on the basis of tort, but the claimant has the obligation to prove the guilt of the terminal. Under the Rotterdam Rules, the burden of proof is reversed, and the terminal has to prove it was not responsible for damage."

Donald Chard, head of legal and documentary at the UK Chamber of Shipping, added that performing parties would be liable only when they have custody or are actually handling or performing activities in respect of the goods. "If something happens when it's not under their control, they have no liability," he told *P&H*.

"Moreover, suing the port or terminal will only be an option for the claimant, who is not obliged to take action against the maritime performing parties; he may well continue to take action against his carrier counterparts," he pointed out.

Other maritime lawyers note that the convention will have a greater impact on some cargo sectors than others. Richard Williams, a consultant for the UK Department for Transport, said that multimodal carriers will have an increased liability, but carriage of bulk cargo by sea might not be greatly affected by the rules.

"Furthermore, the liability of subcontractors... in ports is likely to increase under the rules since they have joint and several liability to cargo interests and cannot rely on contractual defences in the carrier's transport document," Williams said in a presentation to a maritime law forum in London last year.

"The perceived if not actual increased carrier exposure, combined with the complexity of the rules, could also result in an increase in liability insurance premiums, at least in the short term," he added. **PH** 

More info: www.rotterdamrules.com; www.iaphworldports.org/LegalDatabase.aspx



# Happy talking

Three ports show how conversations with the local community can cement the relationship between a port and its city. *Scott Berman* reports for *P&H* 

PECT terminal at Busan... the city waterfront is slowly

public use

being opened up to

Ports and their communities have a lot to talk about, not least because they are both trying to achieve their goals within complex contexts. Dialogue between ports and cities may involve a wide range of community relations activities that differ according to regional custom, organisational structures and community dynamics.

Some ports' community relations strategies involve substantial input from members of the public, although the exact nature of that input varies in terms of the level of direct involvement.

In Busan, South Korea, regular meetings take place between the port and city officials and, in turn, with city residents. It is a critical time for the port, which is undergoing major change, for a \$9.2Bn container port and distribution park is being constructed about 25km away, which will take more than 70% of the container traffic out of downtown Busan. The waterfront space in the old North Port that is being opened up as a result is being redeveloped into a \$7.8Bn, mixed-use district that includes an international cruise terminal.

The complexity of the project, and the fact that the cruise terminal and the remaining container traffic will keep a maritime presence in the city area, necessitates a high level of co-ordination between the port, which is under the auspices of South Korea's central government, and Busan's local city government.

"The aim of the Busan North Port Redevelopment project is to give Busan Port back to the citizens of Busan and create a port space that is open to the public and not congested by container activity," explained Busan Port Authority marketing assistant Rhiannon Shepherd. Although the city handles community relations activities locally, all major decisions related to the port redevelopment involve regular discussions and meetings between the port authority and the city in order, she said, "to incorporate the needs and input of citizen groups and communicate mutually our proposals and feedback".

The planning and construction work prompted reactions that initially "were diverse and mixed". Those public meetings evidently helped nurture good relations, however, because Shepherd noted, "Support from community groups has been gained over time and is now extremely positive."

Sydney Ports Corporation shares Busan's interest in forging strong links with its surrounding community, but it has adopted a different approach. Local stakeholders sit on three port-organised community liaison committees, each of which addresses a specific aspect of the port's activities, including a major expansion project at Port Botany.

Shane Hobday, Sydney Ports' general manager for safety, security and environment, chairs two of those committees and said: "The committees have helped Sydney Ports share information and gain feedback". Feedback from the committees, plus responses from public information days in the neighbourhood, has led to the construction of a boat ramp, a car park, recreational areas and two pedestrian bridges for the community as part of the Port Botany project, he said.

Good community relations have also been fostered by the port's relationship with contractor Baulderstone-Jan De Nul Consortium. Sydney Ports kept the contractor "very well briefed on the community's concerns with the project and dealt



Port Nelson (below) gives city residents the opportunity to air their concerns and discuss solutions with the issues that arose promptly and effectively," maintained Hobday, who is also chair of IAPH's group for Port Safety, Security and the Environment.

The community relations programme at Port Nelson, New Zealand, has a broad goal: to make the port "a leader in environmental performance". It is engaging members of the community to achieve this goal, said Matt McDonald, the port's infrastructure manager. In May, McDonald won the IAPH Busan Open Essay Contest for his paper, 'Successful strategies for making your port a green port'.

The proximity of port and city has made for a relationship that, while generally positive, "has at times been strained," McDonald admitted. Recognising that it was imperative to develop a good relationship, the port established proactive committees, whose members include residents, to address concerns and recommend solutions.

A city-mandated Port Noise Liaison Committee (PNLC), which develops policy regarding port noise and reviews complaints, consists of three residents, three port staff members and an independent, paid chairman. The port uses a six-monthly community mailout to solicit nominations of residents to serve on the committee, with contested seats being put to a vote at a public meeting.

The second, less formal entity, the Environmental Consultative Committee (ECC), has covered the use of methyl bromide to fumigate certain cargoes and transhipment of hazardous materials, among other topics. The ECC recommends solutions and policies and keeps people informed, McDonald said. Its members include port staff, regulatory staff from the local council, representatives from the Conservation and Agriculture and Fisheries Ministry, shippers, shipping agents and exporters, and local interest groups.

# These initiatives provide a communication channel into Port Nelson for concerned citizens

The work of these two committees has spurred the port to purchase environmental and noise monitoring equipment, buy ventilation systems for fumigation, pay for staff time and planners', consultants' and lawyers' fees, mitigate nuisance and buy local homes affected by noise. "We have accounted for the future cost of the mitigation of houses as a liability with an allowance of around \$1M," McDonald said.

The port is active in a business network and a mayoral task force on sustainability. It also sponsors local educational, cultural and recreational programmes and twice a year publishes a magazine for stakeholders and local residents. In addition, the port's harbor master keeps in touch with recreational boating and yacht owners and reaches out to the "wider community" through regular appearances in the local newspaper and radio advertisements.

The bottom line of this "proactive and participatory" process, according to McDonald, is that these initiatives have helped to keep the port well ahead of the curve by providing "a communication channel into Port Nelson for concerned citizens to be heard in a meaningful forum".

Far from hindering development, strategic community relations programmes such as these can help develop trust and create win-win situations for both the port and its surrounding community. **PH** 



# Due to public demand

Three European ports tell *P&H* about the strategies they have adopted to get the local community to support the role they play in their host city

Ports of Stockholm's Portvision 2015 is now part of the way the port operates Many European ports are based either in or near cities. Today, local people make increasing demands as they gain a greater understanding of the impact of climate change and a port's responsibility towards the city's inhabitants. This has prompted ports to look more closely at their relationship with their local community, and it is not surprising that 17 ports wanted to promote this aspect of their activities by entering the Societal Integration of Ports Award. The award is run by the European Seaports Organisation (ESPO) and its theme for 2011 was 'Creative Strategies to Communicate the Port to the Wider Public'.

The winner of the award was IAPH member Ports of Stockholm for a suite of activities that judges described as "nothing less than a manual of best practice for port communication campaigns". Patrick Verhoeven, ESPO's secretary-general, told *P&H* that Stockholm's project shows that communicating to external stakeholders requires an entirely different approach to communicating with customers. "The general public isn't interested in boring statistics and facts; they require a much more creative approach," he said. "Communicating with the general public is not about organising an open day or festival once a year," emphasised Verhoeven. Instead, it requires a continuous effort to maintain visibility and to ensure that the port's role is understood by the people living and working in and around the port.

Two other shortlisted ports – Thessaloniki, Greece, and Koper, Slovenia – share similar qualities with Stockholm's entry in being long-term projects with farreaching goals, and in seeking public opinion. All three have used the internet to reach out to the community and all three have initiatives aimed at younger people.

Ports of Stockholm's Portvision 2015 strategy started in the 1990s and, as its name suggests, draws to a close in 2015. But the ports' communications manager Camilla Strümpel does not see it as ever truly coming to an end, because the strategies adopted as part of the project are becoming normal working practice. "We can now see and measure the impact of this work and it is more and more becoming a part of our everyday work," she told *P&H*.

The initiative came about when it became apparent that the city needed to grow. As in many port cities, some of the port's facilities were located on prime land that was needed by the city to develop housing and business and commercial districts. The port and city needed to grow together, both physically and practically, and in conjunction it was decided to create what the port describes as "an active communication plan to create a social integration" through dissemination of information and to raise awareness among politicians and the general public of the value of the port to the city (see box, right).

Port of Koper's Living with the Port project was



Port of Koper's project (below) aims to identify ways to reach out to the local community and includes guided tours and open days

'Knowing the Mystic Port' at Port of Thessaloniki (below right) was widereaching and was aimed at young people, the wider community and port stakeholders developed for similar reasons. Gregor Veselko, president of the management board, told *P&H*: "More than 10 years ago we were faced with rising throughput and lack of space. Therefore, we wanted to expand the port area towards the sea and land. In order to achieve a healthy balance between spatial port growth and city preservation at the same time, we set ourselves a high goal – establishment of relevant two-way communication channels and honest ties, which would bond the port with the city and offer better understanding of [our] indispensable coexistence."

The port now searches for cost-efficient and creative ways of reaching out to the local community. Its project includes development of a National Spatial Plan that has since received government approval, a Living with the Port web portal, opinion polls, promotion of the port's environmental activities and guided tours and open days.

Veselko believes that one of the project's strengths is the transparent dissemination of information on the positive and negative impacts of port activity on the local environment. "We are publishing online average hourly levels of PM10 [particles of less than 10 microns in diameter] and noise emissions," he explained. Like Stockholm the project has no finish date. "It was set up as a long-term project developing in parallel with our port, so it doesn't have a definite end," he said.

George Vangelas, adviser to the chairman and MD of Thessaloniki Port Authority, believes that you do not have to spend a lot of money to see the benefits of working with the community. Thessaloniki's project cost around  $\in$ 75,000 but has resulted in valuable benefits. "We learned how to co-exist in a co-operative and productive way for the mutual benefit [of both parties]. Despite the economic crisis, ports must undertake actions to improve the relationship with the hosting cities," he told *P&H*.

The project was aimed at three main groups: young people, the wider community and port stakeholders. Activities included tree planting and student visits, a free bi-monthly newsletter, the launch of a Facebook webpage, a cruise MoU and development of a board for port development. Since the implementation of these and other initiatives in August 2010, citizens have shown more interest in the port's day-to-day operations, he explained, and co-operation with various organisations, stakeholders and institutional

## Ports of Stockholm's Portvision 2015

The project consists of six categories, with a number of activities in each: *Collaboration* – includes working with foundations and organisations to provide trips to Stockholm's nearby islands and sailing opportunities to young people; also development of marketing strategies to support commercial districts on the islands.

Digital presence – includes the launch of a new website aimed at the general public, including vessel tracking information and images of ships using the port, digital port map and information on the services provided; and a Facebook site and iPhone vessel arrivals application.

■ *Exhibitions and events* — includes sponsorship of an exhibition at the city's National Maritime Museum to promote the correlation between trade, shipping and shopping; a portable exhibition in a container that can be set up at strategic sites to promote shipping; open days and other exhibitions.

■ *Improving access to port areas* — includes promotion of Stockholm's boat services and walking routes along the quays, and use of port warehouses for commercial purposes.

Environmental initiatives – focus on encouraging port customers to reduce their shipping emissions, including financial incentives for sulphur and nitric oxide emission reduction and waste management, plus investment in onshore power and other collaborative strategies.

 Dialogue with stakeholders – annual visits from the city council and conducting surveys of local residents and customers.

bodies is smoother than before. "We all have common targets, aiming at maximising the benefits for the city in which we live and we create," he said.

The project officially closed in July 2011; while it was active more than 30,000 people visited the port. "Some of the project's actions are still running, like the school visits," said Vangelas. "For the period August 2011 to July 2012, we are already implementing new actions that are more focused on the young people."

As Ports of Stockholm's Strümpel pointed out, "It's not rocket science and doesn't have to cost a fortune. It's more about having the courage to pursue a dialogue with those who our business affects, listen to what they need from us and feel is important." She added that it is also important to foster employees' pride in the port, as, after all, "they are our best ambassadors". **PH** 

More info: www.espo.be





# Mutual benefits for community and ports

A weak economy is driving stronger employment and educational links between several US ports and their cities, reports **John Gallagher** 



www ith an economy stuck in neutral and scant prospect of a recovery in the short term, US ports and the cities in which they operate are renewing efforts to create partnerships that lead to more jobs.

One of the more ambitious schemes is a newly created task force by the US Conference of Mayors that will investigate how cities can generate jobs by exporting more cargo through their ports. On 4 October the association appointed Mayor Alvin Brown of Jacksonville, Florida, to spearhead the effort. Brown will work with Jacksonville port CEO Paul Anderson to oversee the effort locally.

"I'm excited that [the association has] elevated ports to a position within their organisation," Anderson told *Ports & Harbors.* "One of my favourite recent things I like to remind people of is that every major American city grew up around a port, and having this group become involved in advocating for us is a great step forward." Jacksonville's port, known as Jaxport, already supports 65,000 jobs and generates more than \$19Bn a year for the city and the region, according to maritime research company Martin Associates.

Part of the national mayors' project will involve US port cities getting citizens to connect more with their state and federal lawmakers to urge adoption of a more streamlined process of authorising and funding port construction projects. It can take up to a decade or more to obtain the necessary zoning and environmental approvals for such projects – and that is without considering the struggle to obtain funding.

Jaxport's plan to build a \$45M intermodal container transfer facility would directly benefit from a more streamlined approvals process and would attract new jobs to the city faster, Anderson said. "Our country is competing in a fast-paced global market, but the approval process wasn't designed for it and it's not evolving fast enough," he argued. "If we can build a better mousetrap with respect to the process – with mayors lending support for funding – we can speed job creation by 25–30%."

Two ports separated by roughly 300km on the US Gulf of Mexico are both using education to benefit the port as well as their local citizens. Three years ago, the Port of Houston began a maritime programme that works with local high schools, community colleges and universities to give students certification for port jobs. In return, the port gets a pipeline into the local employment pool.

More than 500 students in Houston-area high schools and colleges will be graduating next year

### Jacksonville 'Brings the Noise'

Months before the mayor of Jacksonville was tapped to head a nationwide effort between cities and ports to create more jobs, the city's business community was already mobilising a local effort to showcase the port as a job creator. In June, members of the architecture, engineering and construction industries in northeast Florida began a campaign called 'Bring the Noise', staging events around the city, encouraging citizens to write letters urging elected officials to support funding of critical port projects.

Organisers collected more than 5,000 letters at the inaugural event and now plan to hand-deliver the letters to lawmakers at the Florida state capital in Tallahassee and in Washington, DC. In October on the Jacksonville riverfront, a combination of local high school marching bands and free hotdogs was used to attract 200 people. "It was a real fun time and gave us an opportunity to get in front of media to remind citizens and their legislators to support the port," city councillor Ray Holt, who organised the event, told *Ports & Harbors*.

"We gave our pitch at the event. Even if you're not associated with a port-related business, if we're able to get a couple of these port dredging projects done, that will allow us to expand our cargo capacity; it's going to mean 30,000 more people moving to Jacksonville. And those people will be your customers, too," he said.



with certificates that will allow them to begin work immediately for bar pilots, tug boat companies and the US Coast Guard. "We're creating employment opportunities and stimulating the economy with our working community," Gilda Ramirez, vice-president for small business development at the Houston Port Authority, told *P&H*.

"We recognise that not everyone is going to complete a four-year college degree. For those that don't, there will be port-related jobs here that pay about \$60,000 a year with a high-school degree and their port-sponsored certification."

The Port of Corpus Christi is reaching even further down the educational supply chain. With the help of a giant animated brown pelican named Pocca (the mascot of Port of Corpus Christi Authority), the port has 'adopted' local elementary schools so as to familiarise children with the port while encouraging them to stay in school. As part of the programme, port employees support the schools' extracurricular activities.

"Economic and infrastructure development is our main priority here, but we wanted to develop a secondary priority, which was community outreach," Patricia Cardenas, the port's director of public affairs, told *P&H*. "We see it almost like a gift to the community. Port employees enjoy it as well."

But Pocca is undoubtedly the biggest draw so far as local children are concerned. Created about 10 years ago, the port sends him to community fairs and he welcomes children on their first day back for the new school year. He also rides a parade float during the city's Buccaneer Days, an annual month-long celebration that opens the summer beach season in the city. The port's float adopts a different theme each year depending on the particular project under way. "It's another way to educate children about what we do," Cardenas noted.

She said the port is now looking to adopt a high school, with a view to building job awareness. "If we have the time and the manpower, we can bring kids to the port to shadow an employee [by following them through their working day] to see if they're interested in a career and want to see more of what happens on a day-to-day basis." **PH** 



# Fighting the flood

Port cities need to plan for climate change. **Robert Nicholls** and **Susan Hanson** of Southampton University's Faculty of Engineering and the Environment say disaster preparedness will be a key element of adaptation response

Damage to oil storage tanks at Pointe a la Hache, Louisiana, caused by Hurricane Katrina in 2005 oastal urban areas and port cities are a major focus for hazards, including the impact of sea-level rise. This was demonstrated, for example, by the effects of Hurricane Katrina on New Orleans in 2005 and the river flooding of parts of Bangkok in 2011, which were partly linked to high tides and subsidence.

Together with colleagues at Meteo-France and the Organisation for Economic Co-operation and Development, we have undertaken a series of assessments since 2008 of major port cities' exposure to coastal flooding. Exposure measures the number of people and assets that would be flooded without defences, and hence represents a worse-case situation. These studies focused on the 136 port cities around the world that in 2005 had more than one million inhabitants. They considered the possible impact on exposure to flooding by the 2070s of a range of key drivers – climate change, humaninduced subsidence, population growth, economic growth and urbanisation.

Analysis of the data shows that in 2005 a substantial number of people in large port cities were already exposed to coastal flooding. About 40M people – 0.6% of the global population or roughly one in 10 of the total population in the 136 cities studied – would be exposed to a once-in-a century coastal flood event. The top 10 cities in terms of exposed population in 2005 are estimated to be Mumbai, Guangzhou, Shanghai, Miami, Ho Chi Minh City, Kolkata, Greater New York, Osaka-Kobe, Alexandria and New Orleans. These cities are almost equally split between developed and developing countries.

We also looked at the financial implications resulting from climate change and saw that it is more heavily weighted towards developed countries as a city's wealth becomes important. The top 10 cities in terms of assets exposed are Miami, Greater New York, New Orleans, Osaka-Kobe, Tokyo, Amsterdam, Rotterdam, Nagoya, Tampa-St Petersburg and Virginia Beach. These cities are estimated to contain 60% of the total exposure, but are in only three countries: the USA, Japan and the Netherlands. The global value of assets exposed in 2005 across all cities is estimated to be \$3,000Bn, which corresponds to around 5% of global GDP measured in US dollars in 2005.

The impact of the same key drivers for flooding in the 2070s was considered. These scenarios were based on 'high change' scenarios – for example, on the high end of a scale of possible changes. By 2070 the total population exposed could grow more than threefold to around 150M people as a result of the combined effects of population growth, climate change (sea-level rise and increased storminess) and subsidence. The top 10 cities under these scenarios are Kolkata, Mumbai, Dhaka, Guangzhou, Ho Chi Minh City, Shanghai, Bangkok, Rangoon, Miami and Hai Phong. In this scenario, the cities of east and southeast Asia predominate.

Asset exposure could increase much more, reaching \$35,000Bn by the 2070s, which is more than 10 times the current level. Our research shows that the 10 cities most at risk from an asset perspective are Miami, Guangzhou, New York-Newark, Kolkata, Shanghai, Mumbai, Tianjin, Tokyo, Hong Kong and Bangkok – all of which are in Asia or North America.

Population and economic growth, including the effects of urbanisation, are the most important drivers for the global increase in exposure to flooding. Climate change and subsidence greatly exacerbate this exposure although the relative importance of these factors varies by location. As the top 10 cities in the 2070s scenarios demonstrate, exposure to flooding rises most rapidly in developing countries, reflecting the greater changes there and the fact that much new development occurs in the coastal flood plain.

Global responses to this increased risk of flooding include mitigation and adaptation. These two broad strategies are complementary. Mitigation against climate change, for example reducing emissions, is found to have relatively little benefit in reducing exposure to the changes that will occur by 2070, given that the effects of climate change are growing with time.

Mitigation of human-induced subsidence – for example, as a result of groundwater withdrawal – could have benefits, especially for delta port cities. Such policies could be beneficial to many cities in Asia that are rapidly subsiding today, such as Manila, Jakarta and to a lesser extent Bangkok.

All port cities, including the Asian conurbations noted above, will need to adopt widespread flood adaptation strategies over the next few decades because of the expected increase in population and assets.

A portfolio of adaptation measures will probably include water defence construction and upgrades, effective land use planning and improved building codes for flood resilience. The high level of exposure in terms of population and assets and the inevitable residual risk is likely to translate into repeated cityscale disasters on a global scale. Disaster preparedness therefore remains an important element of any adaptation plan.

Right: Berths at the Port of Itajaí, Brazil, had to be extensively reconstructed after the devastation caused by flash floods in November 2008 Flood management and risk analysis requires proactive assessment from ports and other authorities. Our research shows that climate change mitigation will offer limited benefits by the 2070s. Mitigation of human-induced subsidence offers more benefits, because the effects are more immediate, although it may be difficult to address these challenges in the short term. Any adaptation strategy needs to be multifaceted and we anticipate that cities, including



port cities, will adopt portfolios of adaptation measures rather than just a single strategy.

Communication exchange between cities on their proactive responses to growing flood risk would be mutually beneficial to all parties. Example networks include the Large Cities Climate Leadership Group, now officially known as the C40 Group, with other city networks developing at national and international level. **PH** 

More info: http://live.c40cities.org; www.unctad.org; www.iaphworldports.org



# Don't neglect what's **above** your head

**Geoff Holden**, chief executive of the LEEA, tells *P&H* that well-maintained lifting equipment makes good business sense

> Port and harbor operations can involve a large amount of overhead lifting depending on the cargoes that the facility handles. Ensuring that lifting equipment remains fit for purpose should be a priority for port and terminal operators looking to maintain safety and efficiency when handling cargo.

> Overhead lifting remains a major cause of death and serious injury in the workplace. A wide range of issues must be addressed to minimise the risks, but checking the integrity of equipment that is used regularly is a cornerstone of any safe lifting programme.

> The UK's Lifting Operations and Lifting Equipment Regulations (LOLER) forms part of a health and safety framework built around European directives. Although these directives are applied throughout the EU, the need to transpose them into national legislation results in large differences between member states' laws. LOLER's influence extends well beyond UK boundaries, however. In many parts of the world no health and safety legislation specific to overhead lifting exists, so an increasing number of companies and organisations have been adopting LOLER as best practice.

> Whatever the regulatory requirement, a rigorous, consistent and professional approach is essential to maintaining overhead lifting equipment. This is particularly true of ports and harbors, where the risk of accidents is typically higher than elsewhere. Loads, for example, tend to be large and heavy and must be lifted high, often close to staff. Much of the equipment





on the waterside is exposed to the elements, making it more likely to deteriorate quickly.

Under LOLER, lifting equipment is taken to include any equipment that lifts or lowers loads, including the attachments that anchor, fix or support them. That means it covers not just the obvious items such as cranes and hoists, but also simple products such as shackles and slings. This 'below the hook' equipment secures the load during the lifting operation and is particularly vulnerable to damage and wear. When it comes to ensuring that lifting equipment is safe to use, nothing should be overlooked.

LOLER requires all equipment, apart from new equipment, to be "thoroughly examined" before being put into service, stipulating a risk-based process. There can, however, be uncertainty over what constitutes a thorough examination. LEEA's *Code of practice for the safe use of lifting equipment* defines a thorough examination as a visual examination and testing to check that the equipment is safe to use. This could include proof-load testing, non-destructive testing, light load testing and operational testing.

Equipment that has to be installed, such as an overhead crane, should be examined thoroughly to ensure it has been installed correctly and is safe to operate, irrespective of whether it is new or not.

When equipment is in service, LOLER offers two options for thorough examination of equipment. The most popular option is for examination at fixed intervals: a maximum of six months for lifting accessories and equipment that is used for lifting people, and 12 months for other types of lifting equipment.

Alternatively, an examination scheme can be created. The intervals between examinations are based on the frequency and nature of use, the operating



Lifting equipment takes a lot of wear but if properly monitored there should be ample warning before it becomes dangerous environment and the rate at which a particular piece of equipment is likely to deteriorate.

Thorough examinations are usually undertaken by external companies, although this is not a legal requirement under LOLER. In the UK, for example, there is no official licensing system to qualify engineers to undertake this work. In broad terms, employers should regard competence for thorough examination as a combination of technical knowledge of the equipment concerned and the experience to put that knowledge into practice. Employers must recognise that assessment of overhead lifting equipment is a specialist task that requires relevant skills and experience. The LEEA's diploma programme is a long-established and industryrecognised qualification for engineers that intend to work in this field. This theoretical understanding should be combined with practical experience.

Employers should take all the steps necessary to allow visiting inspectors access to their lifting equipment. Structural elements of a crane may show no symptoms of deterioration for many years. If access is difficult, these can all too easily be neglected.

After each thorough examination, the inspector should provide the employer with a written report. If

the inspector believes that the equipment is not fit for purpose, or will not remain fit for purpose until the next examination is due, it must be withdrawn from service, either for repair or disposal. It is important that whether the examination is carried out by an internal or an external inspector, they have the ability to act independently of the employer.

Any item of lifting equipment deteriorates with age and use, generally in a slow, steady fashion. If properly monitored, there should be ample warning before lifting equipment becomes dangerous. Corrosion can cause rapid deterioration and exposure to heat, strong sunlight or chemicals can damage items such as textile slings. Even when well within their working load limit, items that come into direct contact with loads are vulnerable to damage every time they are used.

It is vital to use the six- or 12-month thorough examinations in conjunction with a comprehensive programme of in-service inspections. These should be designed to detect the type of damage that can occur every time lifting equipment is used. By contrast, an in-service inspection is usually a relatively quick visual process, sometimes supplemented by simple operating tests, conducted by employees who can identify obvious defects. They will need to possess the judgement and authority necessary to withdraw from service any equipment that gives cause for concern.

The thorough examinations required under LOLER are vital and corners should not be cut. Using examiners or inspectors who lack specialist skills may reduce costs in the short term, but letting potentially unsafe equipment remain in service can have tragic consequences. Death or serious injury aside, employers can pay a high price for accidents, including damage to load, buildings or plant, disruption to normal handling operations, and prosecution for breaches of health and safety legislation. LEEA believes that throughout industry, safety and productivity go hand in hand.

Overhead lifting is carried out as part of so many of the operations in a port environment that ensuring equipment remains fit for purpose is an essential part of a successful working environment. Employers that implement a comprehensive programme of thorough examination and in-service inspection will minimise their risk of avoidable accidents and provide the longterm benefit of more efficient cargo handling. PH

The Lifting Equipment Engineers Association (LEEA) is a member organisation that campaigns for higher standards of safety within the lifting industry More info: www.leeaint.com

## Accidents reported in UK docks

Year	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11 (provisional)
Hit by moving, flying or falling object	15	18	29	21	13	23	32	20	12	18
Total incidents during loading, discharging and handling operations on a ship in a dock	69	113	132	135	104	118	150	117	77	92
and nanoning operations on a ship in a dock										Source: HSI

#### MARITIME UPDATE



The World Ports Climate Initiative is a series of projects and aims championed by members of the IAPH Environment Committee to reduce ports' greenhouse gas emissions and improve air quality. Any port can get involved. **More info: www.wpci.nl** 



# A year of progress for WPC

The past year has seen great progress in the development of IAPH's World Ports Climate Initiative (WPCI). Not only have we seen major developments in wellestablished environmental projects, but also the ports that are driving WPCI announced a new project at the IAPH World Ports Conference in May: promoting LNG-fuelled vessels.

Liquefied natural gas is of great interest to both ship operators and ports because it reduces or eliminates many of the emissions targeted by recent IMO legislation to make shipping cleaner. Use of LNG to power ships is still at the pilot stage, but Norwegian operators have successfully operated LNG-fuelled ferries in domestic waters for a decade and Norwegian liner operator SeaCargo has ordered two LNGpowered ro-ros from an Indian shipyard. Nevertheless, more work needs to be done on creating international safety standards before LNG bunkering facilities become a standard feature at ports around the world.

In Scandinavia, important advances have been made in the region's efforts to pioneer onshore power supply (OPS). Shipping and port industry bodies in Sweden have successfully negotiated with the government a cut of 98% in the tax charged for using onshore power. This has enabled Swedish ports, led by Gothenburg, to reduce their charges by 25% for ships using OPS.

The expectation is that other European port bodies will be inspired to follow Sweden's example. The tax reduction was achieved by a successful application for vessels using OPS to be exempt from the EC Directive on Energy Tax on environmental grounds.

More ports adopted the WPCI's Environmental Ship Index (ESI) in

2011, offering financial incentives for greener ships. In mid-2011, Antwerp and Hamburg joined the cluster of big northern range ports that have established ESI incentive schemes for visiting ships and they have been joined by several smaller ports, including Kiel and Wilhelmshaven. The ESI programme is completely voluntary, but IAPH is actively encouraging the global port community to increase its commitment to cleaner ships. Other major ports are expected to adopt ESI incentives soon.

The ESI working group also made an attempt to standardise the baseline for the sulphur oxide element of the index. Hitherto, a sulphur content of 0.1% has been defined as the cutoff point, below which extra points will be awarded to ESI-compliant ships. The group decided in September to raise this content to 0.5% effective from January 2012 as a further promotion of low-sulphur fuel and to encourage more ships to use it.

The Port of Los Angeles made another major contribution to the carbon footprinting project by showcasing a revised CO<sub>2</sub> calculator in Busan in May 2011. The project helps ports to identify emissions sources, track emission trends and help them focus their efforts to reduce greenhouse gas emissions. The calculator was officially launched by the port authority in November.

The calculator estimates ships' CO<sub>2</sub> emissions and allows ports to compare existing or baseline conditions with emission reduction scenarios developed by port users, using control strategies that are based on a range of fuel types and technologies.

### **Notable numbers**

earmarked by Port Nelson to buy houses affected by noise



piracy incidents off the coast of Benin in 2011

# ECDIS mandatory soon for newbuildings

The mandatory requirement for vessels to be equipped with an approved ECDIS electronic chart system will begin to take effect in July 2012. The first deadline will apply only to new passenger vessels above 500gt and new tankers over 3,000gt. Nevertheless, concerns are being expressed that a shortage of trained ECDIS operators will cause difficulties for unprepared ship operators, perhaps even leading to their ships being detained by port state control inspectors.

In July 2013, the same ECDIS requirement will apply to new cargo ships over 10,000gt and the rollout among different classes and ages of ship will continue through to 2018, by which time only ships destined shortly for recycling will be exempt.

ECDIS is much more than a chart displayed electronically on the

ship's bridge. Besides helping the mariner to plan and monitor the vessel's route and positioning, it offers a complex computer-based information system including alarms or other indications relating to information displayed on the screens or equipment malfunction.

For most navigational purposes, ECDIS offers a complete range of tools to enable mariners to navigate safely with all the necessary information at close hand, but the success of the electronic chart system depends on the operator being adequately trained to use it. A recent survey on the introduction of mandatory ECDIS conducted by manufacturer Transas and IHS Fairplay Solutions revealed that the main area of concern among industry responders related to training, with 43% of those surveyed voicing worries about inadequate training.



An officer cadet undergoes ECDIS training

Most newbuildings are fitted with integrated bridge systems, so fitting ECDIS on the first few categories of new vessels should not present great difficulties. In 2014, however, the regulation will begin to be applied to all vessels operating and the work involved may need to be more extensive on less well-equipped ships.

## China takes the lead against Indian Ocean pirates

China has taken control of the group co-ordinating international naval convoys to combat piracy in the Indian Ocean, as from January. Along with other emerging countries, China may have to increase its presence in the region as austerity forces European countries to scale back their overseas naval commitments.

EU naval force officials estimate that about 23 warships will be needed at periods of peak pirate activity this year, but warned that NATO and EU forces will be able to supply a maximum of just 12 ships. The EU force's chief of staff, Captain Keith Blount, has said the defence budgets of several European countries, including the UK, are under pressure, forcing them to cut back on the number of patrolling vessels they can make available.

China, Russia and India already contribute ships to the anti-piracy task force and are among the countries that will be asked to send extra warships to patrol the pirateinfested waters of the northern Indian Ocean.

Anticipating a reduced European naval presence in the

65.000



NATO forces, seen here on a suspect craft, will have a smaller presence in the Indian Ocean in 2012

region, increasing numbers of owners and operators are employing private armed guards on board cargo ships, following the updating of IMO recommendations on private security personnel in September (see *P&H* Nov/Dec 2011, p38). Flag states including Britain, France, Italy and Japan have already announced that they have approved the use of armed security teams on board their flagged vessels. A private security company backed by the marine insurance industry is proposing to deploy armed patrol boats to escort merchant ships through the main piracy hotspots. The convoys will use the same 490nm transit corridor in the Gulf of Aden that the world's state-backed navies currently patrol.

While the leading industrial countries struggle to contain the upsurge of pirate attacks in the Indian Ocean, a disturbing trend of maritime criminality is emerging on the other side of Africa. The new piracy hotspot is the Gulf of Guinea, off the coasts of Nigeria and Benin in west Africa.

Benin saw at least 20 piracy incidents off its coasts last year, compared with none in 2010, according to the International Maritime Bureau. Pirates have hijacked tankers with the aim of stealing fuel or oil cargo.

West African officials met UN and EU representatives in Benin in November to discuss strategies to combat the attacks in the Gulf of Guinea, which have created alarm on coastal shipping routes.

the date

the date by which all ships will be requirec to carry ECDIS

# Operators champion cargo scheme

A web database for sharing safetycritical information on container accidents and near-misses, piloted by five leading ship operators, is gaining considerable momentum now that it is being rolled out in the wider industry.

The Cargo Incident Notification Systems Network (Cinsnet), developed by Exis Technologies, was initiated by CMA-CGM, Evergreen, Hapag-Lloyd, Maersk Line and MSC. The pilot was launched in November 2010 and ran until September 2011, with the Container Owners Association hosting the database and the TT Club and the International Group of P&I Clubs also involved.

Since its launch, four other carriers have expressed an interest in joining the scheme – WEC Lines, ZIM Integrated Shipping, Hanjin Shipping and Yangming. "So we have a lot of carriers that are joining," Dirk Vande Velde, CINS chairman and corporate manager of MSC Chemical Transports, told *P&H.* "For 2012 we have more Asian carriers coming into the



at Algeciras after it rolled over when loading containers in July

organisation, so we are expanding." During the pilot year, the

participating carriers input data about cargo safety breaches that either did cause, or could have caused, an accident. First Cinsnet statistics released by the pilot carriers show that from 27 July 2010 to 27 July 2011, 167 incidents were recorded, five rated high-risk, 12 medium and 150 low-risk. Incident types, from 27 January 2011 to 27 July 2011, included one explosion, 88 leakages, five fires, 21 misdeclarations, two cases of radiological contamination and 34 other incidents. "We come to a monthly average of 1.8 high-risk notifications," said Vande Velde.

Cinsnet will reveal the prevalence of unsafe practices in the cargo shipping industry. Its findings have the potential to lead to changes in legislation and safe practice recommendations and will inevitably drive improvements in dissemination of advice and training, the CINS partners believe.

The International Union of Marine Insurance (IUMI) expressed support for the scheme. "Despite this year's downturn in many container trades, these incidents are still occurring and impacting cargo underwriting results. IUMI will continue to support industry efforts and calls for tighter regulation," said a spokesman.

A note of scepticism was sounded by Nautilus International, the Anglo-Dutch-Swiss maritime trade union, many of whose members work on container ships. "No software package will address these important issues," insisted senior national secretary Allan Graveson. "What we need is a new code, which is coming from the IMO." Referring to the review of IMO/ILO/UNECE guidelines on packing containers, Graveson added: "Individual states can make it mandatory if they wish. It will replace the current guidance. It goes across all modes of container transport - road, rail, sea and ports."

## Portland maintains a clear advantage

Exceptionally clear waters at the southern UK port of Portland have proved a big draw for international shipping companies requiring underwater vessel services in the English Channel. Several European operators have contacted Portland about its underwater inspections and repair facilities.

"When you factor in that companies based at Portland Port offer a wide range of support services, engineering capabilities and commercial dive experience, it's no wonder we've seen a growing interest from companies across the UK and Europe over the past few months," said Portland Harbour Authority's commercial manager lan McQuade.

"The port employs dedicated environmental specialists and is committed to an environmental management programme in relation to ongoing port activity, management, strategic planning and future development. Water quality is tested on a regular basis by government authorities for environmental reasons," Sandie Wilson, environment manager, said. The underwater services the



A diver machine-cleans a hull in Portland Harbor

port offers include class and ownership change surveys and inspections, welding and other hull repair work.

Portland claims to have the second-largest manmade harbor in the world, located just 35km north of the channel's westerly shipping lanes. The port is known for its sheltered inner harbor offering underwater visibility of up to 10m, enabling underwater operations to be conducted in a any weather conditions. The inner harbor is up to 15m deep and the outer harbor up to 20m deep.

### **Notable numbers**

cts of pilotage lobally every year



Port of Marseille employees transferred to terminal operators



Jamaica's maritime authority wants to help preserve the Caribbean's fragile and pristine marine environment

## Jamaica gets tough on ships' waste

The Maritime Authority of Jamaica held a training workshop aimed at improving the disposal of ships' waste in November 2011 in Kingston. Last year, the Wider Caribbean Region was designated a special protection area, within which pollution from shipgenerated waste is outlawed. The authority's accredited course was designed to build awareness of the provisions of the Marpol Convention, in addition to standardising procedures relating to the collection and disposal of ship-generated waste.

"The obligations of port states to give full and complete effect to the provisions of Annex V [of the Marpol Convention] extends beyond the presence of reception facilities to ensuring that those who receive and manage the garbage are appropriately qualified," said Bertrand Smith, the authority's director of legal affairs, who presented the Marpol Convention at the workshop. The maritime authority organised the course in collaboration with Jamaica's National Solid Waste Management Authority.

Although shipping contributes less than 10% of pollution in the marine environment in the Caribbean region, the ability to enforce stricter standards for the discharge of garbage is an important measure to protect the fragile marine resources on which most of the Caribbean countries depend for tourism and fishing.

Along with the other Caribbean countries, Jamaica is now able to enforce stricter standards on ships calling at its ports and marinas, or when they are transiting territorial waters. Jamaica has also put in place measures to deal with shipgenerated waste and support the special area status. These measures include a requirement that ships advise on the volumes and types of garbage that they require to be discharged at least 24 hours before arrival at a Jamaican port.

## **IMO urges ratification of HNS Convention**

The IMO has renewed calls for ratification of the revised protocol on shipping hazardous and noxious substances, following a year in which only eight countries have met the 31 October signature deadline.

The 2010 protocol of the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS) Convention has been signed by Denmark, Canada, France, Germany, the Netherlands, Norway, Turkey and Greece, subject to ratification, or, in the Netherlands' case, to acceptance. It remains for their respective parliaments to ratify it. As these countries include several that account for a major proportion of HNS tonnage, their signature is viewed by the IMO as an encouraging development.

On 1 November, Efthimios Mitropoulos, secretary-general of the International Maritime Organization, urged "all IMO member states to now move forward with bringing the protocol into force at the earliest possible date". The main condition for entry into force 18 months after the minimum ratification threshold has been met is that at least 12 countries must consent, including four each with at least 2M units of gross tonnage. The other condition is that in the preceding year those countries must have received at least 40M tonnes of cargo.

The protocol adopted on 30 April 2010 is a substantially amended version of the original 1996 HNS convention, which failed to gain sufficient ratification to come into force. Many countries withheld consent on the grounds that it was too impractical and complex, particularly the need to report all types of HNS. The 2010 protocol is greatly simplified and removes the requirement for reporting packaged HNS goods.

It establishes a comprehensive compensation regime that will cover not only pollution damage from HNS carried by ships, but also the risks of fire and explosion, including loss of life or personal injury and loss of or damage to property. "No such regime currently exists," said an IMO spokesman. "Both the shipping and port industries will be able to seek compensation under the protocol in the event of such incidents."

Under the protocol, if damage is caused by bulk HNS, compensation would first be sought from the shipowner, up to a maximum of around \$150M. Where damage is caused by packaged HNS, or by both bulk and packaged HNS, the maximum shipowner liability is \$172.5M. Beyond that level, compensation would be paid from the secondtier HNS Fund, up to a maximum of \$375M, including firsttier compensation.

Thomas Liebert of the International Oil Pollution Compensation Funds said the organisation tasked by IMO to establish the HNS Fund is confident that, with eight states that account for significant HNS volumes having signalled their intention to proceed, full global ratification is feasible within three years.

80%

cut in diesel particulate matter from truck-related pollution at Ports of LA and LB

arter three explosions



Israel Ports Company (IPC) chief operating officer **Dov Frohlinger** gives a foretaste of some of the technological innovations that will be on show during the IAPH Mid-Term Conference in Jerusalem.

IPC not only manages and develops Israel's port properties, but also is heavily involved in developing new port technology applications and will be showcasing port-related technology for IAPH delegates when they attend the conference from 21 to 24 May 2012.

In 2010, IPC completed development of a new port gate complex for the Ashdod Port Company, which has substantially upgraded the port's operational and security capabilities. Using a combination of technologies, the gate system automatically identifies arriving drivers via their RFID identification pass, arriving trucks by licence plate readers and arriving containers using OCR technology. The driver's identity is confirmed by biometric readers.

If the data captured at the gate matches the data pre-transmitted

electronically by the shipper, the driver is admitted to the port after his vehicle has been automatically weighed and a job card issued. The card instructs the driver where and when to go to deliver or receive cargo. All operations are supervised remotely by security personnel who protect the port and its cargo traffic.

The company has developed a maritime community trade system for processing all cargo and vessel-related information exchanged between the port companies, importers, exporters, freight forwarders, customs agents, trucking companies, shipping lines and customs. The system is a high-security internet application that can be used 24 hours a day, seven days a week by users anywhere.

The system facilitates all traffic handled at Israel's ports through the transmission of more than 7M messages a month. This paperless trade system has saved millions of dollars in annual operational costs by eliminating the transfer and



New technology at Ashdod's Bassan cargo gate

handling of paper documents. At the same time, data reliability has improved, since there is no longer a need to enter and print numerous forms containing the same data elements.

The company will showcase its technologies at the Mid-Term Conference. Participants can experience this and other Israeli port-related technology at first hand during the four days, at the conference site and on port visits.

Finally, a word on the Israeli port system, which underwent a major reform in 2005 as result of national legislation aimed at transforming it into a more efficient and competitive sector that would help drive the country's economic growth and international competitiveness.

For 40 years, Israel's ports were owned, developed, operated and managed by the Israel Ports Authority. In 2005, the authority was abolished and replaced by four government-owned companies. The Israel Ports Company (IPC) serves as the port landlord, responsible for managing port properties and developing future facilities. Three operating companies, one at each of Israel's commercial ports -Haifa Port Company, Ashdod Port Company and Eilat Port Company - were established to handle vessel and cargo traffic.

The reform legislation included the privatisation of the three operating companies. Currently, the Eilat Port Company is being privatised, with seven companies bidding to purchase the government-owned shares. The three ports are expected to have handled about 41M tonnes of cargo in 2011, including 2.5M teu of containers. *More info: www.iaph-jerusalem2012.com* 



### We value your opinions

Do you have strong views about any of the articles in *Ports & Harbors*? Are there other industry issues you feel strongly about? **Email your views to ph@iaphworldports.org and we'll be happy to include them** 

IAPH INFO



Name: Colombo South Port Country: Sri Lanka Type: Transhipment hub for large container ships being constructed under a BOT agreement

Details: 18m-deep basin, three

container terminals each with a 1,200m quay accommodating

three large berths

*Ports & Harbors* is eager to showcase your port. Please send details and images of your port or port expansion project to *P&H* acting editor Jem Newton; email: jem.newton@ihs.com



# Welcome to the Asia-Oceania meeting

The chairman of Sri Lanka Port Authority, Dr Priyath Wickrama, is extending a warm welcome to all IAPH members planning to attend the 12th Asia-Oceania Regional Meeting and Port Forum at Bandaranaike Memorial International Conference Hall, Colombo, on 8–9 March 2012.

"I want to express my sincere gratitude to IAPH Secretary General Susumu Naruse for selecting Sri Lanka to host this important IAPH event, the first of its kind to be held in Sri Lanka. We Sri Lankans feel really honoured and delighted about it," Dr Wickrama said. "As the host port, Colombo will do its utmost to make the meeting as productive and significant as possible."

He added that the theme of the regional meeting, 'Global challenges – impact on Asia-Oceania Region', would cover the aftershocks of the economic meltdown, fuel price fluctuations, the impact of natural disasters and maritime piracy.

The meeting will be hosted by the Sri Lanka Ports Authority (SLPA) and held simultaneously with an international air freight, shipping and logistics exhibition at the same venue on 8–10 March, thereby offering participants an excellent networking platform to create new logistics networks, forge business connections and expand strategic trade alliances.

SLPA has arranged a technical tour of Colombo South Port for IAPH delegates after the Port Forum on 9 March. The construction of South Port under a build-own-transfer agreement has been in progress since 2008 and is one of the largest public-private partnership (PPP) projects ever undertaken in Sri Lanka. The South Port consists of three terminals and when completed will boast an 18m-deep harbor basin able to take most large container ships, and with a fully equipped yard and hinterland will have an annual handling capacity of 7.2M teu.

SLPA has also arranged a second visit on 10 March to the Port of Hambanthota, the first phase of which was successfully completed in 2010. The port is located just 10nm from the world's busiest east-west shipping lane and is about to embark on a milliondollar investment plan, with many foreign investors already expressing an interest in PPPs for various business ventures.

The second phase, costing \$800M, will be completed within three years and the whole project will provide berthing facilities for more than 30 ships when complete, making it the biggest port in southern Asia.

"Considering that the Port of Colombo now plays its role as a transhipment hub in the Indian Ocean and with more remarkable port development taking place at the Port of Hambanthota, I believe the participants will have an ideal and excellent opportunity to observe at first hand the booming port development in Sri Lanka," said SG Naruse. "I look forward to welcoming as many IAPH members as possible to the meeting in Sri Lanka, as well as non-IAPH members. I am confident that this will be an exciting event for those who participate." Register at:

www.slpa.lk/IAPH2012/index.html



#### IAPH INFO

# President Knatz speaks at Japan Seminar

At the invitation of the Japanese Foundation for IAPH, the association's president, Geraldine Knatz, executive director of the Port of Los Angeles, made the keynote presentation, 'Creating 21st century ports', at the 24th IAPH Japan Seminar in Tokyo organised by the foundation.

President Knatz updated the audience of government and industry figures on the Port of Los Angeles' current focus for development – its Pier Pass programme to reduce port traffic congestion, customer relations and business development and its environmental leadership of the World Ports Climate Initiative.



## Progress on port community system benchmarking

The Trade Facilitation and Port Community Systems (PCS) Committee met in Marseille on 4 November and reviewed the work programme for 2011–13. It includes preparations for the 2013 IT Award and completion of the PCS benchmark study and its extension to African and South American ports.

Committee chairman Frédéric Dagnet, of Port of Marseille, will send a summary of the main recommendations of the benchmark study to committee members soon. The results of the study will also be presented at IAPH regional meetings.

The committee intends to launch a further study to explore co-operation between ports towards agreeing PCS standards and interoperability. A full working session on PCS was also proposed for the 2013 IAPH World Ports Conference in Los Angeles.

There was a presentation of the French national PCS, called AP+, by the project manager of Marseille Gyptis International, Dominique Lebreton. He also showcased the MareNostrum initiative, a communication platform that facilitates computerised data exchange between Mediterranean ports.

Olivier Jean-Degauchy, of Le Havre's PCS Soget, presented the recently launched European PCS Association, which aims to lobby for European PCS at the EU level and monitor the impact on them from new maritime regulations. The chairman explained that Alan Long, committee member from Felixstowe PCS Maritime Cargo Processing, had regularly attended the World Customs Organization's information management subcommittee as IAPH representative. The subcommittee's June agenda and draft minutes were made available to committee members.

Long also represented IAPH at the EU Trade Contact Group, which provides a platform for a regular consultation with industry representatives on operational logistics processes.

Dagnet discussed the WCO Data Model, which aims to standardise and harmonise customs information requirements. It was decided that the committee should focus on implementing the data model worldwide. He reminded members that the consignment reference could be used as a unique code for referring to a trade transaction and/or consignment between parties.

Members were told about the latest EU developments by Martina Fontanet, committee member from the European Sea Ports Organisation. She reported on the Blue Belt concept, the EU E-maritime initiative, multimodal transport, transport security and port performance indicators in the PPRISM project. *More info: www.iaphworldports.org* 



L to r: Secretary General Naruse and Sydney Ports' Grant Gilfillan, Bryan Smith and Lachlan Benson

## **Sydney Ports visit**

A delegation from Sydney Ports Corporation, Australia, headed by chairman Bryan Smith and CEO and IAPH 1st vice-president Grant Gilfillan, visited the IAPH Secretariat on 18 October. Lachlan Benson, executive general manager, and Jason McGregor, senior manager marketing were also in the delegation.

The delegation paid a courtesy visit to Norihiko Yamagata, director general, Ports and Harbors Bureau, Ministry of Land, Infrastructure, Transport and Tourism, to exchange information on ports in Australia and Japan. After Tokyo, the delegation travelled to the ports of Nagoya and Yokkaichi for talks with officials. Sydney has a sister-port affiliation with Nagoya and Yokkaichi to promote mutual understanding and co-operation.

## IAPH Training Scholarship 2012 now available

Under the 2012 IAPH Training Scholarship scheme, the maximum amount offered to an individual will be \$2,500. Personnel from ports whose membership dues are based on six or fewer credits can apply. The scholarship scheme does not extend to staff employed by central government.

The scholarship is aimed at giving staff of developing ports the opportunity to attend advanced port training programmes overseas to acquire the latest port management and operation skills and expand their personal contact network.

Since the scheme was set up in 1980, more than 100 people have received financial assistance through the scholarship.

A maximum of four scholarships can be awarded each year. The IAPH-approved training institutes are: PSA Training Institute (Singapore); IPER (Le Havre, France); APEC (Antwerp, Belgium); PPPM (University of New Orleans, USA); IBC Academy (distance learning)

Scholarship applicants should submit a form to the IAPH Secretariat More info. www.iaphworldports.org

## Jean-Michel Moulod dies



IAPH honorary member Jean-Michel Moulod has died aged 57. He was director general of Port of Abidjan from 1981 to 1998, when he was actively involved in IAPH

technical committees including the former Port Safety, Environment & Construction Committee and the Ship Trends Committee. He was a member of the IAPH Executive Committee 1991–1999 and in 1988 he invited the association to hold its Mid-term Executive Committee (now called Mid-Term Ports Conference) in Abidjan.

For his great contribution to the association, he was made an IAPH honorary member at the Kuala Lumpur Conference in 1999. He also played a leading role in the Port Management Association of Western and Central Africa.

# Membership notes

The IAPH Secretariat is pleased to announce that the following member has joined

### Associate member

Afcons Infrastructure Ltd

Address	AFCONS House, 16 Shah Industrial Estate,
	Azad Nagar, Andheri-West, Mumbai, India
Telephone	+91-22-6719-11152
Email	selvaraj@afcons.com
Website	www.afcons.com
Representative	N Selvaraj, director (operations)
Nature of business activitie	es construction

# Dates for your diary

A selection of forthcoming maritime courses and conferences

January	
17-21	India Maritime Week – New Delhi, India www.indiamaritimeweek.com
19–20	Shifting International Trade Routes – Tampa, USA www.aapa-ports.org/Programs/seminarlist.cfm
26–27	4th International Forum on Maritime and Port Risk Prevention (MARISK) – Nantes, France www.marisk2012.com
Februar	'Y
7-8	RoRo Shipping Conference – Copenhagen, Denmark www.informaglobalevents.com
9–10	Fifth Intermodal Asia 2012 – Melbourne, Australia www.transportevents.com
14 – 4 Sept	Fundamentals of KPIs for Ports & Terminals – distance learning www.ibc-academy.com/kpi
20–24	PIANC-COPEDEC VIII – Chennai, India www.pianc-copedec2012.in
22-24	Third Annual Pacific Ports Clean Air Collaborative Conference – Los Angeles, USA <i>www.ppcac.org</i>
23–24	Introduction to flood risk analysis and management – Oxfordshire, UK www.hrwallingford.com
28–1 March	Breakbulk China 2012 – Shanghai, China http://jocevents.com
March	
5-16	Port Security – Antwerp, Belgium www.portofantwerp.com/apec
5–6	12th Trans-Pacific Maritime Conference – Long Beach, USA
	http://jocevents.com
8–9	IAPH Asia/Oceania Regional Meeting – Colombo, Sri Lanka www.slpa.lk/IAPH2012/index.html
13-15	TOC Container Supply Chain: Asia 2012 – Hong Kong, China <i>www.tocevents-asia.com</i>
19-20	AAPA Spring Conference – Washington DC, USA www.aapa-ports.org
19-20	Third Annual Africa Ports, Logistics and Supply- Chain Conference & Expo 2012 – Accra, Ghana <i>www.magenta-global.com.sg</i>
19-23	38th International Seminar on Dredging and Reclamation – Recife, Brazil <i>www.iadc-dredging.com</i>



▲ IAPH is trying to make a real difference within the wider maritime industry

# Making a real difference

Port Nelson CEO Martin Byrne sees IAPH as an important agent for change in the maritime industry. He encourages members to promote the association to help increase its profile

Having been involved in IAPH as an active member for the past three years, and for the past eight months as the New Zealand director and more recently as an IAPH Executive Committee member representing Asia/Oceania, a question I am frequently asked by other port company representatives is: what are the benefits of an IAPH membership?

In an age when people's time and indeed money are in shorter supply than may have been the case previously, it is important that organisations such as ours are seen to be relevant and to have a real ability to add value to our members through their association with IAPH.

The New Zealand Port CEOs group was fortunate recently to host a visit from Grant Gilfillan, CEO of Sydney Ports Corporation and first vice-president of IAPH. During his presentation to New Zealand Ports, Gilfillan made mention of the work being done by IAPH on the issue of overweight containers and the leading role that IAPH is playing in trying to tackle this issue. He also stressed that IAPH is far more than an organisation that simply meets at a global conference every two years – through the efforts of our various working groups, it is trying to make a real difference within the wider maritime industry.

I firmly believe it is the responsibility of all IAPH members to take active steps to promote the work of IAPH and membership of the association within their various regions. These efforts will ensure that IAPH gains greater recognition and hopefully, through that process, also increases its membership, particularly in areas where our representation remains light.

As a starting point, and as was discussed in one of the technical committee meetings in Busan, I would encourage all member companies to have the IAPH logo on their website home page to promote the fact that they are a proud member of the organisation. If we work together as active members we have the ability to greatly increase the profile of IAPH and to ensure we remain a strong and relevant organisation within the maritime sector.

MR & B.

"It was simple. We cut all ties with conventional thinking."

VACUUM

MoorMaster<sup>™</sup> is used in Australia, Canada, Denmark, New Zealand and Oman. Compared to conventional mooring lines, the technology offers quick, safe, and controlled mooring - even when other vessels are passing.

### Automated mooring for safer, more efficient ports

Cavotec's automated mooring technology, MoorMaster<sup>™</sup>, uses remote controlled vacuum pads to moor and release vessels in a matter of seconds, eliminating the need for conventional mooring lines. MoorMaster<sup>™</sup> improves safety and productivity, and offers substantial infrastructure savings. To find out more, visit www.cavotec.com



NO MORE DOCK LINES





#### Creating value for the nation, for its people, for business

ADPC actively supports Abu Dhabi's diversification as part of the Vision 2030 plan; and recent developments at Khalifa Port and Khalifa Industrial Zone Abu Dhabi (Kizad) are a testimony to the progress and spirit of ambition of our company. Our vision to be a preferred provider of world class integrated ports and industrial zone services embodies our commitment to excellence ensuring we remain at the forefront of progress.

#### www.ADPC.ae

Abu Dhabi Ports Company P.O. Box 54477 Abu Dhabi, UAE Tel: + 971 2 695 2000 Fax: + 971 2 695 2111 Email: Ports-Marketing@adpc.ae