



▶ taking stock of singapore's maritime industry ▶ command & control ▶ spirit of innovation

OUR MARITIME MOMENTS THROUGH YOUR LENS

Open Category

First Prize: \$2,500

Second Prize: \$1,500

Third Prize: \$800

Three Merit Awards: \$500

Youth Category (Age 25 and below)

First Prize: \$2,000

Second Prize: \$1,000

Third Prize: \$500

Three Merit Awards: \$300

A Certificate of Achievement will also be awarded to the top 50 shortlisted photos.

Singapore Maritime Week Photography Competition 18th January - 4th April 2010

In celebration of all things maritime during Singapore Maritime Week, we are looking for special photographs from budding and professional talents who can capture unique and striking images of maritime moments in Singapore. From land, sea, people to architecture, interpret Maritime Moments as you see and experience them. The top six Open and Youth (age 25 and below) category winners will each walk away with cash prizes.

All shortlisted photos will be exhibited at the first ever Singapore Maritime Week Photography Exhibition at VivoCity from 21st - 25th April 2010.

www.smw.sg

Organisers:



Co-Organiser:



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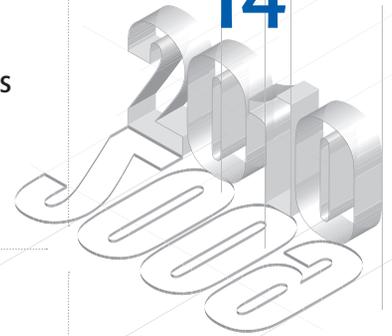
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COMMUNITY TALK
TIME FOR REFLECTION

publisher



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SINGAPORE maritimeweek 2010

Singapore Maritime Week takes centre stage in 2010, with the 5th edition from 25 to 30 April.

Steered by the Maritime and Port Authority of Singapore, Singapore Maritime Week (SMW) is an exciting gathering of the international maritime community in Singapore for a week of conferences, dialogues, exhibitions and social events in celebration of all things maritime.

This is why SMW is all about People, Ideas and Opportunities for the maritime community.

Visit us at www.smw.sg for more details.



PEOPLE **OPPORTUNITIES**
IDEAS

25-30
APRIL 2010

5th SINGAPORE MARITIME WEEK



MPA
SINGAPORE

www.smw.sg



Charting the new year ahead

This year, February 14 marks the first day of the Lunar calendar and it is traditional for the Chinese to greet the new year with a spring cleaning – throwing out the old and replacing them with the new.

To me, it signifies starting the new year with new resolutions, fresh perspectives and hopes.

As we enter a new decade, Maritime Singapore would also like to take a step back and take stock of what happened in 2009 and make new plans in 2010 to charge ahead in the upturn.

Enjoy this issue of *Singapore Nautilus* as we reflect on

happenings in the maritime industry in Singapore and globally, and the new and exciting plans we have in store for the shipping community.

If you have ideas or comments to share, do drop us a line at SN_feedback@mpa.gov.sg. It'll be great to hear from our readers.

Wishing all of you a Happy Lunar New Year!

wee shann
executive editor

SoMS study reveals sufficient capacity to handle traffic growth in the Singapore Strait



► To accommodate a significant increase in maritime trade, the Singapore Strait has sufficient capacity to handle vessel traffic growth by up to 75 per cent.

This preliminary finding from the Straits of Malacca and Singapore (SoMS) capacity study showed that there is still substantial room for vessel traffic growth in the Straits without affecting either efficiency or navigational safety.

The study noted that the Singapore Strait could safely accommodate a doubling or more of vessel traffic, especially with advances in technology and enhanced traffic management measures.

The study assessed the capacity of the Straits of

Malacca and Singapore, based on 2007 data of actual ship reports and radar information from MPA's Port Operations Control Centre.

Using a computer simulation model, the capacity was evaluated based on efficiency and safety of navigation within the Straits. Computer simulation was used because of its greater rigour compared to other alternative traffic modelling models.

"A clear and accurate picture of the carriage capacity of the Straits of Malacca and Singapore will allow MPA to work with the littoral states as well as other interested stakeholders to identify strategies to

enhance capacity while maintaining navigational safety," said Yee Cheok Hong, MPA's Group Director (Policy and Planning).

The preliminary findings were shared with MPA's counterparts in Indonesia and Malaysia last October.

Singapore has offered to work with Malaysia and Indonesia through the Tripartite Technical Experts Group and where appropriate, the Co-operative Mechanism, as well as the International Maritime Organization on further aspects of the study.

MPA wins inaugural Singapore Experience Award

► MPA's Singapore Maritime Week 2008 came up tops in the 'Trade Conference of the Year' category in the inaugural Singapore Experience Awards 2009.

Organised by the Singapore Tourism Board, the Singapore Experience Awards recognises individuals and organisations with the best product and service delivery that have contributed to a distinctive and compelling Singapore Experience.

These awards bring together industry players in the hospitality, retail, dining, entertainment, attractions, business travel and MICE sectors who delivered the highest level of excellence in product and service delivery.



Exercise Deep Sabre II enhances security in the region



Deputy Prime Minister Teo Chee Hean (left), who is also the Minister for Defence, speaking to (from left) Sub-Lieutenant Mark Taylor from Australia and Lieutenant Sarndra Dron from New Zealand in Deep Sabre (XDS) II. The exercise is a drill to stop illegal export of weapons technology.

► Singapore hosted Exercise Deep Sabre II, a multilateral exercise which aims to enhance security measures against the spread of weapons of mass destruction, last October.

The exercise is part of the Proliferation Security Initiative involving the Immigration & Checkpoints Authority, MPA, Singapore Armed Forces, Singapore Civil Defence Force, Singapore Police Force and Singapore Customs.

The exercise involved about 2,000 personnel from Argentina, Australia, Brunei, Canada, France, Germany, Italy, Japan, Korea, New Zealand, Papua New Guinea, Philippines, Poland, Russia, Singapore, Spain, Turkey, the United Arab Emirates and the United States.

ECDIS conference highlights e-navigation

► The Third International Electronic Chart Display and Information System (ECDIS) Conference & Exhibition (IEC09) held last October attracted more than 300 international delegates and speakers from 19 maritime organisations and authorities.

MPA and UK's Hydrographic Office (UKHO) jointly organised the IEC09 event, which focused on issues and implications of implementing ECDIS, in line with the International Maritime Organization's recent announcement of the six-year time-line for mandatory ECDIS carriage from 2012.

During the conference, practical implementation issues like training, equipment retrofitting and costs were covered and existing ECDIS users were also on hand to provide guidance and share implementation experiences.

Lam Yi Young, MPA Chief Executive said: "This transformation from paper nautical charts to e-Navigation is a global effort that will involve the whole maritime community."

MPA-NSSPL collaboration boosts Mariner Exchange Programme



► Mariners from MPA and NSSPL, the ship management business unit of Neptune Orient Lines which manages APL vessels, will be able to enhance their skills through a new Mariner Exchange Programme.

At the recent signing ceremony of the Memorandum of Understanding between MPA and NSSPL, MPA Chief Executive Lam Yi Young said that the exchange programme "provides a platform for MPA and APL/NSSPL officers to exchange knowledge and gain exposure."

Under the programme, APL/NSSPL ship masters and chief engineers will be attached to MPA for up to 18 months over a three-year

period to augment the pool of marine surveyors carrying out ship inspections.

These mariners will be attached to marine surveyors to learn how to carry out Port State Control (PSC) and Flag State Control (FSC) inspections on ships.

This will enhance the capabilities of APL/NSSPL's mariners in PSC and FSC inspection regimes.

In addition, MPA's marine surveyors and officers will be attached to APL/NSSPL for sea trips to gain insight into the latest developments in shipboard technology and operations.

Visit by World Maritime University



The World Maritime University's week-long study visit to MPA



Visit by NTUC



NTUC's Leadership Network visits MPA's Port Operations Control Centre 2



Futsal Tournament for Seafarers



The annual indoor football tournament organised by MPA for seafarers in port was held at Choa Chu Kang Sports Hall



Visit by Nippon Maritime Centre



Delegation from the Nippon Maritime Centre visits MPA's Port Operations Control Centre 2



MPA Family day



Fun times at the MPA Family Day held at East Coast Park in December



Visit by Saudi Hydrographers



A visit to MPA from the General Commission of Survey, Saudi Arabia - led by HE Morayyeh H. Al-Shahrani, President



2nd Co-operation Forum



35th APA Meeting



The 35th ASEAN Ports Association (APA) meeting was held in Singapore last December



The Co-operation Forum is part of the Co-operative Mechanism which is a key platform for the three littoral states and the international maritime community to collaborate on issues relating to the Straits

ECDIS Conference



MPA and The United Kingdom Hydrographic Office jointly organised the Third International Electronic Chart Display and Information System (ECDIS) conference

Visit by Japanese Researchers



Researchers from the Monohakobi Technology Institute visit MPA's Port Operations Control Centre 2

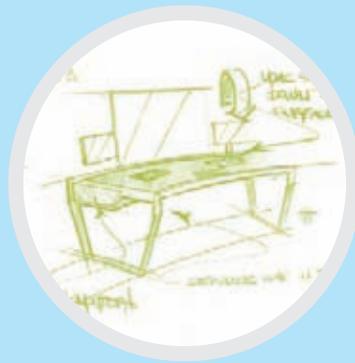
TTEG Meeting



The 34th meeting of the Tripartite Technical Experts Group (TTEG) on the safety of navigation in the Straits of Malacca and Singapore

COMMAND

MPA'S NEW PORT OPERATIONS CONTROL CENTRE AT CHANGI WILL BOOST SINGA



► With one of the busiest waterways in the world, the port of Singapore is the focal point for some 200 shipping lines with links to more than 600 ports in 120 countries, receiving over 130,000 vessel calls with a total shipping tonnage of over 1.78 billion GT annually.

At any one time, there are some 1,000 vessels within the Singapore port, with two to three ships arriving or departing.

And the figures for future traffic growth are likely to increase with global consumer trade picking up and larger, newer container ships and other vessels being built – all of which will significantly increase the load on existing Vessel Traffic

Information Systems (VTIS) and its operators.

A reliable VTIS is thus essential for the safe and efficient navigation of ships in the Singapore Strait and port waters.

Need for new system

In order to meet the projected increase in marine traffic flow, MPA aims to take navigational safety and marine traffic management to a new level with a third Port Operations Control Centre (POCC).

Located at Changi and operational from end 2010, the Changi POCC will oversee marine traffic flow and navigational safety in Singapore's port waters and the Singapore Strait.

The new POCC will harness the latest vessel traffic monitoring technologies to provide a comprehensive traffic situation overview to operators, and offer advanced decision support functions and traffic analysis capabilities.

Operating round the clock, the new POCC will also be equipped with a shore-based Global Maritime Distress and Safety System to monitor distress alerts and calls from ships, and coordinate search and rescue operations.

It will also be able to disseminate Maritime Safety Information through the VHF and NAVTEX systems to vessels off the coast, and the Inmarsat-C SafetyNET system to vessels out in the ocean.

Comprehensive data

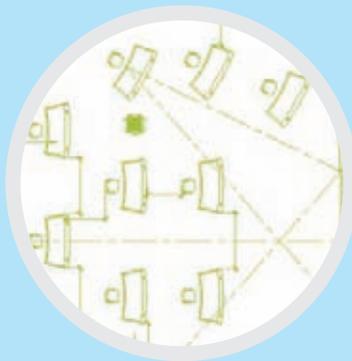
MPA currently operates two POCCs at Tanjong Pagar Complex and PSA Vista where they track and provide information to vessels in the port and the Singapore Strait. These nerve centres also support the Republic of Singapore Navy and Home Front agencies in enhancing Singapore's maritime and port security.

Therefore, it will be more advantageous and synergistic to house the new POCC at the Changi Command and Control Centre together with other maritime agencies. This will enhance the conduct of maritime operations in the region.

"Besides the new POCC at the Changi Command and

& CONTROL

PORE'S CAPACITY AND ITS TRAFFIC MANAGEMENT CAPABILITY EFFECTIVELY



Control Centre, MPA is also investing in enhancing the capabilities of the POCC2 at PSA Vista. The new POCC and the refurbished POCC2 will be equipped with the next-generation VTIS which will help MPA gain better operational efficiency and effectiveness," said Captain Kevin Wong, Assistant Director, Vessel Traffic Management Department, MPA.

Captain Wong explained that the new VTIS will have an advanced data fusion engine to integrate the radar, Automatic Identification System (AIS) and Harbour Craft Transponder System (HARTS) for a more comprehensive and useful maritime traffic situation picture.

Commissioned in 1990 and upgraded in 1999, Captain Wong said that the functions of the current VTIS are to receive movement reports from vessels, track and monitor vessels' movements with radars, check that vessels are observing traffic rules, and provide traffic information, navigational assistance and broadcasting of navigational warnings.

The system is also equipped with synchronised logging to facilitate replay of radar tracks. The radar picture is presented on electronic navigation chart (ENC) and multi-display windows that provide real-time information.

The control room is manned 24 hours under the

supervision of Duty Marine Officers who are certified Master Mariners.

State-of-the-art system

The new POCC systems provide an open system architecture that facilitates integration with other systems and future upgrades. This minimises system life cycle costs as there would not be a need for an overall system change for future upgrades.

The design of the new system will also be more robust in handling huge data and support secure and efficient communication with external information systems. "The new VTIS would be more effective and reliable in supporting critical operational functions as it is

designed for high availability with no single-point-of-failure," says Captain Wong.

He adds: "It is important to have both the POCCs built on a common system platform so that integration will be seamless and actions performed by an operator at one centre are reflected immediately at both centres.

"This ensures a smooth transition with little or no disruption to port operations should there be any emergencies affecting one POCC. The new POCC at Changi and the revamped POCC at PSA Vista will enable MPA to implement enhanced technologies and best practices in monitoring safety and crisis response within its waters."

TURN-KEY DESIGN

The new POCC and the rebuilding of POCC2 will be a turn-key design-and-build project. Examples of some of the new features include:

- **A comprehensive traffic situation picture:** Information from the different sensors (Radar, AIS, HARTS, CCTV) will be integrated to form a comprehensive traffic situation overview.
- **Advanced Decision Support Functions:** Enhanced features to be developed include collision/ striking prediction at intersections, striking prediction with fixed objects/navigation aids, and the monitoring and prediction of traffic bottlenecks at defined critical areas.
- **Advance Traffic Analysis Capabilities:** The system will be capable of generating multimedia and statistical reports for further analysis to support port planning, anchorage allocation, waterway management and incident/infringement investigations.
- **Enhanced Visualisation Engine:** Using integrated data from multiple sources, including satellite images, the enhanced Visualisation Engine will present a 3D Common Operating Picture (COP) for real-time traffic management, search and rescue, oil spill, investigation, training and planning.
- **Synchronised CCTV tracking of radar targets:** The VTIS system will include integrated CCTV/radar surveillance capability for automatic vessel tracking through a 'point and click' action by the operator.
- **Advance Track Dissemination Capability:** The VTIS system will have a web-based client application to provide user-authenticated sea situation awareness on office PCs and remote display devices such as notebooks.

OTHER PORT DEVELOPMENTS

GOING GREEN WITH ANTI-FOULING SYSTEM

Singapore is working with the International Maritime Organization (IMO) to implement an Anti-Fouling Systems (AFS) Convention by March 2010.

The AFS Convention restricts the use of harmful anti-fouling paint on ships entering ports, shipyards or offshore terminals. An anti-fouling paint known as tributyltin (TBT) has been banned by parties of the IMO convention.

Ships that are parties to the Convention are required to carry an AFS Certification on board. Australia, Japan and South Korea have already acceded to this convention.

Anti-fouling paints are used to prevent algae and molluscs from attaching themselves to the hull. This slows down the ship and increases fuel consumption.

Singapore will authorise nine classification societies to issue AFS Certificate of Compliance. Ships of 24 metres or more in length, but less than 400 gross tonnes engaged in international voyage, must carry an AFS declaration signed by the owners or authorised agent. Ships that are 400 gross tonnes and above are required to undergo surveys.

The IMO adopted the International Convention on the Control of Harmful Anti-Fouling Systems on Ships since 2001 and came into force in 2008.

AIS TRANSPONDER

Under the IMO's Safety of Life at Sea Convention (SOLAS), all vessels of more than 300 GT are required to carry Automatic Identification System (AIS) Class A transponders. To further enhance port safety and security, in 2007, the Harbour Craft Transponder System (HARTS) was implemented on all MPA licensed harbour and pleasure craft. In 2008, AVA-licensed fishing vessels were also fitted with the HARTS.

For vessels (below 300 GT) that do not carry any transponders when calling at the port of Singapore, the Singapore Government will fund the installation of AIS Class B transponders.

Echol Tech Pte Ltd will install some 1,000 AIS Class B transponders on selected vessels. Installation works has commenced and is expected to be completed by 2011. After January 1, 2012, the carriage of transponders will be a mandatory requirement for vessels seeking entry into the port of Singapore.

GATEWAY TO ASIA'S CAPITAL MARKET

SINGAPORE EXCHANGE PARTNERS OSLO BØRS ON DUAL LISTINGS
FOR ENERGY, OFFSHORE AND MARITIME COMPANIES



▶ With Asia set to play an important role in the maritime industry going forward, Singapore is well positioned to contribute significantly to its growth as a shipping hub.

The Singapore Exchange (SGX) has been an appealing listing venue for many foreign companies and continues to scan the horizon for opportunities to attract international maritime companies.

Singapore's strengths in this sector are well known. Its marine sector includes ship building, repair, chartering and offshore oil-rig building.

Mr Lawrence Wong, Executive Vice President and Head of Listings at SGX says: "We have observed that a number of Norwegian companies use Singapore as a base to tap into the growing Asian market.

"This signals a possible increase in business activities in this sector and from Norwegian companies in the near future," he adds.

Dual listings

Recognising the potential, SGX and Norwegian-based Oslo Børs signed a Memorandum of Understanding (MOU) last July, where both parties agreed to co-operate in attracting dual listings.

For a start, listed companies from the energy, offshore and maritime sectors of the two exchanges will be encouraged to seek a secondary listing on the other exchange. Companies should have a listing track record of three years and a market cap of at least S\$200 million.

To facilitate dual listings, both exchanges have established a framework of mutually agreed listing rules and procedures as well as a settlement and clearing process for traded shares.

Mr Wong adds that the co-operation was formed as both exchanges are comfortable with each other's regulatory standards.

Mrs Bente Landsnes, CEO of Oslo Børs ASA, says: "Co-operation between SGX and Oslo Børs supports the fact that Singapore and Norway have long, and to a great extent, similar traditions when it comes to shipping and energy-related industries."

Focus on industry

This MOU represents SGX's first dual-listing co-operation with a sector focus between Singapore and Norway.

Mrs Lim Hwee Hua, Minister in the Prime Minister's Office and Second Minister for Finance and Transport, notes that the MOU will "boost Singapore's efforts to position itself as a leading shipping and maritime hub in Asia".

Through this MOU, SGX provides an efficient platform for Oslo-listed companies to have a secondary listing in Asia with regulatory standards similar to Oslo.

This is particularly beneficial to Oslo-listed companies wishing to expand into Asia. It allows them to raise their profile, attract a new set of Asian investors and avail themselves of a new pool of liquidity. Investors in both locations would also benefit from longer trading hours.

We have observed that a number of Norwegian companies use Singapore as a base to tap into the growing Asian market. This signals a possible increase in business activities in this sector and from Norwegian companies in the near future.

Lawrence Wong, Executive Vice President and Head of Listings, SGX

Mr Wong says: "SGX looks forward to having companies list on both exchanges and capitalising on a larger investor pool across two time zones. Potentially, this enhances both listing venues and attracts more listing aspirants."

To date, SGX has 47 listed companies in the energy, offshore and marine sectors, while 89 such companies are listed on Oslo Børs, making a total of 136 companies with a combined market capital of \$185 billion.

The two exchanges will also work together on marketing and promotion, with plans to have a series of marketing seminars to profile the sectors in the two regions in the coming months.

SGX and Oslo Børs will enhance the co-operation framework by exploring opportunities in introducing new sectors, providing regulatory updates, monitoring and governance matters.

To ensure a successful dual listing, Oslo Børs and SGX emphasise the need for

companies to undertake the requisite investor relations activities in Asia and Europe so as to attract potential investors.

Positive step

An example of a Singapore company listed on Oslo's mainboard is EOC, one of Asia's leading operators of offshore construction and production vessels. EOC, which listed in 2007, is an associate company of Ezra Holdings, which is listed in Singapore.

While analysts saw the SGX's partnership as a positive step, they expect it to have minimal earnings impact in the near term.

JP Morgan notes the MOU would make it easier for companies to dual-list, with shipping, offshore and marine and petroleum-related firms as the primary targets.

For SGX, this is the first of such an alliance with a peer exchange and in line with SGX's strategy to be an Asian capital market of choice and a market-friendly gateway to growth.



Co-operation between SGX and Oslo Børs supports the fact that Singapore and Norway have long, and to a great extent, similar traditions when it comes to shipping and energy-related industries

Bente Landsnes, CEO of Oslo Børs ASA



SINGAPORE NAUTILUS RECAPS KEY MARITIME EVENTS AND HAPPENINGS IN 2009 AND EXAMINES SIGNIFICANT EVENTS THAT THE MARITIME INDUSTRY CAN LOOK FORWARD TO IN 2010

• The shipping industry has had one of its worst years on record and the year ahead also looks like it will be a tough one. However, 2009 has also brought its fair share of significant developments that will stand the industry in good stead for the future.

World seaborne trade was expected to fall by two per cent to three per cent in 2009, the first decline since 1982, while industry figures indicate that on the major trade routes, container volumes are down by 20 per cent to 30 per cent during the year.

Traffic volume at the port of Singapore ended the year about 10.1 per cent higher than the year before, although globally, volumes at the top 20 container ports fell an average of 15.5 per cent in just the first half of 2009. Major trade player China expects its main ports to see about seven per cent lower container volume throughput.

The situation has been aggravated by massive

overcapacity in the industry caused by the double whammy of a lack of demand and a huge amount of new supply coming onto the market due to ambitious new building programmes by all the major players.

Capacity expansion is expected to grow more than eight per cent a year over the next few years, so the supply overhang looks set to remain a problem. Almost all the major vessel types, including tankers, container ships and bulk carriers, are facing overcapacity problems. For example, about 10 per cent of the global container vessel fleet is laid up currently and this figure is expected to go up to 20 per cent in 2010.

The root of the problem is the slowdown in global trade.

Since 90 per cent of world trade volume is carried by sea, the fortunes of the container shipping industry are directly linked to global trade volumes.

Like other sectors of the economy, the Singapore port and maritime sector was affected by the economic slowdown. Container volumes for the year fell by 13.5 per cent while cargo volumes was down 8.9 per cent compared to the previous corresponding period.

However, positive growth was registered in other areas such as bunker sales, especially since lower fuel prices encouraged more ships

to take on bunker in Singapore. Sales of marine fuel for the year rose 4.2 per cent from the same period the year before.

Other encouraging signs for Singapore's growth as an international maritime centre were that despite the difficult conditions, the core of ship-owning and operating companies continued to grow in Singapore.





TAKING
OF SINGAPORE
INDUSTRY STOCK
IN A RISKY
STRATEGY
APPROCK

SINGAPORE MARITIME WEEK

▶ Through the Singapore Maritime Week, MPA has been pushing for the transformation of maritime Singapore to develop the city-state as a maritime thought capital, where industry captains and policy-makers gather to discuss topical issues. The Singapore Maritime Week, an annual initiative, completed its fourth run in April.

Singapore Maritime Week 2009 attracted more than 13,000 local and international participants, further positioning Singapore as an important centre for maritime ideas and discourse.



MOVERS AND SHAKERS

The beginning of the year saw several key changes on MPA's board as long-serving chairman Peter Ong stepped down and Allen and Gledhill managing partner Lucien Wong took over last February.

The MPA also saw a change of chief executive as BG(NS) Tay Lim Heng moved to the Ministry of National Development and Lam Yi Young from the Ministry of Defence came in to take over.

The board also saw some renewal as Chief of Navy Rear Admiral Chew Men Leong, Singapore Maritime Officers' Union general secretary Thomas Tay, Public Service Division deputy secretary (Policy) James Wong, Sembcorp Marine president and chief operating officer Wong Weng Sun and YCH Group chairman and CEO Robert Yap joined the board. Keppel Corp CEO Choo Chiau Beng, Singapore Organisation of Seamen general secretary Leow Ching Chuan, Singapore National Shippers' council chairman John Lu and Neptune Orient Lines group president and CEO Ron Widdows stepped down.

R&D PARTNERS



Another one of the MPA's key areas of focus in 2009 was in research and development (R&D). Last June, MPA and the Research Council of Norway (RCN) signed a Memorandum of Understanding (MOU), renewing their bilateral agreement on maritime education, training and R&D for another three years.

In addition to existing research in offshore and marine engineering, maritime operations and infocomm technology, the new MOU also focuses on marine environment and sustainable energy technology. The MOU is in line with MPA's commitment to leverage R&D as a key enabler in the growth and development of the Singapore maritime cluster.

IMO RE-ELECTION

Singapore ended the year on a high note with its re-election to the IMO Council for a ninth term in November. Singapore's membership at the council has enabled the Republic to contribute significantly towards advancing the international maritime community.

Singapore was first elected to the IMO Council in 1993 and has since been re-elected to the council at subsequent biennial IMO Assemblies.

While the past year has been roundly declared to be the worst the container industry has seen and the year ahead looks challenging as well, MPA has been doing all it can to gear itself for the upturn.



SAFER WATERS



Plans for the future safety and development of the straits were set in place with an MPA-commissioned study to assess the capacity of the Straits of Malacca and Singapore (SoMS).

The preliminary finding from the SoMS capacity study showed that there is still substantial room for vessel traffic growth in the straits.

It found that based on the efficiency and safety indicators, the current traffic level in the Singapore Strait could be increased by at least 75 per cent.

On a more sober note, the spectre of piracy finally hit close to home in 2009 with the hijacking of the Pacific International Lines-owned container vessel Kota Wajar in mid-October and Singapore-flagged ship owned by Indonesian tanker shipping company PT Berlian Laju.

Singapore contributed to the multinational anti-piracy task force in the Gulf of Aden last year with the three-month deployment of a landing ship tank from April to June.

CO-OPERATIVE LOCAL FORUM FUNDING

📍 In October, Indonesia, Malaysia and Singapore concluded a Joint Technical Arrangement (JTA) with the International Maritime Organization (IMO) to institutionalise an IMO Trust Fund, with an initial US\$1 million contribution from Greece.

The JTA was signed by the heads of the maritime administrations of the three littoral states and the IMO's director of Maritime Safety Division during the opening of the 2nd Co-operative Forum hosted by Singapore.

The forum opened up new mechanisms for collaboration to expand the scope of participation, including two new panel discussions on Safety of Navigation and Environment Protection.

The mechanism has been making good progress through its three pillars: the Co-operation Forum; the Straits projects; and the Aids to Navigation Fund.



📍 Local R&D efforts have not been forgotten either. MPA, with S\$2 million from its Maritime Innovation and Technology (MINT) Fund, is co-funding a project for the test-bedding and type approval of CSNOx, a locally developed technology that reduces greenhouse gas and exhaust pollutants from ship emissions. CSNOx is invented by Ecospec Global Technology, a local research and technology company specialising in emission reduction technology.

Another project that benefitted from the MINT Fund was Singapore-based company Global-I's ground-breaking container tracking solution. Called G-Track, the device is designed to improve the visibility and security of high-value perishable cargo requiring cold chain logistics.



LOOKING FORWARD IN 2010

1 Co-operative Mechanism

International co-operation in the Straits of Malacca and Singapore will be advanced by working with Malaysia and Indonesia in the 3rd Co-operation Forum and PCC meeting.

2 Maritime R&D

New programmes will be set up under the Maritime Innovation & Technology (MINT) Fund to encourage innovation in key areas such as environment protection and clean energy, and encourage maritime companies to set up R&D centres in Singapore.

3 Singapore Maritime Week

The 4th Singapore Maritime Week will be held from April 25 to 30, 2010 featuring a slew of exciting maritime events. One such event to look out for is the SMW Photo Competition, which will be exhibited at Vivocity.

4 Harnessing Technology

A 3D monitoring system for MPA's Marine Safety Control Centre will be developed to provide a bird's eye view of all marine operations and activities

5 Building capacity (I)

Studies are underway to prepare for the development of Tuas Port. In the meantime, a real-time monitoring system of the anchorages will be developed to optimise the use of limited anchorages.

6 Building capacity (II)

In order to meet future demand, reclamation works are in progress at Pasir Panjang Terminal

7 Marina South wharves

New lighter wharves will be developed in Marina South to replace the current facilities at Marina Wharves.

8 New POCC

The development of a new POCC at Changi is proceeding smoothly and will be commissioned in late 2010.



● Enhancing maritime security

MPA will be working closely with the ReCAAP Information Sharing Centre to explore and facilitate ways in which the centre can strengthen its capabilities to combat piracy and armed robbery in Asia.

● Broadening of services

Plans are underway to strengthen maritime services such as shipping finance and marine insurance in Singapore.

● Revamp of Marinet

The Marinet system will be revamped to boost its performance, layout and user experience.

● Nurturing quality manpower

MPA will be stepping up manpower planning efforts, and looking at various ways in which the maritime industry can attract, develop, train and retain talents.

● SIBCON 2010

The Singapore International Bunkering Conference (SIBCON) will be held in October to discuss bunker developments and policies affecting the industry.

GREATSHIP FUELS PASSION & ENERGY



ATTESTING TO SINGAPORE'S INTERNATIONAL MARITIME HUB STATUS, SHIPPING SERVICE PROVIDER, GREAT EASTERN SHIPPING'S WHOLLY-OWNED SUBSIDIARY GREATSHIP (INDIA) LTD CHOSE TO ESTABLISH ITS GLOBAL OFFSHORE ARM HERE TWO YEARS AGO. *SINGAPORE NAUTILUS* TAKES A PEEK AT ITS BUSINESS PLANS FOR THE NEW YEAR

► India-based Great Eastern Shipping's wholly-owned subsidiary, Greatship (India) Ltd, was looking to develop its global offshore operations and found Singapore to be an ideal location given its large international maritime cluster and pro-business environment.

In addition, the company felt that skill sets of international maritime professionals here would enable the use of more sophisticated vessels.

In 2008, the company took the plunge and started Greatship Global Energy Services and Greatship Global Offshore Services, and the

company has not looked back since.

The Greatship Group believes that Singapore is the main offshore hub in the region and the country provides comprehensive infrastructure and services necessary to support offshore vessel operations.

Said Venkatraman Sheshashayee, Executive Director of Greatship Global Energy Services and Greatship Global Offshore Services: "Singapore is fast becoming the hub of the offshore world, which is attracting talent and opportunity to this region. More business is being done

in Singapore. The ease of doing business and the attractive incentives to grow and develop are unique in this part of the world."

The company believes that an international maritime hub such as Singapore is driven by in-depth market information and industry knowledge and is helmed by people with the right technical knowledge.

The Greatship Group is also keen to develop offshore training and expertise in Singapore, and wants to work with MPA on growing the maritime industry, said Sheshashayee. Greatship

operates its most sophisticated vessels, such as deepwater and other specialised ships, from Singapore, and many of its vessels are registered with the Singapore Registry of Ships (SRS). Its Singapore operations own offshore support vessels as well as drilling rigs. The company is also IMS (Integrated Management System) certified by DNV, one of the few offshore companies who have sought and achieved this privilege.

Challenging weather

Sheshashayee admits that times are tough for the offshore industry now





Singapore is fast becoming the hub of the offshore world, which is attracting talent and opportunity to this region. More business is being done in Singapore. The ease of doing business and the attractive incentives to grow and develop are unique in this part of the world.

Venkatraman Sheshashayee, Executive Director of Greatship Global Energy Services and Greatship Global Offshore Services

and this has impact on the company's business in Singapore and around the world.

"Reduced business opportunities, lower charter rates and increased protectionism in certain markets have led to reduced revenues without concomitantly reduced costs, thus impacting bottom lines adversely," he explains.

And this has led to Greatship's current challenges of managing its core offshore services – people, market knowledge and managing costs.

Greatship Global Energy Services, which performs offshore exploration and production activities for oil companies, recently headlined in the local news when the company purchased a US\$205 million B Class jackup rig, named Greatdrill Chitra, from Keppel FELS Ltd. The massive rig was delivered ahead of

schedule in October 2009.

The company had secured a US\$140 million loan last October to pay for the new oil drilling rig. In a positive sign that the liquidity crunch is easing for the shipping industry, the loan was offered by a consortium of banks that includes Bank of Nova Scotia, DBS Bank Ltd, Thanachart Bank Public Co Ltd and Axis Bank Ltd.

G Shivakumar, CFO of Great Eastern Shipping, said that this is one of the biggest asset purchase loans secured by an Indian shipping company since the liquidity crunch started.

The lack of funds has proven to be an obstacle for many other shipowners' fleet expansion plans.

Looking ahead

Despite the current economic slowdown, Sheshashayee says that several factors – such as steady oil prices (at US\$70-80 levels), stabilised financial

markets and the realisation that reserves and production are depleting – will continue to drive the offshore industry globally. He further explains that the need for continuous and increased investment will be met to ensure that growing consumption, especially in emerging economies, can be satisfied.

Sheshashayee said that the maritime industry in Singapore continues to develop primarily due to the pro-business approach by MPA and the Singapore government. He elaborates: "Talent and business are being attracted and retained, and Singapore is well on its way to replacing London and Oslo as the premier maritime hub.

"I have only one concern – Singapore, so far, is acting only as a service hub, rather than as a research, design and development centre.

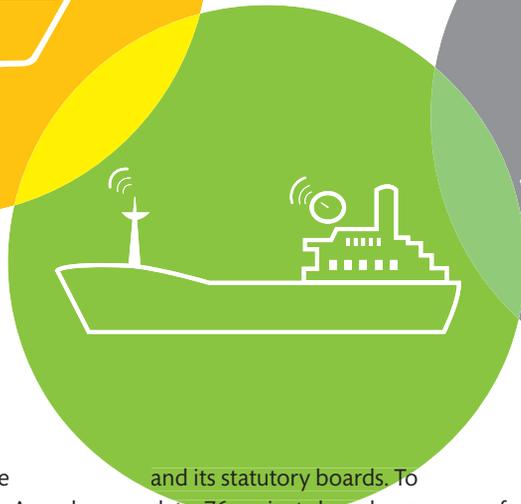
The Intellectual Property Rights (IPR), especially in the offshore and related fields, still remains with Norway, UK and USA.

"It is my opinion that Singapore must invest in developing itself as a hub, not just for services and management, but for technology and innovation."

Looking ahead, the Greatship Group is taking delivery of eight new vessels in 2010. The company's focus is to ensure that these vessels are placed in strong long-term contracts, especially in new market segments.

"We are also investing in developing our people and systems, ensuring that we prepare for the coming years," says Sheshashayee.

"We are also keeping an eye out for opportunities in the market that may align with our long-term goals that we may want to invest in."



► In an environment of finite resources and keen competition, there is a need to seek continuous improvements and productivity gains through innovation. And this can be achieved by challenging mindsets, breaking down traditional barriers, and inspiring a 'can do' spirit.

Indeed, innovation and technology go hand-in-hand and are critical for maritime businesses to stay ahead in these challenging times.

With this in mind, the Ministry of Transport (MOT)

recently awarded the Minister's Innovation Award to the Maritime and Port Authority of Singapore (MPA), the Civil Aviation Authority of Singapore (CAAS), and the Land Transport Authority (LTA) for innovative projects that benefit both the public and businesses.

At the award ceremony, seven Distinguished and nine Merit Awards were presented to the winners. Since its inception in 2002, the annual Minister's Innovation Award aims to promote innovation and creativity in the Ministry

and its statutory boards. To date, 76 projects have been conferred the Award.

MPA won two Distinguished Awards for 'Wireless Broadband Maritime Digital Services at Sea' and 'Recycling of Used Lubricating Oil Using Ceramic Membrane Technology'.

In addition, MPA also won two Merit Awards for 'Developing a Secured Advanced Global Satellite Asset Tracking Solution' and 'Maritime Fuel Consumption Monitoring and Data Acquisition Solution' for the maritime industry.

Raymond Lim, Minister for Transport and Second Minister for Foreign Affairs, says: "The winning projects are all creative and useful in their own way. They demonstrate how innovation and the generation of new ideas and knowledge can contribute towards more efficient and effective ways of achieving our goals."

The impact of these winning innovation projects has been significant, enabling cost savings and increased efficiency.

SPIRIT OF INNOVATION

AS VARIOUS INDUSTRIES ARE ROCKED BY THE WAVES CAUSED BY THE GLOBAL FINANCIAL CRISIS, MPA AIMS TO HELP THE MARITIME INDUSTRY STAY ON COURSE AND STEAM AHEAD THROUGH INNOVATIVE SOLUTIONS

INNOVATION

**Wireless Broadband
Maritime Digital Services**

Collecting maritime charts and notices via paper and CDs will become a thing of the past with the introduction of MPA's web-based Maritime Digital Services (MDS) application.

The MDS application, developed by Maritime Information AS (MARIS), allows ships equipped with electronic navigational systems entering Singapore waters to order electronic nautical charts (ENCs) and issue notices to mariners electronically. Such information is required for navigational planning.

Currently, the ENCs and notices are physically delivered to vessels in CD or paper form when the vessels call at port. Not only is this process time-consuming, updating of information is not possible as there are no cost-efficient ways to transmit huge data volume.

The MDS is a web-based solution that leverages the Wireless-broadband-access for Sea Port (WISEPORT), providing a low-cost, faster alternative to satellite transmission.

Other benefits include automatic updates of charts with customised portfolios, dynamic licensing on a three-month basis, and route analysis where only relevant charts and information will be highlighted.

**Recycling of Used
Lubricating Oil Using
Ceramic Membrane**

Used Lubricating Oil (ULO) is a major source of waste in the transportation industry as it is disposed via incineration or recycled by an expensive re-refining vacuum distillation process.

With support from the Institute of Environmental Science and Engineering and Envipure Pte Ltd, MPA

successfully completed a pilot to test a Ceramic Membrane technology for the recycling of ULO. Not only did the Ceramic Membrane technology result in a high oil recovery rate, the process was also energy efficient, thus confirming its commercial viability. A joint venture company was

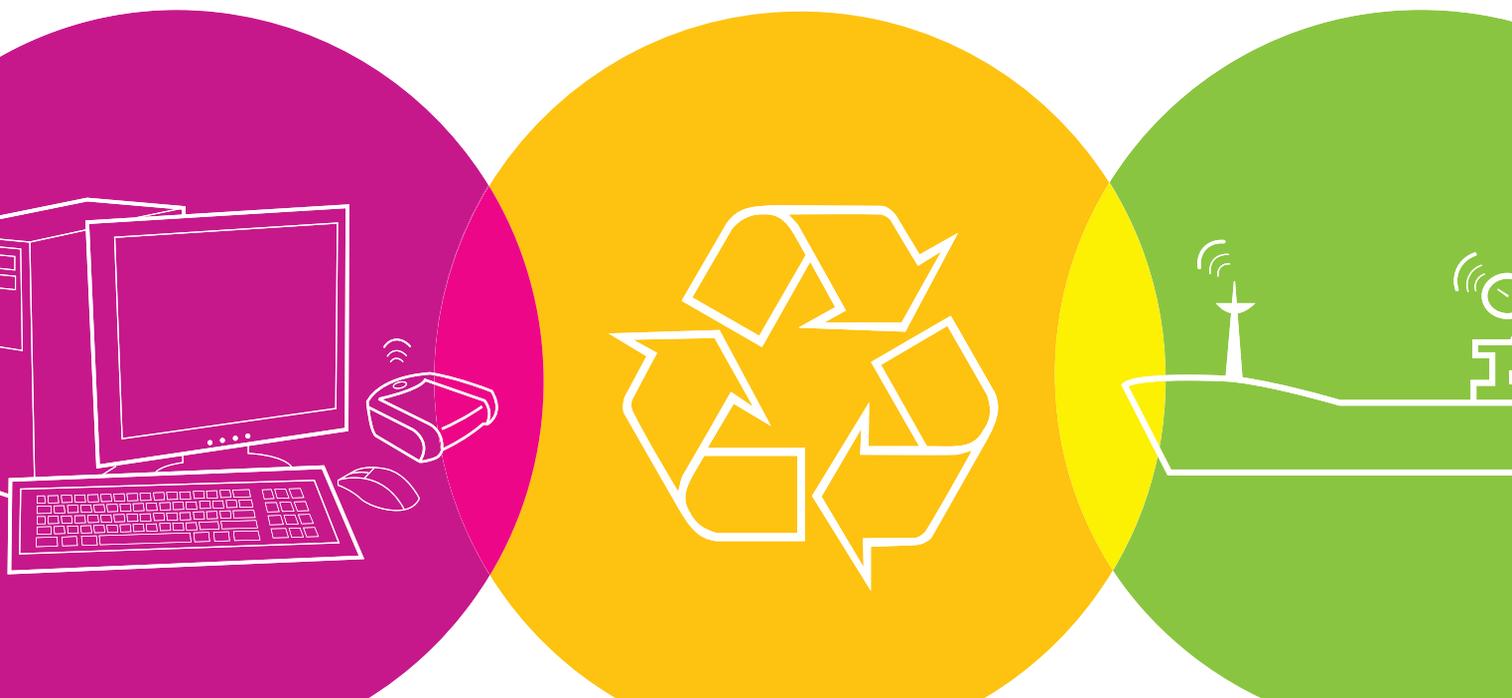
formed to look into improving the recycling process to commercialise this technology.

**Advanced Global Satellite
Asset Tracking**

The AITrac satellite tracking solution, developed by SingTel under MPA's Maritime and Innovation (MINT) Fund,

The winning projects are all creative and useful in their own way. They demonstrate how innovation and the generation of new ideas and knowledge can contribute towards more efficient and effective ways of achieving our goals

Raymond Lim, Minister for Transport and Second Minister for Foreign Affairs



enables maritime and logistics companies to conduct real-time location and movement of goods both on land and at sea remotely.

Compact satellite tracking devices using the Global Positioning System (GPS) are attached on the assets so that goods can be tracked via a web-based asset tracking management system. Security breaches can be alerted via SMS even beyond the range of terrestrial wireless services.

AITrac has since been deployed by a maritime company to track its vessels and a logistics company to monitor its goods.

Maritime Fuel Consumption Monitoring and Data Acquisition

MPA worked with the Infocomm Development Authority of Singapore and Ascenz Pte Ltd to develop a

monitoring system that enables shipboard equipment data to be transmitted wirelessly back to shore.

This allows operators to monitor the performance of their fleet from any part of the world via WISEPORT, GSM, GPRS and/or satellite.

Vessel owners can access useful information such as actual fuel consumption of individual engines/machines of different vessels, vessel positions and speed, weather monitoring and fire or flooding alarm. The system also allows operators to interface with any other shipboard monitoring equipment.

The data can then be analysed, allowing owners an overview of operational costs of their fleet. This solution has already been deployed in nine companies in the Asian region.

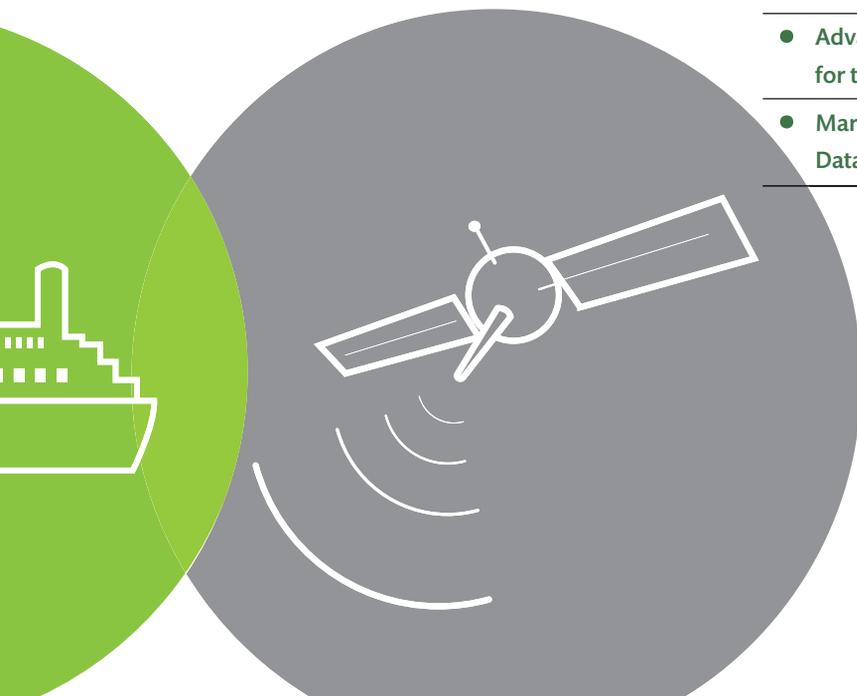
MOT'S INNOVATION AWARD 2009

DISTINGUISHED AWARD WINNERS

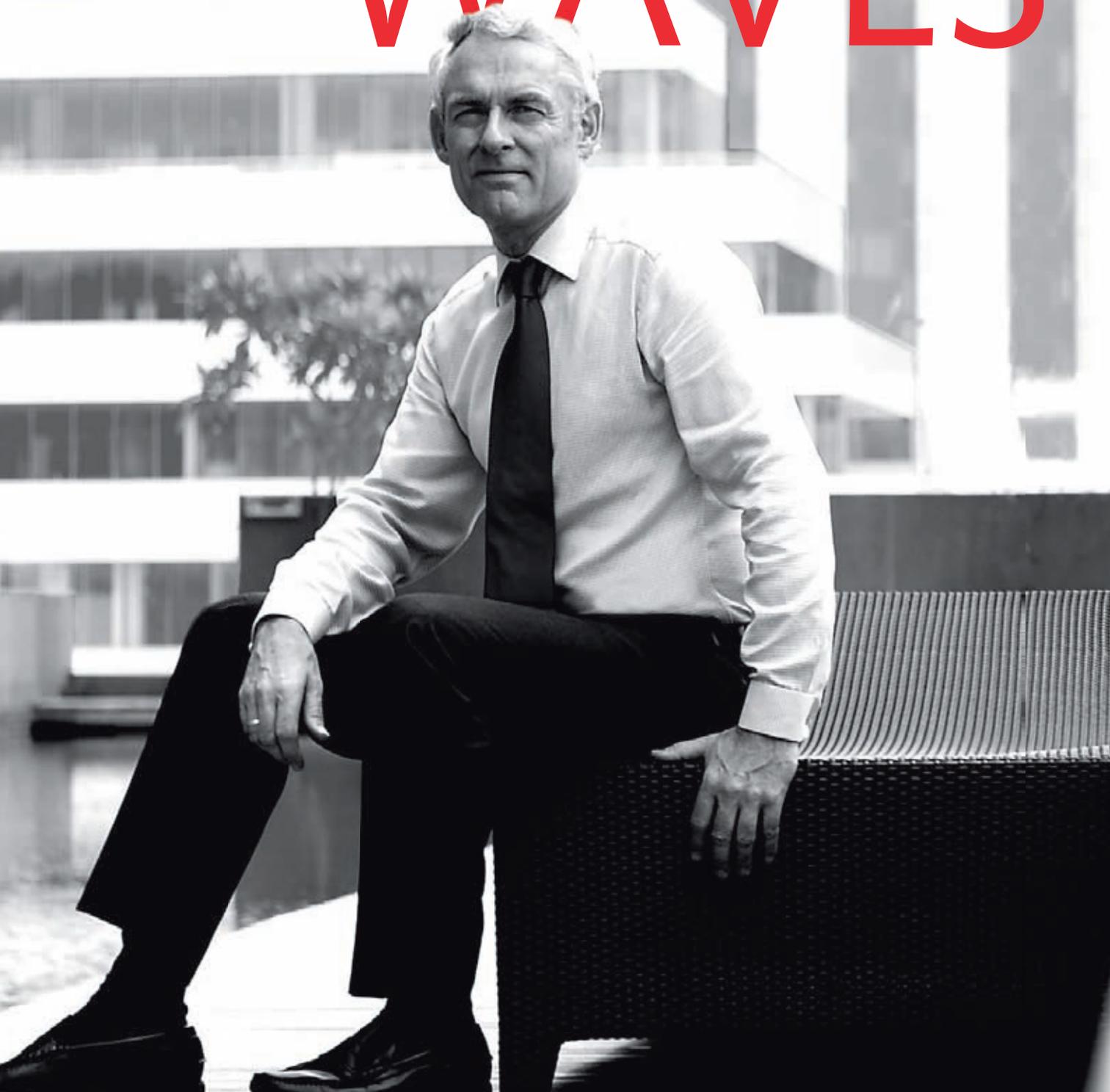
- Airport Foam Tender Driving Simulator (Civil Aviation Authority of Singapore)
- GIS@LTA (Land Transport Authority)
- Symphony e-Payment System (Land Transport Authority)
- Improving Concrete Road Surface Rehabilitation to Avoid Peak Hour Disruption (Land Transport Authority)
- TotalSAFE (Land Transport Authority)
- Wireless Broadband Maritime Digital Services (MPA)
- Recycling of Used Lubricating Oil Using Ceramic Membrane Technology (MPA)

MERIT AWARD WINNERS

- Passenger Reconciliation System (Civil Aviation Authority of Singapore)
- "You Shop, We Absorb" Programme for Retail Outlets at Terminal 3 (Civil Aviation Authority of Singapore)
- Service @ Your Doorstep (Land Transport Authority)
- A Sustainable and Environmentally Friendly Utility Trench Reinstatement Method (Land Transport Authority)
- Quantitative Risk Analysis (QRA) of Road Tunnels (Land Transport Authority)
- LTA Cares Programme (Land Transport Authority)
- PublicTransport@SG (Land Transport Authority)
- Advanced Global Satellite Asset Tracking Solution for the Maritime Industry (MPA)
- Maritime Fuel Consumption Monitoring and Data Acquisition Solution (MPA)



MAKING WAVES



AFTER STEPPING DOWN RECENTLY AS PRESIDENT AND CEO OF TORM SINGAPORE, ESBEN POULSSON IS READY TO VENTURE SOLO WITH HIS NEW COMPANY, EPIC SHIPPING GROUP. HE TRACES HIS CAREER AND SHARES HOW HE ENDED UP IN SINGAPORE

► Gut instinct is what former Torm Singapore President and Chief Executive Officer Esben Poulsson strongly believes in. Although he was advised against settling in Singapore, he went ahead with plans to invest in property here. And he has not looked back since.

His fascination with the mystique of Asia began during his first trip to Hong Kong as a young shipping executive with the Wallem Group in 1971. He subsequently spent 25 years and the better part of his early shipping career in Hong Kong.

Singapore calling

Poulsson used to think he would return to Denmark eventually. But not anymore. "Asia is a part of the world where I feel the most comfortable," he declares, despite having been brought up in Denmark before moving across the Pacific to Vancouver, Canada.

Having placed his bets clearly on Singapore, he says: "The lifestyle is probably more pleasant here if you have a family and the quality of life is higher here too."

When he came to Singapore to lead Torm's new presence in Asia in 2004, one of the first things he did was to buy an apartment for investment, against the advice of his friends and even his property agent.

He was confident that the market would recover and he would stand to gain. His bet went the right way and he was able to capitalise on his investment and use his gains to buy himself a cosy home for his family for the long haul.

He also went on to buy two office units, of which one is being used for his new consultancy venture, Eastern Neptune. "If I'm not committed, I don't know who is, because I've certainly put my money where my mouth is," he quips.

Fuelling his passion

While Poulsson's decision to stay in Singapore may have been serendipitous, his choice of a career in shipping was a little more deliberate. It stemmed from the combination of two fundamental characteristics – a love of the sea and good business acumen. "My interest started from the fact that I love the sea and I wanted to sail since I was young."

Having lost his father at a very young age, finances were tight, making this ambition difficult to fulfil. But as life would have it, his mother remarried and the family moved to Canada to join his stepfather, who turned out to be an avid sailor.

It was the latter's active encouragement that paved the way for Poulsson's entrance into the shipping world.

"I knew I was going to be in shipping from the age of 14 or 15. There was never

any doubt about it," says Poulsson emphatically. When his stepfather noticed his love for the sea and recognised his fledgling business acumen, he sat Poulsson down for some career planning and pointed him in the right direction.

With his stepfather's help and encouragement, he spent school holidays interning at shipping companies and working as a boarding clerk. He was even able to sail for three months on a cargo ship.

The game plan

What counts as one of the early defining moments in Poulsson's shipping career was when he was working for one of the tanker broking old hands at Gibson's brokerage in London in 1967, when the Suez Canal was closed.

He relates how the brokerage went on to fix 38 ships in one night alone. Although the enormity and game-changing significance of the event was a little lost on him at the time due to his relative inexperience, he was left with a deep impression of the excitement and significance of the industry. "It was that day that convinced me this is the game for me," he says.

After completing his studies, his first stop in pursuit of an exciting and fulfilling career was Hong Kong, where he experienced the heat and humidity of Asia and the buzz of the city for the first time.

He went on to spend the next seven years from 1971 in the region, from Hong Kong and Manila to Singapore

(where he stayed for almost a year).

An opportunity to join the family business in the UK came up in 1977 and he took it up, although it would eventually prove not to be his liking. After just a year there, he moved on to ship broking at Galbraith's, where he was frequently sent to Asia on business trips.

Despite his busy schedule, he managed to indulge in his passion for sailing while in Asia. In fact, he represented Hong Kong in three Admiral's Cup campaigns (in 1977, 1979 and 1981) and came in third in the 1979 campaign.

He was eventually offered a job with the former Kleinwort Benson – a merchant bank that was quite active in shipping at that time. He joined them as managing director in 1979 to set up KB Shipbrokers, a ship broking cum project finance arm.

It went so well that Kleinwort Benson eventually sold Rodskog Shipbrokers to Torm in 1990.

After about five years, Poulsson got restless and yearned for new challenges.

By then, it became clear that the bank was losing its interest in ship financing and the time was right for the business to be divested.

An attempted management buyout was unsuccessful but Poulsson was able to negotiate a deal with Torm and the expanded company was successfully sold to Astrup Fearnley's for a good price.

He subsequently moved to London as managing director of Torm UK where he established an offshore

His choice of a career in shipping was stemmed from the combination of two fundamental characteristics – a love of the sea and good business acumen. "My interest started from the fact that I love the sea and I wanted to sail since I was young."

business for Torm before selling it profitably five years later.

New beginnings

This left him with no specific portfolio, and with Torm wanting him to spend time in Copenhagen, he commuted weekly between there and London for nearly three years – possibly "the worst period of (his) life". Then, an opportunity arose due to a confluence of market factors. With the then booming dry bulk market, it was recognised that there would be financial implications for the company.

A decision was made to move certain key assets to the Torm Singapore subsidiary and a senior management person was needed to head it.

Poulsson jumped at the chance to move back to Asia. He arrived in April 2004 and had been busy with the process of moving assets as well as building up technical, operations and commercial expertise from then until his recent move.

His latest focus is his new consultancy venture that allows

him to keep active as well as share his experience and expertise with others.

"I think if I can make a real contribution to a company because I am neutral, have a lot of common sense and can see things clearly, it will have a certain value," adds the non-executive chairman of Epic Shipping Group, which focuses on the ownership and management of LPG carriers and RoRos.

He remains on the board of Torm Singapore and FR8 Singapore, and also serves as a council member of the Singapore Shipping Association and the president of the Danish Business Association of Singapore.

With his strong personality and impressive maritime and shipping background, it is no wonder that Poulsson wears many hats.

After all, you don't find many people like him who could see a shipping career start in Asia in a different era, span the globe and wind up in the premier international maritime centre of Asia.



► Dedication, focus and a constant orientation to people are attributes that Teo Siong Seng places in his highest esteem. "I value people a lot and believe that human capital counts a great deal in the success of a business or an organisation," he says firmly.

He learned these attributes when he first started out in the industry and they have become his cornerstone principles in developing his family business, Pacific International Lines (PIL).

His passion and commitment to the maritime industry are clear. "The fast-paced work environment and the ever-changing nature of the maritime industry keep me going," he says.

"Shipping has become part and parcel of my life and I

enjoy the dynamic nature of this sector. The only constant in the maritime industry is change and every day at work offers a variety of challenges that keep me on my toes."

He has since taken these same principles and turned the Singapore Maritime Foundation (SMF) into a springboard to spearhead key projects to help grow the Singapore maritime industry.

He explains that SMF serves as the link-bridge to synergise efforts between maritime players and the government to formulate new initiatives and push forth Singapore's vision as a premier International Maritime Centre.

The Singapore maritime community is a closely knit one, Teo says, and "SMF leverages on this advantage by working closely with

maritime associations like the Association of Singapore Marine Industries (ASMI) and Singapore Shipping Association (SSA) and Society of Naval Architects and Marine Engineers Singapore (SNAMES), and various government agencies to bring our initiatives into fruition."

"The diverse players of the maritime sector are all working to excel in our own areas of specialisation, and pushing the envelope in order to attract more business opportunities in the Singapore maritime scene."

Early start

When one looks at Teo's family, one would be duly impressed to see how the fifth child in a family of 14 children has risen to helm the family's shipping business. Teo's father,

Y C Chang (Teo and Chang are the same in Chinese for 张), first started PIL in 1967 as a coastal ship-owner/operator in a bid to create a business for himself.

The younger Teo admired the qualities and dedication his father showed to the business. Teo's first exposure to shipping came at the early age of 16 when he was keen to see China. "I decided to sail on a ship to China, and at that time, most of the crew were more than 55 years old," he laughs.

That initial interest in sailing was just a spark then. "After my 'O' levels, I signed on as a cadet because I was very fascinated with how ships worked," he explains. After a twist of events, Teo ended up finishing his 'A' levels, completing his National Service and heading off to University of Glasgow to pursue

SINCE ITS INCEPTION IN 2004, THE SINGAPORE MARITIME FOUNDATION (SMF) HAS GROWN IN STATURE, LINKING EFFORTS BETWEEN THE MARITIME INDUSTRY AND THE GOVERNMENT. OUTGOING SMF CHAIRMAN TEO SIONG SENG LOOKS BACK ON A JOB WELL DONE

CHANGING SKIPPER



Shipping has become part and parcel of my life and I enjoy the dynamic nature of this sector.

The only constant in the maritime industry is change and every day at work offers a variety of challenges that keep me on my toes.

his degree in naval architecture and ocean engineering.

The voyage to China in the winter of 1970 at the height of the Cultural Revolution left a deep impression on him. "The Cultural Revolution showed that people can be motivated, organised and mobilised."

During his university days in Glasgow, Teo still managed to keep a close eye on his father's business before finally joining PIL in 1979. Over the next couple of years until he took over the company in 1992, Teo spent much time learning the ropes in each department.

One key trait he had learnt from his father was to focus on the company's core business and not lose heart when difficulties arose. Teo has built PIL into one of the largest private shipowners in Southeast Asia. With its group turnover now in excess of S\$3 billion, PIL is a leading total transportation company in the region.

Spearhead SMF

In 2004, Teo was nominated by the public and the private sector as the most ideal candidate to spearhead the Singapore Maritime

Foundation. As a private sector-led body with a strong collaborative approach with the public sector, the organisation was formed to "provide the industry with a clear and representative voice," Teo says proudly.

"SMF's efforts to nurture, promote and grow the maritime industry and its diverse sectors is a continuous and accumulative process."

Overwhelming response

One flagship initiative of SMF is the maritime trade show named *Sea Asia*. "SMF partnered Seatrade to pioneer the *Sea Asia* event and it has received overwhelming response from the global maritime industry," Teo says. *Sea Asia 2009* grew significantly bigger and better than the inaugural show in 2007. Teo hopes to make *Sea Asia* the iconic maritime event of Singapore.

During Teo's tenure at SMF, there were several initiatives within the maritime industry which Teo helped drive, one of which was the formation of MaritimeONE by MPA, SMF, ASMI and SSA.

Commenting on these milestones, Teo explains that such milestones "marked a cohesive effort by the Singapore maritime industry to nurture the maritime community, and the four partners pledged their commitment to implement new initiatives to attract youth to pursue maritime careers."

On the international scene, Teo says that SMF now leads the Singapore Pavilion at two major maritime events together with ASMI – *Posidonia* in Greece and *Nor-Shipping* in Norway.

"Together with our maritime partners, SMF flies the Singapore flag and showcases the spectrum of activities and maritime services in the republic to the global maritime community," he adds.

Maritime scholarships

Other major activities undertaken during Teo's tenure at SMF include the creation of scholarships for maritime students, the establishment of new publications and public-education platforms on job opportunities in the industry.

Teo says that one of the crowning moments for him at SMF was when MaritimeONE was selected as one of the 13 winning projects of the Minister's Innovation Award that was conferred by the Ministry of Transport in 2008.

Seventeen MaritimeONE scholarships were given out in 2009, a jump from 14 at the inaugural awards ceremony in 2008. These MaritimeONE scholarships are worth

S\$438,500 and signify the commitment of the partners to grow the maritime talent pool in Singapore.

In a bid to establish greater rapport with maritime students, SMF launched the Maritime YES Club for young executives and students in 2009. The aim was to plug students into the maritime alumni network so that they can keep abreast of the latest maritime events and network with professionals.

Teo admits that the SMF is still a young foundation. He says: "It is an important organisation that helps gel the private sector and the government in the maritime industry. There are a lot of things we can do to help steer the maritime industry towards Singapore's vision to make the republic a leading international maritime centre."

His parting words: "I hope SMF will continue to build upon its strong foundation and be responsive and proactive in meeting the challenges of the maritime trade.

"The past six years have been a great experience and we have worked closely with maritime partners. I believe that under the capable leadership of Michael Chia and the strong support of MPA, SMF will be able to push forth more initiatives that will be beneficial to the maritime industry and steer Singapore closer towards her vision to be one of the leading international maritime centres. I also wish to thank the SMF Secretariat led by executive director, David Chin for the good work that they have done."

SINGAPORE RE-ELECTED INTO INTERNATIONAL MARITIME ORGANIZATION COUNCIL

Singapore has been re-elected to the Council of the International Maritime Organization (IMO) for a ninth term. The election was held at the 26th Session of the IMO Assembly in London last November.

An IMO Council member since 1993, Singapore contributed to and played an active role in the IMO.

Singapore has also had the honour of serving in various leadership positions in the IMO, such as the chair of the IMO Council for a two-year term between 2001 and 2003, the chair of the sub-committee on Bulk Liquids and Gases since 2001, the Vice-Chairmanship of the Marine Environment Protection Committee, and Vice-Chairmanship of the sub-committee on standards of training and watchkeeping.

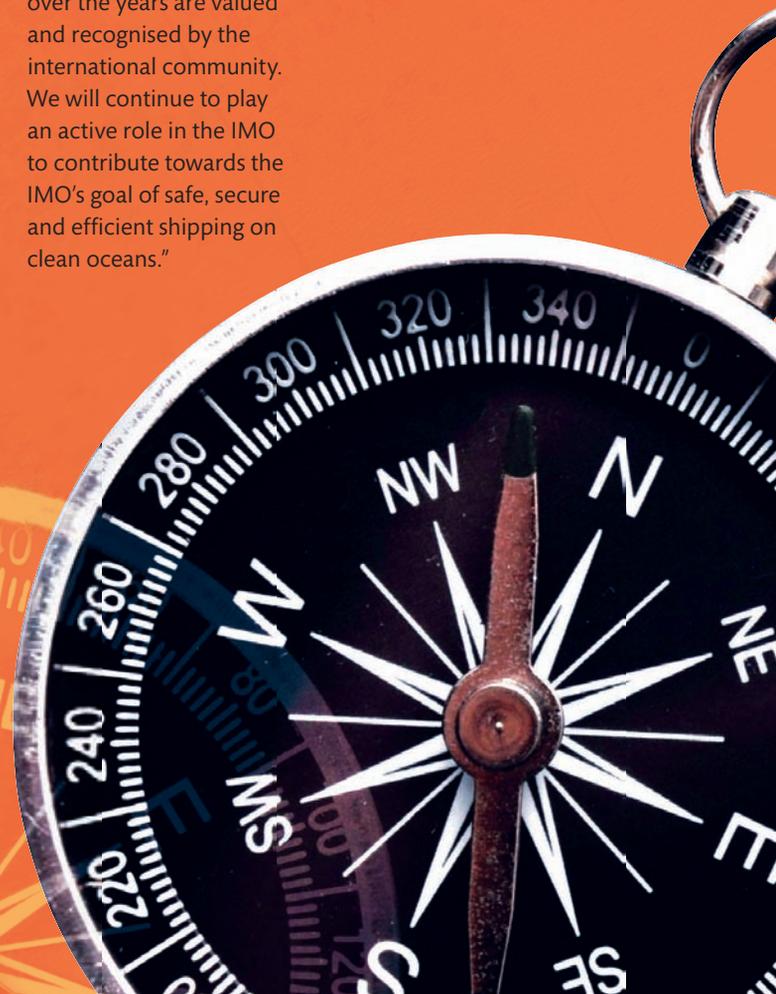
The country has also participated actively in the formulation of the IMO Strategic Plan, which sets out the strategic directions for the IMO.

Singapore has worked closely with the IMO, Indonesia and Malaysia to develop the Co-operative Mechanism for the Straits of Malacca and Singapore (SoMS) under the IMO's "Protection of Vital Shipping Lanes" initiative. The Co-operative Mechanism was launched in 2007, and seeks to promote international cooperation to keep the SoMS safe for international shipping.

Being a member of the IMO Council allows Singapore to help ensure that the diverse views and interests of IMO Member States are taken into account in the work of the IMO. Council membership also allows Singapore to contribute its maritime expertise towards attaining the IMO's objective of safe, secure and efficient shipping on clean oceans.

Leading the Singapore delegation comprising officials from the Ministry of Transport and the Maritime and Port Authority of

Singapore (MPA), Raymond Lim, Singapore's Minister for Transport and Second Minister for Foreign Affairs, said: "We are gratified that our contributions to the IMO over the years are valued and recognised by the international community. We will continue to play an active role in the IMO to contribute towards the IMO's goal of safe, secure and efficient shipping on clean oceans."



Singapore Nautilus spoke to MPA staff who were part of the Singapore delegation to ask them what they thought of this result:

“Our re-election represents the efforts of the team not only within MPA but also with Ministry of Transport and Ministry of Foreign Affairs. I am very grateful for their efforts. Looking ahead, the tremendous support extended by many IMO Member States places a clear responsibility on, and at the same time, provides a strong motivation for Singapore to continue working hard in our role as an IMO Council member.”

Yee Cheok Hong, Group Director (Policy and Planning)

“Going forward, Singapore will continue to work actively and closely with fellow IMO members and the secretariat to further the organisation’s mission objectives of safe, secure and efficient shipping on clean oceans.”

Matthew Lee, Head, IMO Affairs Office

“Preparations for our re-election had started in late 2008, and it was a long journey from then to the final D-day. Nonetheless, it was heartening to see our efforts come to fruition at the elections.”

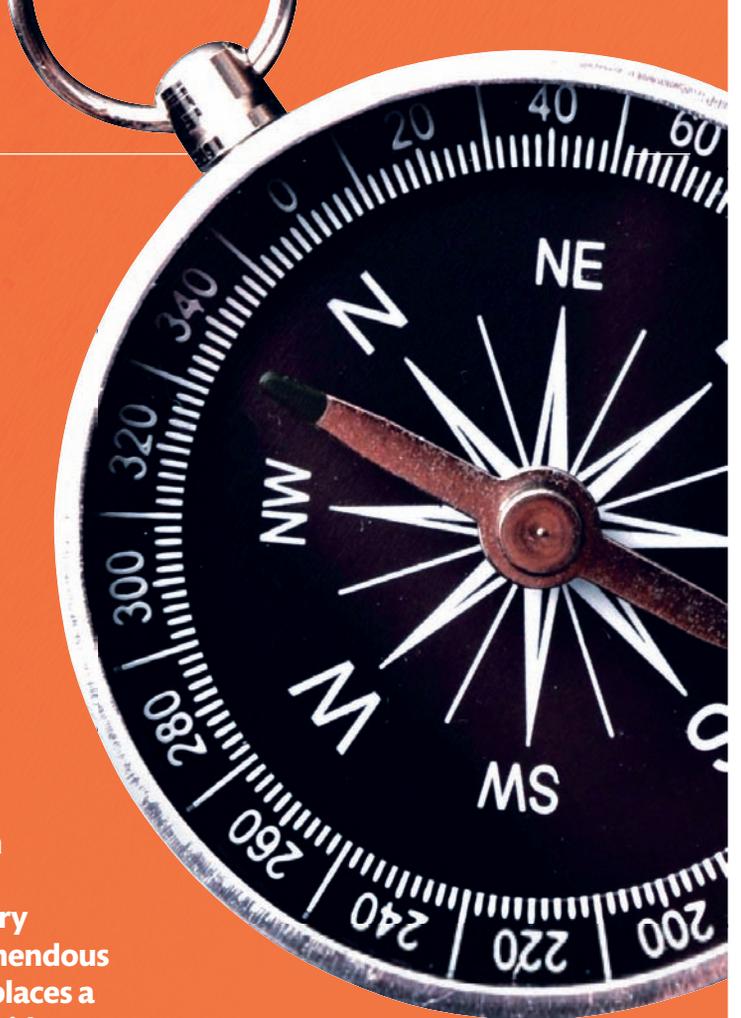
Chika Chow, Assistant Manager (International)

“I felt that an important part of our re-election strategy was to consistently make meaningful contributions to the work of the IMO. In this sense, our strategy is always a work-in-progress.”

Ranjeet Singh, Manager (IMO Affairs Office)

“A lot of hard work goes into the preparatory work in the run-up to the re-election. More importantly, the camaraderie and teamwork of the Singapore delegation on the ground was instrumental to our successful re-election campaign.”

Alan Lim, First Secretary (Maritime)



SINGAPORE INTERNATIONAL BUNKERING CONFERENCE

SIBCON 2010

27 - 29 OCTOBER 2010



The **16th**

Singapore International Bunkering Conference and Exhibition

The Maritime and Port Authority of Singapore is pleased to announce that the 16th Singapore International Bunkering Conference will be held on 27 - 29 October 2010.

Any queries in relation to the programme and speaking opportunities should be directed to Sukumar Verma at Sukumar.verma@ibcasia.com.sg or Tel: +65 6835 5130. Sponsorship and exhibition queries should be directed to Jonathan Kiang at jonathan.kiang@ibcasia.com.sg or +65 6835 5159.

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TIME FOR REFLECTION

FOUR INDUSTRY EXPERTS REFLECT ON 2009 AND GIVE THEIR VIEWS ON WHAT THEY SEE AHEAD FOR THE MARITIME INDUSTRY

Eng Aik Meng



Quek Chin Thean



Simon Wilson



Roland Tan



► Perhaps even the most elite of fortune-tellers would not have predicted the far-reaching impact of the global financial crisis. While the new year has brought hopes of recovery and better times, no one knows for certain what lies ahead.

Not one to be satisfied with tea leaves and the movements of celestial bodies, *Singapore Nautilus* speaks to several industry experts about their reflections of 2009 and their projections and strategies for 2010. They are:

● Eng Aik Meng, President of container shipping unit APL, Neptune Orient Lines

● Quek Chin Thean, Global Commodity Head, Global Residual and BP Marine, BP Integrated Supply & Trading

● Simon Wilson, Country Manager, Singapore and Managing Director, Lloyd's Asia

● Roland Tan, Director of the Singapore Maritime Academy, Singapore Polytechnic

SINGAPORE NAUTILUS: What were some of the highlights and low points of 2009?

ENG: The effects of the global recession have been dramatic and without precedent.

We will look back on 2009 as the most challenging year in the history of our industry. We focused on protecting revenue, managing costs, continuing to provide excellent service, innovating and strengthening our positions in key markets. This, in large part, is due to the commitment and hard work of our people.

We also strengthened our balance sheet and in turn bolstered our standing with shippers through the successful share rights issue undertaken by the NOL Group last July. Operational and financial strength are more attractive to customers than ever before and we are increasingly witnessing a flight to quality operators such as APL, whom shippers know they can rely on for the long term.

We also continued to innovate with initiatives such as the introduction of the market's first direct services between Vietnam and the US, which included the first shipments in D53 equipment for Nike. We also introduced several dedicated short-sea intra-Asia services.

QUEK: The growth in the total bunker volume in Singapore in 2009 demonstrates Singapore's ability to continue to attract business despite severe economic downturns.

In addition, the community saw great efforts by MPA to enhance CP60 (Bunker Supply) & CP77 (Bunker Survey) with the introduction of SS600, which would further strengthen Singapore as a leading bunker port. Other highlights within the industry include enhancements to the standardisation of documentation, and new requirements on sample bottles and seals.

Challenging economic conditions in 2009 saw bankruptcy and continual deterioration of credit conditions among some shipping customers and suppliers, and continued losses by some shipping companies globally. There were vessels being laid up in various parts of the world, and weak manufacturing data and economic activity resulted in reduced world trade and bunker demand.

WILSON: The industry has seen some resilience in the current tough economic conditions. For example, the insurance industry has emerged relatively unscathed, and Lloyd's has maintained its profitability and strong capital position throughout.

We will look back on 2009 as the most challenging year in the history of our industry. We focused on protecting revenue, managing costs, continuing to provide excellent service, innovating and strengthening our positions in key markets. This, in large part, is due to the commitment and hard work of our people.

Eng Aik Meng, President of container shipping unit APL, Neptune Orient Lines

One opportunity that emerged from the financial crisis is the desire of many organisations to spread risk and this is bringing new business into the Lloyd's Asia market. We have certainly seen an increase in the level of regional risks being placed in Singapore.

Last year, there were increased claims coming from recessionary pressures and a decrease in the level of trade which has subsequently reduced the level of premium available, especially in the marine cargo business class.

TAN: In the area of maritime education and training, there had been significant milestones in 2009 for the Singapore Maritime Academy (SMA) at Singapore Polytechnic. SMA diploma graduates secured advanced standing to degree

programmes on the basis of accreditations given to the SMA courses.

The Bachelor in Maritime Operations (BMO) programme with Maritime Institute Willem Barentsz of the University of Applied Science in The Netherlands has been taking in SMA students in Maritime Technology since 2006. With the launch of a new option for maritime transportation management, the year saw 32 students enrolling in the BMO programme.

The University of Plymouth now grants SMA's Maritime Transportation and Management/Maritime Business graduates direct admission to the final year of their three-year honours programmes in Maritime Studies and Logistics, and in Maritime Studies and Maritime Law.

We will continue to explore opportunities for growth in new geographical areas. This will enable us to provide a bigger network of supply ports to support our customers' global bunker demand. In addition, we are developing an integrated global supply chain strategy to further enhance our growth agenda.

Quek Chin Thean, Global Commodity Head, Global Residual and BP Marine, BP Integrated Supply & Trading

However, the economic downturn translated into some ship owners cutting back on cadet placements early in 2009.

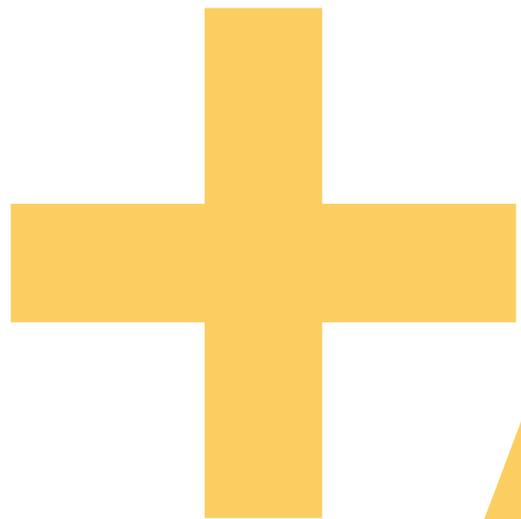
As a result, SMA had to cut back on our proposed local intake of nautical cadets due to a lack of shipboard placement needed in the second year of the student's three-year course at SMA.

SINGAPORE NAUTILUS: What do you think are some of the areas that can improve the standards of the maritime industry?

ENG: One of these areas is better understanding by all stakeholders of the cost drivers of our business. More frequent constructive dialogue between service providers and their customers will ensure that they understand each other's priorities.

QUEK: One area is the promotion of the green agenda. The global crunch has forced some owners to re-examine ways to reduce bunker consumption of their fleet and improve efficiency of fuel usage. Another area is the initiative to reduce greenhouse gas emissions with emissions trading, and the increased use of low sulphur fuel globally to reduce shipping's environmental impact.

WILSON: The increase in piracy attacks off the Somali coast and the Gulf of Aden are a critical issue for the maritime industry and governments worldwide. We hope the combination of EU and NATO action can mirror the success of dealing with piracy in the Malacca straits.



TAN: A concerted effort by all stakeholders to continue improving the reputation of the maritime industry is one such area. This will help attract more young talents into the maritime industry. There is a need to improve the recognition and working conditions of people working in the maritime industry.

We need to leverage more on technology to improve the maritime industry in the areas of working conditions, productivity and output. An example of this move is the collaboration between SMA and SingTel in the setting up of SatCom@SMA for training in maritime satellite communication, and the use of our academy as a test-bed for innovation and development.

SINGAPORE NAUTILUS: How will you continue to build your market presence in 2010?

ENG: We will continue to support the NOL guarantees of service quality, reliability and innovation with new service launches and investments in 2010 in key markets – with a particular focus on key Asian markets such as China, India and Vietnam.

QUEK: We will continue to explore opportunities for growth in new geographical areas. This will enable us to

provide a bigger network of supply ports to support our customers' global bunker demand. In addition, we are developing an integrated global supply chain strategy to further enhance our growth agenda.

WILSON: This year, we celebrate the 10th anniversary of the Lloyd's Asia Trading Centre in Singapore.

We will continue to invest in talent development in the region through participation on the successful Global Internship Programme for graduates, and seek to attract the best and brightest regional underwriters to join our fast-developing platform.

TAN: SMA has been traditionally strong in maritime operations and the training of manpower for the foreign-going or deep-sea merchant fleet. There has been major headway with one-third of our sea-going cadets now in the offshore fleet. To remain relevant for the future of maritime training, SMA is poised to venture into new areas which would attract more young Singaporeans to embark on a sea career.

SINGAPORE NAUTILUS: Are you optimistic about 2010? What are some of the developments to look forward to in the year ahead?

ENG: Business conditions in 2010 will be tough and we will continue to see losses at least during the first half of the year. But there are some positive signs emerging in the market, such as improved demand and rates beginning to move upwards.

The recent Copenhagen climate summit has shown that 2010 promises to be a significant year of change and adjustment on the environmental front. Our company will continue to play a leadership role in the development of the industry-wide programme to reduce the environmental impact of container shipping operations.

QUEK: BP has been actively involved in the drafting of ISO requirements.

We believe that the new ISO 8217 revision in the second half of 2009 should bring forth new challenges for all suppliers and we expect some minor tightening of quality control of other suppliers.

In addition, we should be able to see the effect of owners' efforts to match the cargo capacity versus demand. Scrapping of single hull tankers, cancellation of new builds, postponement in new build delivery and slow steaming of vessels are some of the avenues to reduce pressure on owners' excess capacity.

WILSON: We are cautiously optimistic about 2010. Financial markets have steadied but remain volatile, so we are not out of the woods yet. Insurers must remain focused on underwriting profitability.

2010 will be a strong year for growth in Asia and emerging markets – India has started its space programme and next year will be the first time that manufacturing in the country takes over agriculture. China's recovery is strong with demand for commodities increasing again. Singapore appears to have bounced back strongly from the economic crisis and we look forward to the continued push by the republic to be a centre of excellence in the region across high-value industries such as aviation, maritime, and of course, insurance.

TAN: Demand for training will remain strong in 2010.

We are investing in setting up labs and simulators for new training areas. 2010 will see the new Dynamic Positioning (DP) lab being operationalised,

The lab will feature four ships with full DP capability. This simulator is capable of tugging and towing complex offshore structures and is able to interact with oil rigs. Such a training facility will provide our cadets with an upper edge as they embark on their career in the offshore fleet.



PAST & PRESENT

Singapore was the first port in Southeast Asia to accommodate a third-generation container vessel when it opened the Tanjong Pagar Container Terminal in 1972. At that time, Singapore had four other maritime gateways: Keppel Wharves, Jurong Port, Sembawang Wharves and Pasir Panjang

Wharves. There were about 12km of wharves and more than 1.5 million square metres of warehouses. By the 1980s, the sheer volume of container traffic was stretching Singapore's capacity. In 2009, Singapore handled a total of 25.9 million Twenty-Foot Equivalent Units (TEUs) of container traffic.

10TH ANNIVERSARY OF THE
TANJONG PAGAR CONTAINER TERMINAL



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