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Security support Kurt Nagle calls for government commitment

From the beginning Expert involvement improves project delivery

Membership awards IT and essay competition winners revealed

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PORTS HARBORS

Official Journal of the International Association of Ports and Harbors

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Busan handover

Passing the presidency from Ndua to Knatz

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Past president Gichiri Ndua gives President

Geraldine Knatz a figurine of a Masai

woman at the gala ceremony of the IAPH conference in Busan

Photo: BPA

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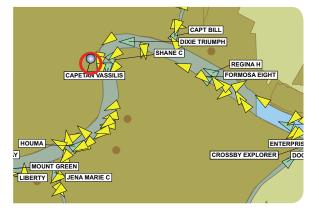
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Spread the word

Following a successful event in Busan, SG **Susumu Naruse** will focus on raising IAPH's profile in the maritime community and beyond

Luille

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

> The 27th World Ports Conference in Busan was a great success. Approximately 700 people working in the ports industry gathered in Busan to share the latest information and exchange views and opinions with their counterparts from other parts of the world. The line-up of the speakers across the working sessions was superb, including CEOs from major ports as well as revered researchers in the maritime field. IAPH members unanimously elected Dr Geraldine Knatz, executive director of Port of Los Angeles, as the president for the next term (2011–13) along with three vice-presidents representing their respective regions.

In addition to the busy business programme, the participants enjoyed a variety of social activities that ranged from a traditional dinner in a serene mountain temple to a fabulous evening's entertainment, Hollywood style. These programmes were made possible by the host port, Busan Port Authority (BPA), and

The secretariat will be expanding the organisation's scope

supporting organisations that included the Ministry of Land, Transport and Maritime Affairs and the City of Busan. This conference would not have been the success it was without the hard work of BPA and other organisations.

This year IAPH has adopted six resolutions, all addressing urgent challenges surrounding the industry: overweight containers,

port infrastructure development, the Environmental Ship Index, and piracy. By adopting these resolutions IAPH has made clear its stance on these issues, and the next challenge is to raise awareness. This is what was discussed in the first meeting of the Long Range Planning and Review Committee, an IAPH internal committee that has been dormant for several years. A set of documents, such as a new IAPH mission statement and vision, shall be considered at committee meetings and reported to the Board of Directors in Jerusalem under the strong leadership of our president, Dr Knatz.

As IAPH technical committees start considering their new work plans agreed in Busan, we, the secretariat, will provide a better service to members and expand the organisation's scope by sending clearer messages to the maritime community, raising global awareness of IAPH. PH

3

Positive outlook

Your incoming and outgoing presidents reflect on Busan and look forward to further IAPH success

Past president, Gichiri Ndua

hat an achievement it was for BPA to attract so many port representatives to its conference. When I think about the importance of collaboration between ports at this event, it reminds me that the port and shipping sectors need to come closer and work together towards our common objective – the facilitation of seaborne trade.

Democracy is increasing across the globe and with it comes a wider political space and broader economic dimensions. These will manifest themselves in the extended selection and availability of goods and services leading to more local and international trade. Ports need to anticipate the increase in throughput in advance, so serious thought needs to be given to port capacities in the Gulf, Middle East and north Africa regions.

The devastating earthquake and subsequent tsunamis that hit parts of Japan

were traumatic. We also remember the floods in Australia and those occurring in parts of America. It is not possible to make a direct link between these effects and climate change, but we cannot rule it out. Your new president, Dr Geraldine Knatz, is well placed to steer the association on these matters and is already doing so through her active participation in the World Ports Climate Initiative. There could be no better personality to lead the association forward.

We all know the adverse effect piracy has on maritime trade, but it needs to be viewed more broadly as a security threat to world peace and trade. We must support IMO and those friendly and mindful nations that have committed resources towards abating this menace. We should also remember that their efforts are not in vain but in pursuit of global harmony, peace and prosperity. **PH**



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President, Dr Geraldine Knatz

Where do we go from here? Those are heavy considerations to weigh when you stop and think about the dynamic and unpredictable environment that ports must navigate today. We felt the effects of the economic downturn in Genoa two years ago, and then there are the natural disasters over the past two years that have hit coastal areas in a seemingly indiscriminate, rapidfire fashion. They have included floods, earthquakes and tsunamis, from Haiti to Queensland, Brazil to New Zealand, not to mention the chain of horrific events in Japan.

If that weren't enough, the price of fuel fluctuates between high and very high and maritime piracy continues to grow and disrupt cargo and cruise traffic in the Arabian Sea and Indian Ocean. In the face of these challenges, governments more than ever have relied on ports and harbors to step up and do what they can to restore normalcy to afflicted regions, whether by facilitating relief efforts, creating local jobs or by boosting national trade. That's why what we do through the IAPH is so vitally important and should be shared not only with the industries we serve but with the global community.

And that leads me to what I hope to focus on during my term as president. I want to raise the global awareness of IAPH. Over the next two years, it's my mission to ensure that the voice of IAPH is heard. We must promote all the meaningful work we are doing so that more people in and out of our industry have a better understanding of who we are as an organisation and how the efforts of our ports, through IAPH, are helping to shape future policy and industry trends.

This is a wonderful organisation and I am very excited and honoured to be the IAPH president. I look forward to seeing all of you at the Americas regional meeting at the Seattle conference in September, in Antwerp in December and Israel next May. **PH**





Christian Paschetta says that reform has meant "far-reaching change" for port workers

All change at France's major ports to match rest of Europe

A national port reform agreement placing French ports on the same footing as their European competitors came into effect recently. "The situation at major French ports is now standardised at the same level as other leading European ports," Christian Paschetta, president of the National Union of Port Handling Industries (UNIM), told *P&H*.

Since May, all state-owned terminals at France's seven major ports, formerly called *ports autonomes*, have been run by private or partially private operators, he said. "This puts French operators on the same terms as their competitors in other European countries and allows each operator to control all the elements concerned in port operation and management," he explained.

The seven ports – Bordeaux, Dunkirk, Le Havre, La Rochelle, Marseille Fos, Nantes Saint-Nazaire and Rouen – are now officially called Grands Ports Maritimes. They were forced into agreeing far-reaching reforms after watching their market share decline progressively in the past two decades. Between 1989 and 2006, the traffic share of French ports dropped from 18% to 14%.

In addition, Marseille Fos, France's biggest port, has fallen to fifth place from third in the European rankings of total cargo tonnage. The deregulation process was initiated by a port reform law passed by French parliament in July 2008, but the transition was blighted by a series of strikes by port workers concerned that the reforms would bring about a deterioration in working conditions and raise retirement age. A deal was finally struck between port authorities and trade unions in April 2011.

Paschetta admitted that the change had been particularly hard for those who had been employed by state enterprises all their working lives. "People who were lifelong port employees have become company employees since 3 May; this has been a farreaching change for them," he said.

In Marseille Fos this process involved the transfer of some 400 port authority personnel to private or partially private stevedoring companies. The facilities affected include the Fos container terminal, now operated by stevedores Euro-Fos and Seayard; the ore and grain terminals, operated by Carfos; and Marseille's Mourepiane container terminal, which will be run by a joint venture between stevedore Intramar and the port authority. In addition, the Fos and Lavera oil terminals will be operated by Fluxel, a specially formed company in which the port authority has a majority stake.

At Le Havre, France's main northern range port, the quay gantry crane operators have been transferred to the operators now running the container terminals. These terminal companies, including APM Terminals, have made significant investments in the terminal operations in recent years, including some €30M (\$42M) in 2010 in anticipation of the deregulation process. Le Havre port authority has also announced plans for a multimodal terminal that will cost an estimated €139M. Subject to a public inquiry, construction should begin in 2012 and commissioning could take place by 2014. This terminal will also be run by private enterprises.

Port updates

ISRAEL PRIVATISES EILAT

The Israel Government Companies Authority (GCA) has announced an intended 100% sale of shares in the Red Sea port of Eilat by the end of 2011. This is part of a programme that started in 2005 to privatise Israel's three main ports – Haifa, Ashdod and Eilat. During the first stage, the GCA will shortlist potential buyers, who will then be invited to bid for shares in Eilat Port Company. The GCA has posted the sale process on its website.

NEW TO BUENAVENTURA

Spain's biggest container terminal operator, Grup TCB, has opened a new terminal in Colombia's Pacific port of Buenaventura. Investment at the TCBuen terminal is estimated at more than \$240M and the facility is expected to handle 250,000teu during 2011. Its 480m quay accommodates two post-Panamax gantry cranes and it has a 26ha container yard equipped with seven RTG cranes.

YANGTZE PORT OPENS

Donggang port development in China's inland port of Chongqing, on the Yangtze River, has started operations with an annual capacity of up to 250,000teu. The first phase, consists of two multi-purpose berths, one ro-ro berth with 60 vehicle slots and a stacking yard of 488,000m². When the three construction phases have been completed, the port area will have 11 berths and an annual capacity of 1.3M teu.

AZERIS LOGISTICS CENTRE

The Azerbaijan government has commissioned a feasibility study for a 100ha international logistics centre at the new port of Alat featuring 800,000m² of storage space and capacity for 100,000 containers a year.

BOX BARGES INLAND

The inland California ports of Stockton and West Sacramento are inviting bids for an operator of a barge container service between the ports. The first phase of the project will be to build a rail-barge link at the Port of Stockton. In a second phase, the Port of West Sacramento will be developed.

Cash & Cargo

ICTSI RIDES THE RECOVERY

Manila-based terminal operator International Container Terminal Services Inc (ICTSI) has reported a net profit of \$28.5M for 1Q/2011, up 25% from \$22.8M in the same period last year. ICTSI said the higher earnings were mainly due to higher cargo volume enabled by economic recovery, favourable container volume mix and higher revenues.

WEST COAST BOX BOOM

Container volume growth of 10% at the ports of Los Angeles and Long Beach over the last half year should continue throughout 2011, a port official told *P&H*. After a dip in March compared with last year, the Port of Long Beach rebounded with a 12% year-on-year increase of box imports in April to 270,107teu. Exports increased 10.4% to 143,693teu, aided by a weak US dollar and growing overseas demand.

ANTWERP FIRST QUARTER

The Port of Antwerp handled 47,374,451 tonnes of freight in the first three months of 2011, up 12.7% from the same period last year. Total freight volume, container and liquid bulk volumes are all higher than the level reached at the same point in the record year of 2008.

MORE MOVES AT ITAJAÍ

The port complex recorded a 11% increase in cargo movements in 1Q/2011. The public and private terminals of the Brazilian port handled 226,230teu, up from 203,000teu in the same period last year. The split was 55% export cargo and 45% imports. The port authority expects to achieve a total throughput exceeding 1.1M teu this year.

TANGER MED GROWS

Morocco's Tanger Med port has announced that it more than doubled its first-quarter cargo throughput year-on-year to 8M tonnes. Box traffic rose 48% to 602,348teu, with particularly strong growth in volumes handled by lines serving west Africa (up 70% year-on-year) and South America (up 30%).

USA seeks box scan repeal



Supporters of a proposal to exempt containers destined for US ports from a law requiring 100% scanning of boxes are pushing for a fast track to Congressional approval.

The SAFE Port Reauthorization Act of 2011, introduced in the Senate on 14 April by Republican Susan Collins from Maine and Democrat Patty Murray from Washington, would allow boxes that meet certain standards to bypass the 100% scanning rule, and would become enforceable by July 2012.

A US government source told Ports & Harbors on 27 June that Senate staffers were hoping to get the proposal on the June business meeting of the United States Senate Committee on Homeland Security and Governmental Affairs, but this did not happen and at time of going to press it was unknown when the bill will receive attention.

Containers that go through a preliminary screening to identify high-risk containers would be exempt. Also

exempt would be those that originate at ports that are part of the Container Security Initiative (CSI), which ensures high-risk boxes are inspected at overseas ports before they arrive in the USA. Department of Homeland Security chief Janet Napolitano has acknowledged that scanning technology will not be in place to effectively scan 100% of all inbound containers by next year without seriously disrupting the supply chain. Napolitano has committed to reconsidering the mandate every two years, but the Collins-Murray proposal would remove the need to do that.

"Until X-ray scanning

technology is proven [to be] effective at detecting radiological material and not disruptive of trade, requiring the X-raying of all US-bound cargo, regardless of its risk, at every foreign port is misguided and provides a false sense of security," Collins and Murray asserted.

"It's certainly a positive, in that it recognises the reality of the situation, that the 100% scanning requirement is not going to happen in anybody's foreseeable future," World Shipping Council president Chris Koch said when the proposal was introduced in April. The proposal would also reauthorise key parts of the original 2005 SAFE Port Act at \$300M per year over the next five years. The reauthorisation would include the Automated Targeting System, which identifies high-risk cargo; the Customs-Trade Partnership Against Terrorism, known as C-TPAT, which provides incentives to importers to enhance their cargo security measures; and CSI.

In endorsing the measure, Collins pointed out that 361 US ports logged 57,600 ports of call by foreign-flagged cargo vessels that brought in 11M containers.

People power to aid Dover privatisation

An announcement issued in May by a government minister could influence the sale of the UK's major trust ports.

Secretary of state for transport Philip Hammond said in a written statement that an application for sale of a trust port would not be approved unless it "is considered likely to deliver an ongoing and significant level of community participation in the port".

Dover Harbour Board, which currently administers Port of Dover, has submitted a scheme to privatise the port, but this plan has provoked criticism from the local community. Dover People's Port Trust – a community bid to buy the port – has been mustering local support to prevent it from falling into private hands.

Neil Wiggins, the chairman of Dover People's Port, maintained that Hammond's announcement would benefit the People's Port campaign. "It puts the boot on our foot," he told *Ports & Harbors.* "It is the only publicly known bid that has full engagement from the [local] community [and stakeholders]."

Criteria in the statement include community participation to "influence the port's long-term development and may include the right to receive a share in the profits of the port, or the future increase in its value". However, it "does not necessarily require a community role in the operation of the port".

Dover Harbour Board believes that its privatisation proposal is community-focused. Bob Goldfield, chief executive of the port, said in a statement that the Dover Harbour Board "welcome[s] the Secretary of State's desire to widen the consultation on the future of trust ports and [is] entirely comfortable that our voluntary privatisation scheme, as already submitted to the Department for Transport, is very community focused". It believes that the proposed scheme "is the only option for funding expansion of the port that is both fully costed and deliverable".

The consultation period for the sale of the Port of Dover ended on 27 June.

Oman protests delay contracts

Protests have delayed development of a new general cargo terminal at Salalah



Political turmoil in Oman has delayed various port developments in the sultanate by up to six months, so decisions that should have been taken early this year are only now being actioned, port officials said. The protests forced a cabinet reshuffle in March and the new transport ministry group has only recently finished reviewing the policies of outgoing ministers.

Port of Salalah chief executive Peter Ford said that a big obstacle to the port's development had been the delay in the tender for a new general cargo terminal. "The tender committee has asked for clarifications on the financial bids and when that is completed they should be able to evaluate an award," he told *Ports & Harbors*. No announcement on the winning bid had been made at the time of going to press.

He said that recent protests in the town centre had not affected port operations. "Our port workers are happy; we have no issues," he added. Local sources said the majority of the population was happy with the progress achieved recently on political and economic reform and that the recent sit-in outside the governor's office in Salalah had ended.

Ford added that an MoU had been signed with a major Spanish company to start a regional distribution network for grain and other bulk cargo in 4Q/2011, and that the official announcement would be made in July. The port's container terminal has a 2km quay with six fully operational berths and is equipped to handle the world's largest container ships with its 16.5–18.5m approach channel. Recent expansion is aimed at increasing throughput to a forecast 4.2M teu in 2011.

The other major news at the port is that, despite the recent political unrest, the number of cruise visits was well up from last year. "So far this year we have already had 20 calls at Salalah, compared with a total of 29 last year," Ford said.

In the north of the sultanate, port operations have returned to normal after the demonstrations of late February. The protests were particularly violent in the port city of Sohar, where at least two people were reported killed in clashes with police.

Among other developments that have been put on the back burner by the turmoil is the creation of a national port authority and the future of cargo operations at the country's main gateway, Sultan Qaboos Port in the Omani capital, Muscat.

It is an open secret in Omani port circles that a decision has been taken in principle to move the main cargo hub to Sohar. However, no port official was willing to confirm that such a move had been discussed.

Port updates

MAASVLAKTE DAM GROWS

The first section of the new block dam that will protect Rotterdam's Maasvlakte 2 port extension from the North Sea is in place. The block dam should be completed by the beginning of next year, by which time 20,000 concrete blocks from the original Maasvlakte dam will have been moved to their new position.

GOOD NEWS FOR US PORTS

Channel deepening at east coast US container ports has moved forward with the release of the Army Corps of Engineers' work plan for 2011. The Port Authority of New York and New Jersey has been allocated \$73M to continue harbor deepening to 15.2m. The Port of Charleston will receive \$150,000 to pay for a feasibility study to increase the depth of the port's harbor from 13.7m to 15.2m.

HANOI DREDGING BEGINS Song Hong Joint Stock Corp has begun a scheme to improve drainage channels running into the To Lich, Hoang Liet, Lu and Set rivers around Vietnam's capital, Hanoi. The total cost of the improvement works is \$370M, with Japan contributing 76% through a development assistance loan. The work includes dredging and cleaning the channel beds, creating embankments, setting up an underground drainage system and building roads above 15 of the channels in various districts around Hanoi.



People

STEINKE TO LEAVE LB

Richard Steinke, executive director of the Port of Long Beach for the past 14 years and one of the most respected leaders of the US maritime industry, has announced his plans to retire, effective from 30 September. Under his leadership he transformed a naval complex into one of the USA's largest container cargo terminals. He also made the port a leading environmental steward, implementing a green port policy including the Clean Trucks Program, in association with Port of LA.

NEW DG FOR SAN PEDRO

Hilaire Lamizana has been appointed director-general of Côte d'Ivoire's second-largest port, San Pedro. He takes over from interim director Yebarth Lucien. Lamizana said his immediate tasks would be to upgrade port facilities, improve hinterland links and acquire a container scanner. "I undertake to turn San Pedro into a regional hub," he said at his inauguration.

SUDAN PORT CHIEF

The government of Sudan has appointed Jalal Eldin Shilia the new general manager of the Sudan port authority, Sea Ports Corporation (SPC). He takes over from Ibrahim Ahmed Al Amin. Shilia has more than 25 years of continuous international service with SPC. Initially he was director general for the Department of Planning and Research.

PORT KLANG CHAIRMAN

Port Klang Authority has appointed Dato' Dr Teh Kim Poo as its new chairman. Teh is founder and managing director of Resintech Berhad, one of Malaysia's leading plastic tubing manufacturers, and is responsible for the overall management and strategic direction of the Resintech Group.

NEW CEO FOR TRANSNET

Tau Morwe has been appointed CEO of Transnet National Ports Authority, in South Africa. Morwe was previously chief executive of Transnet Freight Rail and Transnet Port Terminals.



Up river... Port of Nanjing on the Yangtze will be able to receive 50,000dwt vessels by 2015

Deeper Yangtze to Nanjing

China's Yangtze River will have a 12.5m-deep channel all the way to Nanjing, 312km upriver from Shanghai, by 2015. The 18Bn yuan (\$2.7Bn) project is part of Beijing's 200Bn yuan (\$30Bn) five-year plan to develop China's inland waterways. For the first time, 50,000dwt vessels will be able to reach Nanjing, according to Chen Yuanhua, deputy director of the Nanjing Yangtze River Waterway Bureau. The first leg of the project will commence towards the end of this year.

By 2013 the required depth will have been reached up to Taicang (Suzhou) and Nantong, about 40km upriver from Shanghai. Taicang already has the largest container throughput of China's inland ports, feedering Shanghai's Yangshan deepwater port. Nantong is home to one of China's top three shipyards, Rongsheng Heavy Industries.

The second leg will extend the channel to Nanjing, and will take from 2012 to 2015. During the final stage, the river's response will

be monitored and addressed while traffic management is optimised. Yuanhua expects the whole project to be finished before 2020.

Li Shenglin, minister of transport, said his ministry will accelerate the development of China's inland waterway transport. By 2015 he wants to increase port capacity to 1.3Bn tonnes, and vessel tonnage from 450 tonnes (in 2010) to 800 tonnes. Port capacity should have reached 3Bn tonnes by 2020. Beijing's current five-year plan allocates twice the amount of money for investment in inland waterways than for the previous five years.

The Yangtze's middle and upper reaches have also been upgraded, with new ports added, for example in Chongqing. Improvements have been made to many of the river's tributaries, all the way deep into Guangxi province.

At the other end of the river, Shanghai's Waigaoqiao Port just opened a new deepwater channel. At high tide, 5,000teu vessels will now be able to reach the port, in which APM Terminals has a stake. At the mouth of the Yangtze, its new 12.5m draught is in keeping with the river's planned Nanjing channel.

Keeping the Yangtze at its new depth will be a big effort. Already an armada of dredgers goes out every April to keep the river navigable during the annual drought. Normally, the dredgers return home before May, when the rain returns and water starts flowing again. This year was exceptional, however, with some parts of the river 6m below last year's peaks. Authorities even opened the Three Gorges Dam, allowing it to drop almost 1m (0.5%) to add about 500M m³ of water to the river.

The government has calculated that the Shanghai–Nanjing project will eventually save 2M tonnes of bunkers and 6M tonnes of greenhouse gas emissions a year. It will add a freight capacity some 20 times that of the Shanghai– Nanjing railway line.

Proving run for Hambanthota

Sri Lanka's new Hambanthota port got its first foreign container vessel on 28 April when Wan Hai 502, owned by Taiwan's Wan Hai Lines, entered on a test run. The aim was for harbor pilots to familiarise themselves with manoeuvring vessels at the port, now named Magam Ruhunupura. The laden container vessel, drawing a draught of 12m, was on a trip from Port Klang, Malaysia, to Colombo when it stopped at Hambanthota, the Sri Lanka Ports Authority (SLPA) said.

"In the days ahead, several more vessels of different capacities and draughts belonging to international shipping lines are due to arrive at the port to enable harbor pilots to familiarise themselves" with navigation, the ports authority said in a statement. Two more ships, Sky Apollo and OEL Dubai, called on 30 April and 1 May.

SLPA chairman Priyath Wickrama has said that eventually, following further dredging, Hambanthota will be able to accommodate container ships capable of carrying 10,000teu. The SLPA has been negotiating with shipping lines in an attempt to encourage regular calls at the port, which will initially be an industrial and bunkering facility and later a container port. It is also evaluating proposals to set up industries at the port.

The first phase of construction at Hambanthota was completed in August 2010, when the harbor basin was filled with sea water.

Liners upgrade chassis data

The liner association Ocean Carrier Equipment Management Association (OCEMA) is attempting to address container chassis management as individual carriers continue to cut back in provision of equipment for inland US destinations. At the end of April it completed an IT system upgrade for two of its six nationwide chassis pools, which it operates through subsidiary Consolidated Chassis Management (CCM). The upgrade will allow CCM to reduce costs and to better address changes in demand for chassis equipment.

"A key concern of terminals, shippers and motor carriers, as well as ocean carriers, is ensuring a continued stable supply of chassis in all key intermodal locations," John Nardi, vicepresident of operations for Hapag Lloyd and chairman of OCEMA, said on 29 April.

"We have studied numerous locations and intend to work

closely with terminals, motor carriers, pools and chassis suppliers to ensure a stable and adequate supply of equipment. As ocean carriers, we have a vital stake in ensuring our customers' service needs are met reliably and efficiently," he added.

OCEMA is also developing a chassis provisioning information section on its website to help shippers keep track of how container chassis management is changing in the USA. The association has carried out reviews in different intermodal locations to try and ensure chassis supply, in response to requests from its members.

Over the last two years, major box lines have scaled back container chassis management services to US customers services not provided in other countries - to focus on their core maritime operations. Shippers are concerned the cutbacks could lead to service disruptions.

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- Day 1 Why Dredging? The Need for Dredging/Project Phasing Day 2 What is Dredging? Dredging Equipment Day 3 Production (includes a Site Visit)
- Day 4 Preparation of a Dredging Contract, Cost Pricing
- Day 5 Dredging Projects, Contracts

Costs

The cost of the seminar will be \in 3,100.-; this fee includes all tuition, VAT, seminar proceedings and workshops and a special participants dinner during the week but is exclusive of travel costs and accommodation. Assistance with finding accommodation can be given.



For further information contact IADC Secretariat: Mr. Jurgen Dhollander Phone: + 31 (0)70 352 33 34, dhollander@iadc-dredging.com Secretariat, PO Box 80521, 2508 GM The Hague, The Netherlands



International Association of Dredging Companies

Cross-border security

AAPA's *Kurt Nagle* tells *P&H* that governments should work together to secure their ports

Security prevention and detection procedures form part of a daily routine at seaports in the Americas and these activities have become more sophisticated and costly in recent years. Increasingly, more money is required for everything from personnel and equipment to infrastructure and maintenance.

Although port and cargo security needs have increased since the September 2001 terrorist attacks on the USA, federal spending for these measures, particularly in the USA and Canada, is beginning to decline, leaving many ports concerned about the future of federal security funding support. The agency responsible for Canada's transport policy, Transport Canada, ended its security funding programme in November 2009 with no indication of when it would be reinstated. US federal security grants for ports dropped from \$450M in fiscal year 2010, including stimulus funding, to \$250M as part of Congress's recently approved continuing resolution (a type of appropriations legislation) for FY2011.

Security continues to be one of the highest priorities for seaports. It is a crucial, complex and shared responsibility among private-sector and government entities. The AAPA and our member ports collaborate with government officials and private-sector security experts to maintain and enhance seaport security.

Over the past decade AAPA-member port

authorities and their marine terminal partners have collectively invested billions of dollars in facility security improvements. These include everything from fences and cameras to hightech perimeter access controls and, in some cases, underwater surveillance to monitor threatening activity. As a result of these investments, and through relationship-building and resource-sharing among the various law enforcement and emergency response agencies, new security systems and protocols are significantly enhancing port security.

The financial impacts of the recent recession, coupled with depleted national funds, have caused governments in major countries throughout North, South and Central America to tighten the funding that is provided for seaport security.

Seaports are a critical link for access to the global marketplace. They create jobs, connect us with world markets and are essential for our countries' economic growth and prosperity. In the USA, seaports generate more than \$3Trn in annual economic activity and more than \$212Bn in tax revenue. They also support about 13.3M US jobs, equating to \$649Bn in personal income per year.

AAPA's US-member public port authorities are working with agencies as varied as the US Coast Guard, the Transportation Security Administration, Customs and Border Protection and the Domestic Nuclear Detection Office to ensure the safety of the people and cargo that move through their facilities.

In Canada, seaport agencies collaborate with Transport Canada, Canadian Security and Intelligence Service, Public Safety Canada and the Royal Canadian Mounted Police and local policing agencies on security and policing. In Mexico, ports co-ordinate security with the government's Secretariat of the Navy (SEMAR). Similar port security collaborations exist in Latin America and, in some cases, among Caribbean island ports and their governments. Seaport security requires more of these types of partnerships along with more state funding and policy considerations to augment security procedures and investments.

AAPA is pressing hard to ensure that more funding and policy support is available for seaport security. The US Congress is considering legislation to reauthorise port security policies and grant funding enacted in the Security and Accountability For Every Port Act of 2006 (SAFE Port Act), which is set to expire at the end of September 2011. AAPA has been communicating regularly with the Senate Committee on Science, Commerce and Transportation, along with House and Senate

A truck rolls through a radiation portal monitor at the Port of Seattle

homeland security committee staffs, to highlight the association's SAFE Port Act reauthorisation priorities. These include eliminating the 25% cost-share requirement for port security grants and maintaining the grant authorisation level at \$400M a year.

CBP

AAPA members from all four delegations – Canada, the Caribbean, Latin America and the USA – are keenly interested in the requirements included in H.R. 1, Implementing Recommendations of the 9/11 Commission Act of 2007, which mandates the scanning of all US-bound containers at their overseas port of origin. While AAPA supports a risk-based policy of screening, scanning and searching containers, it has concerns about the 100% scanning mandate.

The Department of Homeland Security (DHS) has already voiced its intention to postpone this mandate for two years beyond the original 2012 implementation deadline, and there is

legislation in Congress to allow alternatives. AAPA has also urged DHS to work more closely with seaports to ensure that the next generation of scanning equipment is complementary to port operations before installation.

AAPA is pressing

hard to ensure more

funding and policy

seaport security

Kurt Nagle, president and CEO, AAPA

support is available for

The association continues to be an ardent champion of seaport security. In April the US Congress gave approval for the Port Security Grant programme to be funded to \$250M rather than the \$100M authorised in the 2007 act. Congress also agreed to waive the 25% cost-share requirement for ports for the rest of FY2011. AAPA campaigned on both of these points on behalf of its members. This cost-share waiver, however, is not included in the SAFE Port Act five-year reauthorisation legislation that is under consideration in Congress, and AAPA strongly urges that it be included before the legislation is adopted.

Enforcement, awareness and funding are important parts of a comprehensive strategy to

thwart terrorism-related cargo disruptions in the future. More federal partnerships will be needed, including co-operative endeavours such as the Canada-Americas Port Security Assistance Program, which provides a range of maritime security technical assistance and information-sharing activities throughout the continent. These and other co-operative ventures will help speed up information integration and internationalise the concept of security partnership between ports, the trade community and customs administrations. For this to become fully realised, however, all entities in the supply chain will ultimately need to connect and participate with one another to share real-time information and exchange lessons learned. PH

Kurt Nagle is president and chief executive officer of the American Association of Port Authorities More info: www.aapa-ports.org



Early expert engagement

Engaging contractors in the early planning stages of port infrastructure projects can help cut cost and avoid delays. *Stephen Cousins* explains how

"How could these problems have been avoided?"

Early contractor involvement (ECI) is a method of project delivery that aims to address these issues by getting everyone involved with a project before any work begins on site. The approach is simple: if experts and stakeholders can agree in advance how things should be delivered and how responsibilities and risks should be divided, a project can be implemented efficiently and cost-effectively, leading to a happier client and contractor.

In contrast to traditional 'construct only' methods, the ECI process allows the contractor to work with the client during the initial stages to develop a detailed project plan. This can lead to a risk-adjusted price for the delivery phase, taking into account all relevant factors.

ECI is a particularly attractive proposition for ports considering infrastructure work. In these cases there is a large number of interests and stakeholders with conflicting views that need to be heard. The tendering process under ECI is less intensive and less costly as it does not require the tenderer to prepare detailed cost estimates for the actual construction stage of the works – these are ascertained at an earlier stage in consultation with the contractor. It can help identify social and environmental issues early on, while other advantages include reduced delivery time,

more opportunity for innovation, better integration of construction methods, earlier procurement of materials and fewer variations during construction. In addition, it creates a partnering mentality that encourages teamwork.

According to Richard Nunn, UK Environment Agency flood and coastal risk technical manager, ECI offered particular benefits when managing a complex programme of works. He has appointed coastal contractors, including Team Van Oord and Westminster Dredging, to work alongside consultants to develop appraisals for future flood and coastal defence schemes: "ECI has allowed us to better understand the timing of works [and] the sourcing of material, and to get a better estimate of costs in the early stages of development," he said. "Previously, the contractor would have come in and priced the job after the design stage, but now we have an early understanding of the most workable solution."

Understanding the contractors' capabilities early on has also helped avoid delays, he said: "Dredging work is often reliant on seasons and the market is such that you often can't get hold of the right plant at the right time. The ECI input from dredging contractors gave us a better idea of timing the work and programme to avoid this issue."

Optimising a design early on can help ease a project through lengthy planning processes, said Daphne Broerse of legal practice Norton Rose. She has advised



Work under way in Rotterdam, where divesting control to experts and contractors is likely to reduce risk on a number of Dutch port development projects, including the landmark Maasvlakte 2 expansion at the Port of Rotterdam. "The Dutch government is working to expedite permitting processes, but it still takes a long time for a permit to be granted," she explained. "It is particularly time-consuming and costly if ports have to make changes to a design once this process is under way. By optimising the design to accommodate the contractor and contracting authority's wishes before applying for a permit, it is much less likely later changes will need to be made."

An early partnering approach can also help reduce a port's exposure to litigation because members of the supply chain have a better understanding of their risks and responsibilities. It also enables better communication between the teams: "Since we have been using an ECI approach we have rarely had significant disputes because there is more of a feeling of partnership," said Nunn. "Any problems are resolved at the time they happen rather than in lengthy claims. Detailed knowledge of the programme also avoids significant overrun costs that need resolving."

ECI is not a solution that will suit every port authority. For some it requires a change of mentality to relinquish complete control of project planning and delegate responsibility. But divesting control to specialist contractors is a great way to eliminate risk, explained Dean Kashiwagi, director of the Performance Based Studies Research Group at Arizona State University.

"The traditional approach is to minimise risk by using management direction and control... but the buyer [port client] should want a vendor [specialist contractor] who has more expertise than them, who can see a project through from beginning to end, who can preplan and therefore control their project," he explained. He believes the more experts a port can get involved, the less decision making it will have to do because the experts already have answers. "Ports that identify this issue will virtually eliminate their risk," he said.

Ports looking towards ECI have various forms of contract at their disposal. Broerse recommends

ECI – points to consider

Early contractor involvement aims to select the best team to deliver a project and does not require the tenderer to prepare detailed cost estimates for the construction stage of the works, as would be the case in the traditional design and tender model. There are other differences to be aware of:

Control is relinquished to contractors at an early stage. Ports will need to feel comfortable with this arrangement.

Involvement of senior port staff is required in the early stages of the project for longer periods.

There are additional costs through 'optioneering' – considering alternative designs and then choosing the most appropriate option.

Independent cost estimators should be involved to prevent higher prices that could result from the non-competitive nature of assigning the works.

the competitive dialogue procedure for European public sector procurement, which is designed for the awarding of complex contracts where contracting authorities need to discuss all aspects of the proposals with candidates. "It is useful on complex infrastructural projects where the client is unsure what a project should look like or cost. It gives the contractor more room to manoeuvre and design a project to his own wishes, while taking account of other stakeholder wishes," she said.

Meanwhile, NEC3 Engineering and Construction Contract – Option C is intended to procure standalone engineering and construction projects, typically of high value, requiring more sophisticated management techniques and with a higher associated risk.

ECI allows all interests to come together. It offers swift and efficient execution of works for the port and commercial advantages for operators and shipping lines, and it could help avoid political issues because problems are identified early and solved by collaboration between the port, contractors and stakeholders. **PH**

More info: www.iadc-dredging.com

Melbourne goes deep with budget savings

ECI was vital to the success of the Melbourne Channel Deepening Project, the most complex marine infrastructure development in the Port of Melbourne's history, Stephen Bradford, the port's CEO, told *P&H*.

Several years in planning, the project required 657 days of dredging operations to create 14m-draught shipping channels, without tidal assistance. Prior to the start of work, the port held several workshops to find an appropriate dredging partner to provide specialist expertise and technology not available locally.

Dutch dredging company Royal Boskalis was selected and an alliance was forged with the port. Much more than a simple client-contractor relationship, this partnership required Royal Boskalis to provide early intellectual input to the preliminary design and help establish a comprehensive set of environmental controls and key performance indicators, critical to securing relevant statutory approvals as the project came under close public scrutiny.

The dredging contractor's early involvement also enabled greater visibility of project costs, optimised environmental outcomes, improved risk management and provided a framework to develop innovative technical solutions for the project, including:

Development of a customised draghead to remove rock at the entrance to Port Phillip Bay, which had never previously been dredged.

A bund and cap solution to manage contaminated dredged material.

Customised plant and equipment to dredge to fine

tolerances to protect various utility pipelines running under the riverbed.

The alliance led to 61 board meetings in Australia and the Netherlands and included senior representatives from both organisations that worked together to align the interests of all parties. Meanwhile, public fears were addressed through jointly set-up Community Liaison and Dive Industry Liaison groups, while weekly media briefings, daily updates and environmental reports helped the team communicate with the rest of the world.

Completed in November 2009, the reportedly A\$969M (\$1Bn) project came in ahead of schedule and more than A\$200M under budget, securing the port the Australian National Infrastructure Award in 2010.

Abu Dhabi protects Gulf jevel

The first priority for the emirate when it decided to build a giant industrial zone to safeguard its post-oil future was to protect its natural heritage, reports *Jem Newton*

he Emirate of Abu Dhabi has invested a great deal of money and care to ensure a healthy future for one of the Gulf's most fragile natural features, the Ras Ghanada coral reef, after the government decided to build a huge industrial zone nearby.

Developers first had to ensure that Ras Ghanada – the Gulf's most extensive and diverse coral ecosystem – was well protected before dredging and reclamation of the island for Khalifa Port began. In 2010, Abu Dhabi Ports Company (ADPC) spent \$240M on an 8km environmental breakwater to restrict any turbidity during the construction phase and to protect the reef from daily port activity in the long term, including possible contamination, sea swell or unnecessary temperature change.

Abu Dhabi is building the port and industrial zone to

compete with Jebel Ali, neighbouring Dubai's highly successful port and free zone. The first-phase port island, located 4.5km offshore, is nearing completion and is connected to Kizad – the proposed industrial complex on the mainland – by the longest bridge in the United Arab Emirates (UAE).

The location and construction of the port were carefully planned to limit the impact on the coastal environment, explained the man in charge of the first-phase work, Peter Marvin, ADPC vice-president of special projects. "You build a bund and create a cell within which the reclamation takes place, thereby minimising the amount of turbidity that can escape," he said when *P&H* visited the site earlier this year. Sixteen monitoring stations were installed around the reclamation site to transmit real-time data on turbidity,

All at sea... the first-phase quay is connected to the mainland via a 4.5km bridge



currents, water levels and weather conditions.

Marine biologists who paid a visit at the height of first-phase reclamation reported a healthy and vibrant reef ecosystem. "The breakwater is worth every dirham spent on it; it's playing a major part in protecting the delicate reef," said Dr Sam Purkis of Florida's National Coral Reef Institute.

Next to the Kizad industrial zone is the Taweelah gas-fired power and desalination plant. ADPC chief executive Tony Douglas said the location of the industrial zone was determined by the need for an abundant nearby power source. The consortium carrying out the dredging and reclamation – Royal Boskalis Westminster, Archirodon and Hyundai Engineering – also positioned special heavy-duty silt screens to shield the reef and the plant's seawater intake system. The screens were repositioned as work progressed.

For the breakwater itself, heavy rocks were brought from Ras Al Khaimah and cleaned to avoid any contamination of marine life. The breakwater's foundation is core material covered with a strong synthetic geotextile heavy canvas, covered in turn by boulders and wave-breaking concrete armour units.

ADPC claims that Port Khalifa's design is as 'futureproofed' as current technological knowledge will allow. For example, railway access has been preplanned in anticipation of the proposed Gulf Railway, for which preliminary engineering is already being carried out in various parts of the UAE. The first freight rail shipments could run as early as 2013.

The road and railway will run in parallel across the causeway and then along the far side of the semiautomated container terminal. The land-facing quay that is being completed has been planned to enable automated container handling along its entire length.

> Initially, however, general, liquid and dry bulk cargo will be unloaded at the far end of the quay.

As container volumes grow, the 'other half' of the quay – beyond the proposed road and railway line – will be reclaimed in phase two and used entirely for breakbulk. When that 'half' is finished, the quay that is nearing completion will be given over entirely to containers. In other words, when phase two is completed, the rail and road links will run up the middle of the quay, serving container and general cargo quays. If demand shows that further quay arms are required, they will be built in a similar pattern to the current quay but located farther out to sea.

Work on both the port and industrial zone is continuing on time, to budget and ahead of schedule. Finnish company Konecranes has secured the contract to supply the 30 automated stacking cranes and terminal operating system for the container terminal. When the automated operating system is up and running, "computers will select boxes ready for the train or truck entering the facility and will automatically take them to the discharge point; there will be different areas for truck and rail loading and they'll run in parallel so there is no conflict between the two transport modes", said Marvin.

Shanghai-based ZPMC will supply the first six ship-to-shore cranes. "The first three Chinese-made cranes will arrive in early 2012 and be fully operational by 2Q/2012. Khalifa anticipates welcoming its first container ship in September 2012," he added. Initially Port Khalifa will take the import containers from Mina Zayed, the current container port in Abu Dhabi city.

Among other features pointed out to *P&H* was ductwork being laid for onshore power. "That is the direction in which the industry is moving, so we're ready for the next generation of ships and circumstances in which emissions levels become a key consideration. There's no point building a port that is going to be out of date in 10 years' time," ADPC spokesman Michael Vertigans told *Ports & Harbors*.

ADPC also claims that Kizad will be the industrial zone of tomorrow, carefully designed to add value at every stage of the supply chain by enhancing productivity. Key industries, such as engineered metals, petrochemicals and chemicals, will be grouped together in integrated clusters to improve productivity and efficiency of transport.

One innovation being introduced by anchor tenant Emirates Aluminium (Emal) for the aluminium cluster, for example, features a 'hot metal road' to transport the aluminium in molten form so that ingots do not have to be reheated before processing. The economic and environmental savings will be considerable.

Emal already has an operational berth at Khalifa Port and received its first shipborne cargo in November 2010. The Emal unloading berth has been built behind the protective breakwater and the bridge that carries the aluminium ore to the Emal plant is built on trestles to allow an unhindered tidal flow along the reef. The main causeway connecting the first-phase quay to the mainland is similarly constructed. **PH**



Abu Dhabi container throughput

ADPC's Peter Marvin (right) is in charge of the first phase of port development

Mina Zayed 2010 500,000teu Source: ADPC

Khalifa Port from 4Q/2012 2M teu Khalifa Port 2030 (forecast) 15M teu

Debt for development

Ports currently wishing to develop may have to consider more expensive finance options in the near term, *Chris Brown* and *Paul Mansouri* of law firm Norton Rose explain to *Ports & Harbors*

The unprecedented upheaval in the financial markets following the banking crisis of 2008– 09 has unquestionably been the dominating story in the infrastructure world over the past few years. The funding market has significantly changed since reaching a peak in the second half of 2007 and, against this backdrop of constraints, the demand for investment in infrastructure continues. Financially constrained governments are therefore turning to the private sector for financing.

A number of port projects collapsed in 2009, including the high-profile New Aqaba Port in Jordan. Sharp increases in financing costs, harder financing terms and greater calls on equity and government investment all made an impact on developments. This situation has been compounded by a drop in container terminal traffic as the natural result of a slowdown in global consumer spending, leaving governments and developers with a dilemma: whether to risk continuing with port expansion plans in anticipation of container traffic increasing in the years to come, or wait until the downturn ends and risk not having the capacity when the upturn arrives.

Reports have suggested that in early 2009 up to \$100Bn of port developments in the Middle East alone were considered to be under threat. Although 2008 and 2009 saw a drop in the level of project finance activity in the transport sector, including the ports sector, most of these developments were saved.

The credit crunch may have put the brakes on port development in Europe and beyond, but the

demand for the development of port infrastructure remains high. This is mainly driven by developing countries where the effects of the global economic downturn were less dramatic. In these countries, port development is probably most needed and the relatively quick bounce-back in consumer demand from across the globe has increased the need for capacity. Some estimates put global container volumes back at their 2008 peak with volumes to grow by more than 7% per annum up to 2015.

The focus has been on the fastest-recovering regions. The Indian government has identified 276 port projects, requiring an estimated investment of \$20.8Bn, and is looking to put in place a new 'investor-friendly' policy framework. Port development in Africa and China is also gathering pace.

In the Middle East, the Gulf Cooperation Council (GCC) region is running at 85% of capacity, and with throughput growth forecast to rise by 8% per year against a capacity growth of 3%, the region may hit a capacity ceiling by 2015. This goes some way to explaining why there are currently 34 projects under development in the region worth \$42.5Bn, the bulk of which is taking place in Abu Dhabi (*see p14*) and Qatar.

Although the developments taking place in Europe do not match this scale, there are some significant projects either being considered or that are fast approaching the stage where they will have their financing in place. Examples are the €2.7Bn (\$3.9Bn) Andalucía port and road public-private partnership (PPP), and developments in Rotterdam and London.



Establishing demand and steering projects towards the development stage is one thing; sourcing finance to implement the development is a different matter. For some regions, developments are largely being funded from public sources, either directly by government or by government-backed infrastructure funds. The 34 projects in development in the GCC region are mainly being financed from public sources and/or publicly owned infrastructure funds. More traditional forms of debt - such as senior (taking priority over unsecured or more junior debt) and mezzanine (an unsecured, more expensive type) - will play more of a minor role in this region. China, too, is funding a great deal of its investment through national and local government sources. This model does not work for countries that continue to rely more heavily on the traditional debt and infrastructure fund markets. So, from a financing term perspective, what has changed since the financial crisis?

Financing terms hardened on a number of levels as a direct consequence of the financial crisis. Margins, fees and the level of required equity commitment increased significantly, due diligence and security package requirements became more demanding and the overall appetite for long-term debt was severely weakened. Those lenders prepared to lend were making smaller commitments, resulting in financing with large numbers of lenders became more commonplace.

Fast-forward to 2011, and while the appetite for longterm lending has seen some signs of improvement, it remains fragile compared to 2007–08 levels. Approval levels have not yet returned to those prior to the financial crisis. Although 2010 saw an increase in loan levels and bond levels compared with 2009, debt is still expensive compared with pre-credit-crunch times, when it was not uncommon to see an almost 90% capital funding structure. The general expectation is

Finance to fund

development

projects in the

current economic

climate could be

costly for ports

that pricing will remain fairly constant for the short to medium term, with some estimates predicting costs of at least twice those before the financial crisis.

The view remains, however, that the capital requirements introduced by Basel III – regulatory standards for bank capital adequacy and liquidity endorsed by G20 leaders – and the expected successor regimes under discussion, are likely to lead to more expensive project financing, which is shorter in tenor. Banks are increasingly encouraging borrowers to refinance by using such mechanisms as cash-sweeps (applying project cash flows that otherwise would be available to distribute to shareholders to further pay down debt and thereby reduce the life of the loan) and margin ratchets (increasing the interest payable on the debt as the project progresses).

There is good news, however. While it is harder these days to source project financing, the appetite to lend to quality assets backed up by significant equity support from sponsors will remain, even if the terms and pricing remain tight over the next few years. An example is the recent financial close of the Port of Brisbane - in excess of \$1.1Bn of project debt provided by nine banks, meeting just over 50% of the project costs. Investment in renewables is susceptible to regulatory uncertainly and therefore may struggle to find funding. Core infrastructure assets, such as ports, could fare better. Debt financing, alongside a greater level of funding support from multilaterals and government as seen over the past few years, together with continued investment from infrastructure funds, will need to continue in order to make sure deals get done. PH

Chris Brown is a partner and Paul Mansouri a senior associate at Norton Rose LLP More info: www.nortonrose.com Data sources: Drewry, HSBC, Zaywa



Climate change, port community systems and port cities were amongst the topical discussions that led the five-day conference at IAPH Busan, from 23 to 27 May

Going beyond



Busan Port Authority (BPA) has "set a very high bar for future IAPH conferences", *P&H* was told by one impressed delegate. Similar expressions of praise were heard throughout the week from among the more than 700 ports and port-related personnel who attended the IAPH World Ports Conference. The social programme was met with enthusiasm every night and the conference host, BPA, made everyone feel welcome.

To kick-start proceedings an opening ceremony attended by Busan's VIPs set the tone for a very highcalibre conference. It was a big event for the city and the Republic of Korea's media organisations crowded around the speakers, all wanting to capture a piece of the action. Ki-Tae Roh, BPA's CEO and president, spoke first and welcomed delegates to the port city of Busan. He said: "These are exciting times for BPA. Our newly constructed Busan New Port, equipped with state-ofthe-art port facilities, is being visited by people from port and logistics industries across the world. Our old port is currently being renovated into a major waterfront destination for international and maritime tourism". Gichiri Ndua, managing director of Kenya Ports Authority and the then IAPH president, was next to address delegates, extending his thanks to BPA and commenting that the conference working sessions were packed full of some of the most pressing topics facing ports today.

Jong-Hwan Chung, who heads the Republic of Korea's Ministry of Land, Transport and Maritime Affairs, remarked that technology "is making the global community smaller and closer" and that the next big challenge is sustainable development. Ports will play a bigger role, he said, and global logistics systems must be established. Nam-Sik Hur, mayor of Busan, encouraged delegates to use the working sessions to consider the impact of climate change and hoped that the conference would help ports take a "giant step forward".

Kurt Nagle, president of the American Association of Port Authorities, highlighted the excellent working



Climate-proof areas of the port when you can when it is re-leased, you may have to sit still for 10 years Peter Mollema, director, Port of Rotterdam the vision

10000

TARACE

Delegates were delighted by a flower dance, performed as part of a Korean opera, at the welcome dinner



relationship that exists between IAPH and his organisation. These events, he said, are an ideal forum for ports to recognise and share experiences. The final opening ceremony speaker was the deputy director general of Japan's Ports and Harbours Bureau, Norihiko Yamagata. He made reference to the devastating tsunami in March, emphasising that it is now safe for ships to call at Japan's ports (see page 32).

Eric Van den Eede, former president of the World Association for Waterborne Transport Infrastructure (PIANC), was the first of two keynote speakers. He extolled the important relationship that has existed

ILO believes that container accidents

 for example, overturned trucks — don't
 have to happen
 Marios Meletiou technical
 specialist, International Labour Organization

between PIANC and IAPH since 2001, when they signed a memorandum of understanding.

VIP delegates included Grant Gilfillan of Sydney Ports, Nam-Sik Hur, Major of Busan, and Bill Johnson of Port of Miami The second keynote presentation came from Keo-Don Oh, president of the Korea Maritime University. Drawing upon upon the conference theme, 'Embracing our future – expanding our scope', he told delegates, "We need to think about how ports in developing countries can become green ports." IAPH's World Ports Climate Initiative (WPCI) will become more important in the future, he predicted. He finished by saying that ports have to coexist and not just compete with each other, adding that the port community should try to co-operate and collaborate and should aim for competition based on goodwill.

The first working session – Globalisation after the crisis – was chaired by Gichiri Ndua. The World Bank's viewpoint was put forward first by its sector manager for Sustainable Development, Ede Jorge Ijjasz-Vasquez. He commented that the recovery seen in developing countries since the economic crisis is remarkable, explaining that there has been a slowdown in growth since mid-2010, although this was smaller than expected. The World Bank projects a real GDP growth for developing economies of about 8% in 2011 and 2012, compared with 9.6% in 2010.

Andreas Nordseth, chairman of the Consultative Shipping Group and director general of the Danish Maritime Authority, was quick to turn the spotlight on piracy. He said: "If we do not solve this issue firmly and quickly, piracy could be spread out and the maritime industry will be hit very hard."

This is a time of uncertainty in the energy market, stated Young-Seok Moon, vice-president of the Korea Energy Economics Institute. High oil prices will continue, he said, and demand for it will increase. He questioned whether natural gas could replace oil and commented that unconventional gas accounts for 35% of the increase in global supply to 2035. While there is a surplus supply for both oil and gas in the short term, in the long term it will be tight, he said.

The second half of this session looked at globalisation, and that debate was started by Hak-So Kim, president of the Korea Maritime Institute. He said that a truly global market is developing as emerging countries begin to play a bigger role in the world economy. This, coupled with an increase in environmental regulations, will result in a different way of working. "The global financial crisis in September 2008 implies [the] limitations of the current system," he told delegates.



Thank You IAPH and the Port of Busan!

OS ANGELES 2013

Cheers to a Wonderful 27th World Ports Conference You were a gracious host and we will treasure the memories

THE I DIRECT

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A STL





Ki-Tae Roh of Busan Port Authority, models in traditional costume at the farewell gala, and past-president Gichiri Ndua

Cur newly constructed Busan New Port, equipped with state-ofthe-art port facilities, is being visited by people from port and logistics industries across the world *Ki-Tae Roh, CEO, BPA*

Kim offered a three-point approach that can be used to make the green shipping concept a reality:

Co-operate beyond regulations

Bridge green technology gaps between countries
 Help developing countries to be active in their implementation of green ship, green operation and green transaction concepts.

The next perspective was that of Singapore-based ST Training and Education. Colonel Michael Chen gave an overview of new developments in maritime safety and supply chain security, highlighting the advantages of participating in Singapore's Secure Trade Partnership (STP) scheme, which is in line with the World Customs Organization's SAFE Framework of Standards and is open to all Singapore-based players involved in the supply chain. Those participating in the programme become a "trusted partner of Singapore Customs", said Chen, and among the benefits he cited was the lower likelihood of cargo being inspected.

Marios Meletiou, a technical specialist at the International Labour Organization, explained his organisation's contribution to safe container packing and port worker training. In particular, he highlighted the need for global training standards and drew attention to the training tools and manuals the organisation provides. "ILO believes that container accidents - for example, overturned trucks - don't have to happen," he noted. In February, ILO set up a Global Dialogue Forum for safe packing of containers to ensure that all players and stakeholders - including shipping lines, ports, road transport, railways, shippers, freight forwarders and marine insurance companies - understand why it is important to pack containers correctly. The forum will also look at why boxes are not always properly packed.

It is no longer a question of port or environment, said Eddy Bruyninckx, CEO of Antwerp Port Authority; "It is a question of port and nature and environment." Antwerp has signed up to the Environmental Ship Index (ESI), which is just one of a number of environmental initiatives the port has adopted, Bruyninckx explained. Port authorities do not pass their responsibilities on to other ports or industries, he said, adding that they should co-operate closely with private companies and play an exemplary role in all that they do.

Climate action was the focus for the Wednesday morning session chaired by Port of Los Angeles' executive director, Geraldine Knatz, then first vicepresident and now president of the association. She said in her opening statement that ports can achieve emissions reductions: "It doesn't have to come from an economic downturn."

WPCI was the first subject for discussion, with a comprehensive overview of its activities from Henri van der Weide, Port of Amsterdam's policy adviser on safety, security and the environment. He focused on the progress of the Environmental Ship Index (ESI) project (see page 40) and asked delegates: "Why should you care about air emissions?" His response was that controlling them facilitates sustainable development, ensures better air quality for local people and gives the port and the entire ports sector a green image.

Take the 'initiative'

Seven projects are still current as part of the World Ports Climate Initiative (WPCI):

- Carbon Foot Print (CFP)
- Onshore Power Supply (OPS)
- Environmental Ship Index (ESI)
- Intermodal Transport (IMT)
- Low Emission Yard Equipment (LEE)
- Sustainability in Lease Agreements (SLA)
- LNG-fuelled ships, as recently added at the conference

Further projects are being discussed, so do get involved or keep up to date by visiting www.wpci.nl.

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Wind and rain did not stop delegates being impressed by Hanjin Shipping's terminal; right, Geraldine Knatz

[Emissions reduction] doesn't have to come from an economic downturn
Geraldine Knatz, CEO, Port of LA

The concept of the ESI is simple: oceangoing ships use a web-based tool to measure their emissions of nitrogen oxide (NOx), sulphur oxide (SOx) and, if desired, CO₂. Credits are awarded depending on the ship's emissions levels, and participating ports offer incentives accordingly. The following ports have signed up to the voluntary scheme: Amsterdam, Antwerp, Bremen/Bremerhaven, Gothenburg, Hamburg, Oslo and Rotterdam.

Momentum is picking up among shipping lines too, reported Van der Weide, and the database contains 243 ships with a valid score, including vessels from Maersk Line, Hamburg Süd, United Arab Shipping Company and MSC. The first incentives have already been issued to the lines, he said. Shipowners and lines have been getting involved and want to see more ports join the scheme, he reported.

Another WPCI project – Onshore Power Supply (OPS) – was presented by Claes Sundmark, vice-president sales and marketing at the Port of Gothenburg. OPS is available to ferries and ro-ro vessels, and 30% of calls to Gothenburg are able to connect to the system. The port's OPS is wind-powered, further enhancing its green credentials.

He also outlined the port's aspirations to be a carbon-neutral company and said that it aims to use only green-labelled electricity from this year onwards. "If we have found that we have used too much carbon, we will invest the difference," he told delegates.

Next to speak was Peter Mollema, director of Port of Rotterdam, who outlined the five main challenges the port faces in relation to climate change: sustainable growth and mitigation against climate change; adapting to cope with higher water levels; guaranteeing inland transport capacity when the River Rhine water levels are low; ensuring future supplies of fresh water; and potential problems with open access to the port, such as flooding and salt intrusion.

When these five areas have been tackled, Mollema noted, the port will consider itself climate-proofed. Rotterdam has, and is, undertaking initiatives to make sure this happens, for example storm surge barriers, carbon capture transport and storage (CCS) and use of sustainable energy. Mollema acknowledged that it is difficult to implement far-reaching plans within a port where much of the land is leased out to tenants. His advice is to act when the land comes back from a tenant at the end of a lease. "When it is re-leased," he asserted, "you may have to sit still for 10 years."

A shipping line's perspective was put forward next. Maersk Line's head of Far East Asia Liner Operations Cluster, Brian Noe Kristensen, asserted that over the past 10 years virtually no improvements have been made in crane efficiency. Some terminals and ports have improved other aspects of the port environment, he conceded, but the port-ship interface has stagnated. If ports are not efficient in terms of their handling capabilities, this has other knock-on effects, he said. Slow steaming, for example, is seen as a good way to reduce ships' emissions and cut fuel costs, but this is feasible only if ships can call at high-performance terminals, said Kristensen. From a shipping company's perspective, it's very difficult to compare the environmental performance of different terminals within a port – to compare terminal A with terminal B. "We urge and expect the terminals to jointly agree on a standard for measuring their performance on key environmental parameters," Kristensen told delegates. However, he added to P&H, ideally he would like to see a global benchmarking project carried out to ascertain the terminals' performance.

Pieter Struijs identified the ways that the Green Award Foundation and the ESI should "link up". Speaking as chairman of the foundation and an IAPH honorary member, he said that shipboard staff are the real people to make a difference to green shipping and that ports should provide an impetus to make this happen (see page 40).

Professor Masahiko Isobe, of Tokyo University, is chairman of the Committee for Adaptation Strategy organised by the Japanese Ministry of Transport and he went back to the topic of climate action and



preparing for rising sea levels. In Japan there are three major bays, one of which is Tokyo Bay, where sea-level rise and increasingly intense typhoons are a particular concern. The current infrastructure is now 50 years old, Masahiko told delegates, and needs to be updated. He explained how the country is prioritising its investments in climate-proofing infrastructure. A series of scoring systems have been developed, one of which takes into consideration simulation information and size of the local population close to the facility. In his concluding remarks Masahiko said Japan's adaption strategy is vital given that it is a country surrounded by sea and that existing facilities are deteriorating with age.

The final presentation in this session also focused on Japan and specifically on the devastating events in March. Takehiko Fujita, acting president of the Port and Airport Research Institute (PARI) of Japan, summarised what has been done so far and what more can be done to limit the damage from another tsunami. As well as investing in prevention work, such as building seawalls and compiling hazard maps for evacuation, an urban plan has proposed the following improvements:

 Adopt more rigid house construction, building in concrete rather than wood

Encourage local people to construct their homes on hillside areas

Provide access from these hillside areas to commercial areas in coastal zones

Build tall buildings that provide residential housing in the upper floors and commercial space in the lower floors.

Movement of goods, in relation to rail logistics and port community systems (PCSs), was the topic of the next working session, chaired by Santiago Milá, then the IAPH 3rd vice-president and now 2nd vice-president. The debate was launched with a shipper's perspective from Robert Hunter, vice-president of logistics provider Access Business Group, a sister company of directseller Amway. Access Business Group, he explained, has streamlined its operations in north Asia and he highlighted three criteria for a successful logistics hub: location, trade connections and service stability. All goods destined for the Asian market are moved to a logistics centre in Busan, which allows the company "to take a number of days off of the supply chain", Hunter told delegates. The company is looking to expand its centre in order to include goods assembly, he noted.

In it together

Success factors identified as crucial for a PCS by the Committee on Trade Facilitation and Port Community Systems are:

- Logistics procedures know-how
- Strong financial capacity
- Confidentiality and neutrality
- Involvement of all stakeholders in the logistics operation
- Belief that a PCS benefits everyone
- Involvement of public bodies
- Public-private partnership (PPP).



A tranquil evening at the beautiful Buddhist temple, Beomeosa

Hamburg Port Authority (HPA) is investing heavily in its railway connections. In a presentation delivered by Jens Meier, CEO of HPA, delegates learned that it has invested \in 20M (\$28M) in rebuilding its IT infrastructure. The technology is now in place to support rail transfer, so the next big step is to operate more trains, Meier said. Currently 200 freight trains per day call at the port and Meier wants to see this increased to 400 trains a day by 2015. "Rail will continue to be the key to our successful future," he asserted.

The railway theme continued, though this time looking at the US experience, from Frederick Malesa, vice-president of BNSF Railway. "The marriage between the port and rail network will drive future growth," he told delegates. He highlighted a number of ways in which BNSF is expanding, including a new site in Kansas City and other intermodal facilities.

Port community systems (PCSs) were next on the agenda, with Milá moving from chair to speaker as he revealed the outcomes of a PCS survey carried out by the Committee on Trade Facilitation and Port Community Systems (see box, page 25). Committee members travelled to ports that have a PCS and wished to take part in the survey. Information was collated from the questionnaires that the participating ports had completed. Milá highlighted the importance of change management within a port if a PCS is to be implemented – it is not the same as putting an IT project in place, he pointed out. "A living PCS benefits everyone," he told delegates, "but it is more a human

issue than a technical one." System provider Soget was involved with the IAPH survey and its head of development, Olivier Jean-Degauchy, broached the subject of a national or international PCS. Data exchange is the big issue here, but he confirmed to *P&H* that the technology is there to ensure safety of information. He too emphasised the importance of a change in mindset from all parties in a PCS.

The next speaker brought delegates back to Busan, and Hee-Soo Park, port information technology director at BPA, gave an overview of its PCS, known as BPA-Net. The port authority hopes that the system will help Busan diversify its cargo away from containers. The system will bring together and integrate four services:

Uni Port Service – admin and gateway system

Ultra Logistics Service – ship scheduling and transhipment support

Utmost Value Service – environmental monitoring and hinterland logistics support

Ubi Infra Service – the wireless port and the integrated database and security.

Park noted: "BPA needs to invest in technology in order to become a world-class port."

Staying with Busan, Young-Suk Kim, Busan office administrator for the Ministry of Land, Transport and Maritime Affairs, updated delegates on developments at the world's fifth-busiest container port. Logistics hubs at New Port, he asserted, are the most competitive in northeast Asia. At the moment containers are taken by truck between North Port and New Port over a

G If we do not solve this issue [piracy] firmly and quickly, piracy could be spread out and the maritime industry will be hit very hard **P**

Andreas Nordseth, chairman of the Consultative Shipping Group



distance of 25km, but there are plans to "synergise" this arrangement in the future.

The final working session on cities and ports was chaired by Grant Gilfillan, then 2nd vice-president and now 1st vice-president. Port of Amsterdam's 'Port vision 2020 – The Smart Port' was the first to be discussed and was presented by its CEO, Dertje Meijer. The aim of the vision is to diversify cargo, incorporate sustainable innovation and become more accessible, by way of a new sea lock, she told delegates. Its aims include:

Reduce road transport – increase rail and water

Cut back on CO₂ emissions

Encourage vessels to use cleaner fuels

Continue to invest in onshore power

Attract transhipment companies and produce sustainable biomass and biofuels

Double throughput on existing ground, by being smart with space

■ Start a sustainability/innovation fund of €2M a year. Port of Oakland has recently repurposed and reconsidered its goals and mission, reported its director environmental programmes and planning, Richard Sinkoff. It has spent one year developing a plan to improve its business and optimise its performance. Outcomes have included investments and partnerships, improved environmental stewardship and shared vision and direction, Sinkoff said.

Keith Gordon, executive general manager port operation at Port of Melbourne, gave examples of what is required of Australia's ports as part of its National Ports Strategy. He cited the two priorities of the plan:

 To accommodate trade growth
 To do so efficiently, giving greater attention to landside logistics networks and integration.

Growth possibilities are not unique to Melbourne, he told delegates. "It reinforces the fact that Melbourne, as do other ports, has strong growth possibilities," although he acknowledged that when the numbers start getting bigger, so do the challenges. In Melbourne's case those challenges arose when planning dredging work that now enables the port to receive vessels with a draught of 14.2m. The project ran into considerable opposition, Gordon said, and "we have learnt a lot about community relations and now we keep no surprises".

The secretary general for AIVP (International Association for Cities and Ports), Olivier Lemaire, highlighted the opportunities enjoyed by port cities – to tap in to globalisation and pioneer environment-friendly ways of working, for example.

From Europe to the Pacific Ocean, the next speaker said that there was a "new frontier" for cruising. Thomas Mathibela, assistant secretary general of the Cruise Indian Ocean Association, believes that South Africa and other African countries offer a "unique" cruising experience that is seeing increasing demand. There is a "willingness to invest in infrastructure" to support this interest, he added.

Bill Johnson, port director of Port of Miami told delegates that cruising caters to an increasingly diverse mix of people, using ships that feature many modern forms of entertainment. "It now appeals to all



Musical treats

A choir of children opened the conference with a range of traditional Korean folk tunes. Their beautiful voices gave delegates a taste of the musical programme that continued throughout the rest of the week, including stunning Korean opera, vibrant drumming, lively show tunes from Hollywood and modern Korean pop music. There really was something for everyone whatever their musical tastes.

ages of all tastes," he said. Johnson is aware that other countries are developing successful cruise industries, and admitted that market share for the USA will decrease over the next decade. There is a positive side to this, though: "The competition keeps us on our toes and results in better ports."

The cruise industry can provide a powerful boost to the local economy, benefitting many businesses, from catering to accountancy, he explained. He also highlighted the need for ports to invest in infrastructure, focus on customer service and market their facilities. "Customers don't buy what you do," he concluded; "they buy what you are."

The impact of cruising on the local economy was discussed further by Kaye Chon, a professor at Hong Kong Polytechnic University. He acknowledged the increase in tourism in Asia, whereas previously it has been a predominantly European and North American activity. In 2010, he said, 4.8M Chinese people travelled outside their country, a figure which he estimates will rise to 79.4M in 2015. He highlighted some key features that are necessary for a port planning to invest in attracting cruise business: the port's potential to capture the growth in cruising, including natural surroundings, modern infrastructure and a location that offers diverse choices for itinerary development. He alo highlighted the importance of deep harbors with no air draught limit.

The last speaker was Kelvin Tan, regional director for Royal Caribbean Cruises. He echoed Chon's requirements for a cruise port and added that at a homeport it is also desirable for signage to be in English as well as the local language. Asia "holds great potential" as a cruise destination, he agreed, but that potential has yet to be realised in all regions.

Business was concluded and delegates and guests were left to enjoy another evening of entertainment, Busan-style. Let's drink to that! **PH**

More info: www.iaphworldports.org

VIPs wore white gloves to cut the ribbon marking the official opening of the exhibition



Busan2011





Social networking at IAPH

IAPH is looking forward with ambitious work plans that benefit both the individual ports involved and the wider membership

Before the conference was officially opened, many IAPH members spent a whole day working within the technical committees, progressing various projects and plans. IAPH's new president, Dr Geraldine Knatz, will be playing an active role in supporting the works of Group 1 Communication and Training during the term of her presidency, and things are already happening.

Eddy Bruyninckx, the chief executive of Antwerp Port Authority, chairs the Human Resource and Development Committee (HRDC) and in this role, and in co-ordination with the Secretariat, judges the essay contest. The winners were announced (see page 44) and Bruyninckx requested that HRDC be integrated into the Communication and Community Relations Committee (CCRC). This suggestion was endorsed by all.

A training fund of \$10,000 has been budgeted for next year, confirmed IAPH secretary Hiroyuki Nagai. As in 2011, the amount will be divided between four individuals, all receiving \$2,500 each.

The Secretariat suggested that two new awards be offered, one for 'port communication' and another for 'port environment'. This suggestion was greeted enthusiastically, although it was noted that the terms of the competitions will need to be crafted carefully to ensure that topics and content remain separate and do not encroach on other award schemes.

Conversation in the CCRC was upbeat as Monica Bonvalet, commercial promotion director at Grand Port Maritime de Marseille and the committee's chair, led conversation from the newly designed IAPH website through to the possibilities of using Facebook, Twitter and Skype to promote the organisation and bring members together. Arley Baker volunteered to champion the use of social networks. Some members also wanted to see a language translation tool (the free Google Translate facility, for example) integrated into the IAPH website to make it more accessible to non-English-speaking members.

The committee called for more press releases to be written to promote the good works of IAPH both among the membership and externally. Several member ports agreed to put forward the assistance of their PR departments and a 'Press Release Group'

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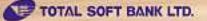
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Siti Noraishah Azizan, assistant GM of Johor Port Authority; Hiroyuki Nagai, IAPH under-secretary; and Geraldine Knatz

within the committee is being developed to identify possible opportunities. Finally, the IAPH logo will be redesigned, a activity that will be led by Martin Byrne of Port Nelson. The first draft will be presented at the Midterm Ports Conference next year in Jerusalem, with the final design to be unveiled in Los Angeles in 2013.

The Port Environment Committee was the first of three committees in Group 2 to update members. Fer van der Laar, IAPH general manager Europe, gave an update on the Environmental Ship Index (ESI, see pages 24 and 40). A resolution, which went on to be agreed at plenary, was drafted to show the organisation's commitment to the index. Van der Laar also updated on the work that he has been doing with the International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) on standards for onshore power connection; a final standard is to be completed this year.

Van der Laar also reported on development of IAPH's co-operative work with PIANC on its *Introduction to a Practical Guide to Sustainable Seaports*. IAPH has been active at IMO, too, presenting comments on its guidelines for assessing dredged material using low-technology techniques, reported Knatz.

The Port Water Quality Survey, carried out last year within IAPH, is now complete, it was announced.

Committee members were updated on two projects from Port of Los Angeles – web-based carbon calculator and water quality best practices – both delivered by Lisa Wunder, PoLA's environmental specialist. Other presentations covered Qingdao's green and ecofriendly port, illegal dumping in Nigeria and PEMA's green rating system for terminal operations.

Looking forward, the committee was tasked with selecting the theme for a new awards category as part of the IAPH Contest – the Port Environment Award.

Henri van der Weide from Port of Amsterdam promoted the potential benefits of LNG-fuelled ships on ports. This was one of the first points of discussion in the Port Safety and Security Committee and it was agreed that it should be taken up as a project within the WPCI (see page 40).

Committee chair Shane Hobday, of Sydney Ports Corporation, provided an update on maritime piracy. A resolution was tabled, which was approved at plenary. Hobday next updated members on the challenges presented by overweight containers. Again, a resolution was discussed, which also went on to be approved at plenary. Piracy also formed a subject for discussion during the Legal Committee meeting and the work session for next term was agreed.

Group 3 consists of three committees, with the Port Planning and Development Committee being the first to adjourn. Chairman Wolfgang Hurtienne, from Hamburg Port Authority, said that the during the 2009–

11 term the following reports have been completed:

Impacts of climate change on seaports

- Impact of economic crisis on ports
- Port redevelopment
- Port project financing
- Economic evaluation of port projects
- Joint work with PIANC.

The committee also discussed and reviewed the IAPH Resolution on Development of Port Infrastructure.

Five projects were overviewed as part of the Port Operations and Logistics Committee, and each project leader gave a brief update:

Port hinterland, by Dov Frohlinger, of Israel Ports

World Ports Climate Initiative, by Henri Van Der Weide, of Port of Amsterdam

Intelligent equipment control and monitoring for improving terminal operation efficiency, by Total Soft Bank, Korea

Gate operation, by committee chair Yoseph Bassan, of Ashdod Port Company

Ashuou Port Company

Off-peak initiative, again by Frohlinger.

The Trade Facilitation and Port Community System (PCS) Committee looked at the past work plan and it was reported that progress had been made on the following five projects:

PCS survey carried out by the committee

Shortsea XML project

Developments on debate at international industry forums with regards to trade facilitation and PCS

Terminology used in trade facilitation and PCS

2011 IT Award.

The outcomes of the awards were announced by Santiago Milá, of Port of Barcelona, who chaired the meeting on behalf of the committee's chair, Frédéric Dagnet (see page 44). **PH**



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Rebuilding faith in Japan's ports

Hiroshi Hayashida of Japan's Ministry of Land, Infrastructure, Transport and Tourism (MLIT) gives *P&H* an update on Japan's efforts to work with shipping lines to allay radiation fears

he largest earthquake ever recorded in Japan's history struck the northeast of the country on 11 March. It has been named the Great East Japan Earthquake, registered a magnitude of 9M_w and resulted in huge tsunamis that hit the Pacific coast. Tremendous numbers of people were killed or went missing and houses, office buildings and factories were swept away. Logistics and transport infrastructure were devastated. Force for a disaster relief mission. Two months later, infrastructure was almost fully restored through the efforts of various private and public organisations. The highways and 'Shinkansen' bullet train services are once again running as usual. Fourteen main seaports suffered damage, but major facilities were restored within two weeks after emergency rehabilitation action, although some ports are still operating with a reduced draught.

The extent of the damage to port and port-related facilities was assessed by government organisations,

Devastation... a tsunami breakwater is broken into pieces

Right after the disaster the Japanese government sent 100,000 troops from the Japan Self-Defense



Containers scattered by force of the tsunami



Quay wall at Port of Sendai after the tsunami hit

including the Port and Airport Research Institute and National Institute of Land and Infrastructure and Management. Facilities at the ports of Sendai, Soma, Onahama and Ibaraki were destroyed. Some damage to onshore facilities was caused by earthquake motion but made worse by the undertow of the tsunamis that followed. Most of the damage to the breakwaters is believed to have been caused by the tsunamis.

The run-up heights (the highest elevation of wave run-up on land) occurred between Soma and Miyako, reaching 23.6m near Ofunato. The inundation (flooding) levels were also high in this region, exceeding 15m. The tsunami that hit ports and harbors in the eastern part of Japan's mainland swept away almost everything, including wooden structures, vehicles, tank trucks and fishing boats. Even steel-framed buildings collapsed and warehouses were severely damaged; containers were scattered and some were dragged offshore by the outflow, then brought in to a nearby beach by the next incoming tsunami.

The tsunami breakwaters constructed at the mouth of Kamaishi Bay, where mean water depth is approximately 40m, were also damaged. The crown height of the breakwater was 6m above low water level to prevent the impact of 5m-high tsunamis, such as that induced by the Meiji-Sanriku earthquake in 1896 – supposedly the largest seen in Japan for hundreds of years. The 2011 tsunami, however, was higher and overtopped the breakwaters, inundating the inland town. Although the tsunami breakwaters were damaged and partially collapsed, numerical simulations showed that they nevertheless reduced the area inundated by 50% and delayed the tsunami reaching the downtown area by six minutes.

The damage to the logistics network on the coast – including ports – as well as the inland network hurt not only industries in the stricken area but also many industries in other parts of Japan and the production activities of foreign companies. Speedy rehabilitation and reopening of the ports in the affected area is one of the key components in the restoration of the region and eventually will lead to the recovery of the Japanese economy.

MLIT is taking into consideration the following criteria to form part of an integrated reconstruction plan:

1. Cause of damage and protective effects of the protective facilities.

2. Reconstruction principles for damaged ports in cooperation with community-based industries and town development.

 Protective levels and methods in the areas where heavy damage is anticipated from future earthquakes.
 Tsunami countermeasures for ports to play their role as logistics bases for transporting emergency relief supplies and supporting business activities.

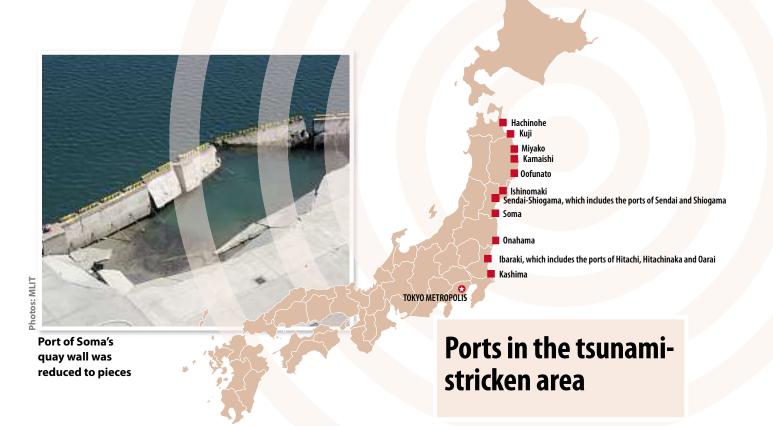
Looking forward, MLIT will tackle port rehabilitation and reopening in a planned manner in accord with the industrial reconstruction schedule. For the interim a supplementary budget of about \$50Bn was approved on 2 May for immediate disaster rehabilitation. We still have a long road ahead of us and are looking forward to your continued support and co-operation.

Some foreign shipping lines have been hesitant in making calls to the Port of Keihin – which includes the ports of Tokyo, Yokohama and Kawasaki – because of concerns about radiation contamination from the leak at the Fukushima nuclear power plant, with other lines avoiding the the port. A container ship that sailed from Japan to China was not allowed to enter its destination port because of what the receiving port judged to be a high level of radiation. Overseas ports have also been anxious about radioactive contamination on ships and cargoes from Japan and have adopted their own measurement procedures.

MLIT, therefore, started providing accurate information on radiation levels in Japanese ports and addressing the request for radiation measurement of export containers and ships to prevent rumours overseas. Since 18 March, MLIT has posted this information on its website for the ports of Tokyo and Yokohoma. The radiation level information for air and seawater in Tokyo bay is now provided in four languages – Japanese, English, Chinese and Hangul.

MLIT is spreading the message through foreign

FEATURE



diplomatic services in Japan, its diplomatic offices abroad and via the international media that the current level of radiation in the Tokyo bay area has no effect on human health.

The International Maritime Organization (IMO) also issued a press release in March highlighting the fact that all of Japan's seaports not damaged by the disaster were, and still are, operating normally and no health risk has been detected around these ports. Concerns that ships, cargoes and/or seafarers can be contaminated at these ports – especially the Port of Keihin – have been mitigated by these efforts. As a result, the number of shipping lines concerned about calling at the Port of Keihin was reduced.

In response to this situation, in April MLIT developed the 'Guideline on radiation measurement for export containers and ships in ports'. The guideline defines the points on the container where the measurements should be taken, specifications for the survey meter required to take the readings, the issuing process for approvals and the criteria against which possible decontamination is identified, along with other procedures. A shipping company can request the radiation measurement of a container in accordance with the guidelines, and MLIT and the port authority will jointly attest this reading. If the radiation measurements for a ship are required these are attested by MLIT or classification society ClassNK.

MLIT's criteria for determining whether a container or ship is contaminated are rigorous. They draw from the International Atomic Energy Agency's guidance, using its definition for 'Criteria for Decontamination', and IMO's International Maritime Dangerous Goods Code for its definition of the 'Criteria for Report'.

If the dose rate of an export container falls below the Criteria of Decontamination, it should be handled as normal. If it exceeds the Criteria for Report, it should be moved to a specified area designated by the parties concerned and MLIT must inform the ministry in charge of radioactivity, the Ministry of Education, Culture, Sports, Science and Technology. If the dose rate of the container exceeds the Criteria of Decontamination but falls below the Criteria for Report, decontamination of the container should be carried out at the specified area. If the dose rate falls below the criteria after decontamination, it should be handled as normal. Should the dose rate remain above the criteria, MLIT will be informed and we take action accordingly.

This activity began at the ports of Yokohama on 28 April and Tokyo on 9 May. About 25,000 export containers had been measured for radiation levels

Thank you from MLIT

Over 150 countries and regions, nearly 40 international organisations and a number of non-governmental organisations have extended their best wishes to us, and expressed their support and solidarity through donations and other means. Various countries and regions rushed in rescue workers to conduct operations in the affected areas and delivered supplies including food, medical supplies and blankets. The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) in Japan would like to express its sincere appreciation for the kindness and support the world has shown us in the wake of the devastation.

LATE

Impact deliver new Cat[®] Lift Trucks to Ahlmark

Impact Handling, the new UK distributor for Cat[®] Lift Truck, has just delivered a fleet of CAT Fork Lift Trucks to terminal operator, Ahlmark Shipping (UK) Ltd in the port of Hull. The nine trucks will be used in the handling of Forest and Steel products at their facility in King George Dock.

"We identified the type of trucks we required and the level of service we expect from our suppliers" say Tim Hollands, Managing Director of Ahlmark.

"Although a number of companies tendered for our business, Impact offered the complete package in terms of quality of trucks, maintenance



The people in the images is: From Left to right – Tim Hollands – Managing Director Ahlmark Shipping (UK) Ltd. In the truck – Gez Trathan – Operations Manager Ahlmark Shipping (UK) Ltd, Neil Websdale – General Manager Ahlmark Shipping (UK) Ltd, Ian Houghton

Vehicles: Client:

Activities:

Handling: Throughput: Special equipment: Contract: and cost. We were already aware of Impact's reliability as we have been working with their depot in Hull for short term hire and servicing our other machines. When they were appointed the UK distributer for Cat[®] Lift Trucks we knew this would be the right combination for Ahlmark". Ahlmark have signed a seven year agreement with Impact Handling to supply and fully maintain their fleet.

Ahlmark had previously used seven tonne trucks but identified that the commodities could be handled by smaller capacity machines, which made the trucks more cost effective. Through discussions and negotiations with Impact Handling, Ahlmark decided in having four DP55N, four DP50N and one DP45N. Although timber is the main commodity for Ahlmark, four of the trucks were fitted with fourth hydraulics in order for clamps to be used for their pulp and paper consignments. The DP45N was also modified by Impact to be used for working inside containers,

Ahlmark Shipping is part of one of the oldest shipping lines in Sweden, Ahlmark Lines AB., established in 1847. Ahlmark Lines have been shipping timber into Hull since 1988 and the agreement with ABP and Impact Handling demonstrates Ahlmark's long term commitment to the UK's forest products industry from Sweden. The Ahlmark terminal in Hull handles over 200,000 tonnes of Forest and Steel products from Sweden and Italy. Their facility offers over 30,000 m² of covered storage which will allow Ahlmark the opportunity to secure additional volumes from the Swedish Forest Products sector and explore the possibilities of shipping from other Swedish ports.

9 new CAT Lift Truck vehicles – 4 DP55N; 4 DP50N; 1 DP45N Ahlmark Shipping, King George Dock, Hull Stevedoring and Warehousing

Forest and Steel Products estimated at over 200,000 tonnes/yr paper reel clamping attachments; lowered head guard on DP45N to enable in-container activity 7 years, contract hire, fully maintained

IMPACT HANDLING POWERFUL PARTNERS





A warehouse still standing but badly damaged

in the ports of Tokyo and Yokohama as of 7 June. During this period, three export containers slightly exceeded the Criteria of Decontamination; of these, two containers fell below the criteria after the decontamination process took place and were exported as usual. The other container was retained and not exported. The cargo inside this container was collected by the owner at whose premises the radiation contamination occurred.

A Japanese delegation presented the report 'Current situation of ports and shipping in Japan after the Fukushima Dai-ichi nuclear power plant accident' to IMO's Maritime Safety Committee in May. It highlighted the fact that accurate data can be obtained via the



A container's radiation measurements are taken

MLIT website to confirm the status of radiation safety in Japan because of the ministry's continued monitoring of air and seawater.

The delegation also presented the scheme on radiation measurement on containers and ships in Japanese ports. Japan's Ports and Harbours Bureau and MLIT will continue to provide accurate information regarding radiation levels and aim to improve this information in the future. **PH**

Hiroshi Hayashida is director general of the Ports and Harbours Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Japan More info: www.mlit.go.jp

Infrastructure first and economy will follow

After a difficult 2011, Japan's economy will see a boost in 2012, reports IHS Global Insight's chief Asia economist, **Rajiv Biswas**

The natural disaster that hit northeast Japan in March has caused considerable disruption to Japanese industrial production and electricity generation capacity. The automotive and electronics sector was hit particularly badly as a result of production facilities in the region being damaged by the earthquake and tsunami. Japanese economic growth is therefore estimated to turn negative in the first two quarters of 2011, with rolling power blackouts continuing to disrupt manufacturing production.

The cost of reconstruction after the disaster is estimated to be in the order of \$300Bn, with the government already moving urgently to pass a supplementary budget for \$50Bn of initial reconstruction spending. As this work gets under way in the second half of 2011, and as manufacturing production gradually returns to normal levels, the Japanese economy is expected to experience a strong rebound.

With this 'V-shaped' growth pattern in 2011, overall Japanese economic growth is expected to be flat and industrial production is forecast to contract by around 11%. As reconstruction efforts reach full speed by 2012, however, the country's economic growth will be pushed up sharply. IHS Global Insight has forecast that Japanese GDP will grow at 3.6% in 2012, with industrial production rebounding strongly, rising by around 14%.

From a global economy perspective the near-term transmission shocks from the disruption to Japanese supply chains will be negative, particularly for auto plants and electronics production dependent on Japanese components. Japanese automakers including Toyota, Nissan and Honda have already announced reductions in production at various plants outside Japan because of shortages of various key supplies. However, this is a temporary effect that will gradually fade away by the second half of 2011 as supply chains are restored.

Continued strong growth in China and moderate but sustained expansion in the USA will help underpin growth in emerging Asia, which is expected to remain robust. Overall, the disaster is expected to have a slight dampening effect on world growth in 2011.

The significant acceleration of Japanese economic growth in 2012 will provide a positive stimulus to the rest of the world as Japanese industrial production rebounds and boosts demand for a wide range of imports that will be required for reconstruction.

INVITATION TO TENDER FOR THE CONCESSION OF THE NEW DEEP SEA **CONTAINER TERMINAL OUR STEPPING STONE R SHIPPING** IN THE CARIBBEAN

TENDERING DOCUMENTS AVAILABLE AS FROM JUNE 17th 2011 CAN BE DOWNLOADED AT http://193.45.254.92/guadlp/index.jsp Information contact : m-gautier@port-guadeloupe.com CANDIDATES MUST SEND THEIR PROPOSAL BY SEPTEMBER 15th 2011 (12:00 pm Guadeloupe time)

GUADELOUPE PORT AUTHORITY FEATURE

Rethinking maritime security

Maritime security challenges are more complex today than in 2001. *Periasamy Gunasekaran*, a PhD researcher at the UK's Greenwich Maritime Institute, explains his thinking

It's time to consider the impact of security regulations on world trade, says Gunasekaran

he significance of a port's role in the maritime transport sector cannot be over-emphasised. It exists not in a vacuum but as an integral component of the supply chain. Embedded in this complex system are national and international security requirements, many of which have been introduced in response to the September 2001 terrorist attacks. They changed the landscape to such an extent as to be regarded by many as a turning point in our approach to security, establishing a line that demarcates port security measures 'before' and 'after' the 2001 attacks. It has added a new dimension in the maritime domain by prompting a host of international security measures, many of which have been brought into force more quickly than usual. Fairplay, IHS's Fairplay's international shipping weekly, wrote in its 17 February 2011 issue: "The normally very deliberative IMO was to move quickly, passing the ISPS in 15 months... record time for the IMO."

The ISPS Code, introduced in July 2004, has met with mixed opinions. Studies of the code, such as those initiated by IAPH in 2006 and the United Nations Conference on Trade and Development (UNCTAD) in 2007, highlighted the various economic consequences for those who have been required to adopt the code – the SOLAS contracting parties – with some developing countries not in favour during the early stages of implementation. Nonetheless, it was implemented for two main reasons: trade significance for national development and political pressure from all corners.

All countries recognise the importance of maritime transport, which accounts for 90% of international trade movements, and understand that it helps facilitate globalisation. The international nature of the industry requires rules and regulations that are similarly international and these have to be transposed into national law. Contracting states must adhere to regulations irrespective of whether their waters are affected by or contributing to maritime violence. A non-compliant state will be sidelined from international trade or its ships subjected to rigorous inspection when they call at compliant states. One could argue that the 'risk' is not from terrorist attack but from loss of trade through failure to conform to legislation.

Any measures adopted should be in line with international approaches instead of individual strategy. There is also a risk that the flow of international trade could be affected if overly stringent safety measures are imposed on goods from Japan. Any suppression of the ailing Japanese economy could eventually affect other countries' economies as the global economy is interdependent and heavily tied to maritime transport.

Figures released by the International Maritime Bureau (IMB) (see box opposite) show that from 2006 to 2010 piracy and armed robbery moved from the previous hot spots of south and southeast Asia to African

PORT AND MARITIME SECURITY

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waters. In contrast, there have been seven high-profile maritime terrorism incidents since 2001, according to RAND Centre for Terrorism Risk Management Policy's 2008 figures. Perhaps these figures indicate that this is not the pressing issue we were led to believe it was in the post-2001 attack hype.

The USA was criticised by some for its unilateral introduction of a myriad of security measures in addition to the ISPS Code. The Container Security Initiative (CSI), Customs-Trade Partnership Against Terrorism (C-TPAT), 100% container screening and Megaports Initiatives are some of the layered approaches it adopted to defend its maritime borders.

New legislation submitted to the US Senate in April would reauthorise many of these programmes. The USA should take into consideration that the world economy has been weakened and is trying to regain its momentum. Many high-powered economies are seriously readjusting their forecasts. The USA should therefore seek international co-operation to establish a fair mechanism for cargo security that will not impede trade flow or place extra costs on doing business.

Most port security measures are technology-based and require a heavy investment, which is ultimately passed down to end-users. Furthermore, no technology can guarantee total security. Again, a close collaboration with other trading partners would establish a fair security mechanism and should be extended to private players. The World Customs Organization, IMO and other international players have already implemented several standard security frameworks and these should be used to their optimum.

The global maritime community acknowledges that the basis for all these rigid measures is to protect its assets from any form of violence or threat. Security, therefore, has been regarded as a vital component in improving and expanding the globalisation process. But to what extent initiatives such as the ISPS Code have successfully brought about the desired level of security is yet to be established.

The marked escalation of maritime crimes, with the IMB reporting another 142 piracy/armed robbery cases from January to March 2011, raises questions over whether the string of existing security measures is able to ameliorate the situation. The industry is being flooded with suggestions aimed at combatting maritime violence. It should be cautious, however, and not overburden itself with initiatives that generate extra work and costs.

The world has changed again since 2001. An increase in pirate activity, environmental concerns, political instability and a series of natural disasters have resulted in an altered outlook. These circumstances pose even greater challenges for port security than those faced before 2001. Maritime authorities and industries should collectively consider a policy rethink, including:

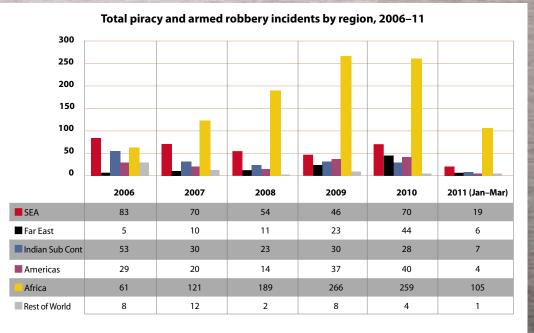
■ A global study to evaluate the effectiveness of the ISPS Code since its implementation on 1 July 2004. The code should be embraced not merely as a documentation requirement but as an effective tool in holistically securing the port.

Ensure that existing port security measures do not allow for bias towards any parties or countries.

Spread a greater understanding of the maritime industry, both nationally and internationally, so port security is taken seriously by all.

Develop a comprehensive tool to enable countries to share information effectively and efficiently in line with IMO's World Maritime Day theme for 2011: Piracy – Orchestrating the Response.

Mitigate root causes instead of symptoms. Many maritime crimes are the symptoms of politicoeconomic degradation. If the root causes are not treated effectively, the symptoms will remain. PH



Source: ICC-IMB Piracy and Armed Robbery Against Ships Report- Annual Report 2010 and Quarterly Report Jan-March 2011.

ESI to co-work with Green Award



Oslo is incentivising the ESI scheme for shipping companies using its port

The project group of the Environmental Ship Index (ESI) is to co-work with the Green Award Foundation, delegates at the IAPH World Ports Conference in Busan were told in May. "Green Award had its own emissions reduction programme but, rather than duplicating the ESI programme, we decided to co-operate.

The ESI will now be embedded in the Green Award programme," Green Award managing director Jan Fransen told *Ports & Harbors*, adding that in the set-up of ESI, the Green Award Foundation is going to be an Incentive Provider, which is expected to be effective from 1 July 2011. This way ports signing up to the ESI would get an advantage in Green Award. The Green Award Foundation will also become a 'supporting organisation' of the World Ports Climate Initiative (WPCI).

"It's good for Green Award and WPCI to develop hand in hand," Pieter Struijs, chairman of the Green Award Foundation and past president of IAPH, said in Busan. "The port has a pivotal role in the logistic chain, and ports partnering in this programme show their society and customers that environmental and safety issues are taken seriously."

The Rotterdam-based not-forprofit foundation certifies ships that are extra clean and safe, with award-winning companies enjoying various benefits. Struijs said that collaboration would accelerate uptake of ESI, thereby stimulating quality improvements in shipping and helping to phase out sub-standard vessels.

The scheme offers "a holistic approach to all the elements that reduce environmental or safetyrelated incidents," he pointed out.



The Green Award scheme has certified about 1,000 ships. It operates at ports in Belgium, Canada, Latvia, Lithuania, the Netherlands, Oman, New Zealand, Portugal and South Africa.

Port of Amsterdam's environment and safety adviser and ESI project group member, Henri van der Weide, gave conference delegates an update on the index's progress. He said that since the ESI website was launched in November 2010, 243 ships had entered the database with a valid score and there have been 250 new applications since 1 March 2011. Among the ports that have become incentive providers for ships with an ESI rating were Amsterdam, Antwerp, Bremen/ Bremerhaven, Gothenburg, Oslo and Rotterdam.

The ESI project group wants to see a wide take-up on the index. To this end, IAPH delegates at the May conference agreed a resolution that calls for all member ports to join the ESI and to encourage shipping lines to do the same (see page 47). *More info*:

www.environmentalshipindex.org

WPCI launches project to investigate LNG as a fuel for ships

IAPH is planning for the future by proactively introducing liquefied natural gas (LNG) as its recommended alternative to conventional fuels. The proposal was accepted by the Port Environment Committee at IAPH's World Ports Conference in Busan.

Port of Amsterdam's environment and safety policy adviser, Henri van der Weide, told *P&H* the switch to LNG would be the next project in the World Ports Climate Initiative. "We see a trend in the shipping sector and the proposal is that we, as ports over the world, should be proactive in introducing LNG and not wait for the first ship to come," he said. "We see the environmental benefits, but we also see that there are infrastructure and safety challenges, so ports should develop plans and guidelines on how to tackle these coming developments." LNG is of interest to ship operators and ports because it reduces or eliminates many of the emissions targeted by current and future IMO legislation to make shipping cleaner. For example, use of LNG eliminates sulphur emissions entirely and reduces particulate matter emissions to close to zero. Furthermore, it reduces NOx by 80–90% and CO₂ emissions by 26%.

"The more vessels that use LNG, the cleaner the air in the port, and cleaner local air quality means a licence to grow," van der Weide pointed out.

One of the issues that the proposed LNG project team would discuss going forward is international guidelines for safety procedures and training for crews and other operatives handling LNG. "Currently there are no standards available, only local guidelines, so it would be good to tackle this at the international level," said van der Weide.

IMO updates piracy guidance

Shipowners and flag states have received updated guidance on the use of private armed guards as a result of the 89th session of the IMO's Maritime Safety Committee, although the organisation left its central position on the issue unchanged.

Issuing interim guidance in an MSC circular, the IMO has sought to address the trend towards use of private security to fight piracy. It maintained that to do so is at the discretion of flag states and that owners must also take into account port and coastal state regulations.

The US Coast Guard's Jeffrey Lantz, chairman of the IMO Council, told *P&H* the development of the guidelines was a positive development for the industry. "It's a shift in that it recognises [armed guards] as a viable alternative for risk reduction. The IMO hasn't changed its position but it has recognised that this is an option. Some owners are going to use it and it's better to have some quidelines out there to advise them," he said.

The guidance to owners restates the previous IMO position that flag state jurisdiction "and any laws and regulations imposed by the flag state concerning the use of private security companies" apply to owners' vessels and that "port and coastal states' laws may also apply to such vessels".

"It's always been between the shipping company and the flag, taking into account where a ship is going to go, because you have to think about the laws of the port state or coastal state that you could be sailing through," added Lantz.

The guidance includes sections on risk assessment, selection criteria, insurance cover, command and control, management and use of weapons and ammunition at all times when on board, and rules for the use of force as agreed between the owner, the private maritime security company and the master.

For owners that means continuing to work with their flags on the right to carry arms and taking into account local jurisdictions when on a voyage. Private armed guards should not be considered an alternative to the use of best management practices (BMPs) and other proactive self-protective measures.

MSC also adopted a resolution that strongly urged "all parties concerned" to take action to ensure better implementation of BMPs. In addition, it agreed guidelines on investigation of crimes of piracy and armed robbery, which are intended to help investigators in collecting evidence to assist in investigations and criminal proceedings.



IAPH helps update dredging guidelines

IAPH President Geraldine Knatz attended the April meeting of the London Protocol (formerly London Convention) on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter and submitted the following report.

A working group to review the *Specific Guidelines for Assessment of Dredged Material* was re-established at the April 2011 meeting of the London Protocol Scientific Group. It was intended that the guidelines adopted in 2000 be updated within five years, and in 2010 an inter-sessional Correspondence Group was organised under the lead of the USA to address the long-overdue updated version.

The group identified areas of the guidelines where revisions are necessary. It was recognised that more technical detail is required on specific dredged material management and operational practices, and on beneficial uses of dredged sediments. More guidance was also recommended on how to undertake comparative assessments for alternatives to dredged material management actions.

The London Protocol Scientific Group also re-established the working group on the review of the *Specific Guidelines for Assessment* of *Dredged Material*. It proposed further intersessional work through a number of task groups that would:

 Revise the text/figures in the guidelines.
 Identify full references for other documents that are available for technical guidance for citation and inclusion in the guidelines.
 Develop a list of the key terms, with definitions, that are used within the revised



IAPH members to test training manual

At the April 2011 meeting, the London Protocol Scientific Group also reviewed the first draft of a manual on the lowtechnology assessment of dredged material. In May 2008, the group approved a proposal from the World Organisation of Dredging Associations (WODA) to develop a tutorial for low-technology assessment of dredged material. The intended end-users of the manual are ports and regulatory agencies that operate in low-tech environments.

IAPH has participated in funding this effort because the manual will be useful in helping some of its member ports assess dredged material in situations where minimal technical capabilities and an absence of laboratory facilities make the assessment of dredged material difficult.

text, which will be incorporated into a glossary.4) Determine the need/value of appendices for specific sections when additional detail is deemed necessary.

IAPH will continue its participation in the working group. Representatives from the

The manual provides information on low-cost sampling, testing, information gathering to allow characterisation of the dredged material and selection of suitable disposal sites. Guidance on simple, low-cost monitoring of disposal activities and case studies will be provided. Additional revisions will include simplified language and case studies, along with the completion of Part 5 of the manual, 'Guidance for instructors on running a training course'.

Geraldine Knatz offered to share the trial draft of the manual with IAPH members who could test the manual in a low-tech environment. The manual will be developed after feedback is received. It is hoped that testing can take place before the October meeting of the London Protocol.

Netherlands and Finland will serve as contacts for the parallel review of similar guidance on dredged material currently under way under the OSPAR Treaty – which covers the northeast Atlantic – and the Baltic Marine Environmental Commission respectively.

Korea leads GHG initiative

A co-operation agreement to build capacity in east Asian countries to address greenhouse gas (GHG) emissions from ships was signed on 21 April by IMO and the Korea International Cooperation Agency (KOICA). This is part of a much broader commitment from the Republic of Korea as part of its East Asia Climate Partnerships initiative, IMO said in a statement, and supports its "efforts to take a lead in reducing carbon emissions and to move toward a low-carbon society, thereby setting a milestone for green growth, and in this process [assisting] the developing countries in the region".

KOICA will make \$700,000 available under the agreement, to fund 10 activities that will be implemented by IMO over a two-year period, a press release explained. The activities will focus on enhancing the capacities of developing countries in east Asia to develop and implement, at the national level, appropriate action on CO₂ emissions from shipping, while at the same time promoting sustainable development. IMO is in discussion with a number of countries and organisations to mobilise additional resources for supporting its activities to reduce GHG shipping emissions. *More info: www.koica.go.kr; www.imo.org*

Class could do more to address GHG emissions

Class societies should play a more central role in the maritime industry's ongoing efforts to reduce maritime greenhouse gas (GHG) emissions, believes the chairman of the International Association of Classification Societies (IACS), Noboru Ueda, who is chairman and president of the Japanese class society ClassINK. Ueda said at Sea Asia 2011 earlier this year that IACS had made important efforts to develop new environmental regulations, including the establishment of an expert group to advise the IMO on technical issues related to implementing the Energy Efficiency Design Index (EEDI) scheme, which sets requirements and calculates the energy efficiency levels for certain vessels.

He also reminded delegates that IACS established a joint working group in December involving other maritime groups to ensure the balanced implementation of the EEDI regulations, a statement noted. "We at IACS have a duty to ensure the work we do and the contribution we make at the IMO reflect the needs, opinions and aspirations of the global maritime industry," Ueda said. But classification societies can do more: "Classification societies are uniquely placed to take the lead in confronting the challenges posed by emissions and must serve as a bridge between all sectors of the industry," he told delegates.



Mohammad Shibin, an alleged ransom negotiator... his arrest is evidence of a new US strategy

Piracy ransom gets 'political'

A further twist in the piracy conundrum emerged earlier this year (April) when pirates holding the bitumen tanker *Asphalt Venture* released the ship on payment of a multi-million-dollar ransom but kept seven of the 15 Indian crew members captive.

One pirate told the AP news agency that the decision was retaliation for the Indian Navy's arrest of more than 100 pirates. "We decided to keep the Indians because India is holding our colleagues," he said. The partial release came in mid-April, almost seven months after the *Asphalt Venture* was hijacked off the coast of Tanzania.

The International Chamber of Shipping called the latest tactic "a major shift in the pirate-hostage equation". Bruce Paulsen, a partner in US legal firm Seward & Kissel, told *Ports & Harbors:* "There's always a leap of faith when the ransom is dropped that the pirates won't say 'thanks for the down payment – give us another million', but this one was purposeful."

John Kimball, a partner at law firm Blank Rome, predicted: "One long-term consequence is that

future ransom payments will be curtailed. "There could also be an additional impact on insurance costs for vessels transiting the region. The worst-case scenario is a broad loss of faith in the ransom process, which could precipitate more *Maersk Alabama*-style military interventions at sea.

In a separate development, US law enforcement is said to consider piracy 'organised crime' and is now deploying the same strategy it honed against the US Mafia in the previous century, it was revealed. Captured foot soldiers are compelled to name superiors, who in turn are apprehended and put under pressure to implicate their own bosses.

After 14 pirates involved in the killings of four US citizens on the yacht Quest were captured, US prosecutors obtained names of alleged co-conspirators higher up the chain. One of these was Mohammad Shibin, said to have been a ransom negotiator. On 8 April, FBI agents, backed by US armed forces, captured Shibin in Somalia and flew him to Virginia, USA. Department of Justice spokesman Peter Carr confirmed to P&H that the operation was carried out with the assistance of Somali authorities.

Shibin's arrest is the first visible evidence of the new US strategy spurred by the *Quest* killings.

AIS monitoring used as speed reduction tool

The State of California has focused on air quality improvement for more than 50 years, and in 1967 it established the Air Resources Board to tackle the problem on several fronts. For the past few years, the ARB has been evaluating the need to develop an oceangoing vessel speed reduction (VSR) programme that would decrease vessel emissions. Meanwhile, ports are initiating their own voluntary programmes, and Automatic Information System (AIS) data is emerging as an ideal tool for determining and monitoring vessel participation.

The Port of San Diego has had such a programme since March 2008, reducing the voluntary speed limit inside San Diego Bay to 12kt for cargo ships and 15kt for cruise ships. Vessels are asked to observe this limit when travelling in an area that extends 20nm seaward from Point Loma. "The difference in the speed limits is based on differing engine fuel efficiencies," explained Cody Hooven, associate environmental specialist with the Port of San Diego. "Studies have demonstrated that there is a significant reduction in air emissions when vessels travel at more efficient speeds, which leads to improved air quality."

To determine VSR programme participation, the Port of San Diego uses the PortVision webbased vessel-tracking service to record the maximum speed of vessels travelling in its VSR zone. The PortVision service uses AIS collisionavoidance data to track real-time and historical vessel movements in major ports and waterways. Using the PortVision reports, the Port of San Diego identifies vessel operators that achieve 90% compliance with its VSR programme, and recognises them for their participation each quarter.

The port has reported significant reductions in emissions since launching the programme. Sample quarterly improvements from participating vessels include a 17% reduction in nitrogen oxide (5 tonnes), 15% reduction in carbon monoxide (0.35 tonnes), 15% reduction in diesel particulate matter (0.12 tonnes), 14% reduction in volatile organic compounds (0.23 tonnes) and 14% reduction in carbon dioxide (190 tonnes).

Voluntary VSR programmes have also been established at the ports of Los Angeles and Long Beach, where similarly high levels of participation have been reported. *More info: www.PortVision.com*

Congratulations to this year's winners

Every other year at its World Ports Conference, IAPH awards three prizes: the IT Award, given to a port, and the Akiyama Prize and Busan Open Award, both given to individuals for their essays. This year the winners received trophies and accolades at the closing ceremony



IAPH IT Award 2011

The IAPH Information Technology (IT) Award entry period opened in September 2010 and closed in February 2011. Entrants competed for gold, silver and bronze awards and plaques were presented by IAPH President Gichiri Ndua. Nine entries were received, from Cameroon, Israel, Malaysia, New Zealand, Russia, Spain, Trinidad & Tobago, the USA and Uruguay. The four-member selection committee was established within the IAPH Committee on Trade Facilitation & Port Community System, comprising chair Frédéric Dagnet, vice-chair Jordi Torrent, committee member Alex Kabuga and Secretary General Susumu Naruse.

Left to right: Bill Johnson, Santiago Milà, Gichiri Ndua and Shlomo Breiman

Gold Award

Port of Barcelona, Spain Received by Santiago G Milà, IAPH second vice-president

Port of Barcelona took the top spot with The TransPortic Project – The Mobility Solution Applied to Containers Transport in Barcelona Port. TransPortic is the electronic data interchange (EDI) within the port community system (PCS). In its award entry, the Port of Barcelona gave a comprehensive overview of the EDI, including images and graphs, to show the system's development and implementation. It explained how messages and information are communicated between the stakeholders involved, including the truck driver hauling the container. It highlighted the benefits and competitive advantages that the system has brought to the entire port community, especially the haulage companies subscribing to the system and the Port of Barcelona itself.

Silver Award National Port Administration (ANP), Uruguay Received by Bill Johnson, IAPH third vice-president

ANP's entry was on Integration of IT Systems to Improve the Management of Uruguay's Commercial Ports Towards a Community Cargo System. It presented a case study on how management of the Port of Montevideo was improved by integrating three IT systems: port management, cargo management and port security. It explained how the system increased connections with the port community and other state organisations, as well as extending the system to the management of other Uruguayan commercial ports for which ANP is responsible. The administration explains how this enormous task was planned, implemented and managed by a team that included representatives from all the involved stakeholders.

Bronze Award Israel Ports Development & Assets Company Ltd, Israel Received by Shlomo Breiman, Israel Ports' CEO

Israel Ports put forward its paper, An Integrated Community System for Managing IMO Crew Lists and Electronically Monitoring the Entrance of Seamen into the Country, and was given the bronze award. The company explained in its paper how it planned and implemented a PCS to manage IMO Crew Lists and developed a 'suitcase' with a computer, camera, document scanner and printer to scan passports and carry out onboard biometric inspections. Israel Ports Development & Assets believes that this system is today a vital component for professional and effective crew member inspection in a world where terrorism is a real threat.

IAPH Essay Contest 2011

Entries for the essay contest were called for between September 2010 and January 2011, with two awards available. The Akiyama Prize was named after one of the IAPH founding fathers, the late Toru Akiyama. It was open to young staff working for IAPH regular members in developing countries. The Busan Open Award, commemorating this year's Busan Conference 2011, was open to any staff of an IAPH member – regular or associate – and in any country. Thirty-three entries were submitted from 18 countries. The essays were judged by IAPH Human Resources Development Committee chair Eddy Bruyninckx, his professional assistants and IAPH Secretary General Naruse using a uniform scoring system focusing on originality and logical clarity. The winners of the Akiyama and the Busan Open awards were invited to the Busan conference with registration fee, economy airfare and hotel accommodation borne by IAPH, along with a cash prize of \$1,000. Those that received merits received a cash prize of \$500.

Akiyama Prize 2011

Eighteen entries were received for the Akiyama Prize this year. Participants were asked to submit a 1,000-word essay on one of the following topics:

- Strategy to increase port efficiency and productivity
- Cost-effective strategy to improve environment
- Creation of a safe work environment
 Best management practices to increase cargo volume.

Winner

Femi Jegede, Nigerian Ports Authority

The assistant general manager of corporate and strategic planning at Nigerian Ports Authority won the award for his essay, Strategy to Increase Port Efficiency and Productivity – The Great Leap. He boldly proposed a multipronged strategy called 'Great Leap', identifying problems faced by Nigerian ports and giving solutions that fall into four categories: technical, organisational, systems and human resources. He presented his ideas succinctly in a fishbone diagram. He also stressed that all maritime stakeholders have a role to play in ensuring increased efficiency and productivity at Nigeria's ports.

Merit Kiki Mohammad Hikmat, Indonesia Port Corporation II

The assistant corporate secretary at the Indonesian port corporation took the merit prize for his paper, Simple Ways to Keep Congestion at Bay. His paper explained how the port of Tanjung Priok identified and proposed solutions to road congestion to and from the port, using customer feedback and working closely with the entire port community. Hikmat demonstrated how his port coped with these challenges through relocating container depots, introducing automated gates, adding more efficient cargohandling equipment and implementing 24/7 working hours, as opposed to the more expensive options of constructing more berths.



Busan Open Award 2011

This year 15 entries were received for the Busan Open Award. Participants were asked to choose from two topics:

Successful strategies for making your port a green port

Successful strategies for improving the portcommunity relationship.

Winner

Matt McDonald, Port Nelson Limited

Successful Strategies for Making Your Port a Green Port was the winning essay in this category. McDonald, infrastructure manager at Port Nelson in New Zealand, concisely and logically explained how his port successfully adopted "a recognised framework for environmental management" that included the involvement of the entire port community and its stakeholders. He expanded discussion from improving port environmental performance to the long-term sustainability of port operations, forecasting a corporate commitment to higher environmental standards.

Merit

Amol Sawale, Mundra Port and Special Economic Zone Limited

The merit prize went to a paper that was also entitled Successful Strategies for Making Your Port a Green Port, written by the associate general manager of the Department of Horticulture at India's Mundra Port. In his essay Sawale comprehensively explained the process of planning, monitoring and assessing any port-related activity to minimise its impact on the environment. These activities included water and air pollution and waste disposal and treatment.

He also presented a variety of strategies to become a green port that include the establishment of a Department of Horticulture and Environment and adopting the ethos of sustainable development as part of a port's corporate policy. Such strategies would require the evaluation of policies relating to the environment, micro-economy, trade, energy, security and energy-saving devices, among others, he noted.



IAPH officials for 2011–13

For the next two years these IAPH officials will be acting on behalf of members to promote the organisation and help fuel technical committees. These members were elected by plenary at the IAPH World Ports Conference Busan

Your new officers

Dr Geraldine Knatz, PhD, takes over from Gichiri Ndua as president of the organisation; Knatz is executive director at Port of Los Angeles, USA

Grant Gilfillan, CEO of Sydney Ports Corporation, Australia, steps up to first vicepresident of the Asia/Oceania Region, following his previous term as second vice-president

Santiago García Milà, deputy managing director of Autoritat Portuària de Barcelona, Spain, is now second vice-president for the Africa/Europe region

 Bill Johnson, port director of Port of Miami, USA, is new to the board and steps in as third vice-president for the Americas region
 Gichiri Ndua, managing director of Kenya Ports Authority, steps down as president and takes up his new role of immediate past president ■ Arley M Baker, deputy executive director of communications for Port of Los Angeles, USA, becomes conference vice-president, following on from Ki-Tae Roh of Busan Port Authority

Susumu Naruse continues as secretary general of IAPH

Executive committee line-up

Asia/Oceania Region

Richard Joost Lino, president director, Indonesia Port Corporation II, Indonesia Le Cong Minh, director general, Saigon Port Company Ltd, Vietnam

Captain Abdul Wahab Mohammed Al

Diwani, director of the Marine Inspection and Survey Department, National Transport Authority, Abu Dhabi, United Arab Emirates (UAE) **Manjit Singh**, 2 deputy director of policy, Maritime and Port Authority of Singapore **Bum-Gou Kang**, director general for Port Policy, Ministry of Land, Transport and Maritime Affairs, Korea

Africa/Europe Region

Jean-Claude Terrier, president of the Executive Board and CEO, Grand Port Maritime de Marseille, France

Leonids Loginovs, CEO, Freeport of Riga Authority, Latvia

Bara Sady, managing director, Port Autonome de Dakar, Senegal

Eddy Bruyninckx, CEO, Antwerp Port Authority, Belgium

Americas Region

Curtis J Foltz, executive director, Georgia Ports Authority, USA

Alberto Díaz, president, National Port Administration, Uruguay

Mario Arbulú, chairman of Board of Directors, Empresa Nacional de Puertos, SA, Peru

New vice-president

Bill Johnson is a new board vice-president for this term. In his current position as port director of Port of Miami, he has presided over the largest capital investment programme in the port's history, including the reintroduction of an on-port rail service, construction of a seaport tunnel to improve port access, and a deep dredge project to enable the port to receive the world's largest container ships – one of only three east coast US ports that can do so.

He said: "It is a great honour to be selected as third vice-president of IAPH. This is a very exciting and challenging time for ports worldwide. The IAPH plays an important role in moving the industry forward and I look forward to contributing to this effort on behalf of the Americas region."

Members resolve

Six resolutions were adopted at the IAPH Busan conference on 26 May, all of which address highly relevant and important issues to the ports industry.

Piracy: IAPH adopted a resolution on piracy at its mid-term board meeting in Savannah in June 2010. The issue is so important to ports, however, that the organisation adopted another resolution in Busan, which acknowledges that there have been more than 400 piracy attacks a year; nearly 2,400 seafarers have been taken hostage in the Gulf of Aden and in waters off the coast of Somalia since 2007; and there have been counter-piracy efforts made by a number of states. It calls for more action from states to use their naval forces to suppress piracy acts in the wider sea areas and for states to take judicial steps to detain, arrest and prosecute pirates, and to ratify international conventions on piracy.

Safety of containers in the supply chain: The need for properly declared container contents and weights is of increasing concern across the chain. IAPH recognises the dangers associated with misdeclared containers, especially for those involved in port operations. It believes that shippers must ensure that they know what is in the container and give it an accurate weight at the point the container is originally packed, and calls for IMO and ILO to adopt requirements to address this. It calls for governments to establish mechanisms to ensure containers are properly declared and for shippers to adhere to these requirements.

Environmental Ship Index (ESI) and World Ports Climate Initiative (WPCI): IAPH members have devoted a great deal of time to developing a series of tools and carrying out research, all geared towards helping ports reduce emissions and improve air quality. This work is ongoing and carried out under the auspices of the WPCI. Late last year it introduced the ESI, and IAPH wants to see it implemented as widely as possible. The resolution calls for the ports and other organisations to join as incentive providers. Furthermore, these incentive providers should encourage the shipowners and managers to join the initiative and reduce their emissions, thus increasing air quality in ports.

Development of port infrastructure: IAPH calls for governments, states and port authorities to recognise the important role ports and their associated infrastructure play in a country's economy. Following on from this, it urges states and port authorities to allocate sufficient funds and resources to enable infrastructure, such as approach channels, breakwaters and terminals, to be developed in a timely way. The resolution states that IAPH is concerned about the connections between ports and their hinterlands, especially in relation to heavy and oversized cargo.

Two further resolutions were drawn up: one addressing the devastating earthquake and tsunami in Japan, and a second extending thanks to Busan Port Authority on behalf of members for hosting such an interesting and enjoyable conference.

Dates for your diary

A selection of forthcoming maritime courses and conferences

August

15–17 Logistics of the Maritime Transportation of Dangerous Goods – Malmö, Sweden *www.wmu.se*

September

5-16	Port Environment Policy and Technology – Antwerp, Belgium <i>www.portofantwerp.com/APEC</i>
11–15	AAPA 100th Annual Convention – Seattle, USA www.aapa-ports.org/Programs/seminarlist.cfm
14–15	Green Port Congress – Hamburg, Germany www.greenport.com/congress
19–30	Tasks and Responsibilities of Forwarders, Agencies and Shipping Lines – Antwerp, Belgium <i>www.portofantwerp.com/APEC</i>
20 onwards	Diploma for Harbour Masters – distance learning www.informaglobalevents.com/event/harbour-master- distance-learning-course
20–23	NEVA 2011 – Saint Petersburg, Russia
	http://neva.transtec-neva.com
21–22	Ninth Intermodal Africa 2011 – Casablanca, Morocco www.transportevents.com
28-30	Coasts & Ports 2011 – Perth, Australia
	www.coastsandports2011.com.au
29-10ct	INMEX India 2011 – Mumbai, India www.inmexindia.com

Membership notes

The IAPH Secretariat is pleased to announce that the following member joined the association **Associate member**

Tomofumi Miyatsu

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Email:	tomofumi.miyatsu@mofa.go.jp
Website:	www.busan.kr.emb-japan.go.jp/jhtm/index_j.htm



▲ This connection with the national railway system is critical in order to compete in today's global marketplace

Gearing up for 2014

Port director and new IAPH 3rd vice-president **Bill Johnson** is confident that infrastructure investment at Port of Miami will pay off when the expanded Panama Canal opens

One of the most important roles of government is investing in public infrastructure. For ports throughout the USA, the quest for governmental support of critical capital projects has become increasingly challenging as we compete for limited dollars.

The Port of Miami has been successful in recent months in moving forward its ambitious capital improvement programme following a series of innovative partnerships with both governmental and private entities. The end result is a new tunnel to improve port access, reintroduction of onport rail and the deepening of our channel to 50–52ft (15–16m) – all scheduled for completion by 2014 to synchronise with the opening of an expanded Panama Canal.

The \$650M tunnel linking port facilities directly to the interstate highway system is one of the largest projects of its kind to be undertaken in the southeastern USA. The public-private partnership includes the state of Florida, along with city-county governments and the Miami Access Tunnel (MAT), a private concessionaire selected to manage the project in what *International Finance Magazine* hailed as "the deal of the year". MAT, in turn, hired contractor Bouygues Civil Works – the same company that helped build the tunnel under the English Channel – which assumes the risk for finishing on time and on budget.

Another beneficiary of a public-private partnership is the rail project. Thanks to a \$23M federal economic stimulus grant, the port is teaming up with Florida East Coast Railway to restore railway services to the cargo yards. This connection with the national railway system is essential in order to compete in today's global marketplace.

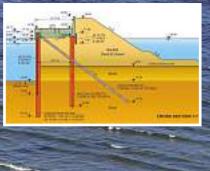
In preparation for the Panama Canal expansion, and perhaps most importantly, our Deep Dredge project ensures that we can accommodate post-Panamax vessels. Florida's governor recognised the importance for the entire region and has committed more than \$100M to prepare for 2014 and beyond.

Port directors wear many hats with responsibilities ranging from operations and finances to security and business development. But nothing we do is as important as forging the right alliances to ensure that our infrastructure needs are met.

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