



PORTS HARBORS

Official Journal of the International Association of Ports and Harbors

Security

Are small Canadian ports an open door?

Technology

What software can do for your port

Cruising

Developments from the cruise industry



Shanghai power shift

Pieter Struijs hands over the IAPH presidency at the 24th World Ports Conference



PORT AUTONOME DE DAKAR

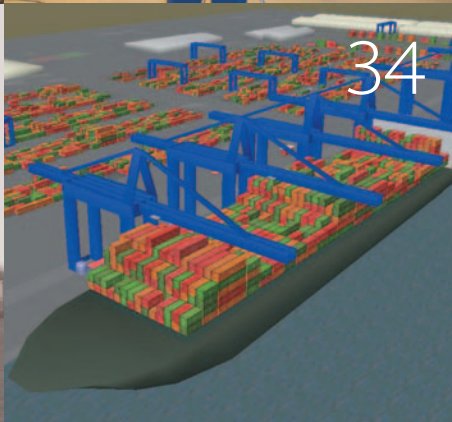
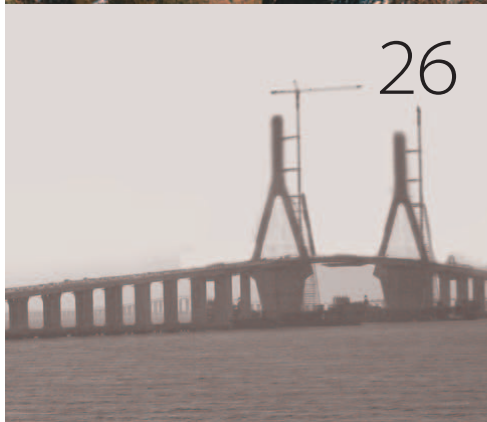
“La Porte Océane de l’Afrique”

Le Port de Dakar est relié par route aux capitales des pays limitrophes du Sénégal :

Gambie, Mali, Guinée Bissau, République de Guinée et la Mauritanie.

Le réseau ferroviaire du Port de Dakar est connecté au trafic international notamment celui reliant le Sénégal à la République du Mali.





Front Cover

Pieter Struijs hands over the presidency of the IAPH to Tom Kornegay in Shanghai

July 2005
ISSUE 03 VOL 50

Cover image: IAPH

P&H CONTENTS

News

- Page 4:** US oil spill fund going bankrupt
- Page 5:** Container titan takeover
- Page 6:** Big cranes give Savannah a lift
- Page 7:** Briston bent on expansion
- Page 8:** Brazil extends tax exemption
- Page 10:** Building up a rivalry at PTP
- Page 12:** Dunkirk's new traffic record

Features

- Page 14:** Topical Features this month include security issues at small Canadian ports, container monitoring and Rotterdam's Maasvlakte 2 expansion plans
- Page 34:** *P&H* looks into the benefits advanced new software can afford port operators
- Page 40:** Cruise industry ports. *P&H* looks at Costa's moves towards managing its own terminals and a round-up of cruise industry experiences gained at Port Canaveral

Open Forum

- Page 20:** Dr Peter de Langen propounds the benefits of port authorities acting as Port Cluster Managers

Cover Story

- Page 22:** Special report from the 24th World Ports Congress in Shanghai, including speeches roundup and event highlights

Maritime Update

- Page 39:** News from major maritime organisations including updates from the IMO, WCO, ICS and IBIA

IAPH Info

- Page 42:** IAPH updates, including a new president for the IAPH, notes from the legal protection committee, birthday celebrations in Tehran and new committee member details

Bulletin Board

- Page 45:** Membership information, winning submissions for the Akiyama essay prize and key dates for your diary

transport insurance plus **stability**

Insurance for:
Transport and logistics operators
Ports and terminals
Cargo handling facilities
Ship operators



TT CLUB

Contact TT via your broker or at any point in the network.

London Tel +44 (0)20 7204 2626 **New Jersey** Tel +1 201 557 7300 **Hong Kong** Tel +852 2832 9301 **Singapore** Tel +65 6323 6577
www.ttclub.com marketing@ttclub.com



What you don't know may hurt you

Detect unseen hazards in shipping containers

voice¹⁰⁰ volatile organic compound (VOC) analysis uses whole-air sampling to instantly detect unseen hazards – from fumigants and contamination to contraband – with pin-point accuracy.

Syft Technologies are leaders in broad spectrum VOC analysis technology and provide critical detection capabilities for industrial, analytical and security applications.

To discover what you don't know, find out more at www.syft.com

3 Craft Place, Christchurch, New Zealand
Email sales@syft.com Ph +64 3 338 6701



PORTS & HARBORS

Official Journal of the International Association of Ports and Harbors

PORTS & HARBORS

Published bi-monthly by the International Association of Ports and Harbors (IAPH), edited and produced by Lloyd's Register-Fairplay Ltd.

PUBLISHER

Dr. Satoshi Inoue

Secretary General, IAPH
info@iaphworldports.org

EDITOR

Nick Brown

nick.brown@lrfairplay.com
+44-(0)1-737-379-148

ASSISTANT EDITORS

Penny Allen

penny.allen@lrfairplay.com
+44-(0)1-737-379-158

Stephen Cousins

stephen.cousins@lrfairplay.com
+44-(0)1-737-379-156

SALES MANAGER

Adam Foster

adam.foster@lrfairplay.com
+44-(0)1-737-379-710

DESIGN & PRODUCTION

Phil McAllister

phil.mcallister@lrfairplay.com
+44-(0)1-737-379-165

Robert Wood

rob.wood@lrfairplay.com

Neal Thompson

neal.thompson@lrfairplay.com

Mark Ames

mark.ames@lrfairplay.com
+44-(0)1-737-379-170

MANAGING EDITOR

G. Paul Gunton

Lloyd's Register-Fairplay Ltd
paul.gunton@lrfairplay.com

EDITOR-IN-CHIEF

Tony Slinn

Lloyd's Register-Fairplay Ltd
tony.slinn@lrfairplay.com
+44-(0)1-737-379-159

ASSOCIATE EDITOR

Yuko Akamatsu

Assistant Under Secretary, IAPH
ph@iaphworldports.org

EDITORIAL & PRODUCTION

Lloyd's Register-Fairplay Ltd

Lombard House, 3 Princess Way
Redhill, Surrey RH1 1UP,
United Kingdom
Tel: +44-(0)1-737-379-000
Fax: +44-(0)1-737-379-001
Web: www.fairplay.co.uk

SUBSCRIPTIONS

**International Association
of Ports and Harbors**

Price Japanese ¥12,000 (US\$115 /
UK£60 / €87) or per issue ¥2,000,
postage included. Visa and
MasterCard accepted or for Bank
Transfer. You do not have to be
an IAPH member to subscribe
– contact the IAPH.
7th Floor, South Tower,
New Pier Takeshiba
1-16-1 Kaigan, Minato-ku
Tokyo 105-0022, Japan
Tel: +81-3-5403-2770
Fax: +81-3-5403-7651
Email: ph@iaphworldports.org
Web: www.iaphworldports.org

COPYRIGHT

No article may be reproduced by
any means, in whole or in part,
without the written permission
of IAPH and Lloyd's Register-Fair-
play Ltd

DISCLAIMER

The Lloyd's Register-Fairplay
Group shall not be liable to any
person for any loss, damage or
expense caused by reliance on
information or advice in this
publication unless that person
has signed a contract with the
relevant LRF Group entity and in
that case any liability is on the
terms set out in that contract.
The opinions expressed are not
necessarily those of IAPH or the
LRF Group and the inclusion of
an advertisement implies no
endorsement of any kind by
IAPH or the LRF Group of the
product or service advertised.
IAPH is unable to accept any
liability for the consequences of
any inaccuracies, errors or
omissions in this publication.

Printed by The Manson Group Ltd. Hertfordshire, England

Challenging China

The City of Shanghai - perhaps the fastest-developing city in the world - welcomed some 700 IAPH delegates to attend the IAPH World Ports Conference in May

Impressed by the scope of the city's development, the participants were all overwhelmed by its ultra-modern urban landscape, with an astonishing number of skyscrapers in the Pudong area.

The delegates were also totally stunned at another incredible sight – that of the new deep-sea port being developed at the Yangshan islands. While the port is eventually to be developed into a complex of 50 berths for mega container vessels, the first phase of five berths is scheduled to be operational toward the end of this year.

This new port off the mouth of the Great Yangtze River is connected to the main land by a 32.5 km long bridge, which

looked just like a 'Great Wall of the Sea'. Thanks to special arrangements by Shanghai Port and the Municipal Government, the IAPH delegates were very fortunate to be the first to drive across the bridge under construction to visit the new port.

The absolutely tremendous container growth to and from China is inevitably putting huge

“ Ports should
certainly not become a
bottleneck in the global
logistics chain ”

demands onto container terminals at almost all major ports in the rest of the world, especially those in Europe and the USA. With this new Chinese mega-port, the congestion elsewhere is only going to get worse if we don't do something about it fast.

In his address at the IAPH 50th anniversary session during the Shanghai Conference, Tommy Thomsen, CEO of container giant AP-Moller Maesk, stressed the need for the world's ports to seriously tackle these spreading port congestion problems. A resolution of the International Chamber of Commerce was also circulated at the plenary session, pressing port authorities to invest more for terminals and facilities to alleviate the current port congestion.

Ports should certainly not become a bottleneck in the global logistics chain. Working with all parties concerned, ports need to not only expeditiously expand their infrastructure, but also aggressively introduce technological innovations for enhancing our productivity.



Satoshi Inoue

Secretary General, IAPH

Port updates

Shanghai, China

As the current president of the Shanghai International Port Group and conference vice president of the IAPH's recent 24th World Ports congress, Lu Haifu is already a busy man. However, in late May he broadened his already wide working remit and has been elected as the director general of the China Ports and Harbors Association. For further information on Haifu's appointment, contact chinaports@vip.sina.com

Teignmouth, UK

The Port of Teignmouth has been awarded a £967,824 (US\$1.8M) grant to develop new cement transporting facilities. The money has come from the UK Department of Transport and will supplement port owner Associated British Ports' and operator Civil & Marine's investments to promote sustainable distribution at the port.

St Petersburg, Russia

Industry sources have confirmed that a management shake-up is under way at the St Petersburg Port Company. The port is Russia's second largest and the major maritime entry point for incoming cargo. The management company currently in charge, Organization of Banking and Informational Projects (OBIP), refused to comment, but as *P&H* went to press, a vote about OBIP's future was due to be held by the shareholders of the port company on 30 June. No reason has been disclosed for the apparent discord.

Kulpi, India

India's shipping ministry is to carry out a new study on the course and movement of the Hooghly river channel, near the proposed Port of Kulpi in West Bengal. The channel suffers heavy silting and has to be dredged continuously, which is one of the main reasons the planned US\$300M port has suffered delays. To be developed by a joint venture of the West Bengal government, Mumbai-based Kventer Group and P&O Ports (Australia), the Kulpi project has also suffered objections from the nearby Port of Kolkata.



The high cost of oil spills (image courtesy of Greenpeace)

US oil spill fund going bankrupt

The fund that serves as the ultimate insurance policy to clean up maritime oil spills will be bankrupt by 2009 unless new funding sources are found, warns the US Coast Guard (USCG).

The claim came during a report delivered to the US congress in late May, when the USCG

announced that the Oil Spill Liability Trust Fund is in serious danger of going broke.

Established by the Oil Pollution Act of 1990 (OPA90), the fund is meant to pay for accidental spillage and also illegal dumping clean-up operations, whenever the responsible parties cannot be

located. It also covers cases where the offenders do not have the ability to pay or have defences or limits to their liability, said Jan Lane, director of the National Pollution Funds Center, which administers the fund.

Until 1994, there was a 5 cent per barrel tax on petroleum produced in, or imported to, the USA. With this and consolidation of the other applicable federal funds, the fund at one time held US\$1Bn, but by the start of this fiscal year, the fund had dropped dramatically to \$842M.

"The trust fund makes it possible for cleanup equipment and personnel to be instantly deployed, provides money to compensate claimants for their costs and damages from oil spills and provides money to restore natural resources," Lane stated.

"We are working closely with the administration and congress to ensure the fund's long-term viability is secured."

In addition to these points, the oil spill fund is also responsible for seeking reimbursement of fund expenditures and penalties from dischargers of petroleum. It assists the US Attorney General's Office in the collection of delinquent accounts, including the preparation for litigation and arrangement of settlements.

The reasons for the diminishing fund are put down to heavy and ongoing administrative costs, compounded by numerous major oil spills in recent years.

Malacca pay as you go security

The influential Nippon Foundation has proposed a radical new system of security charging for vessels transiting the Malacca Strait.

Addressing IMO delegates at a special ceremony in late June, president of the Nippon Foundation Yohei Sasakawa, urged the IMO to re-evaluate the 'free to everyone' approach being taken on security matters. He insisted that the current situation isn't working and a new means of funding must be established.

"We need to examine a new system where the burden should be borne not only by the coastal states but also the users," he told delegates. "I hope the IMO will exercise its leadership in examining such a new system," Sasakawa told the audience, made up

largely of the industry's movers and shakers in town to attend the IMO's official Council meeting being held in London this week.

The Nippon Foundation is one of the industry's largest philanthropic benefactors and has pumped millions of dollars into improving safety and navigation in the Strait over recent years.

In June last year the foundation also sponsored a conference of littoral states to progress the issue and enhance security co-operation between countries. Sasakawa told delegates that the foundation would be prepared to make further contributions when the IMO took a more positive initiative in addressing the difficult challenges ahead.

Container titan takeover

The eyes of the entire shipping industry are on Denmark's AP Moller-Maersk and its unprecedented take-over of Anglo-Dutch rival P&O Nedlloyd.

Even in the inflated world of shipping terms, the deal is huge and will impact on every facet of the container industry. As the deal rolls on, it will hit other lines trying to compete against the resulting leviathan, as consortia and alliance memberships will have to be renegotiated and market share carved out and secured.

Similarly, everybody from brokers and insurers through bankers and all the way up to shipyards and port operators will all likely have to renegotiate a raft of their dealings.

In addition, P&O Nedlloyd is expected to leave the Grand Alliance in the general fallout from the deal and it remains to be seen if the remaining members will look for a replacement partner, continue as normal or go their separate ways.

The merger of Maersk Sealand, ranked number one in the container industry, with third ranked P&O Nedlloyd, will create a huge gap of clear air between itself

and second-placed Mediterranean Shipping Company (MSC).

According to Lloyd's List, the merged group would have a global market share in ship capacity terms of around 18%, while MSC will lag behind on just over 8%.

While this latest deal is the first big merger since the late 1990s, MSC has never bought another company and its fleet has grown organically.

However, in the face of this imminent new mega-corporation, there is already much speculation as to who will be next to merge, with analysts mooted other top ten-ranking companies CMA CGM, APL and China Shipping. After all, a similar wave of acquisitions and mergers followed the late 1990s amalgamation of P&O Containers with Nedlloyd.

With the container industry not only in rude health, but positively booming and virtually all lines reporting solid profits, it may appear on the surface to be an odd time to buy a competitor, as its share price was riding high on its success.

In fact when AP Moller-Maersk made the offer, P&O Nedlloyd's

share price had actually doubled since the company's flotation. But the container boom has been so successful that AP Moller-Maersk could afford to put in a sizeable cash offer over and above its rival's market capitalisation.

This would enable it to steal a march on its other rivals, because though its container fleet had grown by 70% over the last five years, it had effectively been running to stand still and its market share had stayed static at 12%, while smaller rivals had been rapidly expanding their own market share.

P&O Nedlloyd agreed to the purchase deal and the largest shareholder P&O will hand over its 25% stake in the business. The full acceptance period expires on 4 August and five days later, the buyer must announce whether it has acquired the necessary 70% control to make the deal unconditional.

As *P&H* went to press, AP Moller-Maersk had secured just under 20% with the latest deal being for 1.96M shares at €57 (US\$69) each - minus an early-bird discount - from an unnamed investor. This represented 4.8% of the company.

Port updates

Los Angeles, USA

The Port of Los Angeles may impose new container charges to pay for security, infrastructure and environmental programmes. A new bill under scrutiny by the Californian state assembly could levy a new US\$30 surcharge on each container passing through the port. The bill was approved by the state senate in May. Long Beach democrat senator Alan Lowenthal said that the funds would be split equally amongst the three programme areas.

Genoa, Italy

Italian classification group RINA has certified Genoa's Environmental Management System compliant with ISO 14001. Genoa was one of the first ports to instigate a green approach, with a full environmentally sound structure over 10 years ago. The system was funded jointly by the European Union and the Region of Liguria. According to Ugo Salerno, chief executive of RINA, Genoa's policy is a notable example of commitment for sustained development."

Marseille, France

China and France renewed a long-standing link, when the ports of Marseilles-Fos and Shanghai signed an agreement at Shanghai's International Transport & Logistics exhibition on 20 May. Signed by Marseille director general Eric Brassart and his opposite, Xu Peixing, it celebrated the 15th anniversary of the ports' co-operation agreement and the 13th anniversary of their twinning.

Halifax, Canada

Several major Canadian retailers have banded together to select the Port of Halifax as their major east coast sorting and distribution hub. Made up of partner companies from the Canadian Retail Shippers Association (CRSA), these companies include Sears, Sony and Reitmans. From 1 July, a range of imports including clothing, electronics and furniture will be shipped from Southeast Asia and the Indian sub-continent to Halifax. The CRSA expects to move 4,000TEU through Halifax per year.

Squeezing more out of London's port



The Port of London Authority (PLA) has announced several major expansion plans to secure more value and trade.

These new initiatives and investments are to prepare for growth in cargo, passenger and leisure activities on the city's River Thames and will include a new floating cruise ship terminal, a major upgrade to London's port control centre and a new pier and facilities for PLA launches at Gravesend's Royal Terrace Pier.

Finally, the PLA is also introducing new safeguards to existing London cargo wharves, which will enable the port authority to bring three currently unused wharves back into practical use.

Port updates

Cork, Ireland

Ireland's major southern port of Cork increased its ties with mainland Europe when APL started up a new container feeder link with Rotterdam and Zeebrugge on 4 June. This is the first dedicated feeder service that Neptune Orient Lines' APL has launched in Europe and there will now be at least 10 scheduled departures to Northern Europe from the Tivoli Container Terminal each week.

Eemshaven, The Netherlands

Groningen Seaports is to invest €30M (US\$36.5M) to nearly double the length of the Port of Eemshaven's 400m dry bulk quay to 750m. This burst of funding will also see the company excavate a new harbour dedicated to short-sea shipping and a new 10ha terminal. The first service out of there will be a passenger routing to Borkum island in Germany. An unnamed company is also reported to be in negotiations with Groningen to rent dry bulk space.

Port Everglades, USA

Fort Lauderdale's Port Everglades has snapped up a new marine terminal operator to fill the gap left after South Stevedoring declared itself bankrupt in 2003. Under a new US\$62M deal, Florida International Terminals will take over running the concession. The terminal will mainly handle South American cargo, largely from Chile's Compania Sudamerica de Vapores and Compania Chilena de Navegacion Interoceana.

Bremerhaven, Germany

Currently Europe's fourth biggest port, Bremerhaven is hoping to break the 4M TEU barrier this year after volume growth soared to 15.2% in the first four months. Its terminals handled 1.2M TEU up to the end of April and Jörg Kastendiek, Bremen's minister of economics, is confident, that "the positive development will continue throughout the next months." Growth has been driven by the carrier-controlled terminals North Sea Terminal Bremerhaven (Maersk) and MSC Gate.



Mega cranes arrive from China

Big cranes give Savannah a lift

The Port of Savannah has taken delivery of two of the largest ship-to-shore cranes on the planet as it gears up for increasing super post-Panamax traffic.

"With the cranes' capacity to handle the world's largest cargo vessels, the economic impact to the state of Georgia will be tremendous," Georgia Ports Authority executive director Doug Marchand told *P&H*.

The giant cranes arrived on 18 June at the port's Ocean Terminal after a 47-day voyage from Tianjin, China and will be fitted to

Container Berth 8, which is due to open in early-2006.

Each 242 tonne crane is 142m long and 114m high with the boom raised. Impressively, they can span 22 containers across and six containers high. Lift capacity is 65 tonnes under the spreader bar and 86 tonnes under the cargo beam.

On completion, the new berth is expected to increase capacity at the port by around 20%. This will provide more than 9,800ft of continuous dock and create an estimated additional 10,800 jobs for the state of Georgia.

Terminal hunting in Ghana

Italian ro-ro and container groups Messina and Grimaldi have applied for a concession in the Ghana Ports & Harbours Authority (GPHA) port of Tema.

The two companies are trying to acquire the use of two berths at the container terminal, which is operated by a consortium made up of Bolloré SDV, Maersk Sealand, Bougues, Sutton and GPHA itself, which owns a solid 30% stake in the terminal. Messina and Grimaldi are trying to get in on this deal because the facility is often saturated, forcing the two companies' vessels to queue up behind other traffic.

GPHA is currently upgrading Tema and is two-years into a dredging programme, which is already running behind scheduling.

A spokesperson for Messina told *P&H* that they are confident of getting a ro-ro berth into operation by January of next year. For the time being, as a stop-gap attempt to get some quay-space, they have applied to GPHA to provisionally use a berth at the grain terminal.

OOIL takes Navis route to efficiency

Five of Orient Overseas International Limited's (OOIL's) terminals in North America are to be outfitted with Navis' Terminal Operating System.

OOIL will install the software at Deltaport and Vanterm in Vancouver, Global in Jersey City, LBCT in Long Beach and NYCT in New York.

The first system will be installed at Deltaport and will include Navis' SPARCS, Express and WebAccess software.

According to Navis, "SPARCS enables you to fully automate and optimize vessel and rail planning, yard allocation, and equipment dispatch with minimal human interaction, which means faster, more efficient load and discharge."

The Express portion is a modular, tailored information and data system designed to work with SPARCS and WebAccess, as the name suggests, links all of the relevant port data out to the port's customers.

Together, it's hoped that these systems will enable OOIL to expand its handling capacity through better management of its assets and freeing up existing capacity, rather than having to make huge changes to the port's infrastructure.

A large proportion of the volume that passes through Deltaport is handled via on-dock railways and the embedded SPARCS Rail module will play a key role, streamlining operations to enable the port to manage its capacity better to meet growth requirements.

In fact, Colin Donaldson, the terminal manager at Deltaport, stated that the Navis solution was selected for its ability to aid and manage growing port traffic. "[With it] we can make immediate and smarter decisions," he stated.

Melbourne's cost control

Early June saw the Port of Melbourne release its new pricing policy before it swung into force on 1 July.

This is the first schedule of tariffs under the Australian Essential Services Commission's new price monitoring framework. According to the port, it has tried to keep a lid on the price increases, but had to increase them in the face of rising infrastructure costs.

However, it trumpets the fact that prices have only risen by an average of 3.5%, though the port has also revisited a planned levy on international empty containers as an additional source of revenue. Some headline increases are actually below 3.5%. One of the most important of these, wharfage, has only gone up to A\$32.50, from A\$31.50, enabling Melbourne to retain its crown as the cheapest container port in Australia.

Stephen Bradford, CEO of the Port of Melbourne Corporation said that the port believes that "the 'user pays' principal should apply to port facilities." He added that empty containers "benefit from the same port infrastructure as the movement of full containers and they ought to make a contribution to future port development needs."

The full reference tariff schedule and its pricing policy statement are available at www.portofmelbourne.com

Mombasa users lash out at KPA

Kenyan Ports Authority (KPA) plans to smoothen out onward logistics planning from the Port of Mombasa have provoked anger in the logistics industry they were supposed to salve.

The new rules require that truckers make an advance booking before collecting containers, instead of just arriving at the container terminal. In addition, just 210 trucks will be handled in a single day.

Already frustrated by delays at the Port of Mombasa, East African transporters and clearing agents see the latest rules introduced by the Kenya Ports Authority as adding insult to injury. With only 210 truck moves a day, more than 10,000 containers have already piled up in the terminal, with additional delays in clearing documents through customs, port agents told *P&H's* sister magazine, *Fairplay*.

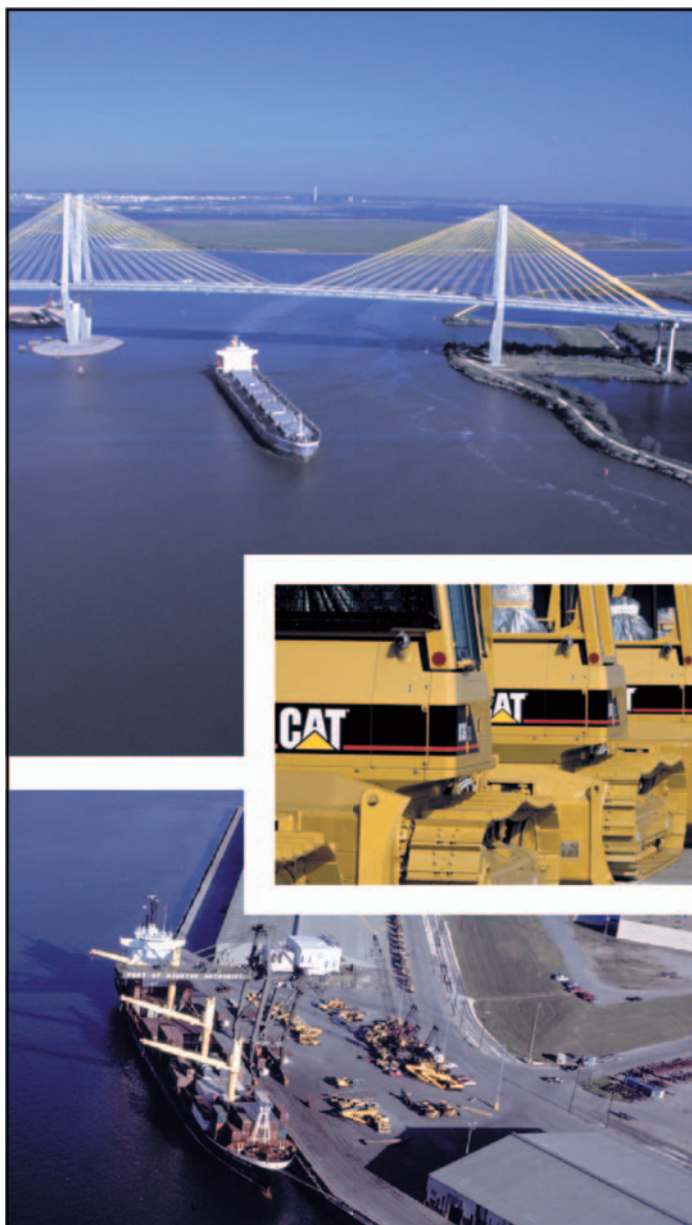
The new rules are just increasing the problem, added the agents, who have asked the KPA to review its new policy. In response, KPA stated that the rules had been aimed at controlling the flow of trucks so that delays would not be exacerbated by too many vehicles arriving in the port at once.

When Brown Ondego, KPA's managing director announced the range of rule changes on 31 March, he said too many importers were using the terminal as a storage facility. Some containers had been stored in the terminal for more than half a year, and about 5,000 of the 7,000 total containers in the terminal on that day were undocumented, he stated.

Under the new rules, after 21 days owners of such a box would be charged a US\$50 fee and the container moved to a conventional cargo area in the port.

Chief executive officer of Kenya's Export Processing Zone Authority, Albert Gumo, added his voice to Kenya's unhappy port users, by pointing out that importers are forced to bear the brunt of problems not of their own making.

He told a Nairobi newspaper that importers were being penalised for the delay in processing documents by customs officials. It can take up to seven days to process a document and these penalty fees should be diverted from importers to customs.



the PORTfolio

The Port of Houston Authority owns and operates the public facilities located along the Houston Ship Channel, providing shippers with deep water access to world markets and a direct link to 14,000 miles of U.S. intracoastal and navigable inland waterways. We are focused on maximizing the commercial potential of our facilities, now and in the future.



**THE PORT
DELIVERS**
the goods

1-800-688-3625 • www.portofhouston.com

Port updates

Pyeongtaek, Korea

Korea's Ministry of Maritime Affairs and Fisheries has selected the Taiyoung consortium as the preferred bidder to build two 50,000dwt grain berths at the Port of Pyeongtaek by 2009. The consortium comprises construction companies, port users and financial institutions and will also develop 207,000m² of yard space, along with 560m berths planned to handle over 1M tons of grain annually. In addition, Gyeonggi province has applied for permission to develop 470 acres of port hinterland to accommodate Pyeongtaek's expected container volume increase.

Antwerp, Belgium

The massive Deurganckdok container complex at the Port of Antwerp received its first container vessel in June, which docked at P&O Ports' Antwerp Gateway facility. The first phase of development featured 1,650m of quay and six post-Panamax gantry cranes, each able to serve ships up to 18 containers wide. Phase two will see it extended to 2,470m, giving the terminal an annual 3M TEU capacity. To Deurganckdok's west, Hesse Noord Natie wil operate a similar facility.

Troon, UK

The Port of Troon's drydocks are being reactivated under a new deal between the port's operator Garvel Clyde and the overall owner Associated British Ports. Available for the usual range of surveys, repairs and conversions, the 122m docks can accommodate vessels with a 17m beam and 4.3m draft.

Ennschafen, Austria

Plans to create an upper Austrian logistics hub on the Danube moved a step closer to reality in May, when the Port of Ennschafen began using the largest gantry crane on the Danube. This 50 tonne crane is mounted on a 740m track, has a 22m outreach and is designed to handle 250,000 TEU a year. Ennschafen has also established a new joint venture to run the terminal. The port holds a 60% stake, with Austrian State Railway and the city of Linz holding 20% each.

Bristol bent on expansion

The Port of Bristol has unveiled ambitious plans to build a £200M (US\$368M) deepwater container terminal at Avonmouth.

Under the proposals – which still need to be cleared through local planning permission – 100 acres of foreshore and a disused oil terminal next to the existing docks will be reclaimed. This will create 1.2km of quay with 10 post-Panamax cranes and four deep water berths.

Serving this will be an approach channel 15m below the current chart datum that will provide access to future-generation container ships of up to 12,000TEU vessels and 16m draught in all tides. To cope with this huge boost in container throughput, the port's container handling and storage facilities will be upgraded with

capacity for up to 1.5M TEU per year.

The Bristol Port Company believes its location close to the heart of the country, with excellent existing road and rail links and a natural deep water navigation channel, make it ideally-placed to handle more containers than it does presently.

"It would be much easier for us to ship a load on containers, which are [currently] coming through the South East, through Bristol, both from an economic and environmental point of view," said a port spokesman.

Bristol is currently looking for client companies for the site and, if the proposals get the green light, it will take another three years for the new docks to be built, ahead of a preliminary operational date by 2009.

Caribbean nations need help with security issues

Barbados Port Authority manager Everton Walters has requested international help to comply with security regulations on behalf of the Caribbean's ports.

Walters made the request at the SecurePort conference in Miami on 22 June. He stated that Caribbean nations are "determined to comply" with all of the international maritime security mandates, but their cash-strapped budgets have them looking to their more prosperous neighbours for help.

"We need each other, the strong must help the weak," said Walters, who is also coincidentally regional coordinator for port security for the Organization of American States.

He recognises that training and improved infrastructure are key to solving the security challenge but said that both are expensive and many island nations in the Caribbean simply cannot afford the increased bills sparked by new requirements.

Despite Walters' comments, another speaker actually lauded the Caribbean nations' security measures. US Coast Guard Rear Adm Brian Peterman, commander of the Miami-based 7th District, also spoke at the conference. He said that he had visited Jamaica and the Dominican Republic and praised them both for their security programmes.

He even went so far as to comment that Jamaica had implemented several industry best practices that other nations, including the US, should emulate.

In particular, he highlighted their 'excellent entry and exit practices', as well as centralized monitoring and the use of x-ray machines for containers on the Kingston docks.

New UK fuel station

Oil giant BP opened its self-proclaimed "most advanced bunkering facility in the UK" at Portland in early June.

This £4.5M (US\$8.2M) refurbishment of the former naval bunker facilities at Portland Harbour brought an important new weather-sheltered fuelling service into action in the English Channel.

Portland was used continuously by the UK Royal Navy for a century, before the service abandoned the station following a round of defence cuts in the mid-1990s. The facility actually offers two dedicated anchorages, one in the inner harbour and the other in the outer, which can serve huge vessels with draughts of up to 19m. It provides a great deal of protection from adverse weather conditions within the inner harbour, enabling bunkering operations to be carried out in virtually all conditions.

Constructed by BP and Greek construction company Diekat, the service will be operated by a UK subsidiary of Diekat, Portland Bunkers International (PBI) and BP Marine to provide at-anchor and port-side marine fuelling services, according to a statement from the two companies.

As part of the refurbishment of the site, PBI have built a new 200m jetty at the inner breakwater of Portland harbour to receive tanker deliveries. This enables the facility to offload fuel from tankers with displacements of up to 48,000t.

The existing berth also received an upgrade, which enables it to act as a secondary transfer location, to allow bunker barges to take on fuels when either a tanker is moored at the new jetty.

The project faced inevitable ecological and environmental controls, but nevertheless secured all of the necessary planning permission. According to a BP statement, "an independent environmental impact assessment concluded that the bunkering facility will not significantly change the existing baseline environmental conditions."

TOC2006
EUROPE

TOC2006
A S I A

TOC2005
AMERICAS

**THE WORLD'S LEADING EXHIBITIONS AND
CONFERENCES FOR THE SHIPPING PORTS
AND TERMINALS INDUSTRIES**



**TOC Events Worldwide
Established since 1976**

**TOC Americas
TOC Europe
TOC Asia**

Complete your details in CAPITALS below and fax back on +44 20 7017 4987

Please send me further information on (tick appropriate event) **TOC Americas** ☐ **TOC Asia** ☐ **TOC Europe** ☐

I am interested in attending as an (tick appropriate event) **Exhibitor** ☐ **Visitor** ☐ **Delegate Conference** ☐

TITLE (Dr/Mr/Ms)	<input type="text"/>	FAMILY NAME	<input type="text"/>	FIRST NAME (in full)	<input type="text"/>
JOB TITLE	<input type="text"/>			COMPANY	<input type="text"/>
ADDRESS <input type="text"/>					
<input type="text"/>		COUNTRY	<input type="text"/>	POST/ZIP CODE <input type="text"/>	
EMAIL <input type="text"/>		TEL	<input type="text"/>	FAX <input type="text"/>	

For further information and booking details please visit: www.toc-events.com

E-mail: lauren.morrey@informa.com Tel: +44 207 017 4212

Data Protection: The personal information shown, or provided by you, will be held on a database and may be shared with companies in the T&F Informa Group in the UK and internationally. They may be used to keep you up-to-date with developments in your industry. Sometimes your details may be obtained from, or made available to external companies for marketing purposes. If you do not wish your details to be used for this purpose, please write to Database Administration Dept, T&F Informa UK Ltd, Enterprise House, 45 Station Approach, West Byfleet, KT14 6NN, UK. Tel: +44 (0) 207 017 4555, Fax: +44 (0) 207 017 4743.

Organised by

informa maritime & transport 

Port updates

Nagapattinam, India

The Asian Development Bank has approved INR500M (US\$11.5M) to renovate the tsunami-ravaged Nagapattinam Port on the Tamil Nadu coast. This will cover rebuilding the wharf, perimeter wall, sunken southern breakwaters, caisson wall and the port road damaged in the December assault. The river mouth will also be dredged and a dredger, patrol and survey vessels purchased.

London, UK

A spending spree has seen eight new Terberg terminal tractors and three Kalmar empty container handlers delivered to London's Thamesport facility. The tractors replace older, less efficient machines and with their powerful 4x2 drivetrains, they can shunt combination weights of 75 tons around the port. The Kalmar handlers can stack boxes seven high.

Gothenburg, Sweden

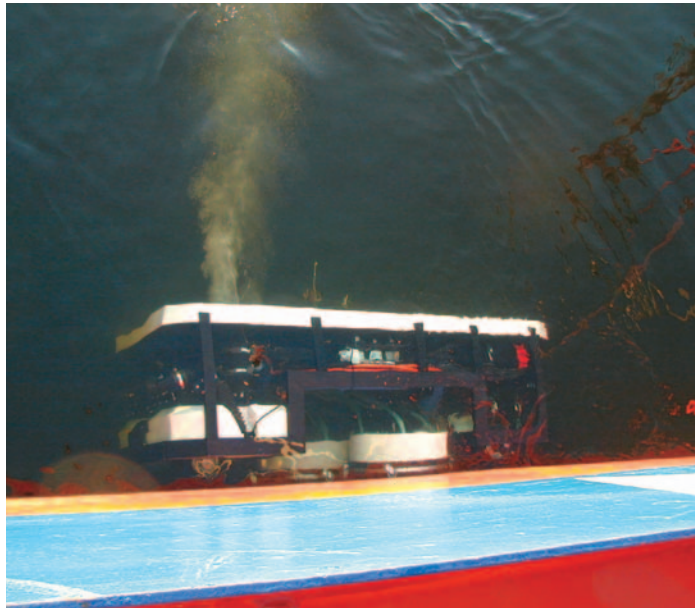
Work to enhance the container terminal at the Port of Gothenburg is reportedly six months ahead of schedule and is likely now to be finished before the end of the year. According to the port, the quay, apron and crane rail foundation reinforcements will be completed by 1 August, when a concerted dredging campaign will begin to increase the alongside depth to 3m.

Makurdi, Nigeria

May proved a positive month for the Nigerian port industry, as plans to revitalise the Nigerian Port of Makurdi were finalised and the federal government agreed to finance concerted dredging efforts to provide access.

Miami, USA

The Port of Miami held a workshop session examining trade opportunities in South Africa in mid-May, followed by a Sister Seaports Agreements. Already healthy, trade between the two countries is only expected to grow as the US Customs and the South African Customs Union work towards setting up a mutual free trade agreement in the near future.



CleanShip's ROV in operation against a hull

Clean bottoms for Stena Line

Environmental concerns over traditional anti-fouling operations led Stena Line to sign a contract with Norwegian specialists CleanHull at the Norshipping show in Oslo, early June.

Traditional methods for anti-fouling the bottoms of ships hulls rely on simple brushing, but this has been banned in a number of ports, including Oslo and Gothenburg. CleanHull developed an innovative new system, fitting a high-pressure water jet to a remotely operated vehicle known as CleanROV.

This submersible body has a camera in its nose and is 'flown' around the hull, blasting off

unwanted fouling agents - without damaging the ship's anti-fouling paintwork - and polishing the propellers. Footage of the cleaning operation is also recorded and can be reviewed as evidence.

It can clean up to 1,000m² of hull per hour, which means that minimal time has to be spent in cleaning operations. Stena Line hulls will be cleaned during regular port stops maximising the time that ships can be operated.

CleanHull is currently only operating in the Oslofjord and Skagerak region, but the company has plans to expand into other ports soon.

Brazil extends tax exemption

Brazilian efforts to encourage port terminals to increase their efficiency and invest in equipment such as cranes and reachstackers, received a serious boost in July with a government decision to extend exemptions on income tax for an extra two years.

Port friendly legislation has seen a number of container terminals - especially Santos Brasil, Tecondi and Rodrimar in Santos, and Teconvi in Itajai - already take advantage of the treasury's elimination of various import taxes that can add up to 40% to the cost of the imported equipment.

These measures were designed to kickstart the troubled Brazilian economy and aid its recovery after the crash of the late 1990s.

Naturally, terminal operators were concerned that the legislation was originally due to end on 31 December 2005, but now after heavy lobbying from industry group Abratec, the deadline has been extended to the end of December 2007.

Sergio Salamao, the president of Abratec, stated that "this is absolutely fantastic news for all our members and for the country as a whole, as an increase in productivity at the port terminals will speed up freight movements and help reduce congestion."

The high cost of fighting congestion

New research commissioned by transport and logistics company Neptune Orient Lines (NOL), has highlighted the huge costs involved in increasing port capacity to ease congestion at northern Europe's terminals.

According to the research - compiled for NOL by Drewry Shipping Consultants - the "planning process alone to develop 12 northern European terminals has cost an estimated €540M (US\$6.55), while delays and cancellations have meant a planned extra 11M TEUs of capacity due to be available this year has not been built."

Speaking at the TOC Europe Conference in

Antwerp mid-June, David Appleton, NOL's president for Europe blamed bad planning for these costs in time and money. "Many of the costs of congestion would have been eliminated if we had a more efficient planning process," he stated.

To turn this situation around, Appleton believes that it is vital to involve all stakeholders in planning and expansion programmes. Encouragingly, he asserts that the port community can not be expected to carry the burden of development alone.

Drewry's full report is at www.nol.com.sg/newsroom

Building up a rivalry at PTP

The second phase of expansion is progressing well at the Malaysian Port of Tanjung Pelepas (PTP), which has led the port's CEO to claim that PTP is a viable rival for neighbouring powerhouse Singapore.

Selling itself as Southeast Asia's fastest growing port, the two new berths being constructed at PTP under Phase II of its development programme will enable the port to handle a total of 6M TEU per year. And figures such as these may indeed tempt operators away, or at least challenge Singapore's outright local dominance.

The first four rows of container yard blocks 10, 11 and 12 were completed to schedule in mid-June and the first batch of 15 rubber-tyred gantry cranes ordered from Impsa Port Systems arrived in PTP in May 2004.

According to a statement from the port, "all rows of the three new yard blocks are expected to be completed in August, boosting yard capacity by 40% to 154,000 TEU at any one time."

All of this means that PTP is gearing itself up as a real container transshipment rival for Singapore and indeed it does actually boast a slight pricing edge with lower handling costs.

However, this isn't PTP's killer punch. Singapore traditionally trades its value, amongst other things, lies in the incredible efficiency that it manages to achieve and the port management on which its reputation rests.

As such, PTP chief executive Mohd Sidik Osman stresses that his port also banks on efficiency as its main strength, rather than relying on his port's subtle pricing edge.

"The shipping boom has resulted in lines not looking at quick cost gains," he insists, "but analysing how ports can cater for their growth." On current form, PTP's expansion places the port in good stead to capitalise on this.

Construction began on the Phase II development programme in 2003, with land reclamation operations initiated for an additional eight berths, offering a water frontage of nearly 3km. Phase I of the expansion plan included six new berths for vessels up to 110,000dwt.

Taking keen note of which way the ship-building industry is going, the Phase II berths will be capable of accommodating ships more than double the size, at up to 250,000dwt.

South Korea expands port authorities

The Republic of Korea's Ministry of Maritime Affairs and Fisheries (MOMAF) is to extend its Port Authority system by September.

The ministry will attempt to do this by analyzing 26 main trading ports currently managed by the central government. This will focus on cargo throughput, earnings and the overall size of the facility.

MOMAF will then gradually transfer important ports to their own port authority, while management of the others will be transferred to local governments.

The obvious exceptions to this process are the major ports of Busan and Incheon, which already come under the aegis of a separate port authority.



**For more
information
on attending or
exhibiting, please
contact
George DeBakey or
Barbara Lecker
at 301-493-5500**

ORGANIZED BY:

**E. J. KRAUSE &
ASSOCIATES, INC.**

MARITIME SECURITY EXPO 2005

4th Annual Expo & Conference

Maritime Security – Maintaining the Flow of Secure Commerce
(Partnership - Security - Resilience)

SEPTEMBER 20-21, 2005

JACOB JAVITS CONVENTION CENTER, NEW YORK

CORPORATE EVENT SPONSOR:
Booz Allen Hamilton

CORPORATE SPONSORS:
BearingPoint
CACI
Unisys
IBM
Honeywell
Hewlett-Packard

3000 Attendees

200 Exhibiting Companies

37 Countries

www.maritimesecurityexpo.com

Port updates

Copenhagen, Denmark

Japanese motor giant Honda has signed a deal with the Øresund logistics hub at Copenhagen's Malmö Port to become its main car distribution centre for the Baltic and Nordic countries. The contract will bring around 40,000 new cars into Malmö for Honda Nordic each year as from 1 October. Manufactured in the UK and Japan, the cars will be transported to Malmö by feeder ships from Honda's existing European distribution hub in Ghent.

Georgia, USA

Georgia Ports Authority (GPA) picked up a prestigious award for its website from the Business Marketing Association, which has awarded the Authority its Pro-Comm Award of Excellence. The GPA fought off nearly 900 entrants in 41 categories vying for the accolade. You can visit their award-winning site at www.gaports.com

Vancouver, Canada

Commissioners at the Port of Vancouver voted in late May to instigate an Industrial Development District tax levy to help fund the port's 600 acre Columbia Gateway from 2007. The tax will be assessed on 2006 property values in the Port district and the port estimates it will generate about US\$60.1M over a six-year period. Total funding for the gateway project is estimated at US\$230M. It is expected that this will come from a wide-ranging combination of operating revenues, borrowed funds, interest income, and grants.

Coega, South Africa

Good news all round for South Africa's newest port, when it announced its first tenant in late May, stating that the Belgian textile manufacturer Sander International will erect a factory on the site. Beyond this, the newly finished Ngqura harbour is due to accept its first commercial ship in just a few months. The harbour has been the subject of much speculation around the industry as it has cost over R3Bn (US\$445M) so far and there have been few takers for the deepwater port.



Coal offloading has helped feed Dunkirk's recent growth

Dunkirk's new traffic record

May was a very good month for the Port of Dunkirk, with its monthly traffic setting a new record for the port at 5.13M tonnes.

In particular, coal had an outstanding month, with more than 1.3M tonnes handled, enabling the port to catch up on the lag that had been building up since the start of the year. In total, the coal traffic for the first five months of 2005 now stands at a healthy 3.8M tonnes.

With a far lower total tonnage, but an incredible growth in traffic terms, grain is another success story at the port, with 555,000

tonnes. Though this doesn't sound an immense amount, it is an astonishing 79% increased on traffic compared with the same time last year.

Petroleum products are also on the up at Dunkirk, with a 33% increase to 5.89M tonnes.

This all helped achieve the port's new record, which was only the second time that the port had surpassed the 5M tonne mark in its history, the other being in June 2003.

Provisional total traffic figures for the first five months of the year stand at 22.6M tonnes, an overall growth of 5.8%.

Australian infrastructure ok

Contrary to concerns raised in the media and shipping industry, an Australian prime ministerial task force report on infrastructure has found that there is no major crisis in the country's export infrastructure.

However the 80-page report has recommended a major overhaul of the nation's infrastructure regulators, saying there needs to be a quicker resolution process to disputes between operators and users.

According to the Australian Financial Review (AFR) – a deregulatory plan which was due to be discussed at the Council of Australian Governments meeting in June – proposes that most decisions about pricing and access at ports should be decided by commercial negotiations between port owners and users.

The AFR article said that a proposal had, however, been made to give the federal government new powers to intervene as a regulator of last resort if commercial negotiations and state procedures fail to quickly resolve any rising disputes.

The article added that the plan would only apply to Australia's export infrastructure, such as ports and dedicated rail links to ports.

EC backs down on Port Services

The European Commission (EC) has signalled its willingness to compromise over its controversial proposed Port Services Directive.

The indications followed a barrage of industry criticism on 15 June during a European Parliamentary hearing. Industry groups joined politicians at the Parliament's Transport Committee hearing in Brussels, calling for several notable amendments to be made to the existing draft.

Accordingly, the force of the opposition has ensured that is now likely that the contentious paragraphs on self-handling and pilotage will be removed.

"Now that organisation such as [the European Sea Ports Organisation] and [European Community Shipowners Association] have indicated that they see little purpose in keeping self-handling in the directive, I will consider excluding it to avoid unnecessary unrest," said Rapporteur Georg Jarzembowski in his conclusions.

Representing the EC, the Director-General of the Transport directorate, Francois Lamoureux, refused to accept that the commission had taken a dogmatic approach by reintroducing the directive after the public failure of the first attempt in 2003.

Lamoureux did, however accept that the level of opposition within the Parliament would be taken into account, though he stopped short of promising to totally cave in. "The commission is not a masochist," he said. "We have taken a slap already and it hurt. The commission will however only draw political conclusions after the vote in first reading."

The Transport Committee's next report is scheduled to be ready by August.

Sea-Sentinel™

Ports, security and risk information

Sea-Sentinel™ is an Internet-based product, which brings together the resources of Lloyd's Register - Fairplay and Jane's Information Group to give you market leading intelligence on ports, security and risk information.

- Assists compliance with the ISPS Code
- Provides up-to-the-minute news and email alerts service
- Cost-effective resource

Sea-Sentinel™ is the only system available that combines maritime security-related news with a comprehensive guide to ports and terminals. It provides a one-stop shop of information relating to your ships safe passage and arrival in port.



**FREE one-week trial
available at www.sea-sentinel.com**

Lloyd's Register
Fairplay

Jane's
www.janes.com

For further information contact: Lloyd's Register - Fairplay Ltd
Lombard House, 3 Princess Way, Redhill, Surrey, RH1 1UP, United Kingdom
Tel: +44 1737 379700 Fax: +44 1737 379001 Email: sales@lrfairplay.com
Web: www.lrfairplay.com

SS/H5/2005



A fast Canadian Coast Guard security patrol pulls a diver out of the water. Small Canadian ports lack these kind of resources

Canada tries to shoulder its security responsibilities

John Hill documents Canada's attempts to shore up its ports up against security threats and warns that Canada's small ports are vulnerable to attack

Commodore Roger Girouard, commander of Canada's Pacific Fleet, told a recent maritime security conference in Victoria that "the Global War on Terrorism transformed the environment for shipping and security." Due to its position bordering the USA, Canada is positioned in the forefront of this changed environment.

On 22 April 2005, the Canadian government announced details of a C\$300M, five-year package of initiatives designed to enhance the security of Canada's marine transportation system and maritime borders. The measures include expanding the operations and response capabilities of the Canada Border Services Agency with new radiation detection equipment to screen marine containers entering Canadian ports. This enables Transport Canada to apply and enforce the Marine Transportation Security Regulations (MTSR) established in 2004, as well as a range of initiatives focusing on the security of the Great Lakes-St. Lawrence Seaway.

The driver for these developments – especially the initial emphasis on the inland waters of the Great Lakes – is the security relationship with its neighbour, as Canada has no wish to be seen as the soft underbelly of US homeland security. Gary Sidock, Director of Maritime Security for the Canadian Coast Guard said at the Victoria conference, that the only thing worse for Canada than a terrorist atrocity in Canada is a terrorist atrocity in the United States for which the terrorists arrived via Canada. Border continuity is therefore seen as the key issue, although the new measures will also be expanded to the coasts.

Any interruption to the world's biggest bilateral trade relationship – worth US\$441Bn between Canada and the USA annually – would obviously be very serious on both sides of the border, but catastrophic for Canada.

The West-Coast's Asian trade is also huge and growing. Furthermore, Canada is in the process of expanding facilities to create a second continental gateway port in British Columbia at Prince Rupert, so security implementation will be key here too.

This new spending comes in addition to C\$308M that was announced for the National Security Policy's six-point plan for marine security in April 2004 as well as the C\$115-million Marine Security Contribution Program announced that May.

Additionally, Transport Canada announced almost C\$24M in funding for 69 ports and marine facilities across the country to ensure compliance with the IMO's International Ship and Port Facility Security (ISPS) code.

This means that in total since 11 September 2001, Ottawa has put more than C\$930M towards new marine security initiatives.

Informed concerns

Nevertheless, there have been concerns with the efficacy of Canada's measures and according to a report prepared for the Canadian Maritime Workers Council (CMWC) by Ipsos-Reid Corporation, Ottawa's security program has left Canada's smaller secondary ports still vulnerable to terrorist and criminal acts.

The report, based on the views of 60 senior-level

personnel involved in the security of Canada's small ports, states that "the security of Canada's seaports remains one of the most pressing North American concerns following the events of 9/11."

It added that "the Government of Canada's approach has been to focus security resources on the major ports of Vancouver, Montreal and Halifax." However, the report points out that Canada has more than 250 ports, "many of which handle strategic cargo such as offshore oil and gas, and serve sensitive nuclear facilities."

As always the security chain is only as strong as its weakest link and two thirds of those surveyed felt that "the federal government focuses too much on major ports, leaving small ports vulnerable."

Specifically, the respondents were not confident that their port security community could prevent terrorists or drugs from passing through their ports, with 68% even lacking confidence that they could control waterside access to vessels at their facilities.

Accordingly, along with establishing an effective container-screening programme, improving waterside security was one of the key measures the respondents would choose to improve their port's security.

Gap in the wire

The report sketches out a general belief that overall security has been improved at Canada's ports since 2001, but 80% of the survey respondents say that their community doesn't have the necessary resources to meet the new, tighter port security standards, and most believe that small port communities' police departments are inadequately funded and lack the watercraft necessary to secure their facilities.

Vanessa Vermette, spokesperson for Transport Canada, told *P&H* that before implementing the ISPS code through the MTSR, they carried out risk assessments for over 400 facilities – including smaller ports – and "allocate resources strategically on the basis of that assessment, to put in a level of security that is appropriate to the level of risk."

Andrew Pitcher, harbour master at Nanaimo Port Authority on Vancouver Island, one of the smaller ports surveyed in the report, told *P&H* "all of our deep

sea terminals are ISPS compliant, and to date we have had no problems."

Under the Marine Security Contribution Programme, Nanaimo has been awarded C\$202,000 for improvements to perimeter security and access control measures, as well as command, control and communications equipment.

Waterside challenges

Pitcher nevertheless admits that the weak point of security at the port is on the water. "We can secure our perimeter fencing, but water side access is always going to be a problem" he stated. Nanaimo actually has a single patrol boat, but this is not manned by security personnel.

This waterside security is a problem also shared by bigger ports such as Vancouver, where there is a 24-hour security patrol boat. However, this boat has to cover hundreds of berths over many miles of waterfront.

Vermette described this as "a challenge we have identified and we are working with various security organizations and the Royal Canadian Mounted Police to determine how best to approach this issue."

One particular aspect of Canada's developing maritime security system has produced a backlash from dockworkers.

Gerald Murphy, a spokesman for the CMWC, which commissioned the report, said "Ottawa is close to establishing new marine security regulations that require port workers in designated jobs to submit to invasive and open ended background checks... At a cost of more than C\$20M, Ottawa's proposals are an expensive invasion of port workers privacy that will divert precious resources away from policing, other effective security measures and alienate people who have been on the frontline of port security for years."

However, in response Transport Canada believes that the fears are unfounded. Vermette concluded that the proposed ID scheme is just one piece of the overall security programme and "is no different to the one we have on the aviation side, where we have been doing this for 20 years."

John Hill is an independent security analyst based in Vancouver PH

A ferry passes the small Canadian port of Nanaimo, one of the ports that analysts fear suffers security underfunding





Tracking the changes

Sam Ignarski weighs up the benefits of monitoring container traffic and securing their contents

The shipping, transport and cargo handling worlds have long been prime users of information technology, but today there is a huge proliferation going on in the range of technology and devices available to them.

Some of these have been very well conceived and are bound to change our world, but others are quite beside the point and seemingly unmindful of international trade realities.

For example, new ships tend to have GPS systems. It costs the salary of a radio officer to install a satellite station on a ship - a no brainer for the cost analysts of the industry. But the use of radio frequency identification (RFID) is certainly gaining ground in logistics and

transport planning, and Optical Character Recognition (OCR) is being used quite cleverly in terminals to speed up the processing of containers in and out.

In addition there is a process of bundling and mixing going on which reflects the creativity of the digital age. Old staggers such as VHF radio are being bundled together with wireless networking (WIFI) and other digital information flow technology to make the technical monitoring of containers ever easier.

Beyond this, the tremendous consolidation of the container world (for example the recent moves announced by Maersk in respect of P&O Nedlloyd) which each year also comprises bigger and bigger fractions of the value of all world trade, makes the introduction of new technologies more likely in the near future.

Just recently Hutchison Port Holdings, which controls a large fraction of all container terminal movements has recently announced its participation in a joint venture with Savi Technology to set up an RFID network around the world which follows the principles of a mobile telephone network.

This has had an interesting effect on others and in April 2005, the Port of Busan also announced that it plans something similar for itself. What can we make of this? One obvious question arises - what is the point in putting chips in containers in South Korea or anywhere

Securing containers has long been a concern for the world's port and terminal operators

else, unless you have a chip inside every container in the world? Containers do not move in a closed loop.

There have been plenty of discussions about putting a chip in every container for some time now. A company called Amtech offered a chip which would have cost \$10 and an ISO standard has even been developed. However, \$10 a container is still too much for shipping lines to pay for no immediate obvious benefit. On the other hand radio chips should cost a matter of cents.

A cynic might say that everybody has been waiting to see what happened with the world of RFID tags and computers, before taking the plunge themselves. As soon as Hutchison was seen to be putting tags in containers – as the biggest terminal company in the world – the less innovative remainder of the industry concluded that the time has come to follow suit.

Questioning technology

With the onward march of digital technology such a feature of our times, perhaps there is room for a sceptical word or two. For the facts of international shipping, its laws and customs and its settled patterns of dealing are not especially susceptible to hosting 'silver bullet' improvements delivered by the hand of new technology.

It is always sensible to pause to remember that few carriers or ports either stuff or seal containers and that carriers do not even often have physical custody of their containers. They are out and about in the world for 70% of their lives and so the business of carriers is very dependent on knowing who has their containers and where they are.

This has obviously been very important since the dawn of containerization. Technology sometimes helps, but satellite tracking is of dubious value and RFID will always appeal to merchants and logistics planners more than to carriage interests.

International trade is in fact a bundle of separate interests who do not intercommunicate. An international trade transaction will sometimes involve hundreds of counterparts from factory to customers, via the carriers and cargo handlers, and of course the industry's good friends in customs and banking. As a result, interchange and interchange processes have been a settled preoccupation of container operators since the beginning. But the fact is that the moment of damage, or loss, or breach of security in a containerized movement is often shrouded in mystery. Bills of lading allow for this by specifying what happens when it is unclear where the damage occurred. The buck usually stops with the contractual carrier.

Sealing the deal

Container seals have long been a settled fact of life in the history of containerization. Electronic seals bring a new feature to the party but the limitations of seals of any nature still remain. They are often removed in a thoroughly lawful way by those entitled to inspect a container and they are not as tamper proof as some might think.

RFID seals seem to offer a higher standard of security,

but ensuring interoperability everywhere from the factory towns of Asia to the shopping malls of the rest of the world is problematic. There are also real limitations flowing from the absence of a single available frequency and the proliferation of so many proprietary standards when it comes to readers and so forth. Smart Containers, sealed or unsealed, remain somewhat of a distant appeal. The simple cheap utilitarian steel box used by all manner of people in all manner of places bridges an extraordinary amount of difference between the global line haul operator and the niche mover of specialist cargo.

Security to the forefront

The suddenly much greater preoccupation of the world with security has indelibly left its mark on the ports and terminals sector. There is in these new realities often an assumption that somehow technology will bring about a new level of security to the work of cargo handling and make the wharves, docks and warehouses of the world safer.

In certain respects, the role of RFID tags or Closed Circuit Television has a proven role in day-to-day

“ Carriers are dependant on knowing who has their containers and where they are ”

operations. Indeed there has been a global acceptance of the technology in department stores across the world, whose owners need no convincing of the merits of tags and video cameras as deterrents to the plague of shoplifting.

But on the whole, the reservations of the sceptic are not out of order here. To reequip the world's fleet of containers and all of its infrastructure with new technology would certainly be a major challenge.

In all security agendas, those considering the adoption of new measures should always go through the risk implications and the trade off equations involved. I can wall off my port or terminal and bar entry to all but the most essential workers. This will probably assist security, but the costs associated with the measure would be highly detrimental to their operating performance.

In terms of trade-off, the price of the extra security gained is outweighed by the effects of the measures on the operation itself.

This kind of calculation is necessarily the daily lot of safety officers, insurers, and planners. The surprising thing is how rarely these kinds of decisions rest on genuine knife edges. **PH**

Sam Ignarski is the editor of the renowned Bow Wave marine and transport risk e-zine. He has worked for many years in the world of the mutual Clubs.



Growing pains at Maasvlakte 2

Rotterdam presses for movement on its ambitious expansion plans to support its monumental growth

Already the world's second largest port, Rotterdam is continuing to grow. Last year throughput grew by 7% overall, while the container sector actually hit 16% and this year's forecasts predict even greater growth. Figures for the first quarter of this year show an 18% growth over the same period last year.

As well as cause for celebration, this growth also brings obvious capacity challenges and much is being invested in the port to cope with them. A number of companies are taking on extra staff and many millions of Euros are being spent on materials and terminals, leading a spokesman from the port to assert that "Europe's largest port will certainly be keeping its transshipment capacity up to the mark."

In line with this, a Euromax terminal for container trans-shipment will come on line at Maasvlakte by the end of 2007, which the port believes will provide sufficient capacity over the medium term. However,

beyond this Rotterdam has long-range plans to build a huge expansion to the port on reclaimed land, in a project known as Maasvlakte 2 (MV2). This will link in directly with the current port and industrial zone, but is also part of a wider project to enhance the main port and improve the social climate of the entire area.

Spending and speedbumps

The government's commitment to 'strengthen the main ports (Schiphol airport as well as Rotterdam) is regarded as a crucial component of the Dutch national government's policy for good reason. Directly and indirectly, the Rotterdam port provides considerable added value and thus employment.

The Rotterdam Port Authority (RPA) will be responsible for all of the costs and risks concerning the project, which are currently estimated at around €2.9Bn.

Because the Dutch government wants involvement

in port developments, a significant share in the RPA will be taken up from 2006. The Dutch government will also be contributing €726M to the project to cover public infrastructure expenses.

The ambitious plan for MV2 should certainly add a huge capacity increase to Rotterdam. Ronald Paul, director of the expansion programme, told *P&H* that "with 1,000 hectares, or almost four square miles, of company sites awaiting fresh allocation and a 20 meter deep port situated directly on the world's busiest shipping lane, Rotterdam can offer new space for future development well into the 21st century."

There are a number of factors driving this growth, but Paul emphasizes global trade developments and the explosion in the Chinese economy.

"The Netherlands needs to prepare for this," he stated. "If we keep delaying, we will soon be too late. Then cargoes will bypass Rotterdam and it won't be easy to get them back. So we need to get going now, offering clarity to potential clients."

However, Rotterdam has been slightly stymied in its rapid expansion plans by the Dutch government's request in January that material policy decisions of the Core Planning Decision Plus (PKB+) be modified and rectified, which has resulted in a tacitly acknowledged delay to the programme of at least 18 months.

According to an official statement from the Port of Rotterdam at the time, "material policy decisions are components of planning decisions that have to be observed in the further decision-making by lower public authorities, such as in the adoption of zoning plans. Although the PKB+ itself is not affected by setting aside the material policy decisions, and continues to represent the applicable government policy, the realization of the various project components has thereby become less certain."

Planning and preparation

MV2 will be managed overall by the Rotterdam Port Authority, which will contract out all of the activities covering the construction, setup and preparation for the land reclamation. According to the port, it will operate on the basis of 'best practice' and international standards in risk and project administration.

Preparations for Maasvlakte 2 are already in full

“If we keep delaying, we will soon be too late. Then cargoes will start to bypass Rotterdam”

swing and the procedure for attracting interested clients to Maasvlakte 2 began in May and should lead to a signed contract with the first clients in 2007.

Paul believes that it is this customer demand that will drive the development. "We are not going to invest in sites which are going to stand empty for years," he said. "Client demand will determine our construction tempo."

The Dutch Minister of Transport will be presenting the plans to the Dutch parliament at the end of August, which will complete the legal procedures covering spatial planning and the environment over the next 18 months.

The port states that the tendering trajectory will follow a 'design and construct' approach and a single contractor will take responsibility for the overall design of the site and for carrying out the land reclamation.

By the cut-off date of mid-June, fifteen companies had applied for tenders. Declining to name these companies, the port asserted that they are "all of the major international container terminal operators and container shipping lines" and the port is now in official talks with them.

The land reclamation will be achieved by the laying of both hard and soft seawalls into the North Sea and the foundations will then be raised within this.

Operations will begin immediately on completion of all of the tendering procedures. "I expect this to be in the spring of 2008," Paul stated "and then four years later the first companies can open for business on Maasvlakte 2."

He is adamant that the project will run like clockwork. "Throughput in the port is growing steadily and the extra space Maasvlakte 2 will offer, will be available on time. Count on it."

For more information visit the port's dedicated website at www.maasvlakte2.com PH

Artist's impression of the greatly expanded Maasvlakte 2 built on reclaimed land

WATER WITCH work boats



Waste Barges

Debris removal



Litter collection

Pollution Control & Waterway Maintenance

Builders of multi-purpose environmental vessels for Ports & Harbours world wide

-  Debris Collection
-  Harbour Clean-up
-  Weed Harvesting
-  Oil Spill Response
-  Dredging
-  Transfer Barges

2-6 Lightbody Street,
Liverpool L5 9UZ, UK

e-mail: info@waterwitch.com web: www.waterwitch.com

Tel: +44 (0)151 207 4874
Fax: +44 (0)151 298 1366



Authorities like Barcelona manage a range of industries around the wider port cluster to the benefit of all

Port authorities must take the lead

Dr Peter de Langen argues that port authorities should take control of their port clusters of related industries to increase their competitiveness and economic impact

Most port authorities (PAs) currently position themselves as landlords, providing the land and basic infrastructure to the private sector and leaving all of the other port handling activities to private firms.

Strictly speaking, textbook landlord ports are not involved in terminal operations and do not invest in the wider port suprastructure such as cranes and warehouses. However, though many PAs adhere to the basic landlord principle, in practice they not only provide land and basic infrastructure, they also make and facilitate investments and this brings positive effects for the 'port cluster' as a whole.

Port clusters consist of all of the firms related to the arrival of ships and cargo in seaports and located in the port region. For the purposes of this article, firms included in the port cluster include terminal operators, inland transport firms, warehousing firms, port industries and service providers such as maritime lawyers.

The 'cluster manager' role of the PA can be

justified with the argument that port authorities solve a 'collective action problem' as the overarching organisation responsible for the smooth running of the port.

While the various private firms in the port cluster may benefit from joint investment, such investments rarely materialise because of problems concerning 'free-riders' on the investments. By contrast, the PA can generate resources from port dues and land rents to make such investments.

In ports where this is the case, land rents and port dues may be relatively high, but the quality of port information systems, port marketing, training and education facilities, and innovation programs are all relatively good.

There are a few excellent cases that show where port authorities who do invest in ports to the benefit of the cluster as a whole. For example, the port authorities in Rotterdam and Barcelona, invested in 'port community systems'. Rotterdam also joined New York in investing in port representatives in other countries, while

the ports of Barcelona and Hamburg have both invested in inland terminals. In personnel terms, the ports of New Orleans and Le Havre invest in training and education programs for the employees of whole cluster.

In large and diverse ports, this is far more efficient than the apparent benefits of low port dues, which inevitably mean that a passive PA does not make these investments. This leads to persistent collective action problems such as congestion at inland gates due to peak arrivals, excessive costs for exchange of information, high labour costs due to labour scarcity, and ineffective or non-existent port marketing.

Money management

PAs need to develop two capabilities to act as the cluster manager: firstly, the capability to make the right investment decisions and second, the capability to carry out investment projects efficiently. Both capabilities require the involvement of the private firms in the port.

Without their support, it is virtually impossible to find out what is good for the port as a whole and to make sure projects are managed efficiently. Thus, effective cluster management requires PAs that can develop partnerships and share responsibilities with the private sector.

But before getting carried away and spending cash all over the place, PAs should look to meet a couple of key conditions. Firstly, the investment should have positive external effects for the whole cluster – in other words it contributes to the competitiveness of various firms in the port cluster.

Secondly, overall benefits – for the PA itself as well as the firms in the port cluster – must exceed the overall costs of the investment itself.

When private firms are not willing to contribute to investments, the PA should invest and recover these investments as much as possible through direct charges for services such as waste collection.

Where this isn't possible, the PA can use revenues from port dues and land rents to make the investments, as is the case for dredging. When private firms are willing to contribute to investments, investments should be organized in public-private partnerships (PPP). Such a PPP can either charge firms for the services it provides (for instance a hinterland terminal) or make investments without specific charges (such as port marketing).

Given the benefits of a PA that acts as cluster manager, both for the port cluster and for the economy as a whole, the institutional setting of a PA must be designed to enable the PA to effectively act as such.

This has implications for two important institutional characteristics of port authorities: the ownership structure of a PA (public or private) and the geographical scope (centralised or decentralised PA).

Public vs private

Most traditional arguments for public port authorities are not entirely convincing. The threat of private PAs assuming monopoly power, both of terminal operators and a private landlord, can be prevented by regulation relatively easily.

The argument that a part of the port infrastructure is to act as a public good also fails to convince – providing subsidies to private firms is a widely accepted policy option for supplying public goods.

Similarly the argument that there is a need for public planning, fails to hold water as there is no reason to assume that the planning capabilities of private firms are inferior to those of public organizations.

Safety clearly leads to public involvement in the port, but a specific safety regulator may be

a better means to secure safety than a public port authority.

In fact, the cluster manager perspective provides a more convincing argument against private port authorities in most ports. Private PAs are actually less inclined to make investments with benefits for the whole cluster, since these investments improve the performance of other firms in the port cluster, rather than the financial performance of the PA.

This argument suggests that private PAs are only appropriate when there is no need to make investments with cluster-wide benefits. In reality, this is only the case in single-user ports or ports with a small number of users. In all other cases, public ownership is better, from a welfare-economic point of view as well as for firms in the port cluster.

In the UK for example, this argument can be used to explain why the port of London is governed by a public authority, while Felixstowe is a private port. A 'licence to operate' is an example of a collective action problem for the port of London that is not solved spontaneously by the private firms, and is taken up by the public authority. By contrast, Felixstowe is essentially a single user facility where the issue of 'collective action' is irrelevant.

National vs regional and municipal

The goal of enabling a PA to act as cluster manager also influences the 'optimal amount of geographic centralization of PAs': a single port cluster should be administered by one PA.

Too much centralization (for instance a national PA that sets tariffs, collects revenues and decides about investments) is not effective for three reasons. First off, the various different branches that administer one specific port have limited incentives to operate efficiently, since all revenues are collected centrally. This leads to high monitoring costs.

Secondly, the level of investment and level of port charges cannot be determined at the local level. This means that the level of port charges cannot be optimized, with adverse welfare-economic effects.

Thirdly, the threat of politically motivated investment decisions increases. Local port communities (including the local branch of a national PA) will lobby for all investments in their port, because these investments are financed nationally and not recovered through port-specific charges. This makes it virtually impossible for a national PA to make an objective assessment of costs and benefits of investment projects.

On the flip side, too much decentralisation is also ineffective, for two main reasons. If a PA's jurisdiction is too small, it will prevent investments in new port facilities outside its jurisdiction, even if outside locations are

superior. This may be because of the ongoing spatial transformation that requires investment in new port facilities at new locations.

Secondly, a PA with a small jurisdiction prevents the creation of economies of scale through duplication, as different PAs will invest in similar facilities, such as container terminals, tracking systems, hinterland infrastructure, and a port community ICT system.

Thus, the appropriate geographical scope is one PA for one port cluster. In this case, firms in the cluster also have clear incentives to improve the performance of the PA, which may lead to greater cooperation between PAs as ports become more inter-related over time. This has already been the case in Rotterdam, the Lower Mississippi and Malmö, Copenhagen.

The best situation would therefore be a public PA that administers one port cluster, cooperates as much as possible with the private sector to identify investments with benefits for the whole port cluster and makes sure investments are carried out effectively, if possible in a public private partnership. This public authority would then also recover the investment costs – directly or indirectly – from the firms in the port cluster.

A PA with these capabilities will rapidly create a competitive advantage for the port.

Dr Peter de Langen is based in the Department of Port, Transport and Regional Economics at the Erasmus University in Rotterdam. He can be contacted at delangen@few.eur.nl PH





You must **expand!**

"Ports are barely managing to handle today's demand – they won't be able to handle tomorrow's growth unless something is done *now!*"



That was the blunt message from CEO of AP Møller-Maersk, Tommy Thomsen, to the IAPH's 24th World Ports Conference in his keynote speech in Shanghai on 23 May. This was a fitting start given the theme of Opportunities and Challenges Facing the World's Ports.

Addressing around 1,200 delegates and guests, including China's communications minister Zhang Chunxian, at the Shanghai Convention Centre he told them that "you must expand or you will be the bottleneck."

Thomsen pointed to full order books at shipyards around the world. "Bigger and bigger ships are coming and that's going to place more and more strain on ports. Think of it, a 10,000 TEU vessel will be tied up for two days as 5,000 boxes are unloaded, then replaced. And that's at 250 moves per hour, more than double that of today."

Efficiency, he continued, went hand-in-hand with expansion and with hinterland development, especially intermodal transport links. He singled out the need for investment in railways and criticised the US rail network for "falling behind in the past few years."

Over the next five years, he felt Chinese ports would be able to handle the new breed of mega boxships "But what about Europe and the USA? Do you want to take the responsibility for slowing world trade? How can China double its trade over the next five years unless ports expand to meet it?"

"What's needed are larger and more efficient ports and terminals and the time to upgrade is now," he said, setting the port community five challenges. These are:

- Introduce new technology "to make the most of what we have"
- Reduce dwell time by logistic improvements, streamlining software and improving port efficiency
- Off-dock improvements, especially transport
- Increase densities in yards with higher, wider stacking – "and cut the number of empties"
- Greenfield port development while respecting the environment, plus the expansion of existing ports.

"Not easy tasks," he concluded, "but I'm confident we can achieve them if we work together."

Earlier, he spoke briefly about his excitement at the impending P&O Nedlloyd takeover and felt the bigger platform would be to customers' benefit – "We hope to complete the transaction this summer," he said.

Guest speakers

The 24th Conference was the highlight of the IAPH's 50th anniversary celebrations and was organised through the Tokyo-based secretariat by Shanghai International Port Group. Opened by SIPG president Lu Haifu and then-IAPH president and Port of Rotterdam deputy CEO Pieter Struijs, its importance was underlined by speeches from Shanghai's mayor, Han Zheng, and communications minister Zhang.

Both stressed that China's policy of 'opening up' along with reform, would continue with Shanghai – now the world's third largest port – playing a pivotal role in this.

Predicting that the port would handle 400M tons of cargo and 17M TEU during 2005, Mayor Han commented "Shanghai's not only a gateway to the world, but the central government's aim is to turn it into an international metropolis."

"As China becomes a relatively well-off society, there are many new challenges facing us. How to live up to them? Well, firstly we must harness our ability for innovation and new technology, increase the competitiveness of our industries and aim for healthy, sustainable growth."

"Ports are a major part of that plan. We must develop a number of hubs and networks – and learn from the other ports around the world that have benefited from IAPH membership," he concluded.

Minister Zhang took up the theme. "The Chinese government attaches great importance to port development and has a national strategy for the coastal ports of the Yangtze River, Pearl River Delta and Bohai Bay regions," he said. "We encourage investment in port construction and will be putting in place various policies – such as tax exemptions and allocation of land – to attract joint ventures and foreign investment."

Port reform through a comprehensive regulatory plan is also on the agenda, he continued, adding that China put port security high on the list. "We support any measures to prevent terrorism, including joint efforts with other countries."

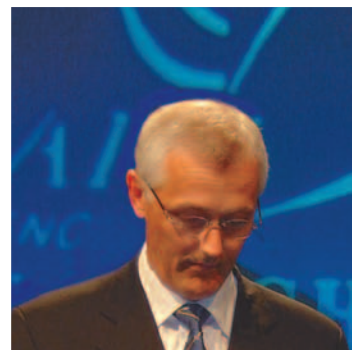
Overall, the Chinese government's aim was to create an affluent society. "We expect our GDP to quadruple by 2020," he stated. To do it, China aims to become "a global manufacturing centre, and that means larger ships and ports that will eventually become hubs."

He concluded that "sustainable development with respect for the environment is a policy goal, and we warmly welcome the participation of friends from around the world."

Conference overview

This was the first World Ports Conference IAPH has held in China. It attracted 668 delegates from 56 countries, with speeches simultaneously translated into English, Chinese and Japanese.

A highlight was the



Shanghai's
landmark Oriental
Pearl tower (left)

Keynote speaker
Tommy Thomsen
holds forth (right)



China's communications minister Zhang Chunxian welcomes delegates (above left)

Host Lu Haihu opens the conference (above right)



Wednesday afternoon visit to Shanghai's new Yangshan deepwater port. On the way, IAPH delegates became among the first to cross the new 32.5km Donghai Bridge from the mainland over the East China Sea to the Yangshan Island group that forms the backbone of this US\$12Bn project.

Apart from IAPH technical and executive committee meetings, there were two plenary sessions and six working sessions, the latter featuring 36 papers from speakers at the top of their profession.

Each working session focussed on a major theme with the first, under the chairmanship of Lu Haifu, on the Impacts of Economic Globalization on the Development of the Port & Shipping Industry. IAPH port planning & construction committee chairman Susumu

Naruse got the conference underway with an overview, supported by World Bank port specialist Bert Kruk on the role of public sector port management. China State Development and Reform Commission researcher Luo Ping joined them. She contrasted China's economic development and port requirements, stating that "by 2020, China will enter a golden age for ports."

Three further speakers concluded the session, China Merchants Group president Dr Fu Yuning reviewed the global market for container shipping and highlighted three major imbalances:

- fleet capacity lags behind demand
- port handling capacity lags behind fleet capacity
- port capacity in Europe and the USA lags behind China.

Cosco Group's president & CEO, Capt Wei Jiafu, continued the theme. "Of the top 20 liners, 13 are Asian," he said, "with 70% of the world's TEU capacity. The focus is shifting from west to east." He too was concerned with port capacity in the west, as was Toyota Motor Group's logistics planning general manager Takishi Kobayashi.

"With 51 production facilities in 27 countries, 99% of our exports are by ship," he said, "which means we totally rely on ports."

Port development strategy

The second session's theme on Tuesday morning was devoted to development.

Chaired by incoming IAPH president and Port of Houston Authority executive director Tom Kornegay, it kicked off with an overview from IAPH logistics

Winner's corner

The IAPH essay contest to commemorate the golden jubilee attracted a record 70 entries from 32 IAPH members in 22 countries.

And winner Nutkunasingam Veerasingam from Malaysia's Port of Penang received the Akiyama Prize from IAPH president Pieter Struijs at the World Ports Congress' first plenary session for his essay. Turn to Pg 45 of the Bulletin Board for more information on the Essay Contest.

President Struijs also presented awards to the IAPH's 2005 IT Award winners:

- Karachi Port Trust, Pakistan, won the Gold Plaque for KPT's Computerization Project
- Penang Port Commission, Malaysia, took the Silver Plaque with Penang Port Makes Its Online Data Available to Mobile Phones
- And the Port Authority of Trinidad & Tobago won the Bronze Plaque for A Booking Information and Ticketing System for an Inter-Island Ferry Service



**Top: the
impressive
Yangshan
development**

**Above left to right:
James Tsien,
Gu Gang and
president elect
Tom Kornegay**

committee chairman José Estrada, who warned that "within a few years, over 200 8,000 TEU ships will be in service – and there are 10,000 TEU ships on the order books." Proper port planning is essential to cope with them, he said.

Charles Heath agreed, the Dubai Jebel Ali Free Zone director using free zones to illustrate his theme of the development of logistics parks in ports.

"Infrastructure, integration and investment are the three 'I's for the future," he said, "with seamless ownership and management of production and transport infrastructure around the world."

Dr Peter de Langen (see Open Forum pg 20.) took that concept a stage further, looking at port authorities as 'cluster managers.' The Erasmus University academic used Rotterdam and Durban as examples of how port authorities could be a "force for investment by inter-

dependent firms." And presented a five-point model of the 'perfect cluster structure.'

Hutchison Ports MD James Tsien's review of ports' future from a global terminal operator's perspective followed the break, stating simply that "port operators must be open to reviewing and changing their systems. Even those that appear to work best."

"How big will ships get? I leave that to the naval architects, but I'm sure if you can't handle them, your neighbours will. The challenge will be managing growth, so my advice is be prepared."

Rollin Bredenberg had already taken that view to heart as vice president of BNSF Railway Company, which is buying 280 new locomotives this year and spending hundreds of millions of dollars on its key routes and infrastructure.

"Railways worldwide will be called on to grow in

much the same way as ports," he said, predicting 24/7 operations at marine terminals.

Concluding the session, Shanghai Tongsheng Investment Group president Gu Gang gave delegates a taster of the next day's technical visit to Yangshan deepwater port, its planning and construction.

The driving force behind the new port is the lack of deep water at Shanghai itself, he said. "Last year's growth to 14.5M TEU was already beyond design capacity and by 2015 we expect it to reach 20M TEU. But even though the Yangtze is being dredged to 12.5m, without Yangshan, Shanghai will lag behind its neighbours because bigger ships need deeper water."

Providing security

That afternoon's session looked at Port Security, with the newly appointed CEO of South Africa's Spoornet rail system, Siyabonga Gama, in the chair and the overview given by IAPH port safety, environment and operations committee chairman Fer van de Laar.

"The recent focus may have been on terrorism, but

ports have to cope with drugs, weapons, sabotage, arson, theft and stowaways on a day-to-day basis," he said, looking at recent initiatives.

"You need multi-disciplinary co-operation and integration," he stated, "everybody should be involved."

Gijsbert Huygen, Siemens' head of integrated port security, agreed completely. Using Rotterdam and the 'green lanes' concept to illustrate his theme of supply chain security, he felt he could convince port managers that: "Good security can not only save money, but even make money."

China's water department deputy director Peng Cuihong outlined the practical steps her department's taking to combat security threats. "We've published a book of guidelines and trained 2,212 people in port security techniques," she said, citing drills as a vital part of maintaining security awareness.

The World Customs Organisation compliance director Jouko Lempinen took up the baton after coffee, reviewing security of the international trade supply chain, worth US\$8.9trillion in 2004 according to

The Great Bridge of China

THE FINAL LINK IN THE 32.5KM DONGHAI BRIDGE, CONNECTING THE MAINLAND TO THE MASSIVE YANGSHAN DEEPWATER PORT IN HANGZHOU BAY, WAS COMPLETED JUST IN TIME FOR IAPH WORLD PORTS CONFERENCE DELEGATES TO DRIVE ACROSS IT

The official opening ceremony took place during the morning of Wednesday May 25th, just hours before the police escorted the IAPH convoy across the six-lane bridge, a trip sponsored by ProLogis, who in a joint venture with the Shanghai Lingang group have built a logistics park directly connected to Yangshan.

China's first truly cross-sea connection, and often called the 'East Sea Bridge,' construction got underway in June 2002. The bridge has three major sections:

- A 3.7km onshore section at Luchao Port connecting with the Hu-Lu expressway
- The 25.3km cross-sea section with three auxiliary plus a main navigational span, the latter featuring twin 159m high towers and a 420m crossing
- A 3.5km bridge-to-harbour connection on Yangshan itself.

The Port

Gu Gang, president of major contractor Tongsheng Investment Group, had told Congress delegates he was "confident that the target to complete the first phase of construction and to put the utilities into operation by late this year will be met." And if anyone had any doubts, the visit to Yangshan dispelled them.

The project features a 1,600m hydraulic quay, massive land reclamation and dredging of the access channels and much of it has already been completed.

The RMB100Bn (US\$12Bn) port will take the pressure off Shanghai, which is already at full stretch, but lacks the deep water vital to cope with next generation boxships. The average water depth around the Yangshan islands is a stable 15m and strong local currents mean silting is a negligible problem.

When it begins trial operations later this year, the port will be able

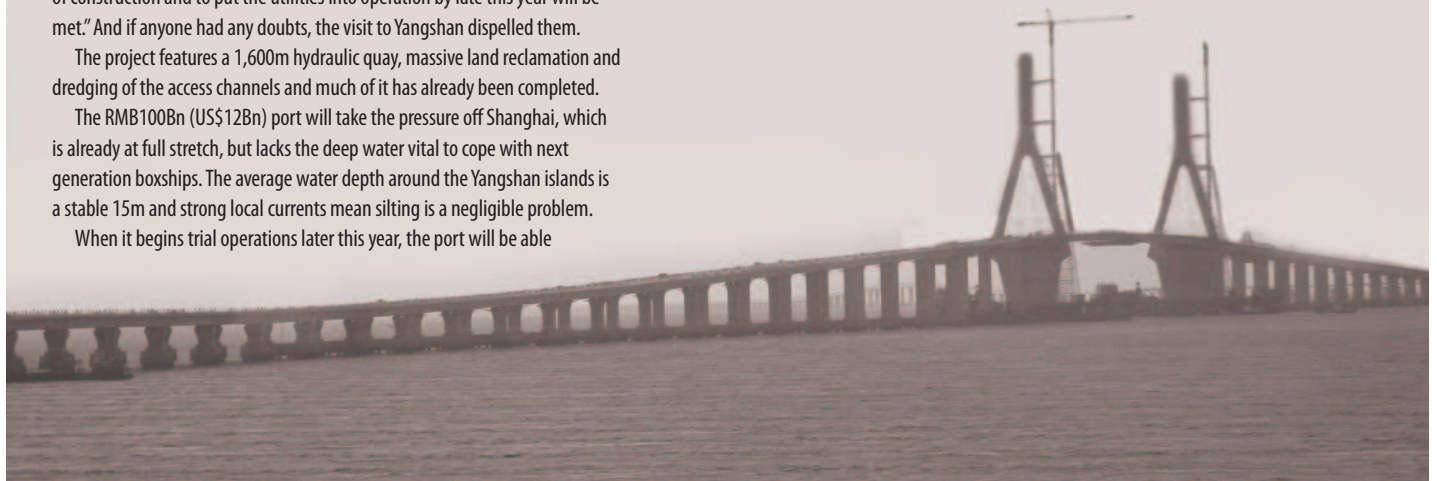
to handle 2.2M TEU, rising to 20M TEU on completion of the 52 berths in 2020. It's a vital addition to China's ports network, which is expected to handle a rise in cargo of 50% in the next five years, taking it to over 6Bn tons annually.

In conclusion

Most of the world's top port operators are interested in investing in Yangshan and during the Congress, China Shipping Terminal Development director Li Huang said his firm – Shanghai-based China Shipping's port arm – was keen to secure a sizeable stake in Phase II.

That's not surprising given the impending 2006 delivery of four 9,560 TEU ships, and China Shipping's tie-up with Modern Terminals' subsidiary, Hong Kong-based Wharf Holdings, to bid for Yangshan.

"We need the deepwater terminals," Li said, "and as a Chinese company, we believe China Shipping has an advantage over overseas operators."





25th INTERNATIONAL SEMINAR ON DREDGING AND RECLAMATION

19 - 23 November 2005 Dubai, UAE

For decision makers in government, port and harbour authorities, consulting companies and individual consultants, the International Association of Dredging Companies organises the 25th International Seminar on Dredging and Reclamation. The Seminar will take place in Dubai, United Arab Emirates from Saturday 19 November to Wednesday 23 November 2005.

Since 1993 IADC has, in co-operation with local technical universities, provided a week-long seminar especially developed for professionals in dredging-related industries.

These intensive courses have been successfully presented in Delft, Singapore, Dubai and Buenos Aires.

As is appropriate to a dynamic industry, the seminar programme is continually updated. In addition to basic dredging methods, new equipment and state-of-the-art techniques are explained.

The cost of the seminar will be € 2.450,- excluding hotel, insurances and travelling costs, including all tuition, workshops and seminar proceedings, lunch daily and one special "participant dinner". On request the IADC will arrange accommodation in the seminar hotel at corporate rate.

For more information and application forms, please contact:

IADC Secretariat
PO Box 80521

2508 GM The Hague
The Netherlands

Phone: + 31 (0)70 352 33 34

Fax: + 31 (0)70 351 26 54

E-mail: info@iadc-dredging.com

Website: www.iadc-dredging.com

International Association of Dredging Companies



“The critical time to add more port capacity has arrived”

Clockwise from top left: Nicole Nesse, Wei Jaifu, Rollin Bredenberg, Peng Cuihong and Kim Fejfer

the World Trade Organisation.

“WCO is working on a standard for all customs organisations,” he revealed, and, as you read this, will be presenting their findings. Furthermore, “it’s vital that national solutions are based on international standards,” he concluded.

Christian Dupont, the EU commission’s deputy head of energy and transport told delegates that the commission is working on a draft directive for European port security following implementation and monitoring of the ISPS code. “To increase efficiency by taking into account members’ feedback and lessons learned from community inspections – which will start this year – and remedy any loopholes.”

Charles Sheldon, the Port of Seattle’s MD, rounded off the session by looking at how to implement security and keep trade moving.

“Any new security initiative must expedite trade, not hinder it,” was his message.

Talking funding

On Wednesday morning, the Conference waded into the complex issue of diversified port investment. Port Klang’s general manager Datin Paduka Phang in

charge and Dato Capt HJ Abdul Rahim Abd Aziz, IAPH’s ship trends committee chair, provided an overview from Malaysia’s perspective.

British premier Maggie Thatcher had given the world a model in privatisation, he said, though the Malaysian version included a ‘golden share’ – typically 30% – owned by the government.

“Our goal for port investment is to transform the economy and ultimately the social fabric of the country,” he concluded modestly.

From his standpoint as a global operator, APM Terminals CEO Kim Fejfer stressed the need for investment. “Most market analysts forecast 10% growth. We think that’s conservative. That means congestion is becoming a real issue in the mature economies and the critical time to add more port capacity has arrived.”

But he acknowledged the constraints from regulators and environmentalists, along with the sheer time-to-market of any major port project.

It’s a problem facing India too, as Neera Saggi, deputy chair of Jawaharlal Nehru Port Trust, acknowledged in her study of the country’s experiences in partnership with the private sector.

“Traffic growth from 2000 to 2004 went from 143M to 512M tonnes and it’s likely to grow even more in coming years,” she said, adding that India was looking for around US\$13.5Bn in port investment over the next decade.

“At a conservative estimate, we’ll need to double capacity by 2013, especially in container terms,” she



Clockwise from left: Bernard Groseclose, Constantijn Dolmans, Bo Lorenius, and the full executive committee gathered for the conference

told the assembly.

NYK Line's harbour group director Masahiro Aoyama, viewing investment needs from his firm's global terminal strategy, left no-one in any doubt that investment was essential.

"Of the top ten container ports, six are Asian," he said, "with an average growth rate of 30%." Which is why NYK now has a new logistics HQ in Shanghai and offices in 22 cities across China.

Angel González Rul, Mexico's general director of ports, looked at the challenges that expansion and investment had created in his country.

Until 1993, he said, the government controlled port investment. Today it works with the private sector and in the last ten years, the number of container berths had doubled to 14.

"Planning, logistics, the need for better infrastructure, competitive tariffs, information exchange, quality of service and especially education were among the challenges we faced as a result," he said. "Today, we're working on an ambitious education programme via

the internet with technical support from IAPH and the American Association of Port Authorities."

Taking the place of her boss, Alphose Siyame, Nicole Nesse, the Port of Douala's equipment director, rounded off the session with a case study of working with both the World Bank and private sector investment at her port.

Now boasting a 700m quay with an alongside depth of 9m, two gantry cranes and a 12ha stacking yard, Douala's new container terminal "is an ongoing project," she said. "Technology, planning and a clear vision for the future are among the benefits and we're working with the United States to implement the container security initiative. The port now has the tools to offer a win-win partnership and we are seeking future investment partners."

Environment and dredging projects

Session five's theme found Associated British Ports CEO Bo Lorenius in the chair, pointing out that "as owners and operators of ports, it's incumbent on us to take the environment seriously. Though many would say that today it's gone too far, we have to accept the situation. But without dredging, some ports would come to a halt. And in the UK, we face some of the toughest legislation in the world."

Legislation was at the heart of Dr Geraldine Knatz's overview too, in which she used her home Port of Long Beach as a case study. IAPH's dredging task force chair, Dr Knatz outlined Long Beach's 'Green Port Policy'.

"We had a lot of great ideas, but legislation wouldn't

Helping others

During the opening ceremony, IAPH president Pieter Struijs made a US\$25,000 donation on behalf of members to the International Save the Children Alliance.

Accepting the cheque, ISCA chairman Barry Clarke, OBE, commented: "We've a special focus on education over the next five years and this gift will go a long way in helping that programme."

After hours

Hospitality during the World Ports Congress was lavish, befitting the golden jubilee, and kicked off with an early arrivals' cocktail party in the nearby 468m-tall Pearl Tower's revolving restaurant on Saturday, May 21.

Sunday's official Welcome Dinner, hosted by Shanghai International Ports Group and China Merchants Holdings International at the HQ Riverside Oriental Hotel, not only featured a 12-course banquet, but ten distinct performances by different Chinese artists, including the famous soprano Yu Lihong, amazing acrobatics, 'changing faces' from the Chuan Theatre (which have to be seen to be believed), a martial arts 'ballet' and traditional dance, music and song.

Monday night saw a riverboat tour of Shanghai, reflecting the new and old in this vibrant city, with Tuesday at Shanghai's Grand Theatre for a performance of 'Dances of the Dynasties.'

It was the turn of incoming president Tom Kornegay's home Port of Houston Authority to host Thursday night – which saw the Grand Hyatt Hotel turned into a mini Texas, complete with both southern US and Tex-Mex buffets. PHA even flew in a seven-piece rhythm & blues band that quickly had everyone on the dancefloor.

All too soon, it seemed, we were back at the Riverside Oriental for the Farewell Dinner, sponsored by the National Ports Authority of South Africa. Again a magnificent event, it was marked by the presidential hand-over to Tom Kornegay from Pieter Struijs and the official announcement of the 2007 25th World Ports Congress in Houston.

PHA will have a lot to live up to!





SIPG outdid itself providing a fantastic sweep of entertainment for the delegates

allow us to carry them out, so legislative proposals became part of the programme," she said.

The policy spread way beyond dredging to cover diesel emissions from locomotives and trucks, the port even offering truck owners two thirds off the price of a post-2000 truck if they'd scrap any pre-1988 vehicle.

Concluding, Dr Knatz felt that the IMO was taking too long to get to grips with environmental issues and felt IAPH "has a real chance to lead the 'greening' of the maritime industry."

Laura Fiffick, now Dallas' environment director, but worked for ten years at the Port of Houston, used the port's channel deepening project to further explain the US approach to clean ports.

"We pushed for the idea of a port-wide environmental management system with three main tenets," she said. "Plan, do, check. And instead of hoping the phone wouldn't ring, we worked in partnership with regulators such as the US Environmental Protection Agency. We said to them: 'let us figure out how to do things voluntarily instead of you coming in and telling us what to do.'"

"Over the past two years, we've not seen a new piece of legislation introduced." But beyond this she warned that "we're almost certainly going to be looking at the collection and treatment of storm water in the not too distant future."

Protecting the environment

EU legislation, specifically the Birds and Habitats Directives and now the 2000 Water Framework Directive, were at the heart of Patrick Verhoeven's talk. The European Seaports Organisation (ESPO) secretary general felt that the existing laws don't create a level playing field.

"They don't take into account pre-designated areas for port development, they're not transparent, there's too much uncertainty and ports were not involved with the legislation at a national level," he complained. This leads to the spectre of "financial losses, legal uncertainty and disputes hindering port development projects," he warned. "Yet a lack of port capacity is leading to Europe becoming a bottleneck."

Following the 'EcoPorts' project, in which 50 ports took part (www.ecoport.com), ESPO is set to introduce a new ten-point code of practice he added, that will include a handbook on recommended environmental



“The IAPH has a real chance to lead the greening of the maritime industry”

practices and a policy annex.

Choice was at the heart of International Association of Dredging Contractors' secretary general Constantijn Dolmans' speech. "Ports have a symbiotic relationship with dredging. Although some are lucky and don't have to dredge, most do," he said, adding that dredging contractors actively aid ports in their efforts to go green. "Dredging companies are not the source of contamination, they're an effective tool for getting rid of it" he asserted.

Dolmans then urged ports to work closely with contractors. "There have been rapid changes in dredging technology and dredging firms' experience, combined with scientific data, should be tapped as early as possible for any planned project. Above all, integrate dredging into your long-term port planning."

Planning, and the length of time to market, was Colin Rudd's concern over Port Botany's container terminal expansion. Sydney Ports' projects general manager, he stood in for CEO Greg Martin and stated that though planning began in 1996, "we won't see the port in operation until 2010. The environmental impact statement went to the government in 2003 and we're hoping for a decision this year."

Botany plans to dredge 7M m³, reclaim 60ha of land and build a five-berth, 1,850m quay to give the port a capacity of 1.6M TEU.

"It's vital to remember that environmental impacts must be balanced against the serious consequences resulting from no development," was his message.

Hold the phone

Different chairmen had differing ways of trying to persuade delegates to turn off their mobile phones during seminars.

Tom Kornegay tried the IMO approach: a hefty donation to the Mission for Seafarers required from any offending delegate. "And if it's Chinese currency," he warned, "I expect to see a lot of zeroes on the note!" Siyabonga Gama was more direct. "You'll go fetch three cases of that excellent Chinese Tsingtao beer for the panel!"



Conference organisers from SIPG let their hair down dancing to an imported seven-piece band at the Houston Night celebrations

Toshiro Tsutsumi, the Port of Naha's executive VP, concluded the session using Japan's Dokai and Mikawa Bay projects as examples of how dredging was environmentally beneficial.

"Dokai Bay was so polluted in the 1960s it was known as the 'Sea of Death.' Today, it's made a remarkable recovery with many species of fish thriving," he said.

Maritime and port innovation

The final session's theme looked to the cutting edge of our industry and was chaired by incoming AAPA chairman and South Carolina Port Authority CEO Bernard Groseclose. There was also an overview from IAPH trade facilitation committee chair Santiago Milá, who used his home Port of Barcelona to illustrate the role of innovation in port operations.

“Whatever approach container terminals take, it's undeniable they must be increasingly flexible”

"A port is more than just a node, you need a distributed organisation to compete in a global market," he said.

"Efficient logistic corridors can be created through a port community system by connecting the port hinterland's network with other existing port and logistics networks, through strategic alliances."

That theme was at the core of Pieter Struijs' talk on marine operations in port development, using his home Port of Rotterdam's planned Maasvlakte II expansion project as an example (see Pg 18).

Standing in for colleague Peter Mollema, the IAPH president said "in 2004, the port achieved an all-time record transshipment of 350M tons and projections for the year 2020 reveal a further increase up to 480M tons. This is why Rotterdam is at an advanced stage of expanding port capacity by means of Maasvlakte II. By reclaiming 2,000ha of new territory, the availability of land will increase by 20%." Staying topical, Capt Abdul Rahim Akob, Bintulu Port Authority's general manager, outlined plans for the marine electronic highway being set up in Malacca Strait "for the safety and well-being of

What price security?

That was the question from Capt. Steve Pelecanos, vice-president of the International Maritime Pilots Association and chairman of his home Port of Brisbane's pilots firm at the Port Security session.

He related how he been invited to America by the US Navy to familiarise himself with some of their larger warships, including aircraft carriers, as Brisbane is a probable port of call.

"Yet the first time anyone asked me to prove my identity was when I went to a local pub and they demanded to see my passport, my driving licence wasn't good enough for them," he said.

Anyone mistaking the good captain for an underage drinker either needs an eye test or a reality check on the meaning of the word 'security!'



As host of the World Ports Conference, Lu Haihu's tireless work ensured a fantastic occasion for all present and the IAPH greatly appreciates this effort

trade and people using this very strategic waterway."

As trade and logistics manager at South Africa's Port of Mossel Bay, Alistair Petersen followed with a look at the challenges of implementing port community systems, and challenge was very much the theme of PSA International chairman Stephen Lee, who looked at container terminal innovation.

"Whatever approach container terminals take, it's undeniable that the faster pace of change today demands them to be increasingly flexible," he said. "We must embrace innovation to improve efficiency, enhance security, increase capacity and reduce costs. Only those able to adapt quickly to change will thrive."

The deputy general manager of the Yangtze Estuary Waterway, Jin Liu, brought the session to a close with a talk on the Yangtze Estuary deepwater channel regulation project that's enabled bigger ships to sail to Shanghai and boosted the port's capacity.

In conclusion

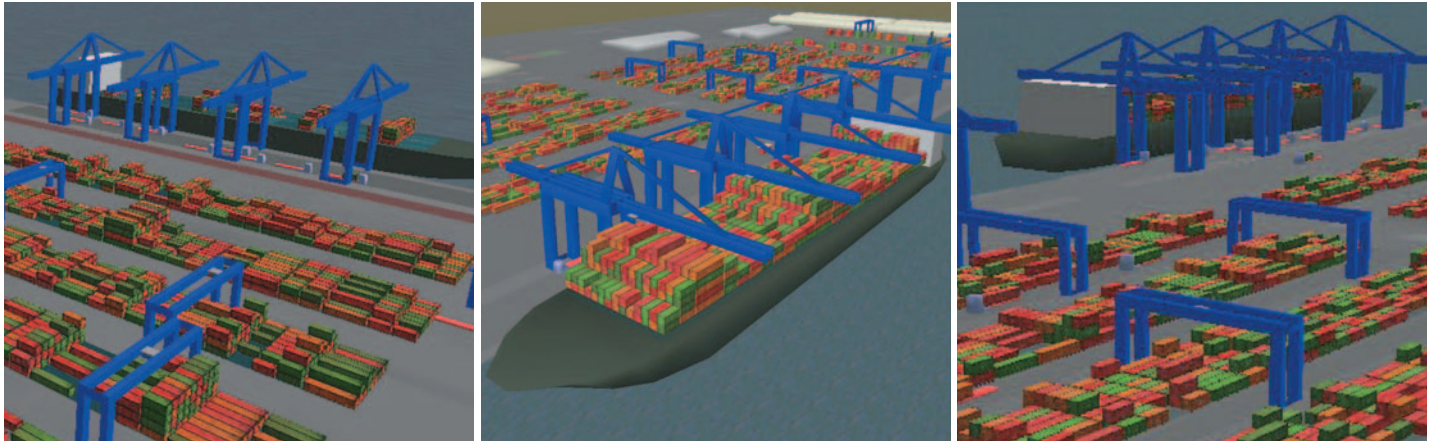
As one of his last acts as president before handing over to Port of Houston executive director Tom Kornegay, Pieter Struijs chaired the closing plenary session on Friday morning, setting the stage for the farewell gala dinner later that evening.

It was, as everyone will doubtless agree, one of the best Conferences in every sense of the word and a fitting celebration of the 50th anniversary. *P&H* will be looking in more depth at many of the papers in future issues. **PH**

"Quotes"

PERSONAL FAVOURITES, BOTH SERIOUS AND LIGHT-HEARTED, FROM THE CONGRESS

- "Ten years ago, if we had an oil spill we just cleaned it up. Today, at least one regulatory agency will show up, maybe even the police looking to press criminal charges. The prospect of going to jail is a real incentive to clean up your act!" Laura Fiffick explaining the US approach to clean ports.
- "Hi mum!" Dr. Geraldine Knatz to her 91-year-old mother who attended her seminar.
- "It's time in Europe for a political discussion on sustainable development – there's a feeling that environmental concerns have gone too far." Patrick Verhoeven on the EU approach to green ports.
- "The coffee break's sponsored by Hapag Lloyd, so think of them while you're drinking it." Bo Lerenius chairing the environment and dredging session.
- "Maintenance dredging can be compared to a visit to the dentist: you don't look forward to it, nor the bill, but you know it's vital to prevent future damage." Constantijn Dolmans reviewing ports' dredging management choices.
- "Previous speaker Masahiro Aoyama mentioned that his name means 'Blue Mountain.' Mine means 'Breakwater,' not 'Tsunami!'" Toshiro Tsutsumi, the Port of Naha's executive VP
- "There have been lots of rumours about Indian ports privatisation, so it's good to hear the reality from the horse's mouth." Datin Paduka Phang, who was really trying to compliment Neera Saggi on her speech
- "It won't matter if your ship is the largest in the world, unless ports' technology and systems can squeeze out the advantages, it's value is best measured as the price of scrap metal." James Tsien reviewing ports' future challenges.
- "In the IMO, you can see that security interest is waning. It's off the main agenda, down to a working group and tucked away in a small committee room." Fer van de Laar reviewing port security.
- "Dredging is regarded as evil. If we can at least convert people to think of it as a necessary evil, then we'll be making some progress." Colin Rudd speaking about Port Botany's relatively modest dredging project.
- "Who do you want to play with? How do you avoid international criminal organisations?" Jouko Lempinen reviewing international trade security.
- "Those who comply will benefit; those who don't will reap the economic consequences." Christian Dupont on the EU's forthcoming transport policy.
- "We've done a lot, we're doing a lot, but there's lots more to do." Charles Sheldon's review of port security.
- "Nobody spends somebody else's money as carefully as he spends his own." Dato Capt HJ Abdul Rahim Abd Aziz quoting Milton Friedman to justify Malaysia's approach to privatisation.
- "Shanghai is growing at the same rate annually as an entire port the size of Felixstowe – that'll keep Mr Lu Haihu busy!" Kim Fejfer on investment strategies.
- "To be honest, some of the dredging equipment in the United States is downright prehistoric." Dr Geraldine Knatz reviewing 'green' measures and the cost of keeping up with the dredging Joneses.



Planning software enables port operators to discover and overcome any operational problems before they are set in stone

A 'crystal ball' for port optimisation

The latest generation of port optimisation software is giving operators new opportunities to make the most of their assets writes Jonathan Tyler

The rapid evolution of information technology has changed the way that we all work and nowhere is this more apparent than in the radically streamlined and efficient world of modern port operations.

Before looking at the application of optimisation software, however, it is worth summarising some of the main issues facing the ports sector, chief among these being the predicted doubling of European container traffic by 2015.

The inevitable implication of this is that port operators must increase capacity to meet demand and if they do, how do they deal with the huge number of operational issues that they will

inevitably encounter?

The modern range of new generation planning and operational software lets us compare various possible terminal layout options, from the simplest of changes to radical developments, such as plans to accommodate huge new container ships.

To this end, computer-generated models can be built to simulate the flow of ships, cargo and transport, and then infinite parameters can be altered to see their effects.

Every day there are potentially thousands of interactions between cargo and machinery in a port and sophisticated software is the only way to get meaningful, accurate insights into these interactions.

The traditional modelling method was to create a series of static plans, but a port is a dynamic entity, so a modelling method showing time-based movement is essential.

Software streamlines expansion issues

Ports that are looking to rapidly expand are faced with several issues, which software can help to plan for by streamlining existing operations and simulating new problems – hopefully before they even arise.

These issues fall into three main areas:

- Congestion issues are a widespread problem and in particular, space for storing and handling large numbers of empty containers is at a premium.
- Ports often just don't have the room to expand, a problem compounded by local authorities' and private developers' preference to allocate valuable waterfront land for housing and leisure developments.
- Underlying all of these issues is the need for ports to deliver good levels of customer service and this can in part be achieved by creating an efficient flow of traffic and cargo through the port modelled by software.

The short term 'soft' option

While taking an interest in long-term trends, port operator clients are also usually keen to create short-term gains in terms of maintaining or enhancing revenue, whilst minimising expenditure. Simulation software is therefore often used to optimize existing operations and help companies get more from their assets.

This optimisation of assets usually begins with 'soft' options like making relatively simple operational changes, perhaps by working the assets harder or in a more 'clever' way. Something as simple as extending gate opening hours can often increase revenue through improving service at minimal cost. The

Software leads the way at Singapore

Singapore's unchallenged position as a global transport hub can largely be put down to its geographic good fortune at a cross-roads of world trade, but its astonishing throughput capacity – 9.02M TEU handled between January and May this year – is empowered by complex and innovative software managing operations at the port.

At the heart of this are PSA's Computer Integrated Terminal Operations System (CITOS) and Portnet. Together these two integrated real-time e-commerce systems control all of PSA's colossal container-moving operations world-wide, from booking, tug and berth applications all the way through stevedoring, loading, trucking, tracking and ship-planning to final billing.

As a sign of how accurate container moves are and smoothly the software-controlled system works, PSA Singapore Terminal's flow-through gate system processes one truck every 25 seconds and remotely-operates yard cranes at the state-of-the-art Pasir Panjang Terminal.

Already impressive, Pasir Panjang is currently only in the middle of a long-term concerted expansion plan that will see an extra 15 berths added over the next six years, which will increase PSA Singapore's handling capacity to 24M TEU a year.

To meet this increased capacity and ensure its continued smooth handling, PSA has embarked on an upgrade programme to further streamline CITOS to CITOS21, making use of new technology.

For more information visit www.internationalpsa.com

software allows us to accurately predict the impact of such changes in a risk-free virtual environment.

One example occurred at a port where the client knew it wouldn't be operating a terminal for more than a decade and wanted to meet the demands of customers over the following few years without major investment.

Royal Haskoning's Posport CTS simulation software tool was used to achieve several 'quick wins', which included creating new tariffs to generate extra income, while simultaneously retaining custom by focusing on the level of customer service.

In other cases, a relatively small investment in the application of simulation software has enabled port operators to review their capital investment plans. In some instances, investment in major new equipment was found unnecessary and the same or better results could be achieved with a much smaller investment.

Increasing transparency

Sophisticated modelling software enables operators to physically see evidence to support a business

case for whatever changes are proposed, rather than taking the consultant's word for it. And perhaps more importantly, the data can also be presented to other stakeholders so that everyone can focus on facts rather than opinions. Many users discover that it's a great way to resolve conflict, often before it even starts.

Another advantage of new software over past analytical tools is that numerical data can be shown in visual form, which could prove essential when involving stakeholders from outside the technical side of port operations or representatives from a local community. Totally 3D animated movies can be created relatively easily to show views across a port from various vantage ports. This means that the planning and optimisation software a crucial role in the inevitable consultation and planning approval processes.

The software also encourages creativity and effective problem solving and allows spontaneous ideas to be tested in a virtual environment. As the history of invention and innovation has shown, even the most apparently impractical ideas can lead to successful new developments.

Made to measure

While a port operator's focus is inevitably on day-to-day problems, it's only sensible to consider future options, particularly as shipping lines tend to take a longer-term view. Every minute a ship is in port when it could be at sea they're potentially losing money, so a port must develop to meet these needs before they decide to look elsewhere.

This long-term view can be vastly improved through the use of software, which doesn't have to be an overly time-consuming or expensive exercise. In this way, it can demonstrate the benefits and implications of possible port developments in a user-friendly and highly visual way. Meanwhile, an ongoing, rolling programme of modelling can also help port operators manage a development plan that ensures the port's ability to meet customer needs.

Jonathan Tyler is Associate Director in the Maritime Division of Royal Haskoning, an independent consultancy firm employing over 2,700 engineers, architects, consultants and other specialists world-wide. PH

Rotterdam cargo planning software barges ahead

Port operational software can be used to streamline operations outside of the direct port area too.

As a major intermodal port sitting on the Rhine, Rotterdam acts as a major transshipment hub for barges, which account for a large portion of the port's trade. Last year 2.8M TEU passed through the port from barges and so in 2004, Rotterdam installed an innovative planning system from Xenos' Port Infolink, known as Barge Planning 2.

This all-in system replaced a mixed arrival and cargo-reporting blend of emails, faxes, radio reports and phone-calls with a single, integrated electronic reporting and management system.

Before this was installed, around 25% of arriving containers' documentation had inaccurate or missing information on their documents, according to Port Infolink. Barge Planning 2 now provides a barge operator with a means to send advance warning of arrival, with detailed information of the cargo and deckspace to swap over at the port.

In turn, this means that the port can plan accordingly and reduce unload and turnaround times, as well as minimise unnecessary dockside storage space.

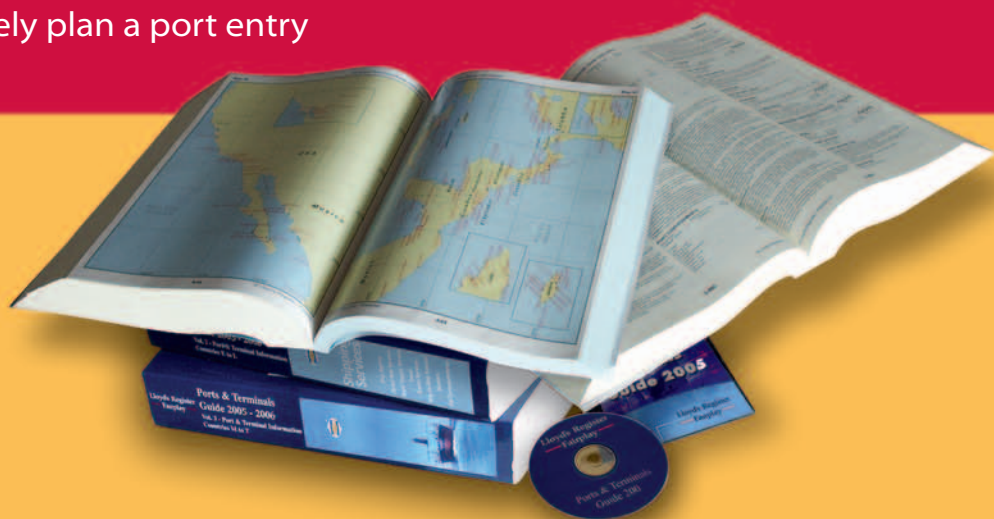
The benefits are obvious and all barge operators using Rotterdam – 39 companies in total – now use the system, providing greatly improved efficiency.

Ports & Terminals Guide 2005-2006

Everything you need to effectively plan a port entry

The guide, which comprises a four-volume book set and CD ROM, details more than 8,336 ports and terminals including

- 100 new entries
- contact details of over 13,000 port service providers
- over 4,000 port plans and mooring diagrams
- atlas
- distance tables



The range of information for each port entry is extensive and each entry is divided into sections such as Port Descriptions, Pre-Arrival Information, Navigation, Berths and Cargo, and General.

To order your copy(ies) of the Ports & Terminals Guide 2005-2006 please complete the order form below.

Please fax your order to

+44 1737 379001

Your order

Price

Book and CD ROM set: £280 / \$520 / €420

Plus postage: UK FREE, Europe £15 / \$25 / €25, Rest of the world £40 / \$70 / €70

VAT will be added to UK orders (CD ROM only)

Name

Job Title

Company

Address

Telephone

Fax

Email

Type of Business

Payment methods

☐ Credit card

Visa ☐ American Express ☐ Eurocard ☐ Mastercard ☐

Maestro /Switch ☐ Issue no.

Card no.

Cardholder's name and address

Expiry date

☐ **Cheque** All cheques made payable to Lloyd's Register - Fairplay Ltd
(Sterling & Euro cheques should be drawn on UK banks, US dollar cheques on USA banks)

☐ **Invoice** I agree that payment will be made not later than 30 days from date of invoice

Signature

Date

VAT number (EU countries)

Terms and Conditions

The liability of Lloyd's Register - Fairplay Ltd (LRF) for any loss or damage resulting from the performance of this order shall in no event exceed the price paid hereunder by the subscriber. Any dispute concerning the provision of LRF's services and/or the contract under which services are provided is the subject to the exclusive jurisdiction of the English courts and will be governed by English Law.

For further information contact: Lloyd's Register - Fairplay Ltd, Lombard House, 3 Princess Way, Redhill, Surrey, RH1 1UP, UK.
Tel: +44 1737 379000 Fax: +44 1737 379001 Email: customer.services@lrfairplay.com Web: www.lrfairplay.com

Lloyd's Register
Fairplay

PT/PH/2005

Looking after its own

P&H's Angelo Scorza investigates Italy's Costa Crociere's plans to manage its own cruise terminals

Costa's holistic approach to cruising has led to an attractive terminal and designer furniture at Palacrociere

Costa Crociere is following an American-inspired strategy of investing directly in the main embarkation ports of its passenger ships in the Mediterranean, in order to directly run all of the management chain.

Unique in Europe, this policy is the result of the then Genoa-based line's stated aim of ensuring efficient operations at reasonable costs, providing total control of both the passengers' and their luggage's logistics.

Although the focus is currently in the Mediterranean, where Costa is one of the biggest operators, the first such strategy was implemented in the Caribbean. From late 2002, the refitted port of La Romana in the Dominican Republic became homeport to up to four vessels. Costa invested US\$6.5M there, upgrading an existing quay and adding a second, as well as building a passenger terminal as a joint development with the country's largest private employer, Central Romana Corp. Costa now co-manages the port, maintaining a 10-year priority use agreement.

Two years after the Dominican Republic deal, the Italian line inaugurated the Palacrociere terminal in Savona, replacing Genoa as its preferred home-port in Italy as the Genoa Port Authority (GPA) had rejected an earlier application from the line. Repeated efforts by the GPA's current President Giovanni Novi – who was not in charge when the line was forced to quit – to get Costa to return by allowing a sub-concession to exclusively operate cruise traffic at the Ponte dei Mille terminal have so far been unsuccessful.

Branching out

In January this year the company signed a Savona-style agreement with Barcelona, where Costa's new €8M Adossat terminal – built at its own expense – is due to open in summer of 2005.

The Port of Barcelona Authority has granted the line a 25-year concession on a 5,500m² area, while Costa and its sister lines of Carnival Corp are given berth priority, though the terminal is actually a multi-user setup.

Complex negotiations in Naples and Civitavecchia, where the local port authorities had to reconcile the deal with simultaneous similar applications by Royal Caribbean and MSC, led to a subtly different situation, with all the client lines sharing the operations controls.

In June 2004, Costa and Royal Caribbean acquired a 20% stake each, joining MSC, which was already a 20% partner in Terminal Napoli Spa, where the Port Authority holds 5%.

More recently, the Port Authority of Civitavecchia has made an agreement with Costa and Royal Caribbean under the terms of a multi-year concession



to be granted on a project submitted by the two lines, who will establish a new company taking care of the construction and management of a new terminal, provided with two berths and able to handle 4,000 simultaneous cruise passengers. It will also be available to other lines, though they rarely call at Civitavecchia.

Finally, Costa is also considering running the cruise terminal in Venice, the line's top port in terms of global passenger throughput.

Costa's Savona concession enables it to operate its own terminal at Palacrociere until 2023, with an option to renew the deal afterwards.

However Costa is not a new client for the Ligurian port. In 1996 it was actually the first to respond to the offer of availability expressed by the local port authority, who wanted to find the fittest use for its empty Calata delle Vele quay.

Cruise traffic in Savona has been growing impressively year on year, from handling 26 ship calls and 45,000 passengers in 1996, to a huge 122,000 passengers in 2001. This was partially thanks to the combined traffic from rival line Festival, until Costa's concession took hold of the facility.

Costa's business plan to manage it exclusively forced Festival – which had approached Costa to jointly run the terminal – to quit Savona. Growth nevertheless continued apace and in 2003, even before the new terminal completion, Costa had reported an impressive 91 ship calls and 225,000 passengers.

The terminal has 20 check-in counters since it was originally designed to serve other cruise lines, but most of them are not used at the moment with Costa's vessels being the only customers. "We prefer to manage our own business though we do not want to monopolise the port and believe our tariffs are so competitive that theoretically there's room for other cruise lines" Costa's marine operations director Roberto Ferrarini told *P&H*.

Costa understands that the cruise industry's terminals aren't simply an anonymous processing point and actually constitute part of the passengers' holiday. As such, the terminal's impressively refurbished maritime station (10,000m² spread over three levels) was designed by Catalan architect Bofill, with interiors by architect Censasorte of Rome and furnishings by architect Vicini of Genoa.

"Our base philosophy is to lower operation costs without losing productivity. Palacrociere is a great

demonstration that you can get top quality results by investing just what is really necessary." Ferrarini told *P&H*. "In conceiving it we did not copy any feature from any model, all you can see is our own design in cooperation with a pool of architects who translated nice-looking areas into our operational needs."

The same principles successfully tested in Savona are to be applied at the new Adossat terminal in Barcelona, giving Costa its own dedicated facility in Spain as well by mid-2005.

Palacrociere also boasts a hotel and shopping area and the multifunction cruise terminal complex itself is ideal for exhibitions, concerts and conferences, offering its services to the city. As such, Savona's Palacrociere has set certain quality standards to be used as a template for the other ports where Costa intends to extend its new operating strategy.

"We are very satisfied," Ferrarini stated. "After just a couple of departures, we reached perfection in the terminal running as far as the smooth handling of both baggage and passenger flows is concerned. We can accommodate two ships at a time, a big one and a medium one, such as the *Costa Fortuna* or *Costa Magica*, and a mid-size one such as the *Costa Classica*."

A crucial issue for efficiency is the use of tailored software, nicknamed BATMAN as a conveniently memorable acronym for Baggage Tracking Management. This was developed in-house by Costa's IT department and enables barcode-reading of all baggage and passengers at the gate.

"There are no queues since traditional check-in operations have been eliminated; every passenger is given a number at his arrival and when his number is exhibited, then he can smoothly access the embarkation gate where all subsequent controls are fulfilled," Ferrarini concluded.

"Where there is a mismatch such as a passenger getting in without baggage or vice versa, we are immediately informed of the discrepancy," explains Antonella Ighina, Costa's Ship Security Manager. "Palacrociere enjoys top security equipment and surveillance systems to ensure the safety of passengers and crew, achieving compliance ahead of schedule with the IMO's International Shipping and Port Facility Security code." **PH**

Five top facts about Savona

- The terminal was built from scratch in 15 months at a cost of €11M, of which €3.8M was put forward by Costa with the balance financed by the Savona Port Authority.
- The 452m long, 9.2m deep berth can accommodate two ships at a time.
- The newly refurbished terminal can handle 7,000 passengers disembarking and embarking a day.
- In 2004 Savona successfully withstood the pressure of 174 ship calls (including 20 days with two ships simultaneously).
- In the same period, the terminal handled 480,000 passengers, a figure projected to rise to 600,000 in 2005.

Cruise industry rocketing at Canaveral

Stan Payne shares his experience running the cruise industry-heavy Port Canaveral

After nearly a year as CEO of the Canaveral Port Authority – which has seen us hit by three hurricanes and a tornado – I can look out of my window at a port in transition to meet the challenges of intense cruise industry competition with the following thoughts.

The issue of rapidly growing vessels faced by the cruise port industry is not unlike what happened in the container business, where I spent the first part of my career. At one time in the not too distant past, a 3,000 TEU capacity container vessel was considered a 'giant' and ports talked about never needing more than 42 to 45 feet of channel depth for these ships. Now, a 10,000 TEU ship is on the horizon.

The same thing is now happening with cruise ships. At one time a 2,600-passenger ship was viewed as a 'behemoth', but now our largest ship currently carries 3,600 passengers. Larger ships are being constructed now and even bigger ones are being planned in the pipeline.

In this climate, as much as a port would hope to plan effectively for the future, it remains difficult to stay the two or three steps ahead of the cruise industry in terms of planning facilities.

Just as Post-Panamax container ships have required massive new investment in terms of port infrastructure, including container cranes and equipment to take containers into the terminal – not to mention larger roadways and gates – large cruise vessels often require dock improvements, gangway modifications, and, yes roadway and gate improvements.

The one major difference is that cruise ships, unlike container ships, have requirements that can be very specific to the design of the ships. Gangways are a good example and the fixed gangways of yesteryear will almost certainly yield to articulated gangways, as a premium is put on terminal flexibility.

Operational challenges

The actual operations phase of a cruise-port interface is

an often-overlooked area. As cruise ships grow larger and ports such as Port Canaveral continue to add homeported and port-of-call vessels, any flexibility that can't be built into an infrastructure must then be a goal of operations.

Ships, like their passengers, sometimes have special needs and ports must strive to meet those needs just as cruise lines strive to meet those special needs of their cruise customers.

A ship that normally docks at 0700 and sails that day at 1700 presents a special challenge to port operations when it is late, even by an hour. If it is several hours late, as sometimes happens, the potential for chaos is great. World-class cruise ports are able to – and have had to – meet these challenges on a regular basis and that differentiates them from ports just now 'dipping their toe in the water' of the cruise business.

Securing the port

The changed security environment after 2001 has also obviously had a substantial impact on cruise ports. Before 11 September 2001, Port Canaveral spent approximately 3 to 4% of its budget on security. Today that number is closer to 20%.

At one time ports boasted of having the lowest cargo theft rate in the industry and security was more focused on preventing cargo pilfering and unauthorized people from getting in.

The potential for terrorism was recognized in the port world before then, but not with the intensity of focus that those events galvanised.

I have heard repeatedly that "if you want a totally secure port, shut it down." Ports therefore inevitably struggle with finding the balance between providing the highest level of security while not so burdening commerce as to destroy it. Or, worse, watch it move over to ports that, even within the strictest of Federal and State regulations, have adopted different philosophies about security levels.

My own opinion is that while there is a growing recognition that port security should only be the responsibility of those capable and suitably trained to administer it, this acknowledgement has been too slow across the wider industry. Security is only as

strong as its weakest link, whether it is an inadequately designed closed circuit TV system, hard-to-maintain radar arrays, or security guards with less-than-optimal experience and expertise.

The following will constitute the key security themes and challenges for the future:

- Technology will continue to improve, but it will be expensive to procure and costly to maintain within the marine environment of ports.
- Technology will supplement security personnel but may not reduce staff or budget numbers dramatically as employees are simply shifted into support roles.
- The 'glue' that holds security together is still 'people-related' and those people vary from US\$8/hour contract guards to fully specialized port police.

Brand royalty

For our newest initiative, we have contracted with a well-known New York-based firm, Sterling Group, to reinvigorate the Port Canaveral 'brand'. While other ports have attempted this, these took the form primarily of logo development, not true branding as such. Our branding initiative will stress the importance of 'living the brand' to our employees and promoting the brand to our business partners.

But, in the end, it all boils down to this, can a government entity provide exceptional customer service (as broadly defined, facilities, operations, security) to satisfy the demands of cruise lines in a fiercely competitive market?

At Port Canaveral, the answer is 'yes'. While we do occasionally receive federal and state grants for infrastructure, we are proudly self-sufficient.

Our five-person Board of Commissioners, is currently comprised of five elected Commissioners, dominated by clear private business experience and acumen. In other words, decisions are made on a full set of facts, supportable assumptions, and with an eye toward the delicate balancing of self-sufficiency and revenue generation, with creating and sustaining economic activity. **PH**



**Port Canaveral's
busy cruise
terminal**

ICS attempts to derail EU

The International Chamber of Shipping (ICS) has reacted with horror at the spectre of the European Union's plans to become a full member of the International Maritime Organisation (IMO).

On 15 June, the ICS sent out an urgent memo to all of its members requesting that they use their influence to encourage their national "governments – both inside and outside the EU – to highlight concerns" about the EU's plans.

In particular, Chris Horrocks, Secretary General of the ICS, pushes for members to approach their transport ministries to raise awareness "of the profound industry concern

about direct EU IMO membership, which will weaken the quality of IMO decision-making and threaten the long-term authority of the IMO."

The ICS believes that EU membership would necessarily constrain the advice and activities of European IMO advisors as they would have to defer to – or at least consult with – and toe the Brussels line. The danger is then that the EU would have a disproportionate power and could use it to lobby the IMO, leading to the politicisation of the organisation to the detriment of all sea-farers.

Furthermore, the ICS asserts that the "special global characteristics of shipping mean



EU plans to apply for full IMO membership have met with stiff opposition from the ICS

that it has always been subject to a special international approach to maritime decision making."

This letter came out of concerns debated at the recent ICS annual general meeting, following news that the EU was to make overtures towards full membership and

begin negotiations at the next meeting of the EU's Council of Transport Ministers. This was set for 27 June as P&H went to press and the outcome will be noted in a future issue.

For more information visit www.marisec.org

WCO urged to adopt US security measures



The World Customs Organisation (WCO) is being urged by US officials to adopt a framework of standards that largely mirrors the scheme now in place at ports in the USA.

The requests came during a WCO meeting held in Brussels in late June, when Robert Bonner, commissioner of US Customs

and Border Protection (CBP), asked the organisation to embrace the Container Security Initiative (CSI) and the Customs-Trade Partnership Against Terrorism (C-TPAT).

These two programmes are absolutely central to the USA's homeland security strategy to prevent terrorists from using the

global supply chain for their purposes.

"The Framework represents a worldwide strategy that all nations can implement in order to combat global terrorism and to protect trade and our economies," said Bonner.

He added that the strategy "has the potential to revolutionize the security and efficient movement of global trade." Demonstrating its commitment to making the framework a success, CBP has pledged to assist countries in obtaining detection equipment and training in security and risk management and to help ensure that WCO members' customs-related capacity building needs are met.

"Nations that truly demonstrate they have high-level political will and commitment to implement the framework will need – and deserve – capacity building assistance," Bonner said.

Acting as a kind of priority members' club, the C-TPAT 'carrot' for participation is that those partners with the highest-rated security policies will benefit from

expedited passage through US customs checkpoints. At the beginning of the year, Bonner announced that CBP intends to have a full no hassle 'green lane' policy in operation.

Clients able to use this green lane will not have to undergo inspection in the US and will benefit from the immediate release of goods. The partners who exceed the basic C-TPAT criteria and follow best practice down the supply chain will be awarded C-TPAT Plus status.

Examples of the best practice needed to achieve this include: validated supply-chain security from the point a container is stuffed at a foreign manufacturer; the use of a 'smart' container, equipped with a high-security seal and internal sensors to detect tampering; and shipment through a member port in the CSI grouping.

Similarly, the CSI focuses attention on the international supply chain and ensuring that the every link is secure, not just the beginning and ends.

For more information visit www.CBP.gov

ICC calls for port investments to counter congestion

Mounting congestion and looming delays at the world's major ports have prompted the International Chamber of Commerce (ICC) to call for more investment to alleviate the pressure.

In particular, the ICC is asking the freight industry and public authorities "to expand freight transport infrastructures, reducing congestion on roads and railways to ports and eliminating bottlenecks."

The ICC's maritime transport committee took the opportunity to make this plea at the IAPH's World Ports Conference in Shanghai. If industry is to avoid the congestion problems that the current explosion in container traffic looks set to cause, investment is needed now, the ICC argues.

According to the ICC statement, "owners and

operators of ports and terminals are called upon to identify measures to increase efficiency and throughput and to adjust their investment plans accordingly." More particularly, the ICC suggests that "carriers, freight forwarders and shippers should work together to improve the forecasting of cargo volumes and exchange information to help reduce bottlenecks and to improve decision-making."

Freight bottlenecks are a serious concern to the whole industry. Missed berthing slots mean missed feeder and train connections, and higher fuel costs to adjust schedules. It also has serious knock-on effects for industry in the wider community and can impact very badly on just-in-time distributors, manufacturers and along the rest of the supply chain.

Spirited IBIA backs MARPOL

The International Bunker Industry Association (IBIA) released a statement in late May, urging the bunker industry to meet the "spirit of MARPOL Annex VI in addition to meeting the specific technical requirements laid out in the legislation."

The ship emissions legislation came into force on 19 May 2005 and mandates a maximum sulphur level of 4.5% worldwide. Despite this, according to the IBIA not all countries have actually agreed to enforce the legislation, which prompted its latest statement.

Hence, IBIA's urge to comply with the spirit of Annex VI. "If a vessel takes on bunker fuel in a port that is not a signatory to Annex VI," IBIA secretary general Ian Adams stated, "owners should still insist the bunker supplier complies with the terms in the legislation."

Under the new legislation, this means that the supplier is obliged to provide a bunker delivery note and take an approved bunker sample, all of which are liable to inspection by a port state control



for up to three years after delivery.

"It will be very disappointing indeed," IBIA chairman Don Gregory continued, "if we hear reports of fuel exceeding that very conservative limit."

Adams added that "it is no protection that the vessels' flag state, or the country that the fuel was bunkered in are not signatories to Annex VI. They must still comply."

IMO pushed to extend ISPS to combat piracy

The resurgence of piracy in the Malacca Straits since February led the Japan International Transport Institute (JITI) to call a conference with the IMO in May, aiming to extend the International Shipping and Port Facility Security (ISPS) code to fill in apparent gaps in its coverage.

Held at the International Maritime Organisation's (IMO's) London headquarters and with a panel discussion chaired by Frank Wall, the outgoing head of the Maritime Safety Committee (MSC), the conference was ensured attention at the highest levels of the maritime world.

In particular, JITI raised concerns that though the ISPS code covers SOLAS vessels (over 500gt) the majority of piracy attacks are carried out from and on vessels below this threshold.

The attack on the Japanese tug *Idaten* that clearly galvanised JITI to hold the conference was a classic case in point of a small, slow vessel being attacked and boarded by other small vessels.

A study run by JITI prior to the conference noted the vast scale of this group of vessels, stating that 15% of the 110,000 foreign vessels that called in Japan last year were non-SOLAS and therefore immune to direct ISPS requirements.

Quite aside from being targets and pirate-carrying threats, Jiro Hanyu, president of JITI, also pointed out that non-SOLAS vessels can be used as weapons themselves. This danger was very clearly illustrated when a small Aden harbour boat detonated alongside the US Navy destroyer, USS *Cole*, in 2000 and again when

another small boat exploded next to the *Limburg* tanker in 2002.

There was unanimous approval amongst all present, therefore, that the IMO needs to do something to combat these issues. But what exactly that will be is still open to debate.

Misunderstandings of ship roles and definitions under the ISPS code have added to the problem. The MSC has now got a huge task on its hands to clear up gaps in controlling vessels within port areas and some hard decisions to make on where to draw the line.

In particular, there appear to be differing interpretations of exactly where the boundaries of the ISPS code lie. While initial plans intended that all port waterways and port service vessels would automatically come under the aegis of the ISPS

code, irrespective of their non-SOLAS state, a large number of ports are contending the issue.

Brian Parkinson, trade and operations adviser to the International Chamber of Shipping, asked "what happens with a ship-to-ship interface outside the direct remit of the port? When a non-SOLAS bunker vessel leaves the port area to supply a vessel at sea, or a cargo ship picks up boxes for example?"

Held the day before the 80th sitting of the MSC, the JITI/IMO conference was obviously too close to be fully incorporated into the proceedings of the slow-moving wheels of the IMO. Nevertheless, the organisation's secretary general, Efthimios Mitropoulos, urged the MSC to take note of any findings and this issue will not be going away any time soon.



Dr Satoshi Inoue and Datin Paduka Phang cut the IAPH 50th Birthday Cake

Tehran's tasty celebrations

Iran's official celebration of the IAPH's Golden Jubilee will be fondly remembered by those present not only for the warm welcome from the hosts but also for the post-dinner entertainment and 50th birthday cake.

As part of the 6th Asia/Oceania IAPH meeting, the party attracted 150 delegates from the local maritime circle and the wider IAPH regional membership.

As you can see from the happy faces in the picture above, the cake formed an impressive centrepiece to the celebration. It was ceremonially cut by secretary general Dr Inoue and Asia/Oceania Region vice president, Datin Paduka Phang, while president Pieter Struijs looks on.

The celebration party gathering was presided over by the official host, Deputy Minister of Roads and Transportation and Managing Director of Iran's Ports and Shipping Organisation, Ahmad Donyamali.

In his welcome speech, he promised to devote his country's active role in the IAPH's future.

No shelter for IAPH at the IMO

Despite the subject of places of refuge being prominently on the agenda of the IMO's Legal Committee's 90th session, the IAPH was disappointed that the organisation decided against a specific convention for now.

The IAPH submitted a position paper on the current liability and compensation regimes in place of refuge situations, ahead of the meeting, held between 18 and 27 April. In this, the IAPH stated that the current system is inconclusive and therefore unsatisfactory, and urged the IMO to develop a convention on places of refuge, which was also recommended by the Comité Maritime International on the basis of its thorough analysis.

Some delegations supported the IAPH's proposals and noted that the subject is unique, as coastal states are effectively innocent bystanders who should be encouraged to grant permission to ships in distress, with assurance of adequate compensation.

Furthermore, they recognised that the existing conventions – although useful – did not address these issues and it is not simply a question of filling the gaps with individual national legislation. It was also noted that existing conventions did not satisfactorily address the problem of limitation of liability.

However, most delegations believed there was no need for a new convention. In their view, the existing regime of liability and compensation for pollution damage worked reasonably well and noted that not all of these conventions were in force yet. Though this means that there are gaps in the regime, they contend that the best way to fill them is by ratifying and implementing the existing conventions.

The view was expressed that it would be premature – and possibly even counterproductive – to begin work on a new

convention and that IMO's Legal Committee would only be in a position to make such a decision once all the existing liability and compensation conventions, including the future Wreck Removal Convention, had entered into force and some experience was gained with them.

IAPH intervened several times in the debate and stressed that already at this stage it is clear that gaps and loopholes will remain. Therefore any current lack of clarity and uncertainty should be resolved as soon as possible.

Denying this state of affairs not only ignores scientific evidence presented to the meeting, it is also a missed opportunity. The IAPH called upon the delegates to consider the position that all parties will find themselves in if this is not explored further.

In the end, the IMO's Legal Committee agreed that places of refuge is a very important issue and needs to be kept under review. Therefore it will remain in the long-term working programme of the organisation's Legal Committee.

Though it doesn't believe there is any direct need for a convention, the IMO also noted that urgent priority is needed to implement all the existing liability and compensation conventions such as the HNS Convention, the Bunker Convention and, later on, the Wreck Removal Convention.

The IAPH hopes that a more informed decision as to whether a convention is needed might be taken in the light of the experience acquired after their implementation.

In the next issue Frans van Zoelen and René Bos from the IAPH's Legal Protection Committee will consider this unsatisfactory conclusion and the consequences for the members of IAPH and coastal-related interests in greater depth.

New president takes over the IAPH helm



Thomas Kornegay was unanimously elected as the new president of the IAPH and took over from incumbent Pieter Struijs at the 24th World Ports Conference in Shanghai.

"It's an honour to take the helm of the global maritime industry's leading organisation," he stated.

Kornegay has been a member of the IAPH for 20 years and has faithfully served it in many leadership capacities. During this time, he spent five years as managing director of the Port of Houston Authority (PHA) before taking over as executive director of the Authority in April 1992, twenty years after he began his career at the port.

An engineer by training and trade, Kornegay spent 15 years working in the PHA's engineering department and is still a registered engineer in the state of Texas. He holds a bachelor's degree in Architectural Engineering from the University of Texas and a master's in Architectural Engineering from Oklahoma State University. Since then, he has completed several graduate-level finance and economics courses at the University of Houston before gaining certification from the American Association of Port Authorities (AAPA) as a Professional Port Manager in 1998.

His senior status in the IAPH was solidly acknowledged in May 2003, when Kornegay was elected first vice president of the association.

He has served as Chairman of the Board of the AAPA and Chairman of the US Delegation of AAPA.

For more on the new president's intentions for his term, see Last Word on pg 48

President Kornegay shakes hands with Secretary General Inoue

PIANC tied to IAPH

Eric Van den Eede, president of PIANC, presents his thoughts on the relationship between his organisation and the IAPH

First of all, my warmest congratulations on the IAPH's 50th anniversary. Perhaps PIANC can get some inspiration for its 125th anniversary in 2010 from your approach to commemorating your foundation's birthday.

It has been four years since both our associations signed our Memorandum of Understanding (MoU) in Paris and Montreal. The most visible results are the mutual representation and co-operation in our technical commissions and committees, the nearly annual meetings at the management level and the publication of relevant news items about each partner in our own publications.

We were glad to welcome Tom Kornegay as guest of honour and IAPH representative at our annual general assembly (AGA) in Charleston, USA on 10 May. In his address to the meeting, Mr

Kornegay expressed the intention of assessing the implementation of our MoU and to identify points that need to be activated. We are more than willing to join IAPH in this endeavour as we remain convinced that close co-operation between both our organisations is to the benefit of the entire port and navigation community across the world.

The major decision taken at our recent AGA was that, next to the drafting of a new strategy, PIANC is going to undertake an in-depth self-assessment, with the aim of redefining our target membership, their expectations of us, the objectives and products that are required to satisfy membership and the most appropriate organisational structure. This exercise will most probably lead to a major change in the appearance and operations of PIANC.

A couple of the new working groups that were approved by our executive committee are also of the highest importance for the IAPH-membership.

Firstly, we are going to update the criteria for the loading and unloading of containerships, to take into account that the former guidance doesn't fully apply to the last generation of very large ships.

We also agreed, as a consequence of the unfortunate tsunami of last Christmas to develop tsunami design criteria for maritime structures.

I look forward to having a strong IAPH-representation in both working groups.

Finally I would like to draw your attention to some of our major upcoming events:

■ our 31st international navigation congress is going to be



held from 14 to 18 May 2006 in the beautiful resort of Estoril in Portugal;

■ in March 2008 we will organise the PIANC/COPEDEC VII conference for port and coastal engineering in Dubai, UAE;

■ to further demonstrate the importance of Asia for the world economy and hence for world trade and world ports, our AGA's of 2007 and 2008 are going to be held in Cochi, Kerala, India and Beijing, PR China.

I wish IAPH a very fruitful 24th World Ports Conference.

Changing of the guard

Along with the IAPH's new president, the association has selected a new 'cabinet' of vice presidents and executive committees and confirmed others in their existing roles, to take over from the 'old guard' in their support of him.

This supporting cast stood up as follows:

First Vice President for Asia/Oceania Region

Datin Paduka OC Phang
General Manager
Port Klang Authority, Malaysia

Second Vice President for Africa/Europe Region

Gichiri Ndua
Corporate Service Manager
Kenya Ports Authority, Kenya

Third Vice President for Americas Region

Bernard S. Groseclose, Jr.
President and CEO
South Carolina State Ports Authority, USA

Immediate Past President

Pieter Struijs
Senior Executive Vice President
Port of Rotterdam, The Netherlands

Conference Vice President

Argentina James
Director, Public Affairs
Port of Houston, USA



New IAPH regional committees assigned and approved

The following executive committees were also confirmed at the Shanghai congress:

Executive Committee Members by Region (* indicates a newly elected member)

Asia/Oceania Region

Long-Wen Lee, *Director General, Taichung Harbor Bureau, China**
Manjit Singh, *Assistant Director (Ports), Maritime and Port Authority of Singapore, Singapore**
Lu Haifu, *President, Shanghai International Port (Group) Co., Ltd., China*
Susumu Naruse, *Director, Ports and Airports Administration, Hokkaido Bureau, Ministry of Land Infrastructure and Transport, Japan*
Geoff Vazey, *Chief Executive, Ports of Auckland Ltd., New Zealand*
H.E. Hassan Mousa Al-Qumzi, *Under Secretary, Abu Dhabi Seaport Authority, UAE*
Greg Martin, *Chief Executive Officer, Sydney Ports Corporation, Australia*
Kang, Beom Gou, *Director, Port Policy Division, Ministry of Maritime Affairs and Fisheries, Korea*

Africa/Europe Region

Leonids Loginovs, *Chief Executive Officer, Freeport of Riga Authority, Latvia*
Bara Sady*, *Managing Director, Port Autonome de Dakar, Senegal*
Eric Brassart, *Executive Director, Port Autonome de Marseille, France*
Capt WTC Wong Chung Toi, *Director-General, Mauritius Ports Authority, France*
Bo Lerenius, *Chairman, Group Chief Executive, Associated British Ports, UK*
Eddy Bruyninckx, *Chief Executive Officer, Antwerp Port Authority, Belgium*

Americas Region

Dr Geraldine Knatz, Ph.D., *Managing Director of Development, Port of Long Beach, USA**
Dominic J. Taddeo, *President and CEO, Montreal Port Authority, Canada*
Douglas J. Marchand, *Executive Director, Georgia Ports Authority, USA*
(one vacant)

Akiyama essay results in

The winners of the IAPH's Golden Jubilee essay contest were announced in Shanghai in May (see next page).

Authors had a deadline of January this year, giving the judging panel – headed up by Eddy Bruyninckx and including Greg Martin, Douglas Marchand and Paul Verkoyen – time to digest them all.

Run under the wide theme of 'Action for a quality port' the key judgment criteria included: the originality of the essay; its logical clarity, problem identification and solution; and applicability of the

author's suggestions.

The contest traces its roots back to 1979, but since 1983, the winner has received the Akiyama Prize, named after IAPH founding father Toru Akiyama, who served as secretary general between 1967 and 1973.

The contest was set up to encourage research in developing countries. However this year it was open to all nations to celebrate the unity of the 50th Anniversary. As such, the winners did particularly well against such vast competition.

Members are urged to join *P&H* in congratulating all who took part.

Clarification

A story in the May issue was inaccurately based on a report to the ICHCA's Safety Panel and the ICHCA would like to point out that it was not responsible for raising the claims as *P&H* reported. Author of the report, Peter van der Kluit explains: "the opinions in the report are those of organisations participating in those meetings and, in a number of cases the IAPH, or my personal views. None of the views originate from ICHCA International."

Sir, I should like to set the record straight regarding the article that refers to the ICHCA in the May edition of Ports and Harbors.

ICHCA International's Safety Panel met in Limassol, Cyprus on 11/12 April and Peter van der Kluit, Managing Director of IAPH's Europe Office attended. He made a report on IAPH issues, as usual. None of the concerns attributed to ICHCA had been raised by it as suggested by the article.

However, both organizations work closely together, in particular at the IMO where there is a current questionnaire from the IMO Secretariat to Maritime Administrations on dangerous goods arising from a joint paper from both organizations last September.

The International Safety Panel is primarily concerned with cargo handling health and safety issues and related aspects. Amongst other initiatives, it is involved with an international container terminal accident benchmark scheme, a Cargo Handling Accident Report Scheme, development of a generic guide to shippers on dangerous goods and eleven new advice or research papers on cargo operations to add to the 35 already published.

I hope that this will clarify issues for IAPH members. Further enquiries can be made to Peter van der Kluit at his Europe Office at pvdkluit@msr-r.nl or myself at mike@portsafety.demon.co.uk

Yours, Mike Compton,

Chairman International Safety Panel, ICHCA International Ltd

P&H urges you to read the full report at www.iaphworldports.org

Clarification Golden Jubilee, London

A story on March's excellent Africa/Europe meeting neglected to mention that Associated British Ports jointly sponsored the conference and 50th anniversary reception with the Port of London Authority. The IAPH once again would like to thank both organizations for their generous support to the event.

Membership notes

The IAPH is pleased to introduce seven new members into the organisation

Regular Member

Fiji Ports Corp

Address: PO Box 780, Suva FIJI
Telephone: 679-3312700
Fax: 679-3300064
Email: herbert@sw.ph.com.fj
Contact: Herbert Hazelman, CEO

Drogheda Port Company

Address: Maritime House, The Mall, Drogheda, Co Louth, IRELAND
Telephone: 353-41-983-8378
Fax: 353-41-983-2844
Email: maritimehouse@droghedaport.ie
Website: www.droghedaport.ie
Contact: Paul Fleming, Chief Executive

Ports Department

Address: Muara Port BT 1728, BRUNEI
Telephone: +673-2770222
Fax: +673-2774226
E-mail: madi_tuah@ports.gov.bn
Website: <http://www.ports.gov.bn>
Contact: Pg Mohd Norasmadi Bin Pg Hj Tuah, Port Engineer

Associate Members

Bonyad Barandaz Company

Address: No. 24, Gandhi Ave., Tehran 1417737765, IRAN
Telephone: +98-21-8784054
Fax: +98-21-8777923
E-mail: commercial@bobacoir.com
Contact: Mohammad Ramezani, Commercial Deputy

Arab Academy for Science, Technology and Maritime Transport

Address: Gamal Abdel Nasser Street, Miami Alexandria, PO Box 1029 EGYPT
Telephone: +203-5482419/+203-5547475
Fax: +203-5482517
E-mail: itl6@hotmail.com
Contact: Dr Ahmed Abdel Monsef Mahmoud, Dean

Nomad Services

Address: C/O BP 25, Djibouti, DJIBOUTI
Telephone: +253-359087
Fax: +253-356291
E-mail: pauldh63@gmail.com
Website: www.nomadriskservices.co.dj
Contact: Paul Hopkins, Managing Director

Tidewater Middle East Marine Services

Address: Tidewater Building, PO Box 14155/1873, 80 Vozara St, Tehran, IRAN
Telephone: +98-21-8553321
Fax: 98-21-8717363
Email: twmo@tidewaterco.com
Website: www.tidewaterco.com
Contact: Javad Asghari



Penang Port should gear up for a variety of cargoes (photo courtesy of Joachim Affeldt)

Penang's winning ways – an extract

The following is an edited extract from Nutkunasingam Veerasingam's Akiyama award-winning essay

Relative to the era of globalization and increased competition, Penang Port Sdn Bhd (PPSB) is confronted with varied and increasingly complex customer requirements. Customers expect not only efficiency but also world-class levels in the quality of services provided.

The provision of world-class levels of service requires that PPSB take a holistic approach to improving current business practices at the port. In attempting to do this, the port must be prepared to undertake change management activities in its business.

This paper attempts to identify the shortfalls that currently exist within the organization and provide alternative solutions and simple measures that can

be implemented to overcome these shortfalls.

Structure

PPSB is divided into a number of strategic business units (SBU) and corporate service units (CSU). When the port was corporatised in 1993, PPSB's operational computer

systems were segregated by SBU to each handle only specific business areas.

There are two main systems currently in use for core business functions, known as the Container Terminal Management System (PELKON II) and the cargo management system (PELPIN).

The disparity of systems causes much inconvenience to customers, especially when these customers handle both containerised and non-containerised cargo.

Consider a scenario where a shipping agent has two ships - Vessel X (VX) and Vessel Y (VY) -

Writing to win - the honour roll

All of the entries submitted for the IAPH 50th anniversary essay competition were of a high standard and the judges were greatly impressed by the serious analysis and thought put into the essays.

However, as with all competitions, a winner must be chosen and the judging panel plumped for the following submissions:

First Prize – Akiyama Prize

Nutkunasingam Veerasingam of Penang Port, Malaysia.

PPSB: How structural and information systems reorganisation can be beneficial

Second Prize

Adrian Syahminur of Indonesian Ports Authority
Creating a synergy between Semarang and Benjarmasin Container Terminal in export/import container trade

Third Prize

Femi Jegede of the Nigerian Ports Authority
Port security

and
Deepankar Sinha of Kolkata Port Trust, India
Productivity, effectiveness, Pricing Approach

calling at PPSB carrying containerised and break-bulk cargo respectively.

Assume that VX is calling at North Butterworth Container Terminal (NBCT) and VY is calling at Perai Bulk Container Terminal (PBCT). The agent has to first register the voyages of both vessels with PPSB to acquire Ship Call Numbers (SCN) and because of the disparate systems, the agent would have to register the voyages at two different locations – Butterworth Wharves (BW) for VY using the PELPIN system and NBCT for VX using the PELKON II system.

The shipping agent would then be required to submit the inward manifests for both types of cargo again at those two locations. At BW, the shipping agent would additionally have to submit the inward manifest in the form of a hard copy to a manifest clerk, who would then input the details of the inward manifest into the PELPIN system.

At NBCT, the shipping agent would directly input the inward manifest (called K3-I at PPSB) into the PELKON II system. The difference in the submission of manifests is due to the fact that the PELPIN system is not extended to external users while all external users access the PELKON II system.

When both vessels are at berth and all their respective cargos have been discharged, the relevant forwarding agent would then proceed to perform the necessary processing in order to truck the cargoes out of the port to their intended destinations. Again, all processing of the respective cargo is done exclusively from one another requiring the agent to move between these two terminals. Although the document processed for this scenario is the Import Document for both types of cargo, the agent is still required to process it at the two different terminals mentioned above.

Meeting the challenge

All of this means that customers cannot get the status of their cargo from a single source. Any

enquiries must be made to the relevant personnel at the two different terminals.

These difficulties can be overcome, however, using IT solutions and also some changes to the organisational structure. The first solution requires PPSB to implement a one-stop centre approach when dealing with customers, regardless of the type of cargo that they are carrying.

This approach requires the CSUs of both the SBU Cargo Services and the SBU Container Services to be merged into one cohesive unit.

From PPSB's perspective, the benefits to be enjoyed are twofold. Firstly, it would bring a leaner, meaner organisation where manpower can be reduced and consolidated. Secondly, PPSB could cut down on bureaucratic red tape and enable it to provide new value-added services for mixed-cargo customers.

Customers will also benefit from minimised time wastage and hassle, while consolidated billings could be produced much faster.

Following the merger of the CSU, the next logical step is the centralization of computer systems, especially the operational systems at PPSB. This is critical, as the centralized systems would serve as the backbone for cross-functional transparency within PPSB. Any customer conducting business with PPSB would then only liaise with a single contact point and interface with one system, without having to know intimately how everything works in the background.

Just as a back-bone is important to the human body, the centralized operational system will be vital to PPSB's strategy. The centralized system will allow for operations involving multi-mode cargo handling to take place seamlessly and transparently. All of the complexities and intricacies involved in the handling of such cargo will be taken care of by the centralized system.

The full essay can be found at www.iaphworldports.org and the author can be contacted at nat@penangport.com.my

Dates for your diary

A selection of forthcoming maritime courses and conferences

July

- 13-16:** International Exhibition on Logistics and Port Equipment, Dalian, China,
<http://www.coastal.com.hk>
- 11-13:** AAPA – Port Administration and Legal Issues Seminar, Seattle, USA
www.aapa-ports.org/programs/05admin_legal.htm
- 27-29:** AAPA – Port Security and Safety Seminar, East Rutherford, USA
www.aapa-ports.org/programs/05security_safety.htm

August

- 22:** Distance Learning - Diploma in Port Management 2005-2006, London, UK
<http://www.lloydsmaritimeacademy.com>
- 22-3:** PSA Institute - Port Management and Operations, Singapore,
<http://www.singaporepsa.com>
- 29-1:** International Seminar on Remediation and Handling of Contaminated Sediments, Delft, Holland
<http://www.unesco-ihe.org>

September

- 5-7:** The International Conference on Port-Maritime Development and Innovation, Rotterdam, Holland
<http://www.portofrotterdam.com>
- 20-21:** The Marine Heavy Transport & Lift Conference, London, UK
<http://www.rina.org.uk>
- 21-22:** The 3rd Asean Ports and Shipping Exhibition & Conference, Jakarta, Indonesia
<http://www.transporevents.com>
- 26-29:** The 8th Russian Shipping, Ports & Offshore Energy Exhibition – St. Petersburg, Russia
<http://www.setcorp.ru/exb>
- 27-29:** International Construction and Utility Equipment Exposition, Louisville, Kentucky, USA
<http://www.icuee.com>

October

- 5-8:** INMEX India – Mumbai, India
<http://www.inmexindia.com>
- 23-26:** Trimble Dimensions 2005 User Conference, at The Mirage Hotel, Las Vegas
<http://www.trimbleevents.com>
- 25-26:** Port & Terminal Technology 2005 Conference & Exhibition – Hamburg, Germany.
<http://www.millenniumconferences.com>



"I want to reach beyond the port community to strengthen and develop alliances"

Thomas Kornegay sets out his agenda as he takes over as the new president of the IAPH

"Pieter Struijs has been a real inspiration to me as I follow in his very large footsteps"

It is a great honour to take the helm as president of the International Association of Ports and Harbors, the leading organization for the global port and maritime shipping industries.

I am looking forward to working collaboratively with the officers and staff of the IAPH to develop and implement a bold agenda to tackle the enormous challenges and ensure we seize the vast opportunities that confront ports worldwide – from economic viability and capital resource development to security management and environmental stewardship.

The extremely able leadership of Pieter Struijs has been a real inspiration to me as I follow in his very large footsteps and I hope I can count on him for continuing guidance.

Likewise, the time and dedication shown by the IAPH's board of directors, officers and executive committee members keep this organization moving forward in a most positive direction. I thank them for their commitment in the sure knowledge that I will be relying on their wisdom more than ever before in the coming months.

For 50 years now, the IAPH has provided unparalleled leadership to the global port industry. The combined expertise of the membership, the secretary general and the staff has kept us at the forefront of all of the emerging issues and challenges facing our ports. I intend to keep us there.

Membership of the IAPH helps all of us make wiser decisions that influence world trade and the global economy. I intend to use my time as president to strengthen this esteemed organization.

All of the leaders who have preceded me have helped create an organization that can be of great service to every member.

However, strengthening the IAPH will require greater involvement from all of its

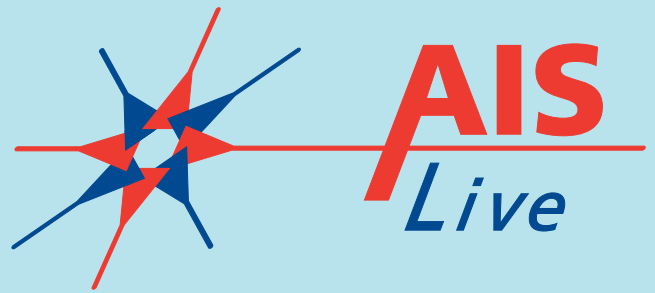
members – this organization is only as good as what members put into it. Each of us must devote more of our time and expertise to the community of the IAPH to broaden the membership and improve services to the global maritime industry.

In my opinion, this task of broadening the membership will be much easier if we have more to offer prospective members. Crucially, I want to reach beyond the port community to strengthen and develop alliances with non-governmental organizations and other associations that can be mutually beneficial and make membership the IAPH more useful to all of us.

The vital issue of reorganizing the technical committees so that members can get even more out of our work is certainly at the top of my list. But I cannot do this alone. I will be reaching out to members across the globe, asking for help and relying on their sage advice.

Finally, as president of the IAPH, I am looking forward to hosting the 2007 IAPH conference in Houston.

I truly expect this will be a highly engaging and productive gathering for discussions and decisions affecting progressive change for ports and the global maritime shipping industry, as well as exhibitions and hands-on demonstrations of the latest advanced technologies. **RH**



Connect your port to the world's largest AIS network

AIS Live, the first global AIS network has coverage on four continents and continues to grow.

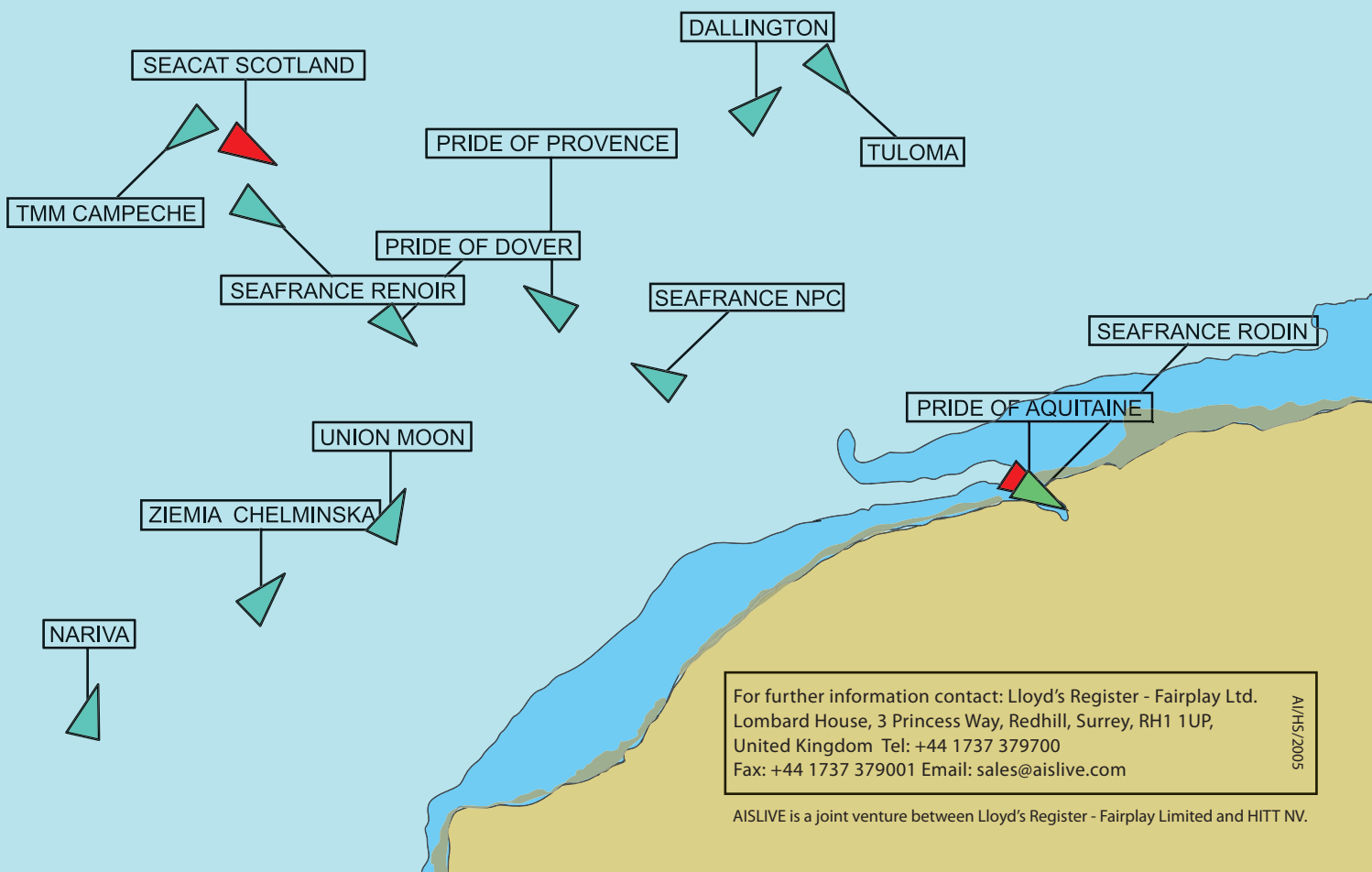
For a one off fee of £1305 / €1899 / \$2449 you will receive:

- Charts of your port approaches and berths
- AIS receiver, antenna and necessary cables
- Connection to AIS Live server
- Complimentary corporate subscription to aislive.com

AIS Live has 68,500 registered users in over 200 countries and is visited by over 9,500 people a day, which gives your port global presence.

When will your port join the AIS Live network?

Click on www.aislive.com and find out how



For further information contact: Lloyd's Register - Fairplay Ltd.
Lombard House, 3 Princess Way, Redhill, Surrey, RH1 1UP,
United Kingdom Tel: +44 1737 379700
Fax: +44 1737 379001 Email: sales@aislive.com

AI/HS/2005

AISLIVE is a joint venture between Lloyd's Register - Fairplay Limited and HITT NV.



Really?

KALMAR RTG E-ONE UNCOMPROMISING, GREEN AND PRODUCTIVE

Let's be honest. There's often a conflict between performance and environment friendly solutions. Being green means sacrifice. But now you don't have to make that choice in your terminal. E-One is ready to meet not only the toughest environmental standards on pollution, discharges, noise, safety and working environment but also the toughest demands on productivity, reliability and cost efficiency. You don't have to compromise neither the environment nor your terminal performance.

Read more about the uncompromising E-One at www.kalmarind.com/e-one.



Make things easy