Big bulk flows
An investigation into the trades and the shipowners
“Fresh thinking can lead to fresh air.”

Cavotec in Action

We’re all concerned about the environmental impact of shipping. In Los Angeles alone, experts estimate that ships give off as much air pollution as one million vehicles. That’s why Cavotec developed the AMP (Alternative Maritime Power) solution. It lets vessels switch off while moored. Instead of using their diesel engines to power air conditioning and controls, they can plug in for electrical power. For more about our maritime solutions, please visit www.cavotec.com
There’s never been so much bulk cargo going through the world’s ports – we investigate how it keeps flowing

Photo: Rio Tinto

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A sea of opportunity

Van Oord is a dredging and marine contracting company with a worldwide reputation for building tomorrow’s infrastructure. We carry out projects around the world, offering solutions to our clients’ marine engineering problems and managing the entire process from design to completion. Our work combines professional skill with experience in local environments and innovative solutions. Van Oord employs 3,000 highly-qualified professionals and has one of the world’s largest state-of-the-art dredging fleets. The company arose from the merger between Ballast Ham Dredging and Van Oord ACZ.

**Sohar Port project**

The project involves the construction of quay walls and the execution of dredging activities at the industrial port and the fishery harbour of Sohar. A total of 23.6 million m³ of sand are to be dredged. By October 2008, when the project is due for completion, the largest container, cargo and liquid carriers in the world will be able to call on the port.
COMMENT

Green for go

There should only be a single AEO scheme that takes into account the international supply chain.

The EU introduced a new supply chain security measure from 1 January 2008 when it started issuing certificates for authorised economic operators (AEOs). These go to importing and exporting companies that can show they are fully compliant with the new security requirements.

The measure aims to enhance security for shipments entering or leaving Europe. It rewards AEOs with trade facilitation incentives that include fewer customs inspections and easier reporting. This should make their logistics services more predictable and cheaper.

Following adoption of the SAFE framework of standards by the World Customs Organization in 2006, similar schemes have been introduced to improve supply chain security within the borders of particular countries. These include New Zealand, Canada, Australia, Malaysia, Japan, Korea, China and Singapore.

In 2002, the US put in place the CT-PAT, which is a precedent to the AEO scheme, though it applies only to those involved in importing goods to the US.

While this development is a great move forward, it should be just the first step towards enhanced security of the global supply chain. As global logistics do not complete within any one country, it is of critical importance for us to develop an international security regime to cover the entire supply chain process from end to end.

IAPH has always said that the port/ship interface and shipping security alone cover just one segment of the global supply chain. Therefore, we need to make vigorous efforts to bring together those countrywide AEO schemes through bilateral or multilateral mutual recognition and aim for the formation of an international AEO scheme.

One day, with the support of global IT systems for exchanging trade and security information, ‘AEO goods’ will move smoothly through green lanes without any physical checking at borders.
MUMBAI APPROVAL
Shipping minister TR Baalu approved Mumbai Port Trust’s proposed development of harbor wall berths in Indira Dock. The cost of about Rs3.5Bn ($86M) will be taken from MBT’s own resources and will cover cargo-handling equipment and dredging in the project area and approach channel. The work will increase the port’s handling capacity by 8M tonnes, so it can handle bulk as well as general cargo.

FIXED SCANNER
Haifa port will get a container scanner costing $12.4M – $8M of which will come from the US anti-terror programme – by July 2009. The new scanner will be able to scan two containers simultaneously, making a total of 24 containers per hour.

HOMEPORT AGREEMENT
Canaveral Port Authority and Royal Caribbean Cruises are expected to finalise a homeport agreement for the 3,634-passenger Freedom of the Seas. Royal Caribbean plans to deploy the 160,000gt vessel to Canaveral in May 2009, making it the largest cruise vessel using Canaveral as a homeport. Disney Cruise Line extended its partnership at Port Canaveral for another 15 years, committing to operate its two new 4,000-passenger vessels from its exclusive-use terminal in Canaveral. The first new Disney ship arrives in 2011 and the second in 2012.

PARADIP PROJECT
Paradip Port Trust on India’s east coast plans the construction of a deep-draught iron ore and coal berth at an estimated cost of Rs8.9Bn ($220M). The project is at the tender stage. The port also wants to develop a southern dock complex, but that proposal is still in the preliminary stage.

CONGESTION REDUCTION
Luanda container terminal manager Sogester has asked the port to reduce the number of days that containers are stored before transfer to the dry port to reduce congestion. Sogester, which plans to invest $45M over 3–5 years, says 30 days is too long. It’s also called for Viana dry port to be upgraded.

Port updates

Turkish success story
One of Turkey’s recently privatised terminals has announced 35% growth in container traffic for 2007. Marport, part of the Istanbul-based Arkas container terminal group, handled 1.3M teu and 1,564 vessels.

The terminal is the only one in the country that is currently accepting post-Panamax vessels.

Marport put into service 10 new rubber-tyred gantry cranes and two mobile harbour cranes (MHCs) last year and plans to invest in new yard and berth equipment. Five new ship-to-shore gantries (SSGs) have been deployed since the start of the year. Of these, three went to its West Terminal and two to Marport Main, bringing the total inventory to nine SSGs, 10 MHCs and 35 RTGs.

Privatisation pushes ahead
The Port of Tokyo’s publicly owned terminal operations company was due to have been privatised from early April, in a move designed to offer port users greater flexibility and more competitive services.

The process was outlined in a document released last October by the Tokyo Metropolitan Government’s Port & Harbor Bureau. The city will retain ownership of the port’s terminal infrastructure while creating a new and more competitive body to manage the 70% of international cargoes that pass through public berths in Tokyo.

The city government has been contributing about ¥6.4Bn ($64M) a year to support the activities of the terminal corporation under public ownership.

Apart from the anticipated savings that will accrue to taxpayers, the chief advantages of the privatisation are expected to be cost reductions for port users arising from the streamlining of management, freedom from regulations, and a flexible approach to expansion and the development of new terminal facilities.

The port regards expansion as a priority because Tokyo’s neighbour and rival, Yokohama, is continuing to develop new, very large deepwater berths that are intended to cater for the latest generation of container ships carrying more than 10,000teu.

C40 conference plan hots up
Plans for the C40 World Ports Conference are firming up, with 80 port CEOs and their mayors and senior civic leaders invited, the IAPH mid-term board meeting in Dunkirk heard.

Peter Struijs, conference director and a past president of IAPH, explained that the world’s largest cities made up the C40 group to lead the Clinton Climate Initiative.

Although Rotterdam is not a member of C40, it was asked to develop a worldwide ports response to climate change at the conference, which will be held in Rotterdam from 9 to 11 July.

Struijs said 32 of the C40 member cities had ports, and he urged other ports to attend too. He hoped at least 80 ports would attend the event and contribute to a “tangible programme of action” that would confront this “important challenge”.

More info: www.wpccrotterdam.com
Sustainable expansion completed in Savannah

An $11M terminal upgrade project has been completed by Georgia Ports Authority (GPA) using sustainable construction and operational methods.

Chairman Steve Green said the Container Berth 2 upgrade included installation of electrified refrigerated cargo racks and conversion of GPA’s ship-to-shore cranes to electric power.

“These projects will increase capacity, improve efficiency and the environment,” said Green. “Our goal is to create jobs and be good stewards of the environment and these projects do exactly that.”

The project used 11,000 tonnes, or 9.7ha, of recycled concrete material. “Not only did we eliminate the need to import quarried stone but also the need to dispose of it,” explained Doug J Marchand, GPA’s executive director. “Emission reduction from this project alone is significant.”

As part of its Container Berth 2 upgrade, the GPA announced the completion of more than 300 slots on terminal for refrigerated cargo containers. These new cargo racks are completely electrified and greatly reduce the GPA’s reliance on diesel power for cargo refrigeration on terminal. The GPA also announced that it had completed a six-year project to transfer its ship-to-shore cranes from diesel to electric power.

“Today we have 17 cranes powered solely by electricity,” said Marchand. “As a result of this programme, the Port of Savannah will conserve more than 1.5M gallons (5.7M litres) of diesel fuel every year. It is safe to say that the release of hundreds of tons of nitrous oxide, carbon monoxide and particulate matter will also be avoided.”

The GPA also announced 18% growth in total tonnage for February, or 270,000 more tonnes than in February 2007.

Downturn on its way, says PSA

Financial uncertainties and slower global growth volumes will hold back throughput at one of the world’s top container ports, an executive has claimed.

PSA Container Terminals chief executive Kuah Boon Wee told the TOC Conference in Shanghai that throughput would fall in 2010, a seminar at IAPH’s mid-term board meeting in Dunkirk heard.

Jonathan Beard, MD of consultant GHK, agreed, saying the allocation of space in the port for logistics was a wasteful use of scarce land.

HK operators call for space

Hong Kong financial secretary John Tsang’s announcement in his budget speech that the government had identified two sites for port expansion received a lukewarm response from terminal operators.

Tsang said container throughput would continue to increase from last year’s 24M teu and the government had identified two sites to build Container Terminal 10 (CT 10).

“Extensive reclamation is required for the site at Northwest Lantau, which may affect the ecological environment,” he said. “Consequently, the government will study the other site at Southwest Tsing Yi.”

But Alan Lee, chairman of the Hong Kong Container Terminal Operators’ Association, said what the terminals really needed was land at the existing terminal complex for stacking containers rather than new terminals.

“If operators can get more land the terminals will be more efficient and this will be more cost-effective than building a new terminal,” Lee said.

Jonathan Beard, MD of consultant GHK, agreed, saying the allocation of space in the port for logistics was a wasteful use of scarce land.

EC promises policy reviews

A full review of the European Commission’s policies as they affect port hinterland connections has been promised – but not until 2010, a seminar at IAPH’s mid-term board meeting in Dunkirk heard.

José Fernandez Garcia, of the EC’s directorate-general for energy and transportation, said legal uncertainty surrounded the effects on port development of waste and environmental directives.

In particular, doubts centred on the Habitats, Birds and Water Framework directives. “Significant improvements” in reliable and sustainable hinterland links were needed, Garcia acknowledged.

He told the 150 delegates: “The commission intends to evaluate ports’ hinterland connections’ status and needs and their impact on a balanced network of traffic flows on the occasion of the mid-term review of the trans-European transport network in 2010.”

See the IAPH mid-term board meeting on pages 44–45.

Port updates

SQUEEZING IN
Carnival Australia’s chief executive Ann Sherry has urged the Queensland government to build a second Brisbane cruise facility, because larger vessels are unable to access the city’s new upriver Portside terminal. The company’s Queen Victoria was forced to dock at Brisbane’s grain wharf on its maiden call, as at 294m in length it was unable to dock at Portside.

Sherry said that options might include a new cruise terminal on Fisherman Islands or in a location next to a cement works on the other side of the river.

ENNORE PORT FLOAT
Ennore Port Co floated a global tender calling on private operators to develop a container terminal at an estimated cost of Rs13,000M ($325M). The terminal will have a quay length of 1,000m and capacity to handle around 1.5M teu a year.

It will be constructed on a build, operate, transfer basis for a concession period of 30 years. It must be able to accommodate 8,000teu capacity vessels, although there is an option for a terminal able to handle ultra-large container vessels. Ennore Port has a waterfront of 3,000m and back-up land of 836ha for development of deep-draught cargo terminals.

PORT IN PANGASINAN
The Philippine Ports Authority (PPA) is to develop a port in the town of Sual, in Pangasinan, within three years. An initial budget of PhP100M ($2.5M) has been released by the government to start the project. PPA says the deepwater location at Sual provides an ideal site for a port facility and serves as a vessel sanctuary when there is bad weather in the area.

EXTRA BUSAN BERTHS
Three extra container berths are to be built as part of the Busan New Port project. Busan Port Authority said it will now build 13 out of the 30 container berths at Busan New Port. It will spend W680Bn ($720M) on building the latest berths. Construction will start from 2010, with the berths ready to operate from 2015.
Port updates

BACK ON TRACK
The UK east coast port of Felixstowe has revised its plans for the £595M Felixstowe South project so it can start work as soon as possible. The Hutchison-owned port changed the scheduling of railway upgrading works. Construction of phase one will start in the second half of 2008 to build 730m of quay with 16m depth. Phase 2 will follow as demand requires and provide another 555m of quay. Some 120m of extra sidings will also be added to three tracks in the South Rail Terminal, adding 10% to the facility’s rail handling capacity.

NJ LNG HOPES DASHED…
Prospects for a BP LNG facility on the New Jersey banks of the Delaware River were dashed by the US Supreme Court. It said cross-river neighbour Delaware could block the project as the terminal would extend some 600m into Delaware territory. New Jersey also wants a new container port nearer the Delaware River mouth, while Pennsylvania would rather see the river dredged to the port of Philadelphia to keep it prosperous.

…AND IN LONG BEACH
A court has rejected a request by LNG developer Sound Energy Solutions for the Port of Long Beach to resume an environmental assessment of its proposed 160,000m² terminal at the port. In what observers see as the final blow to the $700M project, the court said the port was justified in deciding not to lease land to the company and abandoning the environmental assessment. Sound, a Mitsubishi subsidiary, began negotiations with the port in 2002.

LNG SECURITY BILL
New security requirements for LNG terminals in the US have been promised. Representative Elijah Cummings told the Connecticut Maritime Association conference: “State authorities should have a formal say in the placement of terminals in their state, given that we are increasingly relying on state and even local authorities to provide security for these facilities.”

Russian regeneration
St Petersburg-based Oslo Marine Group (OMG) has announced a $200M development of two Russian ports.
London MD Keith Parker told P&H at a meeting of the UK Ports & Terminal Group that it had five development areas.
These are centred on two ports – St Petersburg and Vyborg, near Finland, where it owns all the port. St Petersburg’s Onega facility is to be developed into a 6.5ha container terminal – ro-ro traffic is handled there now.
In future, rail connections will be added and a dry port opened nearby Yanino. The Western terminal, through which OMG moves its own timber, may diversify to handle refrigerated cargoes. In Vyborg the plans are even more ambitious. Parker said that finance was being finalised for development to deepen berths to 8.5m from the current 7m, as well as to modernise equipment, improve loading and discharge times and move from the current ‘dirty cargoes’ of bulk and neo bulks to containers and later possibly ro-ro traffic.
Parker said targets were 160,000teu, 200,000 ro-ro units and 1M passengers by 2011. Tsvelodubovo dry port, covering a total area of 20ha will be developed to serve Vyborg to provide container storage and goods processing.

Scandinavian terminals drop the ropes
Ferry terminals at the Danish ports of Hou and Sælvig are to introduce automated mooring units for ferries operating on a high-frequency passenger route to and from the island of Samsø.
The automated mooring systems, designed by Cavotec MSL, are already in use by APMT at the Port of Salalah in Oman, by SeaRoad Shipping in Australia, by Toll in Picton in New Zealand, and on the St Lawrence Seaway in Canada.
The latest order is from Denmark-based Nordic Ferry Services, a joint venture between Bornholmstrafikken and Clipper Group. The units are to be installed in September.

Port Klang expands apace
Malaysian ports operator Westports and fellow terminal operator in Port Klang, Northport, are not letting the US economic slowdown subdue their expansion plans.
At Northport a spokesman admitted global economic gloom “could impact” on transhipment traffic or trade routes, but added: “Mercifully we are not totally dependent on transhipment for our growth”. Northport’s plans involve a RMS85M ($185M) outlay, mostly for developing Berth 8A of Container Terminal 3 (CT3) this year. Redevelopment of the breakbulk terminal will see its container quayline (including CT1 and CT2) lengthened to 3.2km. Dredging of the northern approach channel will ensure the ultra-large container vessels can access the facilities.
Westports’ $253M three-year expansion programme ties in with its executive director Ruben Emir Gnanalingam’s plan to boost capacity by 50% to 5M teu by year-end, including two new berths that will expand capacity to 8M teu from its current 6M teu. Westports also has a 15-year plan to build up to CT9, adding 2,400m of quay from CT6 to CT9, which will increase capacity to 12M teu.

Tied up: the system does not use mooring ropes
Jan De Nul Group, operating worldwide, is specialized in dredging and land reclamation, rock placing, trenching, rock dumping for oil and gas related offshore pipeline projects, quay walls, marine related projects, civil engineering and large-scale environmental remediation projects, with a good reputation in turnkey projects.

With a yearly turnover in 2006 of 1.2 billion Euro, the company ranks amongst the international top of dredging contractors and the top of marine engineering contractors.
**Dredging**

**KHALIFA WORK STARTS**
Abu Dhabi Ports Co has begun dredging and reclamation work at Khalifa Port, involving 45M m³ of material. Khalifa is one of the world’s largest greenfield offshore port and industrial zone developments. The first stage will consist of dredging to create a deep-draught 12km-long approach channel to the proposed port, as well as reclamation of the offshore port island which will cover an area of 275ha, the company said in a statement.

The first vessel is expected to visit Khalifa Port in late 2010. Stage 1A development will include over 3.2km of quay walls able to accommodate a throughput of over 2M teu and over 6M tonnes of general cargo, it added.

**GEORGIA TENDER**
Poti Sea Port Authority in Georgia has announced an open international tender for the dredging of the entrance channel and silt trap at Poti Sea Port. Container handling is booming at the port and management has announced a terminal expansion programme. More info: www.potiseaport.com

**DEME FLEET PLANS**
The official naming of 9,000m³ trailing suction hopper dredger *Breydel* on 16 May marks the seventh addition to DEME’s fleet in just four years.

It forms part of the group’s €500M ($782M) investment programme that will see at least 10 new main dredging units added to its fleet, plus auxiliary vessels. This is a response to an orderbook worth €1,800M and what the company describes as “promising” short- and medium-long-term market perspectives. Turnover for 2007 amounted to €1,300M.

**HUMBER DEEPENING STUDY**
Associated British Ports is investigating the feasibility of deepening the Humber estuary’s deepwater approach by 2m in 2009 to allow vessels of up to 15m draught to reach Immingham’s riverside jetties. While improving access to any of the jetties along the river frontage would be a benefit, the prime mover behind the project has been Total’s plan to handle larger shipments at its Lindsey refinery.

**Melbourne triumph over opposition**
Melbourne channel deepening opponent Blue Wedges Coalition (BWC) has lost its second and possibly final court challenge to the dredging project.

Justice Tony North of the Australian federal court ruled that federal environment minister Peter Garrett had properly considered the economic, social and environmental impact of bay dredging before giving it the green light. “I have determined that Blue Wedges has not established that the minister failed to act in accordance with the requirements of the law,” Justice North said. BWC president Jenny Warfe maintained: “The people of Melbourne are going to realise this is a bad project. Whether or not the minister made a lawful decision is irrelevant.”

Port of Melbourne Corporation CEO Stephen Bradford said work would proceed on more difficult parts of the project, including Port Phillip Heads and the River Yarra. Prior to the court decision, 3M m³ had been removed in other sections of channels pending.

The first tests for toxins and heavy metals in Port Phillip Bay after dredging began showed they remained at safe levels. “Water samples showed slightly higher levels of nitrogen, arsenic and zinc than were recorded days before the deepening started,” the Australian Broadcasting Corporation reported, “but levels of mercury, cadmium and lead remained below detectable levels.”

The samples were taken a week after Queen of the Netherlands began dredging clay containing low levels of contaminants from the channel. Melbourne University water quality expert Professor David Fox commented that the results did not raise any red flags.

**New Panama dredger contract**
The Panama Canal Authority (ACP) has awarded a contract to Dutch yard IHC Beaver Dredgers to design and build a new, more powerful cutter suction dredger for its fleet.

The new 12,000kW vessel will replace the 9,000kW *Mindi*, which has been in service at the canal since 1942. ACP said in a statement that it expects delivery of the new dredger in May 2011.

“The construction of a dredger with more pumping capacity and the ability to dredge deeper will allow us to continue to make the waterway even more navigable, safe, reliable and efficient,” ACP’s vice-president of operations Manuel Benitez said.

The new dredger will boost the production capacity of the dredging fleet, which is necessary to meet the demands of the expansion, as well as maintenance and modernisation projects. It will be built in the Netherlands and will have capacity to dredge along the entire waterway, including the Gaillard Cut, Gatun Lake and both Atlantic and Pacific entrances, to a depth of 25m, even after the expansion concludes.

**Dredging surge marred by collisions**
Major channel maintenance and deepening projects at the Port of New York and New Jersey have claimed their second victim this year when another commercial vessel collided with a dredger.

The 50,206dwt *Eagle Bulk* collided with the dredger *Delaware Bay* in March. The US Coast Guard reported that the vessel sustained a breach of the hull, above the waterline. It said the vessel was outbound when the collision occurred in the upper bay of New York harbour, about 1nm from Staten Island.

The dredger, which was conducting operations for the US Army Corps of Engineers, sustained minimal damage. USCG inspectors examined both vessels and are working to determine the cause of the incident. Both ships were detained.

On 25 January, the 43,420dwt fruit juice tanker *Orange Sun* collided with the dredger *New York* in Newark Bay. No injuries or major fuel spills were reported from either of the collisions.
30th IADC INTERNATIONAL SEMINAR ON DREDGING AND RECLAMATION

16 – 20 June 2008
Delft, The Netherlands

For more information and registration, please contact Mr. F.H. Cammel at info@iadc-dredging.com or visit www.iadc-dredging.com

FOR WHOM?

For decision makers and their advisors in government, port and harbour authorities, offshore companies and other organisations that have to execute dredging projects, the International Association of Dredging Companies organises in cooperation with UNESCO-the International Seminar on Dredging and Reclamation.

The 30th Seminar will take place in Delft, Monday 16 to Friday 20 June 2008.

An important feature of the seminar is a trip on a trailing suction hopper or cutter to visit a dredging project being executed in the given geographical area. This gives the participants the opportunity to see dredging equipment in action and to gain a better feeling of the extent of a dredging activity.

Highlights of the programme are:
Day 1 Why Dredging? The Need for Dredging/Project Phasing
Day 2 What is Dredging? Dredging Equipment/ Survey Systems (Includes a Site Visit)
Day 3 Cost, Pricing and Contracts
Day 4 Preparation of a Dredging Contract
Day 5 Dredging Projects

The cost of the seminar will be € 1,350,-; this fee includes all tuition, seminar proceedings and workshops and a special participants dinner during the week but is exclusive of travel costs and accommodation. Assistance with finding accommodation can be given.

Representatives of port authorities, companies, and individuals, with an education level equivalent to at least a B.Sc. or comparable work experience, interested in attending are requested to complete the registration form. Please call or visit our website.

VUOSAARI CRANES
Steveco at Helsinki’s new Vuosaari port has signed an order for a second Panamax-class, BoxHunter-type port crane for Steveco’s container terminal at Vuosaari. The crane has a lifting capacity of 50 tonnes and a reach of 38m and will be delivered in early 2009. A previously ordered crane will arrive in Vuosaari later this year.

Earlier another Vuosaari company, Finnsteve, ordered four post-Panamax cranes and expects installation of the first unit on a wharf in the eastern part of the harbor to start this month.

More info: www.portofhelsinki.fi

BRAZIL RTGS
Kalmar has received an order for 12 E-One rubber-tyred gantry cranes from South America’s largest container terminal operator, Santos Brasil, operating at the Port of Santos. The 7+1 wide and 1-over-6 high units will be delivered by March 2009. Unit prices for RTG cranes vary from €1M to €1.5M. Kalmar has already delivered five conventional hydraulic and 12 all-electric RTGs to Santos Brazil, which handled 1.2M teu in 2007.

SPANISH TIES
Konecranes has acquired the entire share capital of crane and service company Edilmen 2000, based in San Sebastian in northern Spain. Before this transaction, Konecranes held 19.2% of the share capital. The value of the acquisition was not disclosed. The company, which has 15 employees, will be named Konecranes Grucas.

MORE TRADE
India’s major ports saw cargo grow 14% over the seven months from FY2007–08 (April–October), up 9.5% on the corresponding period of the previous year, according to the official Economic Survey 2007–08. The survey said the total traffic carried by both major and minor ports during 2006–07 was estimated at around 650M tonnes. The 12 major ports carry about three-quarters of the total traffic, with Visakhapatnam top. Major ports increased their annual capacity to 505M tonnes in 2006–07 from 456M tonnes in 2005–06.

HHLA has designs on Russia
Container terminal operator Hamburger Hafen & Logistik (HHLA) is sounding out further investment opportunities beyond its core market in Hamburg, north Germany. “We are looking at investments in the Baltic Sea region and may participate in a terminal project in Russia,” said chief executive Klaus-Dieter Peters.

HHLA wants to expand its network on the back of major cargo flows via Hamburg. Given the port’s leading position as a transhipment hub for Russia, an investment in a Russian feeder port would be the next logical step, Peters explained.

HHLA, which recorded an operating profit of €288M ($456M) – up 32%, driven by double-digit throughput growth last year – already owns a facility in Lübeck, Germany, which is connected to Hamburg by various intermodal services.

A strategic stake in a Russian port would help HHLA set up direct container shipments into the Baltic that could bypass Hamburg altogether. Strong volume growth in the region has fuelled speculation that the deepsea container liner may introduce direct loops covering ports such as St Petersburg/Ust Luga and Gdynia in the near future.

The decision to expand the scope of the business is justified by many years of “consistently strong demand” for port handling technology and the continued favourable outlook for global container traffic and the container handling business, Hartwig explained.

Theodor Maurer, chief sales officer of Linde MH, added: “In the past 14 years, the number of containers being transported has quadrupled. We believe that over the coming years container transport will undergo further significant growth.

“The principal drivers behind these trends will be international supply relationships, relocation of production to low-wage countries, increases in global sourcing and global sales strategies. Asia will continue to be the most dynamic region for global container handling in the future,” he continued.

Of its €21M investment, almost €17M will be spent on research and development and more than €4M on improved production techniques.

In 2007, the Linde Heavy Truck Division generated sales of €173M.
Container charge catches on

The Port of Oakland has followed the lead of southern Californian ports by planning to charge fees to pay for ecological improvements. Harbor commissioners say the fee will help fund a $520M campaign to cut diesel pollution by 85% by 2020.

A port spokesman said that a study is being done into the business impact of various levels of charges. Again like southern Californian ports, Oakland wants to replace all older-model heavy vehicles and to require owner-operator vehicle drivers to become employees of established transport companies.

Federal officials seeking funding sources for highway repairs are eyeing the fees too, but have met resistance from ship operators.

Chris Koch, president and CEO of the World Shipping Council, urged the US Congress to look elsewhere for funds to upgrade the nation's infrastructure.

Speaking at the Northeast Trade & Transportation Conference, sponsored by the Coalition of New England Companies for Trade, Koch said domestic freight — not covered by the fees — far exceeds international. Only about 5% of containers moving across US highways come from non-NAFTA international trade, he estimated.

China Merchants move in

China Merchants Holdings (International) plans to buy 5.4% of Ningbo Port for $16.74M.

Fu Yuning, chairman of China’s biggest port operator, said in a statement to the Hong Kong stock exchange that subsidiary China Merchants Ningbo would pay cash generated from group resources. China Merchants will join six mainland companies to take over port and related assets from Ningbo Port Group.

The new company will operate a deepwater port that combines the inland estuary and coastal harbors of five port areas that include Beilun, Zhenhai, Ningbo’s old port Daxie and Chuanshan. Ningbo Port has plans to float shares on the Mainland and Hong Kong exchanges this year. China’s fourth-busiest container port, it handles about 9M teu a year.

BIGGER BOX SHIPS

The Port of Tauranga in New Zealand has purchased a new container crane for 5,000–7,000teu container ships. It is expected to be in operation by July 2009. It will have an outreach of 48m to handle ships 18 containers wide.

SERVICE AT LAST

Two new 87m cranes that sat idle at the Port of Los Angeles for three months and had run up a $2M demurrage bill have entered service. Along with a third unit, they will be installed at TransPacific terminal.

INTERMODAL BOOST

The Port of Tacoma has ordered seven straddle carriers for on-dock intermodal rail operations. The units from Kalmar will be used to load and discharge double-stack container cars. Delivery is due in October 2008.

Cash & cargo

China Merchants Holdings

(INTERNATIONAL) plans to buy 5.4% of Ningbo Port for $16.74M.

Fu Yuning, chairman of China’s biggest port operator, said in a statement to the Hong Kong stock exchange that subsidiary China Merchants Ningbo would pay cash generated from group resources. China Merchants will join six mainland companies to take over port and related assets from Ningbo Port Group.

The new company will operate a deepwater port that combines the inland estuary and coastal harbors of five port areas that include Beilun, Zhenhai, Ningbo’s old port Daxie and Chuanshan. Ningbo Port has plans to float shares on the Mainland and Hong Kong exchanges this year. China’s fourth-busiest container port, it handles about 9M teu a year.

Universal communication needs universal partners

Inmarsat, Thrane & Thrane and Becker Marine Systems communication

universal marine communication

With the umc.global network, the next generation of communication services is ready to embark on seagoing vessels. Inmarsat, Thrane & Thrane and Becker marine systems communication are joining forces to provide high-speed and always-on communication by using FleetBroadband on the high seas, umc.connect portnet WiFi and WIMAX as well as umc.connect roaming free 3GSM in ports and in coastal areas. With the increasing reach of the umc.global network sailors can stay in touch with their family and friends; business operations can be streamlined and costs can be reduced.
LYTLE AT LONG BEACH
The Long Beach Board of Harbor Commissioners approved the promotion of J Christopher Lytle to the position of deputy executive director and chief operating officer. He will serve as the Port of Long Beach’s number two executive.

DP WORLD EXECUTIVES
DP World has appointed Flemming Dalgaard as senior VP and MD of its Europe and Russia region, and Capt Anil Singh as senior VP and MD of its Africa region. Dalgaard joins from Maersk Line and Singh joins from Thailand, where he was group chief executive officer of Laem Chabang.

NEW CHIEF EXECUTIVE
Peel Ports’ new chief executive Stephen Baxter, has taken the reins of the UK’s second largest ports group which includes the Port of Liverpool. Baxter succeeds Tom Allison, who has become chairman of the group. Baxter, the former COO for the UK’s BAA airports, has taken up his position at Peel Ports’ Liverpool head office.

CORPORATE OFFICERS
ICTSI has announced the appointments of Maria Roweena Gulino as business analysis and valuation services manager; Anthony Jake Duran as information systems auditor and Arsenia Magtalas as business support services assistant manager.

MANAGEMENT CHANGES
VYCON has announced changes in top management. Vatchi Artinian, currently a non-executive director of the company, will take the role of CEO in place of Tony Aoun, who is leaving to take a position at Calnetix, an associated company.

HONG KONG COO
Bulk cargo port and infrastructure group PYI Corporation has appointed Xu Wei Hui chief operating officer. PYI MD Tom Lau said Xu has “strong credentials” in strategic development, growth and operation of businesses in port and logistics rubber, petrochemical and energy sectors.

Who’s counting: 795 piles are needed for the wharf

Tacoma terminal a step nearer

A Port of Tacoma contractor has driven into place the last of 795 concrete pilings into the Blair Waterway to support a new wharf. The $46M wharf is part of a facility planned for the 83 acre (33ha) former Kaiser Aluminium property on the east side of the Blair.

Manson Construction of Seattle worked 12-hour days Mondays to Saturdays from late August to drive the 142ft (42m) long concrete piling. The long work days were necessary to complete the in-water work before the start of the annual fish migration season. Remaining construction outside the water will continue until the wharf is complete, expected in October.

“We’re grateful to our neighbours in northeast Tacoma for their understanding during this first phase of construction,” said Port of Tacoma Commission president Dick Marzano. “The improvements will serve our community well into the future. And while we know the results will be worth it, we also understand a remodelling project of this magnitude might create noise.”

This phase of construction was the first of more than $800M in redevelopment along the Blair-Hylebos peninsula between now and 2012. Future plans include a relocated and expanded terminal for Totem Ocean Trailer Express and a new marine terminal for NYK Line.

The plans also include substantial road and railway improvements to serve these terminals as well as a privately owned terminal planned by SSA Marine and the Puyallup Tribe of Indians.

More info: www.portoftacoma.com

New LA clean scheme

The ports of Los Angeles and Long Beach have agreed to pay ship operators to use low-sulphur fuel.

The harbor commissioners approved the plan to pay the difference between the price of bunker fuel and low-sulphur distillate fuel for vessel operators that make the switch 24–40nm from the ports.

Incentives will begin 1 July and expire on 30 June 2009, unless extended. To qualify for the incentives, vessels must participate in the ports’ voluntary speed reduction programme, which mandates a 12kt limit.

Pacific Merchant Shipping Association president John McLaurin called the incentive programme a “direct result of co-ordinated public-private partnership”, adding that the vessel speed reduction programme now boasts a 90% compliance rate.

Fuel incentives are expected to cost the Port of Los Angeles (PoLA) as much as $8.6M annually and the Port of Long Beach as much as $9.9M.

The ports believe the incentives will cut sulphur oxide emissions by up to 11% and particulate matter by 9%. “We don’t want to keep waiting for state regulations to kick,” noted Long Beach Harbor Commission president Mario Cordero, who described the incentives as a “much-needed bridge”.

California Air Resources Board regulations propose that low-sulphur fuel be used within 24nm of the state coast, effective from 1 July 2009. A federal court ruled that the state could not impose such regulations without Environmental Protection Agency approval, but California has vowed to enforce the rule while it appeals against that decision.

PoLA has also posted its final recommendations for a port-wide clean truck programme (CTP) as part of its drive to reduce air pollution.

The port said the initiative would help to achieve long-term sustainability and accelerate replacement of high-polluting lorries with cleaner vehicles.

It hopes the move will provide market incentives to encourage private investment to create a short-haul trucking or drayage system.
Comprehensive and innovative solutions for retaining walls, cofferdams, bridge abutments, underground car parks, quay walls, flood protection structures... Decades of experience in the steel sheet piling business, including technical assistance for design and installation.

Steel Sheet Piling
Solid bulk terminal, Portugal
Strategically negotiated contracts with terminal operators can deliver a win-win situation for port owners in which they can meet future investment needs while providing their customers with fixed costs and guaranteed availability of services.

This was the conclusion of a United Nations Conference on Trade and Development (UNCTAD) meeting on the globalisation of port logistics. The Geneva meeting was examining the opportunities and challenges for developing countries before April’s UNCTAD XII meeting in Ghana. This was convening as P&H went to press and a report on its conclusions will appear in the July issue.

The UNCTAD report noted that fast-expanding global containerised trade, and its specific requirements in terms of efficient handling of growing volumes of boxes and ever-larger ships at port terminals, has prompted the rise of global container terminal operators.

Their knowledge, expertise and financial strength give them leverage and power to negotiate with shipping lines that are superior to those of ports in many developing countries, the agency observed. Terminal operators’ highly profitable activities are benefiting developing countries, which struggle to put in place the sophisticated workflows needed for today’s complex container port operations.

International terminal operators have the necessary highly specialised managerial and technological knowledge and can bring substantial initial and continuing financial investment to build, operate and maintain more efficient ports. By building longer berths and deepening draughts to accommodate larger vessels and greater volumes of traffic, these ports can achieve economies of scale.

Offering a terminal concession to a global terminal operator, or even an established single port operator, is not the only possibility open to governments. Port or terminal operators may wish to consider vertical integration into a supply chain incorporating national transport systems.

One way forward is to unite transport operators, such as truck or rail operators, together with terminal operators to provide a dedicated service along specific inland routes to dry ports. In partnering with major global operators, ports in developing countries may benefit from the sharing of knowledge and expertise in the areas of:
- Management and operational techniques
- Infrastructure planning
- International finance
- Tried and tested computer software systems
- Port equipment
- Stimulation of imports and exports.

Some developing countries possess particular geographical or commercial advantages, especially if they are close to important international trade lanes. They are therefore natural candidates for handling transhipment traffic, yet they may find it hard to exploit those natural advantages because of the volatility of these trades.

Transhipment business is particularly subject to rapid transfer from one port to another by shipping lines, which can result in a significant loss of traffic to rival facilities located on the same international trade lane.

Partnerships between established terminal operators and port operators could provide the necessary safeguards to protect the security, environment and national land transport systems of the host nation. This combines with attractive conditions for potential foreign investors.

We encourage the development of transhipment services because they can help to improve the efficiency and capacity of ports through handling larger cargo volumes, which can also help to subsidise imports or exports.

At the heart of competition for transhipment traffic are two important issues. There is the race to the bottom, where low costs are rewarded with higher business. The pressure is upon ports to reduce their charges as much as possible while providing the best possible service.

The second issue is port congestion or quality of service. Severe congestion is penalised by the
removal or transfer of transhipment traffic to competitors. Ports have to balance the needs of import/export trades, which provide significant employment opportunities and much-needed earnings that benefit the whole country, with the needs of transhipment clients.

The negative side to transhipment traffic is that it is fickle. Operators can transfer transhipment business rapidly from port to port, making it difficult for ports to plan future investments when neither traffic nor revenue is certain. Ports should take care that their fortunes do not become reliant solely on transhipment customers.

This can be a significant challenge to developing countries, but it is one that can be met through negotiation with customers and incorporation into long- or medium-term contracts. In the ideal situation, port owners are able to meet their investment needs while customers have the security of fixed costs and reliable services.

Port investment requires a leap of faith, but some of this uncertainty can be mitigated by better understanding the port customers’ needs through regular dialogue.

We offer some advice for countries that are considering bringing in foreign companies, and particularly transnational concerns, to help develop their port logistics.

An important challenge facing any government privatising its ports is to change from its previous role of a self-regulated provider of services to a new role as an independent regulator of activities delivered by private operators. Care needs to be taken not to create shadow management of former activities or to over-regulate.

Some governments have opted to regulate port tariffs and have linked them to minimum throughput volumes. Although the policy is designed to protect the customer, there have been cases where port operators have turned away traffic because the extra work did not create cost reductions that could be retained as revenue. A lack of incentive to perform anything more than the minimal contractual requirements is sure to result in minimal traffic.

Many African countries have the worst connections to international shipping transport networks and they face high international freight costs as a percentage of the value of imports. The proportion increased from 9.4% to 10% between 1990 and 2005.

On the other hand, many Asian countries, which have numerous privately operated terminals, are among the best-connected worldwide and have seen estimated international freight costs as a percentage of the import value decline steadily from over 9% to just below 6% over the same period.

So UNCTAD supports the introduction of private equity to help developing countries upgrade their port facilities and improve connections to global transport networks. The lack of modern facilities at direct or transhipment ports remains an important barrier to trade in many developing countries.

Vincent Valentine is economics affairs adviser, Trade Logistics Division, UNCTAD

More info: www.unctad.org
Demand builds for raw materials

Key ports, land infrastructure and the bulk carrier fleet have all been overwhelmed by demand for bulk cargoes. P&H finds out what ports plan to do to cope

For the past five years, China’s industrial and urbanisation programmes have demanded more and more raw materials – a demand that has overwhelmed the world shipping markets. China, and especially the Chinese steel industry, remain key drivers of the dry bulk market.

The commodities that are leading this rise in demand for bulk transport are iron ore, steel and coal. Ports are finding that the number of bulk carriers in service is growing – and more are still being ordered. The ships on order are getting bigger too.

Unsurprisingly, this increase in shipments has contributed to port congestion at both ends of the trades. Worse still, once the system has reached capacity the resultant problems become much harder to deal with, making a backlog of vessels inevitable.

According to UK-based Howe Robinson Shipbrokers, rail and port upgrades planned in New South Wales and Queensland for thermal coal facilities will ensure that shipments are able to increase. If the ports experience bad weather conditions that affect operations, this picture could change, its report Dry Cargo Market Annual Review 2007, Outlook 2008, says.

In one move, Australia’s Queensland state government has given the environmental go-ahead for a A$3.5Bn ($3.1Bn) coal terminal at Wiggins Island on the northeast coast. This greenfield development will be the second major coal export facility in the Port of Gladstone, adding up to 84M tonnes of capacity to take Gladstone’s total export capacity to 150M tonnes a year. The project will be managed by the Central Queensland Port Authority and built in three phases.
Wiggins Island still needs approval from Australia's federal government, but construction of the A$1.3Bn first phase could begin as early as next year and be in operation by 2012, according to Queensland's infrastructure and planning minister Paul Lucas.

"Wiggins Island will greatly enhance Queensland's ability to get our number one export across the seas to 33 potential markets," he said, adding that over 20 collieries had expressed interest in taking up the new export capacity. The terminal will include a 2.4km jetty, up to four coal berths, three dump stations, underground conveyor systems and ship-loaders, plus supporting roads, power and water infrastructure. It will be located northwest of Gladstone, immediately upstream from the existing RG Tanna Coal Terminal. Its extensive associated rail infrastructure, totalling about 70km of track, will be built in conjunction with the A$500M Moura Link- Aldoga Rail upgrade project that is scheduled to get under way about the same time.

Australia is the world's largest exporter of coal – 257M tonnes last year – but years of under-investment, combined with surging demand from Asia, have left Australian ports severely congested, among them the world's largest coal export terminal at Newcastle. It's a supply bottleneck that has had an impact on the Asian coal market, driving up spot coal and freight prices.

The Queensland government is determined to redress the balance, Paul Lucas told P&H, and is also investigating the feasibility of a A$860M expansion at Port Alama to help coal miner Xstrata boost production and exports. If federal-level approvals are received, construction could begin as early as 2009, he added, and the first phase would lift capacity by up to 25M.

According to Howe Robinson, South Africa is expected to ship below mine and port capacities, hampered by continuing rail bottlenecks. By contrast, it reports substantial port development taking place in China. This will be the first full year of operation for the major coal handling terminal commissioned in 2007 at China's largest coal port, Qinhuangdao. The port, in the northeastern province of Hebei, currently handles about 144M tonnes of coal a year, most of which is shipped to power companies in Guangdong and other provinces in the south. The facility's operator and manager, Qinhuangdao Port Group, is building six more berths to expand capacity by 45% to 209M tonnes a year to meet increasing demand, according to deputy general manager Zhao Ke.

In Caofedian a similar-sized terminal will handle 200M tonnes of coal a year when it opens next year. It will then be able to accommodate vessels up to Capesize capacity.

In India, coal and iron ore exports are also expanding. At Ennore, a massive iron ore terminal is under construction, with phase one expected to start operation in 2010 and phase two in 2011. Brazil-based CVRD – the world's largest exporter of iron ore – had to close its smallest terminal at Itagual, in the state of Rio de Janeiro, in order to reconstruct structures damaged in an accident last year. The stoppage represented an average daily loss in shipments of 60,000 tonnes of iron ore, demonstrating very clearly the vulnerability of these types of facilities. Itagual, with annual shipload capacity of 25M tonnes of iron ore, is Vale's smallest maritime terminal dedicated to iron ore shipments. Vale also operates the Ponta da Madeira maritime terminal, in the state of Maranhão, Guaíba Island maritime terminal, in the state of Rio de Janeiro, and Tubarão Port, in the state of Espírito Santo – the world's biggest iron ore port. It handles about 15% of the world's iron ore shipments.

As its facilities are already working at more than capacity, Vale has announced port expansion plans. It has already invested in equipment to help it speed cargo handling, but feels more is needed, given that Brazil's iron ore exports are predicted to rise by some 36M tonnes over the course of this year.

Indonesia is a country with huge potential to export thermal coal, but it is struggling to satisfy increased local demand and to push through development projects. Indonesian coal miner PT Tambang Batubara Bukit Asam (PTBA) is planning a massive injection of funds to develop the infrastructure surrounding Kertapati port in Sumatra. A company spokeswoman told P&H that the company is considering a $1.8Bn initiative to develop the port's road and railway facilities. This would be a joint project with PT Kereta Api Indonesia, aimed at raising PTBA's annual coal capacity to 20M tonnes by 2012, she added.

Bukit Asam's development plans coincided with the findings of a PricewaterhouseCoopers survey that noted the record financial results of Indonesian mining corporations in 2007. It said the results accrued from strong commodity prices caused by a surge in worldwide demand.

The survey added that price increases were mainly attributable to rising demand from Asia. The survey was highly critical of Indonesia and its investment conditions, but added that global companies were nevertheless showing considerable interest in the country's mining industries. PH

More info: www.shipbroking.com
Black gold not green

As the demand for coal escalates, ports may find themselves facing protests against its use as a fuel, as Bridget Hogan investigates.

Around the world, efforts are being made to satisfy the world’s appetite for fuel. The aim is to find green solutions, but for now it is coal and oil that power most of the world’s transport and industry. New tactics are being employed to promote awareness of the deeper issues of the exploitation of limited global resources and specifically the growing use of coal as a fuel.

Ports and mines are targets, and protests are escalating all over the world. There have been examples in Australia, India, Brazil and even China. Take the example of Lyttelton, in New Zealand.

The coal facility there is the largest in the country, from which over 2M tonnes is exported every year. Coal is received from mines on the west coast, consolidated in the port’s coal yard, then loaded on to vessels by port labour.

The quiet town’s normal routine was interrupted one evening in March when a consignment of coal for export to Dunkirk was being handled. Also in port was the Rainbow Warrior 2, flagship of the Greenpeace environmental movement.

The organisation’s representatives on board outwitted staff at the Port of Lyttelton and the vessel slipped its berth two hours ahead of schedule. The plan, as it became clear, was to block departure of export coal-carrying bulk carrier Hellenic Sea. As the vessel finished loading 60,000 tonnes of coal from mines belonging to state-owned Solid Energy, the Rainbow Warrior 2 moved into
position and set two anchors to block the bulk carrier.

“We were surprised by the Rainbow Warrior 2 leaving the berth ahead of its scheduled departure time without using our linesmen or a pilot,” Lyttelton Port Company (LPC) spokeswoman Julie McCloy told P&H. She said the ensuring ‘collaborative’ response went according to the port’s security plan and involved LPC, the harbourmaster, police and Maritime NZ. With assistance from 30 police attending the incident and an LPC tug that pushed the Rainbow Warrior 2 away from the coal ship, the vessel’s departure was delayed by only a few hours.

McCloy said the port was not expecting trouble. “We had worked with them over the previous week scheduling Rainbow Warrior 2 open-day tours. All seemed to be going well.”

After the Rainbow Warrior 2 dropped anchor, Greenpeace protesters climbed up the hull of the bulk carrier as crew turned high-pressure hoses on them. Police officers on the dock moved in, arresting a number of the protesters.

McCloy said the Rainbow Warrior 2 had not been scheduled to leave port to start its national publicity tour until 7pm, but shortly after 5pm it pulled out of its berth without notifying the public and Maritime NZ. “It left port early, without authorisation, and without a pilot, which is illegal – a breach of local bylaws,” she said. “It was also a breach of maritime safety protocols.”

“We tried to ask them to return to port, and they refused and then turned off their radio. They were illegally moored.”

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Police boarded the Greenpeace vessel to advise them of the breaches of protocol, and conducted negotiations, she said.

McCloy said that because the vessel had breached bylaws, Greenpeace could be prosecuted, but the charge was not clear. Either piracy or terrorism laws could cover the incident.

The environmental group’s activities reflect a general, and growing, unease around the world about the possible consequences for world climate change of burning more coal to generate power. According to the objectors, when burned, coal is the dirtiest of all fossil fuels. However, technologies are being used and developed to reduce the impact on the environment of coal-fired power stations.

This is not enough for coal’s detractors, and many power station developments are being held up by protests. Such land-based facilities are an easy target, of course.

Now there is concern that ports, too, could face disruption as activist groups such as Greenpeace step up their campaigns. The Lyttelton protest followed one in Australia last year. Then, protesters targeted Newcastle, the world’s largest coal exporting port.

Twelve Greenpeace activists were arrested after the message “Australia pushing export coal” was painted on the side of a bulk carrier, the Endeavour. The protest came at the start of the 2007 Asia Pacific Economic Cooperation (APEC) forum meeting which was hosted by Australian PM John Howard in Sydney.

Protests are likely to get more strident as coal exports grow and more power is generated using that fuel. These will put port security systems to the test as demonstrations may be expected both on land and from the sea.

Growing energy needs mean that coal is unlikely to diminish in importance as a major fuel source.

Several protesters appeared in a court in Auckland over the Lyttelton incident, incurring fines and other penalties. LPC was believed to be considering options for recovering costs and may ban the vessel from berthing in the future.

The Rainbow Warrior 2 moved on to Port Otago in Dunedin, as police there organised a contingency plan in the event of another protest. Locally, the visit was expected to proceed without incident. Port Otago does not export coal, but LPG and products are moved through the port.

“Protests are likely to get more strident as coal exports grow.”

More info: www.lpc.co.nz; www.greenpeace.org.nz
Ports as dredging laboratories

Essential research by port authorities and dredging companies is providing useful data for ports all over the world. P&H reports

What’s causing our ports to silt up – fishing trawlers, dredging or stormy weather? Scientific studies at Bremerhaven have been conducted with the aim of reducing sedimentation inside the brackish tidal zone in the harbor.

Bremerhaven is not only a buzzing, busy harbor playing a crucial role in Germany’s trade – it’s now the fourth-largest container harbor in Europe – it is also a ‘laboratory’ for the advancement of dredging techniques and sustainable development.

Sediment intrusions into the various harbor basins require annual dredging of sediment, which has to be disposed of on land after separation and specific treatment. For the moment, vessels can be accommodated to a maximum draught of 14.5m at low tidal waters.

To ensure Bremerhaven’s future growth, port access channels will have to be kept open and made deeper. But this needs to be done in a sustainable, environment-neutral way.

For these reasons, Bremerhaven, situated at the lower end of the Weser estuary, is being used for several important dredging research studies and experiments. One study seeks to assess the impact of dredging-induced sediment plumes in the broader context of natural processes such as storms, winds and changes of season, along with other human activities like fishing.

Another study aims to find technical solutions that will discourage sedimentation caused by natural tidal flows in the harbors.

Always in the forefront of technology, the private dredging industry is funding and promoting a research programme called TASS (turbidity assessment software). The programme aims to determine whether suspended sediment concentrations resulting from dredging operations are really environmentally more damaging than fishing or natural occurrences.

The field trials in Bremerhaven yielded eight successful experiments, two of which were undertaken during maintenance dredging and six others during offshore sand mining for the construction of the planned new terminal.

Another study at the Port of Bremerhaven, established by the German Federal Ministry of
Education and Research, is examining the interaction of the brackish waters of the river at the harbor entrance caused by tidal currents. Understanding how tidal changes work is an important step in trying to develop solutions to minimise sedimentation in the port.

If sedimentation can be minimised there is a possibility that the need for annual maintenance dredging can be reduced.

Reduced maintenance dredging would, in turn, limit potential impacts, reduce port authority costs and ultimately benefit all stakeholders.

This type of research by the dredging industry and port authorities has yielded useful data for ports all over the world. As transporting goods by water remains the most efficient and environmentally sound means of global trade, ports will continue to expand. This type of scientific data is essential to enable this process to continue.

This is certainly the case at Bremerhaven, where port expansion plans are on the drawing board to provide facilities able to handle more than 5.5M containers a year in a port that extends over some 3M m² and where more than 1.3M cars annually pass through a port area of 2M m².

The study was quite complex, using measurements from a harbor basin and some river profiles in front of Bremerhaven North Lock. Comparison has to be done extremely carefully and time is needed to produce an area map of flow velocities.

Studies were conducted of the water exchange and sedimentation between the harbor and the River Weser for different harbor entrances during tides. Model results showed that sedimentation occurs mainly at the end of the flood period.

This helped identify the period that the main sediments are transported into the harbors. Maximum suspended sedimentation can be found at the end of the flood period and at the end of the ebb period of the spring tides.

A summary of the results of the water exchange and basin sedimentation showed that sedimentation increases. Without the salinity gradient the inflowing sediment would be driven out of the basin.

The results will be used to redesign the entrance of the harbor in front of the North Lock. Four entrance variants were tested:

- Reduction of the entrance width by 40%
- Construction of a current deflection wall (CDW) to reduce flow effect
- Use of a sill/bottom to influence density currents in front of the original entrance
- Combined use of level difference and CDW.

The water exchange between the river and harbor was reduced significantly by decreasing the width of the entrance. By contrast, sedimentation height was reduced only through a combination of the two methods.

No relationship between water exchange and mean sedimentation height could be found.

Bremerhaven field trials yielded eight successful experiments

The study concluded that sediment intrusion from tide- and density-driven estuaries into a diverting harbor basin will remain a major factor in the operation and maintenance of harbors. From the studies, an effective method of reducing harbor sedimentation has been devised.

It has reached a reliable standard for identification of local influences, including flow, tide, density effects on sediment intrusion and deposition. Rational arguments can be demonstrated for maintenance dredging, fluidisation measures or structures that will need to be built against sedimentation.

All of this will help port authorities decide on the optimum orientation of the harbor axis and entrance width. Ports now have the assurance of a tool that can help them significantly decrease harbor sedimentation. PH

Abstructed from two papers in the March 2008 issue of Terra et Aqua, published by the International Association of Dredging Companies

More info: www.terra-et-aqua.com; iadc-dredging.com
Save money: build in, not out

Although dredging costs increase the nearer to shore work is undertaken, cutting a port out of the coast rather than building it at sea generally remains the cheapest option. P&H’s Jim Wilson explains...

The cost of new ports and port expansion could be reduced by nearly two-thirds if developers turned away from deepwater projects offshore and looked closer to the coastline. “Inshore port locations are some 60% cheaper than the most seaward port locations,” declared John Headland, senior VP of US-based Moffatt & Nichol.

Speaking at the at the seventh PIANC COPEDEC conference in Dubai in February, he said that while the example he was using for the conference was only hypothetical, the model has been used for numerous port planning projects “to the same effect”. Headland went on to cite an actual, although anonymous, case study in which redrafting of a container port plan saved $550M.

“The original concept involved an offshore land reclamation scheme to be constructed over deep deposits of soft mud. This design had been taken to the final stages and the environmental impact statement (EIS) for the project was near completion...
difficulties in financing the port development stemmed from its prohibitive costs in the order of $900M. Using these principles it was found that a better port scheme — more terminal area, better soil conditions etc — could be developed at an inshore location at roughly a third of the cost," Headland told the conference.

The key phrase is "inshore location". As a general rule, the closer a port is to the shore — ie cut out of the coast rather than built at sea — the cheaper it is. A few obvious caveats have to be applied to that rule. In places where land is extremely expensive, an offshore development may prove cheaper. This may be the case, too, if there is a need for extensive rock dredging or if navigation channels are subject to heavy sedimentation — from littoral drift for example — and need extensive maintenance.

But, as a general rule, offshore ports are more expensive because of reclamation costs and the need to build extensive breakwaters, quays and dykes. "Breakwater, quay and reclamation costs increase with distance from shore. For the case of reclamation, this owes to the increase of fill volumes with water depth and length from shore.

As for breakwaters and dykes, the costs and fill volumes increase with offshore distance and water depth. Moreover, wave heights are limited by water depth due to wave breaking. Accordingly, armour stone/unit sizes and crest elevations will decrease with proximity to shore with an attendant decrease in costs," explained Headland.

Building quays inshore also presents an opportunity for savings. That's because land-based, rather than marine-based, equipment can be used to dig out the harbor. Against that, dredging costs plummet with distance from the shore, because the water is generally deeper offshore. If it is deep enough, some types of dredging can be dispensed with completely. And totally inshore ports can attract substantial costs if jetties have to be constructed to combat littoral drift, for instance.

So, as builders go off-, near- and inshore, some costs go up, some go down and others don't change. It's all complicated stuff — which is where Headland's model comes in, to simplify matters.

Although presenting an idealised, generic version of the model for the conference, with some sample numbers for illustration, he emphasised that actual applications would use real site data for calculations.

He presented the conference with four hypothetical, and simple, port plans. The first comprised two reclamation areas of 600m wide and extending out to sea by 1,500m together with breakwaters, harbor basin and access channel. Each successive version was moved a little closer inshore, so that Option 4 had no part of the quays extending into the sea and had its breakwaters comparatively close to shore.

Option 1 (offshore) was the most expensive. Options 3 (near-shore) and 4 (inshore), at $213M and $21M respectively, were considered the optimal designs. Development closer inshore would increase costs because of the need to build extensive jetties to combat littoral drift, Headland explained.

To obtain the results the model was run on a ‘deterministic’ basis. To obtain a more realistic model, a probabilistic method, sometimes called the Monte Carlo method, was used. This confirmed earlier work on the near-shore and inshore options.

Headland said the key difference between the deterministic and probabilistic method was the range of costs. “The probabilistic results show the same trend as the deterministic results … the spread of the 10% and 90% costs are considerable. For example, the Option 1 costs range from $328M to $372M; the Option 4, from $199M to $225M,” he said.

He concluded that Option 3 (near-shore) was of particular benefit. Offshore ports use more material for land reclamation than can be gained from dredging access channels and harbor basins.

Inshore ports pose a different problem for the developer – disposing of the material dug out to create it. Near-shore ports offer a happy solution, because the excavated material can, if it is clean, be used to create the land reclamation sites. None of this, of course, takes into account the myriad other factors that affect port construction such as local politics, patterns of land ownership, social objectives and so on.

But, as Headland concluded: “It is clear that it is generally least costly to develop an inshore port, especially in cases where land costs are low or are already under the ownership of port interests.”

So, all other things being equal, the message is clear: build in, not out.

More info: www.pianc-copedecdubai.com

It is generally least costly to develop inshore ports, especially where land costs are low or in the port’s ownership.
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Big bulk boom stalling

Shipowners reacted to the burgeoning dry bulk trades by ordering new vessels, but their appetite for the largest sizes is reducing, as Bridget Hogan reports.

Over the past two years excitement in the world’s shipyards has been generated by multiple orders of very large ore carriers (VLOCs), which have a renewed attraction for shipowners. After years in the wilderness, the enormous, inflexible hunks of metal enjoyed a boost in orders as world demand for steel, and therefore iron ore, soared.

Some 28 ore carriers of 300,000dwt or larger are on order at present, which means an extra 4.5M dwt of capacity is due to hit the water in the next four years. Over a third are destined for operation by China’s COSCO, which has also ordered several vessels in the 180,000–300,000dwt size range – now considered ‘smaller’.

Japanese majors have also been active recently in the VLOC sector, but, despite the dramatic look of the current orderbook, demand may now be tailing off. Owners have not always looked favourably on VLOCs, as the vessels lack versatility and can generally be used for just one thing – moving iron ore around for the steel industry.

Nevertheless, with the steel industry booming and forecasts favourable for the next few years, when most of these ships will be entering service, orders have been sustained.

Ships that have been ordered so far are unlikely to be left lying idle, because steel demand has been
The iron ore carrier has a long-term transport contract with Nippon Steel Corporation. MOL is the first Japanese shipping company to enter the VLOC market. “We plan to build five more of the same size,” Ashida said, so he is obviously unconcerned about criticisms that the ships are inflexible and not suited to other trades.

Notwithstanding Ashida’s optimism, the signs are that other owners are not rushing to follow Mitsui OSK Lines’ example any more. The latest spate of orders seems to have subsided, indicating that forward

出stripping supply over the past two years. With soaring demand for steel, companies are keen to improve the efficiency of ore transport by grabbing a bigger slice of this booming industry.

A report by MacQuarrie Research claims that steel production will rise to 1.36Bn tonnes by 2010. This means iron ore shipments will increase by 6%, or around 46M tonnes a year. Owners, not surprisingly, have been anxious to secure as large a share of that market as possible — by building the biggest ships.

Most of the ships currently on order are for charter to steel majors in China or are intended to serve that market. As the world’s largest consumer of steel, China will continue to play that role as its economy continues to grow. Despite predictions by some detractors that the bubble is about to burst, there is no sign yet of Chinese demand weakening.

Mitsui OSK Line (MOL) of Japan has taken delivery of what it claims is the world’s largest bulk carrier. Company president Akimitsu Ashida said the company’s latest vessel, the 320,000dwt Brasil Maru, was built “to meet customer needs for efficient transport.”

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<table>
<thead>
<tr>
<th>Commodity</th>
<th>2007</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron ore</td>
<td>841M tonnes</td>
<td>1.318Bn tonnes</td>
</tr>
<tr>
<td>Met coal</td>
<td>224M tonnes</td>
<td>280M tonnes</td>
</tr>
<tr>
<td>Thermal coal</td>
<td>674M tonnes</td>
<td>792M tonnes</td>
</tr>
</tbody>
</table>

Source: Abare in Australia

Getting bigger: the scale of bulk carriers is increasing as world trade grows
This Central California international 35-foot deep-water port is located in Foreign Trade Zone #231, close to Interstates 5 and 80. The UP and BNSF railroads have equal access to the Port through their regional railroad - The Central California Traction Company. Both major railroads have their main lines within 8 miles of the Port and have direct access for unit-train type service.

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- 5.5 million s.f. covered storage located within 1/4 mile of the terminal’s rail
Chartering: developments are increasing profitability

Chartering: developments are increasing profitability

## VLOC orders

<table>
<thead>
<tr>
<th>Vessel numbers</th>
<th>Total dwt</th>
<th>Year of delivery</th>
<th>Average size (dwt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>229,045</td>
<td>2006</td>
<td>229,045</td>
</tr>
<tr>
<td>3</td>
<td>785,741</td>
<td>2007</td>
<td>261,914</td>
</tr>
<tr>
<td>8</td>
<td>1,991,636</td>
<td>2008</td>
<td>248,955</td>
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<tr>
<td>16</td>
<td>4,611,340</td>
<td>2009</td>
<td>288,209</td>
</tr>
<tr>
<td>17</td>
<td>4,764,228</td>
<td>2010</td>
<td>280,249</td>
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<tr>
<td>26</td>
<td>7,129,856</td>
<td>2011</td>
<td>274,225</td>
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<tr>
<td>23</td>
<td>6,538,228</td>
<td>2012</td>
<td>284,271</td>
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<tr>
<td>2</td>
<td>475,000</td>
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</tr>
<tr>
<td>1</td>
<td>225,000</td>
<td>2014</td>
<td>225,000</td>
</tr>
</tbody>
</table>

As at March 2008

Source: Lloyd’s Register-Fairplay

## BULK TRADES

Volumes of ore shipments have finally been satisfied. COSCO looks to have sewn up the Chinese ore market virtually single-handedly and few other owners are expected to pay $90M or so for a new ship with limited scope for alternative employment. The orderbook looks likely to remain as it stands for the next few years.

In fact, as the credit markets tighten up, bulk vessel orders may be facing a squeeze, with up to three-quarters of present newbuilding contracts for ships of all types lacking finance. This is the view of Fotini Karamalis, CEO of the Athens-based dry bulk shipping company Hellenic Carriers.

A possible consequence, she believes, will be delays in deliveries or even contract cancellations as the credit crunch gets worse. However, secondhand values of dry bulk carriers should remain high despite the crunch, as owners have enjoyed good earnings since 3Q03 and few of them have been forced to sell ships. Nonetheless, Karamalis revealed that she was finalising finance for another secondhand purchase.

It is revenue that drives the demand for vessels, however, as well as trade volumes. And it is in terms of dry bulk freight rates that Lee Jong Chul, vice-chairman and CEO of STX Pan Ocean, remains bullish. He announced “an exceptionally strong” close to the fiscal year ending 31 December 2007. “We believe that the current dry bulk market is on track on its super-cycle,” Lee said.

He confirmed that demand from China for commodities remained strong. “There are even some signs of delays in dry bulk vessel deliveries,” he continued. STX has 13 vessels – 11 of them dry bulk – on order for deliveries in 2010–2011, representing a total value of $810M.

Year-on-year net profit for the group rose nearly threefold to $497M on the back of an almost doubling of turnover at $5.8Bn, thanks to the booming dry bulk market. Profitability of the dry bulk segment was also attributed to increases in chartering to capitalise on robust commodities demand and to exploit high spot-rates.

Developments in the chartering market were illustrated by a deal announced by Japan-based Kawasaki Kisen Kaisha (‘K’ Line), which announced an en bloc deal of 10 consecutive voyage charter (CVC) contracts, each for a duration of 10 years. The deal was concluded with Mumbai-based JSW Steel and JSW Energy, both part of the OP Jindal Group.

JSW Steel, headed by Sajjan Jindal, is one of the Indian conglomerate’s steel-making arms, producing some 4.5M tonnes of crude steel each year. The company is set to expand the existing steel mill in Vijayanagar and to build two more steel mills in Jharkhand and West Bengal, which would make it the largest steel-maker in India.

The same group’s power-generation company, JSW Energy, also has aggressive plans to expand its generation capacity to 15,000MW, including coal thermal plants and hydropower plants, by 2015.

JSW Steel and JSW Energy will employ two Panamaxes, three post-Panamaxes and five Capesizes for 10 years each, with deliveries starting this year and concluding in 2014. Coking and steam coal will be moved from Australia, Indonesia, China and South Africa to the companies’ plants in India. ‘K’ Line said that revenues from the 10 new voyage charter contracts would total about $200M a year.

Together with one COA and two CVCs previously signed with JSW companies, the red-funnel operator will carry over 15M tonnes – or 40% – of the expanding group’s coal imports by 2015. Daisuke Yamagishi, of ‘K’ Line’s Drybulk Project Division, told P&H that “newbuildings may be used to cover these CVCs, but the exact vessel assignment has not been decided”.

US-based Ted Petrone, president of Navios Maritime Holdings, told the Connecticut Maritime Association conference that the dry bulk orderbook to 2010 now totals around 164.7M dwt, representing some 41.5% of the fleet. Any new vessels ordered from now will not be delivered until 2010–11.

Even with all the new vessels arriving, trade volumes were so high that older vessels were not being scrapped, he continued. About 29% of the fleet by deadweight was more than 20 years old and 14% was over 25 years old.

Korea Line Corporation in South Korea is also diversifying into the VLOC sector and has placed an order in Japan for a 297,000dwt bulk carrier.

Chartering: developments are increasing profitability
The dry demand and supply gap

One of the world’s leading dry bulk owners looks ahead to see what is in store for the market, as outlined by Koichiro Ebihara

Few will be unaware that today’s dry bulk shipping market is going ahead full throttle. Nobody could anticipate such a strong chartering market as we see today; even so, it is hard to avoid the temptation to try to find out what may come next in dry bulk shipping. Without having a crystal ball, I would like first to give a historical perspective.

On the demand side, of all the dry bulk commodities, iron ore and thermal coal are the two major phenomena. The picture with iron ore is straightforward. China is responsible for much of the growth in iron ore shipments. Its demand for steel products has risen drastically and many steel mills have been built around the region. Until recently China was self-sufficient in iron ore, but there has been a market shift as the new plants find it economical to import higher-quality iron ore from overseas sources such as Australia and Brazil.

For thermal coal, the situation is a little more complicated. Environmental concerns have made coal unattractive for power generation, whereas renewable energy and natural gas have grown more attractive because of their lower emissions.

However, provision of a sufficient number of wind power and solar generators is lagging behind demand, and that’s before the cost of this source of power or supply reliability is taken into account.

Those who try to substitute coal for power generation find that huge investments are needed to set up supply chains. This is especially true for natural gas, resources of which seem to be located in the most geopolitically sensitive regions.

Therefore, the demand for coal is increasing even in the environmentally sensitive European countries. And the development of CO₂ capture and storage technologies seems to indicate a continued use of thermal coal globally. In predicting coal trade flows it is important to realise that the established exporting countries might increasingly use their own reserves to meet growing domestic demand. I am thinking of China and South Africa in particular.

Increases in quantity could not make the demand-supply gap as it is today. As the demand for resources increases, importers have to look for supplies from countries farther away. In the case of iron ore we have
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were often developed years ago. These berths lack the pier strength necessary to accommodate the latest Capesize bulk carriers of 160,000dwt and above, and need deeper approach channels.

We know major dry bulk ports are spending to enhance capacity. Most attention in China has been concentrated on its container port programme, but it is also investing extensively in bulk terminals to cope with the surge of import demand, as new factories are built in the coastal provinces.

Exporting countries too are improving port capacity. However, their efforts are not often sufficiently supported by inland infrastructure, such as the railways that connect mines to ports.

Ports used to be the single point of concern when congestion occurred. However, today the picture for the bulk trades is rapidly mirroring the experience in container shipping. If we look at exporting ports in Australia it seems logical to apply supply chain management to the transport of bulk commodities.

A complete solution is needed that will ensure the provision of both waterfront infrastructures and connecting transport capacity inland. The bulk transport chain can learn from the container trades as to how terminals and land transport capacity should best be connected.

Koichiro Ebihara is general manager, Research Office, Mitsui OSK Lines

seen ton-miles increase as Chinese imports grow. If this trend continues, then iron ore will be following the experience of the soybean industry.

The US, traditionally the major soy exporter, is now channelling into biofuel production the harvest that once would have been exported. Brazil and Argentina are expanding soybean production and China, another former exporter, is now the world's top importer.

There is no indication that this trend will change in the near future. We expect the trend towards long-haul transport will continue to drive dry bulk shipping.

The huge demand for iron ore shipments has prompted owners to place orders for large bulk carriers, typically Capesize ships. However, the shipyards are already full building post-Panamax container ships and double-hull crude tankers. It will take some years for enough newbuildings to come through to ease the demand-supply gap.

And, while waiting for additional capacity to match the increased demand, the market is suffering from another constraint – port capacity.

Our experience at Mitsui OSK Lines is that bulk carriers waited about 6% longer outside ports in 2007 compared with 2002 (see table above). The major cause of congestion is the shortfall of cargo handling capacity at major exporting ports, and particularly those in Australia and Brazil.

The position is not very much better at importing ports either, as those in the advanced economies were often developed years ago. These berths lack the pier strength necessary to accommodate the latest Capesize bulk carriers of 160,000dwt and above, and need deeper approach channels.

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Planning for overcapacity

Most of the world’s container ports are struggling to cope with capacity – China’s are actually building surplus to requirements, as P&H’s Bouko de Groot reports.

In two years’ time, China’s container terminals will have an annual overcapacity of 20M teu a year. This is part of the master plan. Even though the US economy is under pressure and fewer containers are moving between the two countries, other developments indicate that this loss might be compensated elsewhere.

March, for example saw the start of the China-EU multimodal shipping pact, which gives each partner unrestricted access to the other’s maritime market. And a recent survey of China’s economists found that 70% expected only a slight fall in exports, probably because growth is expected from areas such as Brazil, which imported 60% more goods from China in 2007.

According to Beijing’s Ministry of Communications, by 2010 China’s total throughput will be 130M teu, while total capacity will be 150M teu. This overcapacity has been part of the plan from the beginning of the current expansion project (2005), which defined five container port clusters for China. In the north is Bohai Bay, in the centre lies the Yangtze River Delta and in the south is the Pearl River Delta. These three account for almost 80% of China’s throughput. Two new clusters are being set up in Fujian province, across from Taiwan around Xiamen, and in the deep south, focused on Hainan island and Beihai.

Massive investments are still being poured into all the ports. Tianjin for example, will invest RMB45Bn ($6Bn) until 2010. By then the port will be able to host 300,000dwt vessels. Tianjin is fighting a fierce struggle with Dalian and Qingdao. Dalian will use public funds to try to get back in the race and surpass Tianjin.
Within two years Dalian expects to be able to handle 10M teu, growing to 15M by 2020.

A similar battle is going on in the Pearl River Delta between Shenzhen, Guangzhou and Hong Kong. Shenzhen is building as fast as it can and streamlining customs clearance. There are feeder services to 15 cities and nearly 300,000 vessels called at the port, contributing to the 23M teu it expects to handle in 2008. To keep pace, Guangzhou is planning to spend another RMB20Bn ($3Bn).

In between all these Goliaths are smaller ports that have found their own niches. Lianyun, half-way between Qingdao and Shanghai, managed to handle 2M teu last year, earning it a ninth place in the league, but it’s a mistake to think it merely acts as a feeder for both. It is served by direct calls to Japan and South Korea and has opened a special container railway service to faraway cities in China and Russia.

With throughput exceeding 35M teu, the Yangtze River Delta is the undisputed champion of China. Most international lines calling at the two major ports, Shanghai and Ningbo, do not even see land as the deepwater ports for these cities have both been newly built on small islands far out into the sea. Only about 50km apart, Shanghai’s Yangshan and Ningbo’s Zhoushan facilities are closer to each other than to their cities.

Cities farther inland have in turn built their own container terminals. Taicang in Suzhou is a good example, only 40km upriver from Shanghai. This year it welcomed the first 8,000teu vessel and handled more than 1M teu – by 2010 that should be 6M teu.

The Shanghai International Port Group is investing heavily in this new hinterland, building container terminals all along the Yangtze, to feed from Yangshan. China’s Ministry of Communications calculated that building new factories along the river will cut transport costs. Now logistics make up 30% of a product’s cost in China, 10% more than in the West.

The Yangtze outperforms the Mississippi and the Rhine in cargo tonnage, but still operates at a third of capacity, handling 5.5M teu in 2007, up nearly 40% from 2006. Traffic on other rivers reached 3.5M teu, up 20%.

Of course, port capacity is not everything. The severe winter earlier this year showed that. Loading speeds in Shanghai came down 70%, with roads and railways closed. Improvement of the railway network is a priority for the government. Last year China’s – and Asia’s – first double-decker container line started operating. It will be part of a nationwide network of 18 terminals, ready in 2010. Through a joint venture, CMA CGM is participating in this RMB12Bn ($1.7Bn) project.

China’s government has begun actively promoting foreign investment for its railways. In 2008 alone, almost 8,000km of new railways will be built. A plan to revitalise China’s northeast specifically aims to set up what is termed by officials an “efficient and convenient” container transport system, with Dalian as trunk-line port. New container loading centres will also be established in Harbin and Shenyang.

Chinese ports are also increasing productivity – in Qingdao, moves rose 35 to 50 per hour. New technology is being developed by another home-grown industry – cargo-handling equipment manufacturers. Shanghai’s Zhenhua Port Machinery Co (ZPMC) spends 5% of revenue on research and development to improve port efficiency such as the triple container crane that loads up to three 40ft containers simultaneously.

All this is expected to have a significant effect on transhipment – in Ningbo only 10% of container services are feeder and China’s neighbours have already started to feel the chill. Taiwan’s Kaoshiung set a new record for traffic at 10M teu in 2007, but half of these were transhipped to mainland China. This won’t be the case in the future. PH
Breathing more easily

Its supporters say alternative marine power (AMP) promises an end to polluted, noisy ports, but how successful is it and how widespread its use? Nicholas Chipperfield has an update

There’s no better illustration than an example – or even two. The two largest ports in the US, Los Angeles and Long Beach, where AMP has already been introduced, have seen dramatic improvements in air quality, enhancing the health of port employees and those living in the surrounding areas.

“Each ship using AMP saves around 1 tonne of pollutants per day, giving significant air quality savings for the port area,” says Theresa Adams Lopez, director of media relations at the Port of Los Angeles (PoLA).

One of the greatest challenges currently facing port operators and shipping companies is striking a balance between economic demands and concerns over the environment. AMP technologies represent a major change in the way ports and shipping have an impact on the environment. With record numbers of cruise ships and container ships on order, this issue is likely to become increasingly acute.

One area where the shipping industry can reduce pollution effectively is in ports, where moored vessels need to run their auxiliary generators around the clock. The result is that on-board generators churn out millions of tonnes of diesel fumes.

If no action is taken to combat the high level of pollutants, the European Commission (EC) estimates that NOx and SOx emissions from vessels operating in the European Union (EU) will exceed land-based emissions by 2020.

According to EC research, included in a Commission Recommendation document in May 2006, switching to shore-side electricity could cut CO₂ and nitrous oxide (N₂O) emissions by more than 50% and carbon monoxide emissions by 99% – far superior to reductions that are possible from the use of alternative fuels. AMP also eliminates vibrations and noise from auxiliary engines, measured at 90–120 decibels in some port areas, the report said.

Ports are looking over their shoulders and considering their neighbours. The California Air Resources Board (CARB) recently approved new rules designed to limit emissions from diesel engines operated by deepsea vessels while in California state waters. This is an example of legal requirements that could be replicated by other countries, international agencies and industry.

The California state government is now reported to be planning to launch legal proceedings against the US federal government over the lack of national limits...
Ship-to-shore systems are considered safer and easier to operate, while allowing rapid turnarounds. And for newbuild vessels at least, ship-to-shore systems are the cheapest alternative available today.

While questions will remain over how the power used in ports is generated, AMP has proven to yield dramatic improvements in air quality in and around ports and in surrounding communities. In the absence of internationally recognised standards governing the use of AMP however, adoption of the technique remains modest.

The industry has been working closely with the International Organization for Standardization (ISO) in efforts to define international standards for AMP. The International Electrotechnical Commission (IEC) is working on several initiatives to develop international standards for ship-to-shore connections, including a standard for high-voltage shore connection (HVSC) systems. The IEC had been expected to publish the first publicly available specification (PAS) on these alternatives by the end of March, although as P&H went to press, the publication had been delayed.

The International Maritime Organization’s Marine Environment Protection Committee (MEPC) has been considering the global standardisation of in-port electrical supply in recent years. The MEPC is taking steps to build upon the consensus among MEPC members, environmental group Friends of the Earth International, and the industry as a whole, to ensure that standardised power supply connections benefits the shipping industry.

Lloyd’s Register is set to publish preliminary guidelines for AMP by the middle of this year. As AMP gains credibility in the shipping industry, interest is being generated among international agencies and lawmakers, but standardisation issues remain an obstacle to its wider use. AMP has the potential, however, to become popular and change the way ports operate, giving the maritime industry a chance to tackle local criticism that ports are a major source of pollution.

Nicholas Chipperfield is press relations manager for Cavotec MSL.

More info: www.cavotec.com; www.iec.ch;

Alternative power: standardisation is needed before it is adopted for widespread use
Success in the gas field

Two huge gas importing terminals are opening to serve the growing UK market, as P&H’s Andrew Lansdale reports

Many LNG terminals around the world are struggling even to start work on handling a fuel that is expected to grow in popularity in the coming years. Yet, as P&H went to press, one port was preparing to handle its first LNG tanker.

Milford Haven, in the west of the UK, is huge. From St Anne’s Head at the harbor entrance it extends 22nm inland. In area it is about 155km², with 314km of shoreline. It is run by Milford Haven Port Authority (MHPA), and the success of the LNG project coincides with the 50th anniversary of this UK trust port established in 1958.

Yet for many of those years the port was under-utilised and traffic levels were low, as it mainly served the local area. Then it moved into the oil tanker trade as Exxon, Chevron, BP and other oil companies built facilities in the harbor. At one time Gulf Oil was bringing in fully laden VLCCs with oil from the Persian Gulf. At low water the Exxon berth had 20m draught alongside and deeper vessels could berth at high water and pump over the tide.

The trade in oil led to the incident for which the port of Milford Haven is most widely known – the night in 1996 when the Sea Empress was caught by currents and tides in a gale and driven ashore inside the harbor. Despite this, oil movements continue to be important to the area, with the Murco refinery importing crude oil and then exporting large amounts of gasoline, especially to the US.

The port has shaken off the traumas of the past and now has a great success story to tell. It is developing into the LNG trade and, as P&H went to press, was expecting to receive its first shipment.

Two new terminals are being completed – Dragon and South Hook. Dragon is 50% owned by BG and 30% by Malaysia’s Petronas, with Petroplus holding the other 20%. It is capable of taking LNG vessels of more than 150,000m³ capacity.

South Hook is a joint venture led by ExxonMobil. Its new berths will take the largest LNG tankers in service, such as the 216,000m³ QFlex Al Gattara, and forthcoming 260,000m³ QMax designs. Between them
The port has shaken off the past and now has a great success story to tell – it’s developing into the LNG trade.

These new berths will have the capacity to handle 25% of the UK’s gas imports.

The port authority has worked closely with the two developments over the past four years to ensure the planning was successful. Central to this was how the LNG vessels will be managed together with other shipping users, including the growing number of cruise ships.

An important part of the process was the long and detailed programme of public consultation and information that was undertaken by the MHPA and other bodies including the local council and the authority responsible for the coastal national park. Their responsibility was to try to allay the concerns of the public.

MHPA also took a leading role in making sure that the various planning authorities and other organisations involved, including the UK’s Health and Safety Executive and Maritime and Coastguard Agency, had all the information they needed to carry out their responsibilities in relation to planning issues.

Despite all these efforts, MHPA said there were those who were still opposed to the LNG terminals, some of whom tried, and failed, to seek a judicial review of the planning consents.

A major criticism levelled at the MHPA is that it has not made public the full details of the risk assessments carried out for the projects. Critics suggested this was because inadequate assessments had been made of LNG shipping in the port.

In fact, MHPA says it has several assessments, both from its own staff and commissioned from other experts. One of the conclusions was that the port was well-placed to cope with the increase in traffic. Growth of 20% could be accommodated, said reports – whereas the LNG traffic is expected to add some 6–7% once both terminals are working at full capacity.

Many provisions have been made to welcome the giant ships into the warm embrace of Milford Haven. More pilots have been recruited. This will enable one pilot to concentrate on manoeuvring the ship from the boarding area to the berth, while the other pilot will be responsible for communications, other vessels and ensuring that steering instructions are being obeyed.

New tugs have been deployed in the port. Ultimately, nine tugs with bollard pulls of between 80 and 100 tonnes will be available, ensuring that plans to have a tug permanently deployed close to each LNG ship while in the port can be realised.

The former Royal Navy Mines HQ will be used to berth an emergency towing vessel for deployment in the harbor from 2009. The berth lies between the two LNG terminals. At these facilities, there will be an exclusion zone of 100m around each LNG ship.

To put this into operation, large-scale dredging has been conducted, moving the navigable channel farther to the south and farther away from the gas terminals.

All these provisions have encouraged the growth of other trades. Five cruise ships visited its sheltered waters in 2007 and seven are booked for 2008. This will include the 55,000grt Maasdam, with its 2,000 passengers and crew. The port is becoming a popular cruise destination with expectations of the number of visits increasing by as much as 50% each year.

The big drawback to further expansion into cargo handling is poor infrastructure, especially the lack of a motorway connection. But should the infrastructure eventually be improved, Milford Haven will be an attractive port for post-Panamax container ships seeking to avoid the extra time required to steam to Southampton, London or Felixstowe.

Road and rail links will speed the flow of cargo in and out of the port. Of course there will be a vocal crowd of locals who will object to giant container cranes being sited in a national park, but perhaps they can be disguised as trees. PH

More info: www.mhpa.co.uk
IMO and EC meet for fourth time

London was the setting for a fourth meeting between Jacques Barrot, VP of the European Commission and commissioner for transport, and the IMO secretary-general Efthimios Mitropoulos. The meetings are intended to improve cooperation between the two sides to promote maritime safety and security and environmental protection.

The topics discussed during the meeting included:
- Ship emissions
- European community observer status and participation in IMO
- The Commission’s third maritime safety package
- EU/IMO technical co-operation – in particular, the SAR programme in Africa.

Barrot said the EU supported IMO’s work on global rules for ship emissions. In addition, noting the complexity of the topic and the tight timetable presented by Mitropoulos, he welcomed efforts to deliver the expected results within the timescale of common efforts to combat climate change.

Turning to the question of the EU’s participation at IMO, Barrot said it was still policy to seek a change from observer status for the European Commission to one for the European Community. Mitropoulos said the matter should be referred to the IMO Council for consideration.

Barrot said that the EU’s third maritime package, currently under negotiation, is based on IMO rules. Barrot received a report on recent developments in the introduction of the long-range identification and tracking of ships (LRIT) system, currently under development by IMO.

Mitropoulos thanked Barrot for the Commission’s support for technical co-operation projects carried out by the IMO and for his contribution towards establishing, with EC financial assistance, a regional maritime rescue co-ordination centre in Morocco as part of IMO’s efforts to cover the African coastline with an adequate SAR infrastructure.

The two agreed to keep an open dialogue in the future.

More info: www.imo.org; http://ec.europa.eu

Danet: the key is technology and training is critical

100% scanning is “not workable”

US Congressional proposals that 100% of containers bound for the US be inspected at ports of embarkation are “not workable” according to Michel Danet, secretary-general of the World Customs Organization (WCO).

“The technology just doesn’t exist,” he told P&H. He said the standard will be met in the future, but not by 2012. “It may be 2015 or 2018, but it will happen.”

Danet noted that several ports involved in the US Secure Freight Initiative pilot are already scanning 100% of US-bound cargoes and others seem on course. “Dubai’s new port is scanning about 50% of the cargo headed for America and both Hong Kong and Singapore will likely be able to meet the standard,” he said. “But smaller ports are struggling.”

For now, Danet believes a risk-based system of screening and scanning is the best course. And while he hopes the US Congress will compromise over the 2012 deadline, he admitted that the customs community has to plan as if that date is firm.

He said that he is proud of the WCO membership in embracing the Framework of Standards, a worldwide co-ordinated scheme to address security, noting “150 of our 171 members have signed on to the framework.” Some 108 of those are also asking for help in finding ways to implement the plan.

The key to most programmes is technology, he explained. “The use of non-intrusive scanning together with RFID and satellite-based tracking is critical to all of the security goals,” he said, noting that development in those areas is changing daily and accelerating.

Training is also critical too, Danet believes. “The machines are no better than the people who operate them,” he said.

More info: www.wcoomd.org

Engineering reinvention urged

Speedy construction of mega-projects has created the need to reinvent both the dredging and the port and coastal engineering industries, believes Professor Kees d’Angremond. The former MD of the Port of Amsterdam and professor in coastal engineering at Delft University of Technology was speaking at the recent PIANC COPEDEC VII conference, hosted and organised by Dubai Municipality, which attracted almost 1,000 delegates from 66 countries.

“We need new enterprise organisations, financial models, new technologies and improved human resource management,” said d’Angremond. He also called for more innovation and more work at the “interface” of all disciplines and cultures.

Comparing major marine engineering projects of the past with modern mega-projects, he said: “It’s not so much about the size but the speed of completion.” He added: “The Suez and Panama Canals, the Ijssel reclamation, they were gigantic undertakings – far larger than the mega-projects of today. But Suez took 11 years to build. Including its initial failure, the Panama Canal took double that, at a cost of 27,500 lives.”

Technology advances – like the first of the 35,000m3 dredgers due to enter service shortly – are making fast completion of mega-projects possible.

Turning to organisational matters, d’Angremond described a need to find forward-thinking people to deliver the needed “span of control.” He added: “Our profession has been developed to a very large extent. I do not think that we can dredge much more or reclaim much more than we do at the moment.”

The way to unlock new opportunities, d’Angremond said was “to go for interface breakthrougths – between disciplines, between countries, between cultures, between countries.” He pointed to an example involving engineering, geology and biology. One paper presented at the conference explained how engineers had created ‘smart soils’ by injecting bacteria into the soil to alter its properties. “If we want to have success, we have to have an open innovation – the best ideas, a border-less strategy and dynamic business models,” he asserted.

His Excellency Nayef Al Kalali, under-secretary for the Ministry of Works & Housing in the Kingdom of Bahrain, wrapped up the event by declaring: “It was a very successful conference. I’d like to thank you.”
Fuel plans take two directions

Annex VI of the IMO’s MARPOL Convention has been successfully revised after the conclusion of MEPC at its 57th session. The NOx technical code was also revised, writes Fer van der Laar.

There are two main changes for reductions in sulphur oxide (SOx) emissions from ships. The global sulphur cap will be reduced from the current 4.5% to 3.5% from 1 January 2012. After that it will be further reduced to 0.5% from 1 January 2020 subject to a feasibility review to be completed no later than 2018. Following that review it may be decided to postpone the effective date to 2025.

In the second move the limits for sulphur emission control areas (SECA) will be lowered to 1% from 1 March 2010 (from the current 1.5%) and thereafter further reduced to 0.1%, effective from 1 January 2015.

Reduction in nitrogen oxide (NOx) emissions from marine engines were also agreed, with the most stringent controls on so-called Tier III engines, ie those installed on ships constructed on or after 1 January 2016, operating in emission control areas (ECAs).

Another important change concerns the replacement of SECAs by ECAs to cover particulate matter (PM) or NOx, as well as SOx, or all three types of emissions from ships, for the first time.

Lower taxes port handling diesel

The European Commission has authorised a reduction in excise duty on diesel fuel used by German port handling companies, in line with EC rules on state aid. Excise duty will therefore fall from €0.47.040 to €0.6.135 per litre for such activities.

The Commission and the Community courts have always considered reductions in excise duty that apply to only one business sector to be state aid. According to the German authorities, the cost of this measure to the budget will be €25M a year.

The new environmental aid guidelines approved by the EC allow it to authorise aid in the form of lower excise duties on energy products, subject to compliance with the minimum rates of taxation provided for in EC legislation.

The Commission said Germany’s measures complied with the minimum rates of taxation laid down in Directive 2003/96/EC, on energy taxation, and therefore concluded that the aid is compatible with the common market.

Estonia first to sign up to wreck removal

Estonia has become the first country to sign the Nairobi International Convention on the Removal of Wrecks 2007.

The Ambassador of Estonia to the UK, Dr Margus Laidre, signed the convention on behalf of Estonia in March at IMO’s London headquarters. The convention was adopted in May 2007 and is supported by IAPH. It will provide the legal basis for states to remove, or have removed, shipwrecks that could adversely affect the safety of lives, goods and property at sea, as well as the marine environment.

It is open for signature until 18 November 2008. After that it will be open for ratification, accession or acceptance, and will enter into force 12 months after 10 states have acceded to it.

IMO secretary-general Efthimios E Mitropoulos welcomed Estonia’s move and urged other states to follow suit as soon as possible.

This will be achieved in part by making the registered owner liable for costs of locating, marking and removing a wreck and by imposing an insurance requirement on ships of 300+gt to cover this liability. The convention also includes an optional clause enabling states parties to apply certain provisions to their territory, including their territorial sea.

Although the incidence of marine casualties has decreased dramatically in recent years, the number of abandoned wrecks has reportedly increased to almost 1,300 worldwide. As a result, the problems they cause to coastal states and shipping in general have become more acute.

These problems are three-fold. First, and depending on its location, a wreck may constitute a hazard to navigation, potentially endangering other vessels and their crews. Second, and of equal concern, depending on the nature of the cargo, is the potential for a wreck to cause substantial damage to marine and coastal environments. Third, in an age where goods and services are becoming increasingly expensive, the costs involved in the marking and removal of hazardous wrecks have also become an issue.

The Nairobi International Convention on the Removal of Wrecks attempts to resolve all of these issues, and others beside.

New courses plotted

Details of all ships’ routeing and mandatory reporting systems adopted by IMO, including traffic separation schemes, two-way routes, recommended tracks, deepwater routes, precautionary areas and areas to be avoided, are included in the latest edition of the IMO’s Ships’ Routeing.

Essential for administrations and seafarers alike, the 2008 edition, available as a 720-page publication or a CD, covers all routeing and mandatory reporting systems adopted by IMO up to October 2007. It has representational maps as well as full co-ordinates of all schemes.

It is available from IMO’s online bookshop and the organisation’s authorised distributors.

More info: www.imo.org; http://tinyurl.com/3yqbgz
EU-China maritime accord

An agreement on maritime transport between the European Union (EU) and China, first proposed in 2002, has at last come into force.

To mark the occasion, a gathering in Beijing involved the Chinese authorities, the European Commission (EC), EU member states and industry representatives from both sides. The EC explained that the maritime agreement contained provisions on market access and provided for co-operation on maritime affairs. It has become the key component of the existing strong relations in the maritime field between China and the European Union, the representative said.

The agreement was aimed at improving the conditions for maritime cargo transport operations and was based on the principles of freedom to provide maritime transport services, free access to cargoes and cross trades, unrestricted access to port and non-discriminatory treatment in the use of ports and auxiliary services and assurances over commercial conditions.

It covered all aspects of door-to-door services and also dealt with maritime transport cooperation, notably in international organisations such as the International Maritime Organization, International Labour Organization and the World Trade Organization. "Annual meetings on the implementation of the agreement take place in the EU and China respectively and gather both sides, as well as representatives of their shipping industries," the EC added in a statement. "These meetings address practical problems and look for appropriate solutions to improve the efficiency and quality of maritime transport operations and increase trade in a world perspective."
Inspection campaign welcomed

The Tokyo MoU said it successfully completed a new concentrated inspection campaign (CIC) on the ISM Code in late 2007.

The campaign was conducted in conjunction with other MoUs, including the Paris MoU, and unlike previous ISM CICs, was aimed at determining whether the safety management systems on board the inspected ships was effectively implemented and properly maintained.

During the CIC, member authorities inspected a total of 4,094 vessels of which 108 led to detentions – 2.6%. The overall PSC detention rate during the campaign period was 5.0%. This compares to an average regional detention rate at other times in of 5.9%.

Tokyo MoU said members found the lowest-performing ship type was general cargo/multi-purpose ships. These accounted for 29% of all inspections and 61% of the detentions – 66 vessels – a detention rate of 5.5%.

Next highest were offshore service vessels with a detention rate of 5.3%, although only 19 ships were inspected and one detained. The Tokyo MoU pointed out that 70 gas carriers were inspected and three were detained – a rate of 4.3%, putting gas carriers third.

Other detention rates for ship types, in order, were: other ship types (4.0%), noxious liquid substance (NLS) tankers (3.4%), oil tankers (2.3%), bulk carriers (1.7%), refrigerated cargo vessels (1.5%), container ships (1.1%) and chemical tankers (1.0%). It pointed out that the categories of other ship types and NLS tankers had relatively small numbers of inspections (25 and 29 respectively) and a single detention each.

The agency said the performance of bulk carriers, having been subject to 1,093, or 27%, of all inspections, should be noted as “very pleasing”.

Performance of individual flag states subject to more than 10 inspections, showed that the five states with lowest performance were North Korea with four detentions (18.2%), Georgia with two detentions (14.3%), Thailand with six detentions (12.2%), Indonesia with two detentions (11.1%) and Mongolia with three detentions (10.3%).

Looking at the total number of detentions, the agency said Panama had 28 detentions out of 1,440 inspections (1.9%) and Cambodia had 26 detentions from 254 inspections (10.2%).

The CIC questionnaire indicated that an answer of “unsatisfactory” was given to a question on 3.1% of occasions. Initial analysis of the results of the CIC also indicated that most non-compliance was related to the lack of an effective maintenance system. This was followed by review of the safety management system and reporting of non-conformities, accidents and dangerous occurrences.

A Tokyo MoU statement said that more detailed analysis of the results will be considered by committee members, however, it declared the inspection campaign a success and said that for most ships and ISM operators, the safety management system is “functioning and understood onboard”.

More info: www.tokyo-mou.org

IMO celebrates 60 years of serving shipping

The International Maritime Organization marked its 60th anniversary in March, when it commemorated the adoption of the international convention that established it.

The setting for this historic event was a conference held in Geneva, under the auspices of the United Nations. The IMO Convention entered into force in 1958, and the new organisation met for the first time the following year.

Commenting on the 60th anniversary, IMO secretary-general Efthimios Mitropoulos said that the theme for this year’s World Maritime Day would be: IMO: 60 years in the service of shipping.

This would provide an opportunity “to pay due tribute to the sterling work” of the organisation since its inception in 1948 as a specialised agency of the UN. He added that IMO had served the common public good, was a regulator and partner of the maritime industry.

IMO’s establishment was in recognition that the best way of improving safety at sea was by developing international regulations that could be implemented by all nations with an interest in maritime transportation. From the mid-19th century onwards, treaties covering aspects of maritime safety were adopted. There had been attempts to establish a permanent international body to deal with shipping, similar to those that had already been established, for example, to regulate international telecommunication services in 1865 and postal services in 1874.

It was not until the end of the Second World War that governments were convinced of the need for greater international co-operation. The UN was established, and several specialised agencies were brought within its framework.

It was against this background that in 1948 the UN in Geneva convened a conference to consider the establishment of an organisation to deal with international shipping, and especially shipping safety.

That conference ended on 6 March 1948 with the successful adoption of the convention establishing the new organisation – originally called the Inter-Governmental Maritime Consultative Organization (IMCO). The name was changed to the IMO in 1982, to reflect its evolving role as a regulatory body.

Despite the goodwill, it took 10 years for sufficient countries to accept the IMO convention and for it to meet its entry-into-force requirements, so operations started in January 1959.

When the IMO Convention entered into force in 1958, the organisation had 21 member states. Its membership of 167 plus three associate members covers nearly all the nations of the world with an interest in maritime affairs, either through involvement in the shipping industry or as coastal states interested in protecting their maritime environment.

Certain inter-governmental and non-governmental organisations, including IAPH, enjoy consultative status with the IMO.

Today, IMO remains one of the smallest UN agencies, headquartered in London, with a total of around 340 staff in the secretariat.

This year marks a number of key milestones and anniversaries for the organisation. In addition to the 60th anniversary of the adoption of the IMO Convention, 17 March is the 50th anniversary of that convention entering into force in 1958, and June will see the 100th meeting of the IMO Council.

These occasions, along with the organisation’s return to its refurbished headquarters building on London’s Albert Embankment, will be celebrated in a series of events coinciding with the week-long 100th session of the Council, from 16 to 20 June.

More info: www.imo.org

Members of the Tokyo MOU

Australia, Canada, Chile, China, Fiji, Hong Kong, Indonesia, Japan, South Korea, Malaysia, New Zealand, Papua New Guinea, Philippines, Russia, Singapore, Thailand, Vanuatu and Vietnam

Anniversary: IMO meets for the first time in 1959

The Tokyo MoU pointed out that 70 gas carriers were inspected and three were detained – a rate of 4.3%, putting gas carriers third. The next highest were offshore service vessels with a detention rate of 5.3%, although only 19 ships were inspected and one detained. The Tokyo MoU pointed out that 70 gas carriers were inspected and three were detained – a rate of 4.3%, putting gas carriers third.
Port representatives from 25 countries concluded the mid-term board meeting in Dunkirk as P&H went to press.

Some 100 delegates attended a full programme of officer and technical committee meetings, culminating in a board meeting chaired by IAPH president Datin OC Phang, from Malaysia.

Full reports from the meetings will appear in the July issue of P&H, but one decision from the Dunkirk meeting showed how IAPH is helping ports to play their part in one of the world’s big issues – reducing greenhouse gases. The meeting decided IAPH should take a lead role in ensuring a worldwide approach to the measures that ports can take to improve air quality and reduce emissions from their activities.

The resolution instructs the Port and Environment Committee to work with regional organisations such as the Association of American Port Authorities (AAPA) and the European Seaports Organisation (ESPO). It also says that IAPH should work with individual ports, particularly those which have a lead role, to help in specific areas.

The Communications and Community Relations Committee will work with the Port Environment Committee to help devise a framework for the exchange of information on the issue. The plan is that a dedicated section of the IAPH website will provide the forum for this information exchange for all IAPH members.

The initiative means IAPH will be attending the C40 Ports Climate Conference in Rotterdam. The event has been organised under the auspices of the C40 Large Cities Climate Leadership Group, which is supported by the Clinton Climate Initiative.

A successful conference followed the committee deliberations, drawing interest from the Flanders’ region’s maritime industry representatives, who swelled the ranks of delegates to 150.

Energy and emissions were discussed in this forum too, and Datin OC Phang told the conference that, thanks to the IAPH resolution, the association has created a framework that will enable ports to take steps to counter world climate change.

“We are determined to play a leading role, but we have to be mindful of the needs of different economies,” she said.
Genoa agenda finalised

The next time IAPH members meet for an important meeting in Europe it will be for THE big meeting – the 26th World Ports Forum, in Genoa.

IAPH conference VP Dr Maurizio Bussolo gave an outline of the conference to the mid-term board meeting in Dunkirk and gained approval for the draft programme.

Dr Bussolo, who is CEO of Finporto di Genova, said one session has been set aside for deliberations on climate change initiatives. Full details will appear in P&H’s July issue.

“The conference is the biggest gathering of top port executives in the world,” he said. “We are putting together a programme that will reflect the latest thinking on port issues from industry leaders.

More info: www.iaphconference.it

Technical committee deliberations were held under new groupings devised at the Shanghai World Ports Congress in Shanghai in May 2005. These are aimed at streamlining work undertaken by IAPH members and ensuring they work more efficiently.

Networking continued in the evenings over the full social programme.

François Soulet de Brugièure, chairman of the board of the Dunkirk Port Authority, and Jean-Claude Terrier, CEO, welcomed guests to a variety of venues.

Terrier welcomed delegates to the town’s port museum on the first night and expressed the wish that they “would not forget” the time they spent in Dunkirk.

Speaking the following evening on board the paddle steamer Princess Elizabeth, he said he was “proud” that IAPH had selected Dunkirk for the mid-term board meeting. A highlight of the event was the magician who entertained guests with some dexterity.

The social calendar concluded with a gala dinner at Dunkirk’s renowned casino, which also featured a flamboyant traditional French cabaret.

More info: www.wpccrotterdam.com
26th IAPH World Port Conference
Cotone Congressi Genova, Genoa, Italy
25-29 May 2009

Organised by:
www.iaph.it

On behalf of:
IAPH headquarters welcomed two other delegations from Europe who were visiting Tokyo for a number of business meetings. A delegation from Bulgaria (below, left) were in Tokyo to visit the Japan Bank for International Co-operation (JBIC). Pictured are left to right: Susumu Naruse, executive director, OCDI, Japan (chair of IAPH technical committee); Anguel Zabourtov, deputy general director, Bulgarian Ports Infrastructure Co (IAPH Co-ordinator); Dr Inoue, IAPH; and Hiroyuki Ohnishi, OCDI.

Views were exchanged on a variety of topics with the delegation from Hamburg (below, right). Pictured left to right are: Heinrich Lieser, chairman of the board, Hamburg Business Development Corporation; Nina Alswede, project director, HWF Hamburg Business; Dr Jürgen Sorgenfrei, chairman and CEO, Port of Hamburg Marketing Association (IAPH alternate director for Germany); and Dr Inoue, IAPH.

Change for the better

The latest information on the C40 World Port Climate Conference, to be held in Rotterdam from 9 to 11 July, was delivered to IAPH by former IAPH president Pieter Struijs and Frans van Zoelen, both from the Port of Rotterdam (centre, back row, above).

Struijs, in his capacity of director of the conference, was on a mission to meet representatives from the ports of Tokyo, Yokohama and Kobe to explain the background to the conference, the programme and draft declaration. He stressed it was important for the world ports to join the global fight against climate change by reducing emissions. More info: www.wpccrotterdam.com

Dalian discussions

The 9th IAPH Asia/Oceania regional meeting will be held over 29–31 October 2008 in Dalian, China, to be hosted by Dalian Port Corporation, chaired by Yuan Fuxi. The tentative schedule is:

- Wed 29 Oct – arrival and registration; evening: welcome cocktail reception
- Thu 30 Oct – opening ceremony, work sessions I, II and III
- Fri 31 Oct – work session IV, regional meeting followed by a technical tour.

Ports message delivered

IAPH president Datin OC Phang told the Coastal & Port Engineering in Developing Countries (COPEDEC) conference – now a part of PIANC – in Dubai, UAE, how ports acted as facilitators in a borderless world. “Ports are consistently seeking new ways to stay relevant to their own economies and stay competitive to be successful,” she said. “The focus is now on efficiencies and the relevant strategies to achieve these.”
A generosity of spirit that leads to enlightenment

Jean-Claude Terrier, EXCO member for the Europe/Africa region and CEO of the Port of Dunkirk, reflects on a successful mid-term board meeting.

It took months of planning by my dedicated team and it took long hours and almost military precision to co-ordinate the movements of 100 port people plus their guests from 25 countries around northern France for April’s meeting and seminar.

After four days of deliberations and a packed social programme for both delegates and their spouses, can I say it was worth it? Undoubtedly, yes.

Meetings ranged from those of officers and technical committees to the board. Then we held a special conference to which dignitaries and others with an interest in the maritime and energy industries were invited.

The calibre of the speakers and the variety of their professional backgrounds made this gathering particularly fruitful.

Finally, we finished with a tour of the port, initially by boat and then by coach. In this time we were able to show colleagues from ports all over the world how we manage our business in Dunkirk and we were also able to discuss our hopes and plans for the future.

The exchange of ideas and information went much deeper than that, however. It was obvious from all the discussions in the technical groups and socially in the day and evenings that people were happy to talk frankly about their own experiences.

The term ‘networking’ is used a lot. But these days of travel constraints could see it happening less and less. And that would be a pity.

As the meetings in Dunkirk showed, with the right target group, you can learn a lot in a short time and have your own convictions challenged – or, sometimes more importantly, reinforced – by others who have trodden a similar path.

Ports differ so much from each other. Some handle only containers others are home to only dry or wet bulk trades. Many others are like Dunkirk – handling a myriad of cargoes.

Despite this diversity, we all face similar issues. Common to all is a driving need to expand to ensure the continued wealth of the countries we serve and the need to handle the complex chemistry of doing so in harmony with our neighbours in surrounding cities and towns.

The IAPH strength is that we can meet and learn from each other and through generosity of spirit help each other through the challenging times we face ahead.

To those of you who made the effort to travel to Dunkirk, I thank you for your contribution in making it such a successful meeting. I hope you had a safe journey home.

To those of you who missed it, I urge you to make the effort to attend other meetings, either regional, EXCO or the big World Ports Conference planned for Genoa in 2009. You will not regret it, as it will give you an insight into your industry that you cannot gain from any other gathering.

Wherever I see you next, have a safe journey there! 

The IAPH strength is that we can meet and learn from each other and through generosity of spirit help each other through the challenging times we face ahead.
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