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++ = ++  
**MaritimeONE**

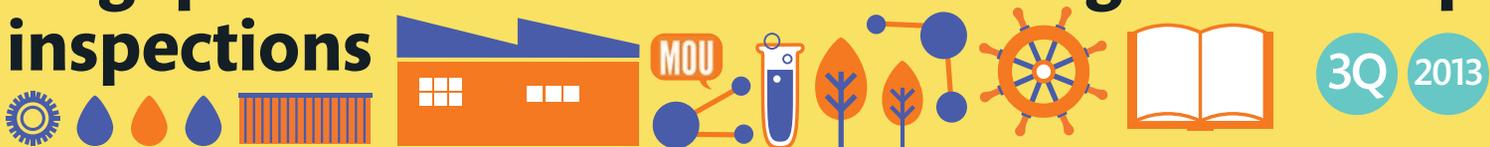


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2012

# PEOPLE

# PARTNERSHIP.

▶ tackling manpower issues ▶ how maritime singapore continues to thrive ▶ high-tech ship inspections



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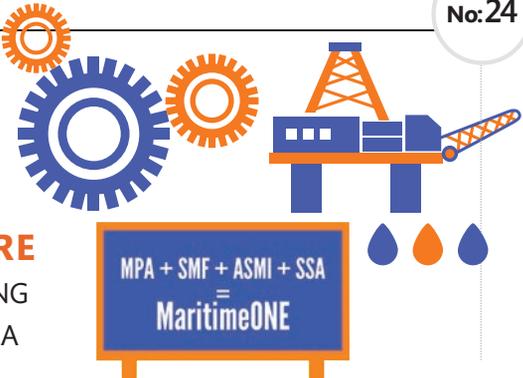
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**publisher**



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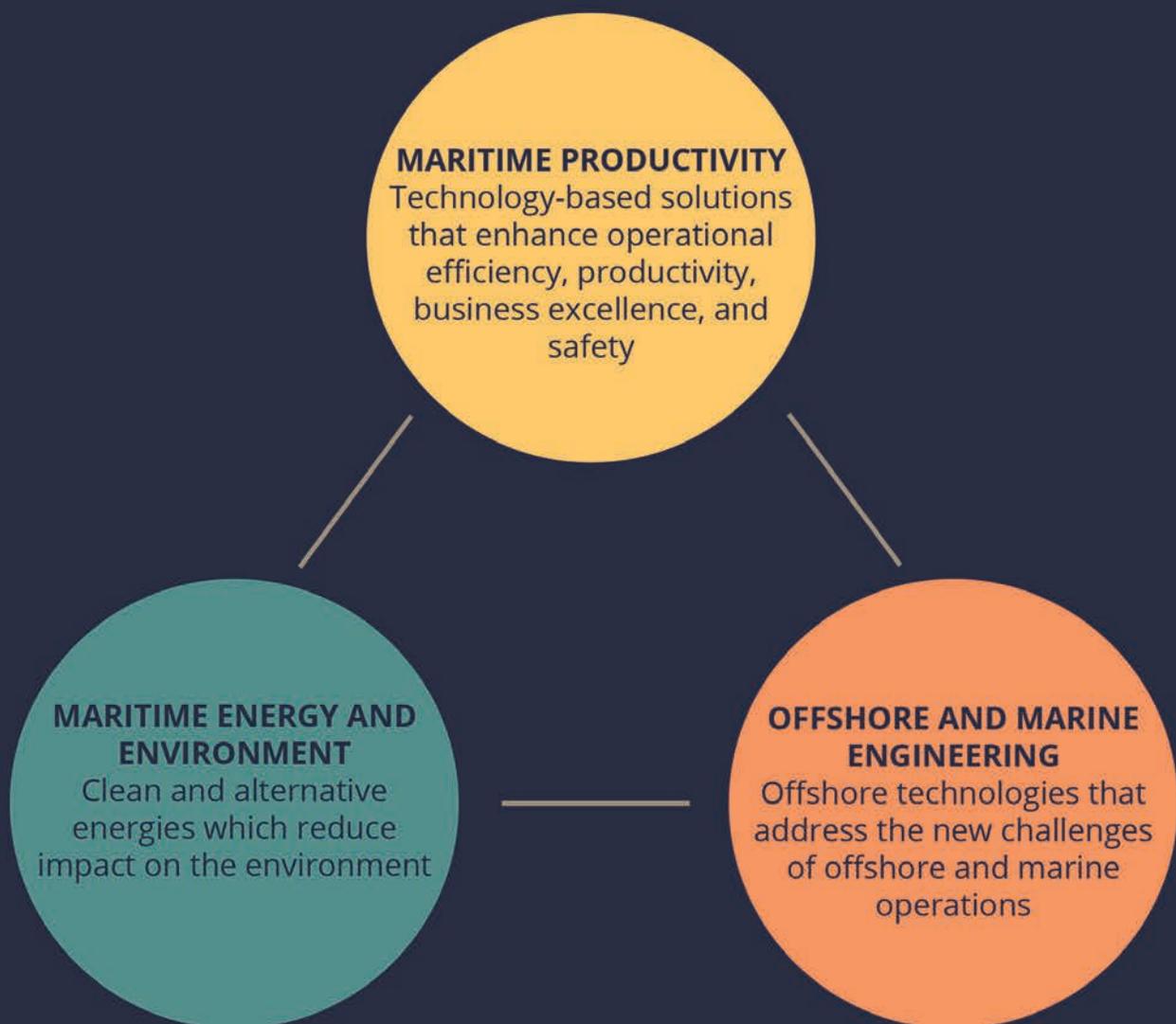
**Feature Design, Gold**

**Apex Awards 2012**  
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# The Maritime Innovation and Technology (MINT) Fund

## CALL FOR PROPOSALS

The Maritime and Port Authority of Singapore (MPA) invites proposals for research, innovation development and test-bedding projects to be submitted by companies which are incorporated in Singapore, either owned by local or foreign shareholders (and subject to the provisions of the Companies Act [Cap.50]) for consideration for funding under the MINT Fund. This Call for Proposals aims to encourage submissions involving innovative technologies under the three themes set out below:



For more information, visit  
[www.mpa.gov.sg/sites/research\\_and\\_development/mint\\_fund\\_cfp.page](http://www.mpa.gov.sg/sites/research_and_development/mint_fund_cfp.page)

Enquiries: [mint@mpa.gov.sg](mailto:mint@mpa.gov.sg)

## People & Partnerships

Maritime Singapore comprises a diverse and dynamic ecosystem that employs over 170,000 people, and contributes about 7 per cent to Singapore's gross domestic product.

The growth of Maritime Singapore over the years is made possible through the interaction of people from diverse backgrounds, and the cooperation between many different companies and agencies.

This is why people and partnerships remain at the centre of Singapore's maritime industry – a topic we delve into in this issue's main feature.

Maritime Singapore relies on a quality talent pool as a solid structure of support to the industry. It does this by attracting new talent as well as further developing the skills of its existing employees.

The industry also benefits from various partnerships among the Government, private organisations, associations, unions, academic institutions and the international arena, to ensure that Maritime Singapore continues to propel itself forward.

Complementing the main feature is an insight into MaritimeONE. This is a Maritime Singapore outreach network that comprises four organisations – the Maritime and Port Authority of Singapore, the Singapore Maritime Foundation, the Association of Singapore Marine Industries, and the Singapore Shipping Association – working together to further raise public awareness of the industry.

You can find out more about MaritimeONE's inception and plans for the future in our Community Talk section.

We also speak to the Thome Group, which celebrates its 50th anniversary this year. In the article, Thome Ship Management, which became Singapore's first independent ship manager in 1976, sheds light on its strategy for the years ahead.

*wee shann*

executive editor



## MPA helps to fund FutureShip's new research centre

► FutureShip, Germanischer Lloyd's (GL) maritime engineering and consultancy subsidiary, has unveiled its ECO Research Centre in Singapore.

It aims to conduct research to strengthen FutureShip's energy-efficiency solutions for its Asian clients, and will be supported by the Maritime and Port Authority of Singapore (MPA) under its Maritime Cluster Fund (MCF).

The ECO Research Centre will be the first research and development (R&D) centre to benefit from the enhancement to the MCF, which was expanded to cover the setting up of R&D and test centres – critical components in developing a maritime knowledge hub – in Singapore.

The Centre, which will be an arm of FutureShip Singapore Pte Ltd, will embark on "Analytical Ship Performance Evaluation and Management" as its first project, and conduct other R&D projects over the next five years.

Mr Lam Yi Young, MPA's Chief Executive, said: "MPA has been actively promoting maritime R&D and innovation development over the past decade. The setting up of R&D and test centres in Singapore will further strengthen our maritime R&D capabilities, and position us as a centre of excellence for maritime technology. We are thus happy to welcome the setting up of FutureShip's ECO Research Centre in Singapore."

## Enhancing the Port of Singapore's competitiveness



► Speaking at the Singapore International Maritime Awards during Singapore Maritime Week, Mr Lui Tuck Yew, Minister for Transport, announced initiatives aimed at further enhancing the competitiveness of the Port of Singapore.

Mr Lui said that the Maritime and Port Authority of Singapore (MPA) has completed a comprehensive review of Singapore's port dues structure and rates, in consultation with the shipping industry and other stakeholders.

As part of the review, MPA will simplify the port dues

structure and streamline the various incentive schemes. Under the revised structure, up to 83 per cent of vessel calls are expected to pay lower port dues compared to today.

About 10 per cent of vessel calls will pay the same port dues, and up to 7 per cent of vessel calls – mainly long-staying vessels – may pay more port dues if call patterns remain unchanged. The changes to port dues are expected to save the industry an additional \$11 million a year.

In addition, to further encourage companies to adopt environmentally-friendly shipping practices,

From left: Minister for Transport Lui Tuck Yew, chief engineer of the vessel K. Sidharthan, and ship captain Premnath Vinaik.

Mr Lui announced several enhancements to the \$100 million Maritime Singapore Green Initiative.

Among these is the expansion of the Green Ship Programme to recognise Singapore-flagged vessels that adopt approved SOx scrubber technology, which go beyond the International Maritime Organization's (IMO) emission requirements.

## MOU signed on Maritime Technology Professorship



The programme's Memorandum of Understanding was signed in April by ABS President and Chief Executive Officer Mr Christopher J Wiernicki, MPA Chief Executive Mr Lam Yi Young, and SUTD President Professor Thomas Magnanti.

"The needs and opportunities of the maritime industry align beautifully with the expertise, technology and design focus of SUTD," said Prof Magnanti.

"Through the gracious support of ABS and MPA, SUTD will be well positioned to contribute to important societal needs by developing deeper relationships with industrial partners."

Inset, from left: SUTD President Professor Thomas Magnanti, ABS President and CEO Christopher J Wiernicki, and MPA CEO Lam Yi Young.

▶ A new maritime educational programme has been set up at Singapore University of Technology and Design (SUTD).

A collaborative effort between the American Bureau of Shipping (ABS), the Maritime and Port Authority of Singapore (MPA) and the university, the ABS-MPA Maritime Technology Professorship programme will receive funding of up to \$12.5 million.

The aim is to build up SUTD's capabilities in maritime education and research and development (R&D), to further boost the growth of Singapore's marine and offshore R&D.

## Singapore is "Best Seaport in Asia" once more

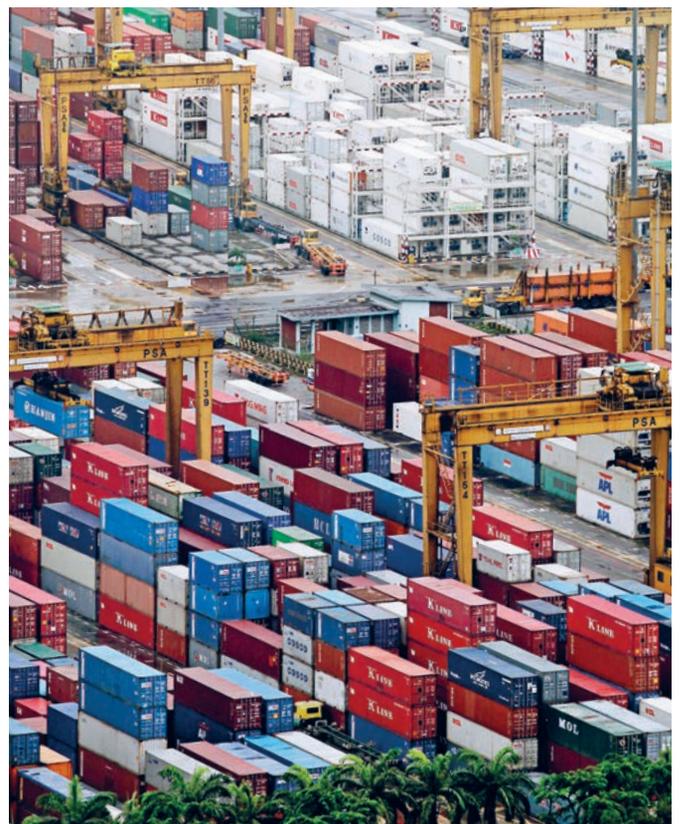
▶ The Port of Singapore again clinched the Best Seaport in Asia award at the Asian Freight and Supply Chain Awards (AFSCA), retaining its crown as the region's port of choice.

The award was presented to Singapore for an unprecedented 25th time at the 27th AFSCA, which was held in Beijing in May. Receiving the award on behalf of the Port of Singapore was Mr Chan Keng Nee, Deputy Director (Vessel Traffic Management) of the Maritime and Port Authority of Singapore.

The Port of Singapore was recognised for its cost

competitiveness, container shipping-friendly fee regime, provision of suitable container shipping-related infrastructure, timely and adequate investment in new infrastructure to meet future demand, and the facilitation of ancillary services, including logistics and freight-forwarding facilities.

Singapore was selected ahead of strong competition from Busan, Dalian, Hong Kong, Kaohsiung, Klang, Laem Chabang, Manila, Ningbo, Tianjin, Shanghai Yangshan, Shenzhen and Tanjung Pelepas.



## US\$1 million NGCP Challenge winner announced



► The Next Generation Container Port (NGCP) Challenge has a winner.

Walking away with the US\$1 million (S\$1.3 million) grand prize is the team from National University of Singapore, Shanghai Maritime University and Shanghai Zhenhua Heavy Industries Company Limited.

The team's proposal, SINGA Port, impressed the judging panel with its ability to achieve high throughput and high land and labour productivity.

Mr Lui Tuck Yew, Minister for Transport, awarded the prize to representatives from the winning team at the Singapore International Maritime Awards 2013 during Singapore Maritime Week. Commendation awards of US\$100,000 each were also presented to six other teams.

The Maritime and Port Authority of Singapore and the Singapore Maritime Institute jointly organised the NGCP Challenge. This is to

encourage participants from around the world to submit innovative proposals and ideas on how to plan, design and operate the next generation of container ports that exemplify performance, productivity and sustainability.

Up to S\$5 million has also been set aside for further research and development of various worthy concepts arising from the Challenge.



Mr Lui Tuck Yew, Minister for Transport.

## Singapore International Maritime Awards 2013

► Fifty awards were presented at the Singapore International Maritime Awards (IMA) 2013, which was attended by more than 700 luminaries and leaders from the maritime industry.

Organised by the Maritime and Port Authority of Singapore (MPA) during Singapore Maritime Week, the biennial IMA recognises individuals and companies for their outstanding contributions to Singapore's advancement as a premier global hub port and international maritime centre.

Mr Lui Tuck Yew, Minister for Transport, presented 10 Maritime Industry Awards to nine deserving companies and one individual for contributing to the growth of Maritime Singapore at the awards presentation and gala dinner.

In addition, the IMA's new Singapore Registry of Ships (SRS) Green Ship of the Year Award, which recognises quality Singapore-registered vessels with energy efficient ship designs, was presented to Neptune Orient Lines Limited for its vessel, APL Yangshan.

The industry award recipients are:

**SRS Green Ship of the Year Award**  
**APL Yangshan, Neptune Orient Lines Limited**  
**SRS Ship Owner of the Year Award**  
**BW Group**  
**Bunker Award**  
**Shell Eastern Trading (Pte) Ltd**

**Maritime Service Provider Award**

**Simpson, Spence & Young Outstanding Maritime R&D and Technology Award**  
**Keppel Offshore & Marine Technology Pte Ltd**  
**Offshore & Marine Engineering Award**  
**Swire Pacific Offshore Operations (Pte) Ltd**  
**Excellence in Training Development Award**  
**Singapore Maritime Academy, Singapore Polytechnic**  
**Special Mention Award**  
**Tian San Shipping (Private) Limited**  
**International Maritime Centre (Individual) Award**  
**Mr David Chin Soon Siong, Executive Director, Singapore Maritime Foundation**  
**International Maritime Centre (Corporate) Award**  
**NYK Group South Asia Pte Ltd**

Mr Lui also presented Maritime Sector Incentive (MSI) award certificates to 40 maritime companies that have helped strengthen Singapore's maritime cluster. The MSI aims to facilitate the growth and expansion of Singapore's ship owners/operators and maritime service providers.

Of the 40 recipients, 33 were awarded the MSI-Approved International Shipping Enterprise scheme, one was bestowed the MSI-Maritime Leasing scheme, and six were presented the MSI-Shipping-related Support Services scheme.

## New initiatives to boost Singapore's maritime sector

► The Maritime and Port Authority of Singapore (MPA) will be rolling out new initiatives in maritime research and development (R&D), productivity improvements, and manpower development to further strengthen Singapore's maritime sector.

The new initiatives were announced by Mr Tharman Shanmugaratnam, Deputy Prime Minister and Minister for Finance, at the opening of the Sea Asia Exhibition

and Conference, held in conjunction with Singapore Maritime Week.

To continue developing Singapore's maritime R&D capabilities, MPA will be extending the validity of the Maritime Innovation and Technology (MINT) Fund by five years and topping it up by a further \$50 million.

The MINT Fund was established in 2003 with \$100 million to fund and support R&D and test-bedding of maritime technologies by

universities, research institutes and companies in Singapore over 10 years.

MPA will also be introducing a new \$25 million Productivity Programme under the Maritime Cluster Fund (MCF).

This new plan of action will support the maritime industry's effort to raise productivity by co-funding initiatives like business process re-engineering, automation and adoption of other productivity tools or practices.

As for manpower

development, MPA will be setting aside \$2 million from the Manpower Development Programme under the MCF for a new Global Internship Award over the next five years.

This fully sponsored maritime-focused award will be offered to high-achieving local undergraduates from three local universities: National University of Singapore, Nanyang Technological University and Singapore Management University.



Singapore Maritime Week (SMW) is an annual offering by the Maritime and Port Authority of Singapore (MPA). This year, SMW offered 25 events – comprising conferences, dialogues, awards dinners, outreach activities and more – to the maritime community and the general public. *Singapore Nautilus* takes a look at how SMW 2013 has lived up to its tagline of People, Ideas, and Opportunities.

## PEOPLE

### Amazing Maritime Adventure



The Amazing Maritime Adventure gathered more than 1,000 participants for a morning of fun-filled activities, which took them around Plaza Singapura, Marina South Pier and the Singapore Management University. The Adventure is part of SMW's public outreach programme to raise awareness of the maritime industry.

### T-shirt Design Competition



Over 700 members of the public and students from LaSalle College of the Arts took part in the T-shirt Design Competition. Each participant had to create a T-shirt based on their impressions of Maritime Singapore. Selected designs were displayed at the SMW Exhibition at Plaza Singapura, and a "runway show" of the winning entries was held during the Launch of SMW 2013.

## Launch of SMW 2013



With the push of a ship telegraph, SMW 2013 was officially launched by Mrs Josephine Teo, Minister of State for Finance and Transport. Held at Plaza Singapura on April 7, the launch of SMW 2013 included a prize-giving ceremony for winners of the Amazing Maritime Adventure and T-shirt Design Competition.

## Singapore Maritime Week Exhibition



To boost public awareness, two satellite exhibitions at the Nex and VivoCity shopping malls accompanied SMW 2013's main exhibition at Plaza Singapura. More than 60,000 people visited the exhibitions' seven zones, which explored various features of Maritime Singapore, such as aids to navigation and shipping.

## International Sportsweek for Seafarers



To promote healthy living and foster team spirit among local and foreign seafarers, MPA organises the annual International Sportsweek for Seafarers. This year, the event was held from April 10 to 13, and participating seafarers took part in a series of games such as tug of war and football.

# OPPORTUNITIES

## Singapore International Maritime Awards 2013



This year, 50 awards were presented to more than 40 different companies at the International Maritime Awards. The US\$1 million award for the Next Generation Container Port Challenge was also presented at the ceremony to the winning team for its innovative double-storey container port concept.

## Maritime Learning Journeys



Aimed at showing students and members of the public about the vibrant and diverse maritime industry, these learning journeys took participants to the Singapore Maritime Gallery and various shipyards, as well as on a tour out to sea to visit Raffles Lighthouse.

# IDEAS

## Sea Asia 2013



The biennial Sea Asia Exhibition and Conference was back for its fourth run this year. Held at Marina Bay Sands from April 9 to 11, the event provided insights into pertinent industry issues such as maritime financing, design technology and green ships, and drew more than 16,000 key personnel from the maritime community.

## The Pozzie Project



Making its debut this year was the Pozzie Project, a photography initiative aimed at showcasing Maritime Singapore through photographs submitted by maritime organisations. Over 700 photographs from 29 companies were sent in, depicting Pozzie, the project's mascot, in various maritime scenes.

## 7th Singapore Maritime Lecture



Mr James Hughes-Hallett (top right), Chairman of John Swire & Sons Ltd, delivered the 7th Singapore Maritime Lecture. As SMW's anchor event, the lecture allows industry players to have meaningful dialogues on various maritime issues.

## 5th Annual Asian Maritime Law Conference



Now in its fifth year, the annual Asian Maritime Law Conference's 2013 theme was The Future of Shipping. The three-day conference featured many key players who shared valuable insights on the maritime industry.

## Sea Tour for Students



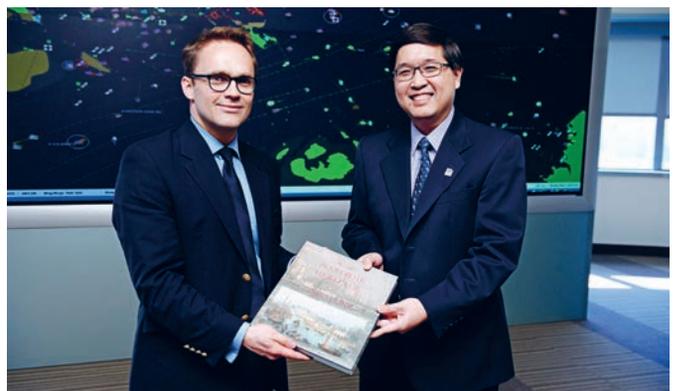
In May this year, MPA organised a learning journey for students from different educational institutions in Singapore. Students were taken to Raffles Lighthouse and the Singapore Maritime Gallery at Marina South Pier. The visit was aimed at raising their awareness of Maritime Singapore and the diversity of career opportunities in the industry.

## Visitors From Hong Kong Special Administrative Region



A delegation from the Hong Kong Special Administrative Region, led by Professor Anthony Cheung, Secretary for Transport and Housing, visited MPA's Port Operations Control Centre at PSA Vista.

## Visit by Special Advisor to Icelandic President



Mr Dagfinnur Sveinbjornsson, Special Advisor to the Icelandic President, paid a visit to MPA's Port Operations Control Centre at PSA Vista.



SINGAPORE NAUTILUS TAKES A CLOSER LOOK AT PEOPLE AND PARTNERSHIP – KEY ENABLERS THAT KEEP MARITIME SINGAPORE THRIVING. BY AJ LEOW

# A WINNING FORMULA

► While Singapore's favourable geographic position is often cited as the main reason for her economic success, the growth of Maritime Singapore to where it is today cannot be credited to geography alone.

Singapore's maritime ecosystem, which currently contributes about 7 per cent of the Republic's gross domestic product, is made up of more than 5,000 establishments. Together, they employ over 170,000 people.

It is these maritime players and the synergy among them that have created a cohesive whole – one that drives Singapore's development as an international maritime centre.

Besides being home to over 130 international shipping groups, Singapore also hosts a wide range of technical and

commercial maritime service providers that support the diverse needs of these ship-owners and operators. These service providers include marine insurance companies, shipbrokers and research consultancies.

Singapore is also a preferred venue for the headquarters and offices of international maritime organisations and associations, such as the Baltic Exchange, the Asian Shipowners' Forum, and the International Bunker Industry Association.

These players, along with industry associations, seafarers' unions and academic institutions, have all come together to build the vibrant landscape of Maritime Singapore.

People and partnerships are at the centre of Maritime Singapore's growth.



## PEOPLE & PARTNERSHIPS

### PEOPLE

- Singapore Maritime Institute
- \$25 million Productivity Programme under the Maritime Cluster Fund
- \$2 million Global Internship Award

### PARTNERSHIP WITH ASSOCIATIONS

- MaritimeONE: SSA, ASMI, SMF and MPA

### R&D AND INNOVATION

- Green Technology Programme: To date, MPA has contributed \$11 million towards 14 projects, such as Propeller Boss Cap Fins (Norgas Carriers), electric RTGCs (PSA), and variable speed drive retrofit for loading pumps (Universal Terminal)
- Clean Technology Centre partnership agreement between MPA and DNV
- MPA, ABS and SUTD MOU: To promote Maritime education and R&D

### INTERNATIONAL PARTNERSHIPS

- MOU between MPA and Research Council of Norway: Renewed bilateral agreement on maritime R&D, education and training, for another three years
- Singapore-IMO Third Country Training Programme (TCTP): Benefited over 1,400 participants from more than 70 countries

## PEOPLE

At the heart of Maritime Singapore is its people. As Singapore is a small island state with no natural resources, strong support is essential for its maritime system to flourish.

To develop a professional and efficient workforce, industry players collaborate on training programmes for existing employees and recruitment schemes to attract both polytechnic and university graduates.

Specialised training and upgrading programmes are widely available to those who work in the industry. The Singapore Maritime Institute was formed, for instance, to develop quality manpower and boost the Republic's reputation as a

global maritime knowledge hub.

The Maritime and Port Authority of Singapore (MPA) and the Singapore Maritime Academy have also set up the Integrated Simulation Centre, which trains ship officers and crew using simulators that employ a wide range of realistic scenarios.

In the private sector, global offshore contractor EMAS, a unit of Ezra Holdings Limited, has launched the \$10 million EMAS Academy. Dedicated to advancing safety and operational standards in the industry, this maritime training institute equips crew with specialised skills in handling intricate offshore operations.

To further improve efficiency, MPA has introduced a new \$25 million Productivity

Programme under the Maritime Cluster Fund (MCF), which co-funds initiatives in areas such as business process re-engineering, automation, and adoption of other productivity tools or practices.

MPA is also setting aside \$2 million over the next five years for a new Global Internship Award, which will be available to undergraduates from the National University of Singapore, Nanyang Technological University, and Singapore Management University (SMU).

In August, SMU is due to launch a new maritime economics programme which includes internship opportunities and overseas industry study missions.



## MARITIMEONE

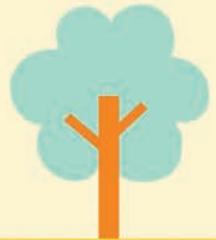
The Maritime Outreach Network (MaritimeONE) was launched in 2007 to raise awareness of the maritime industry in Singapore.

MaritimeONE comprises four associations – MPA, the Singapore Maritime Foundation (SMF), the Association of Singapore Marine Industries (ASMI) and the Singapore Shipping Association (SSA) – and uses outreach initiatives to get students and other influence groups interested in the industry.

These efforts include activities like industry-student networking events, career fairs, school talks, the Maritime Careers Portal and the MaritimeONE scholarship programme.

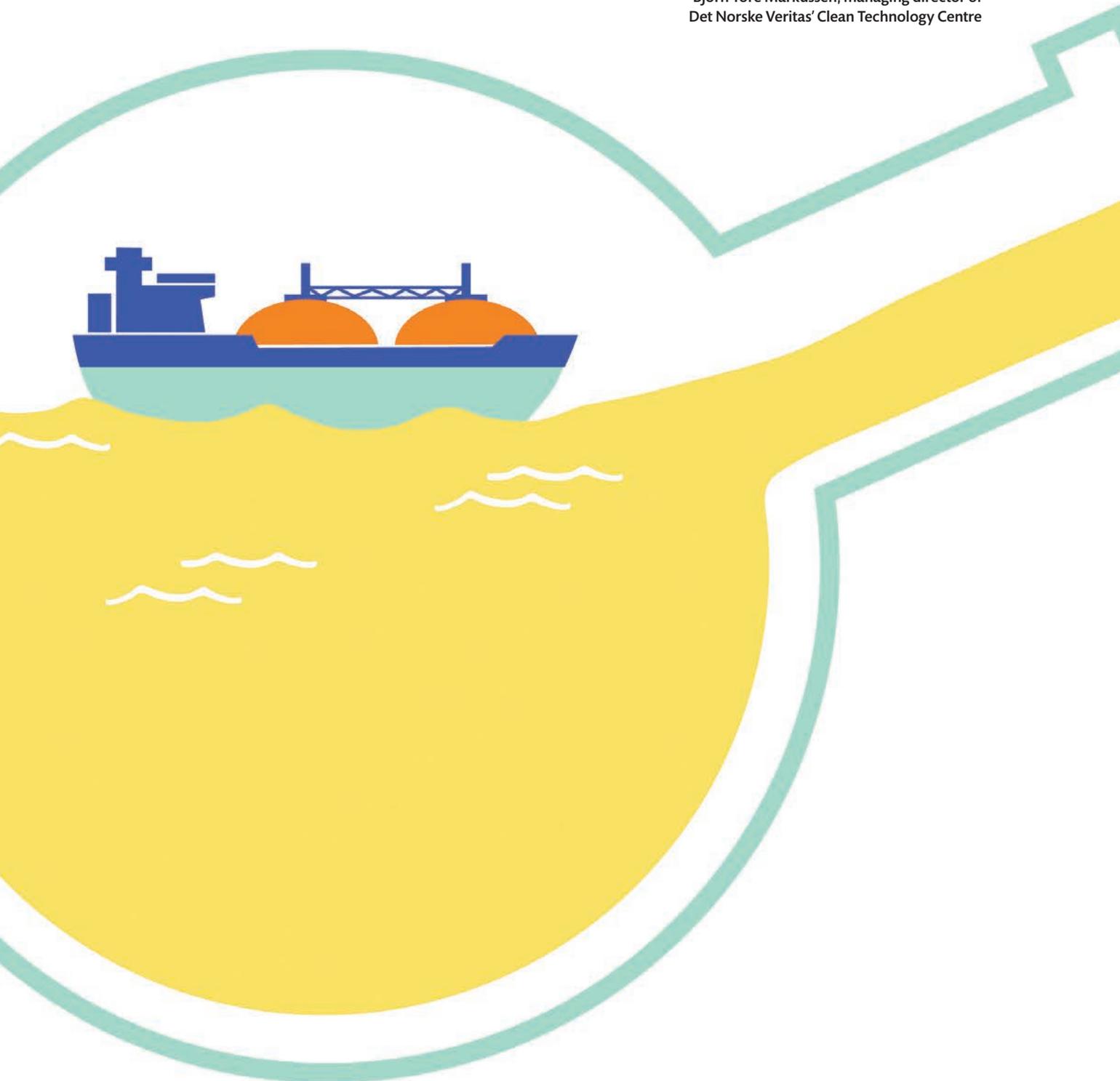
MaritimeONE also works with MPA on public outreach activities during the annual MPA-organised Singapore Maritime Week (SMW). These include the SMW Exhibition, the Amazing Maritime Adventure, and the T-shirt Design Competition.

Explains David Chin, Executive Director of SMF: "As the Secretariat of MaritimeONE, SMF works closely with strategic partners to spearhead initiatives to raise the hip quotient of the maritime industry, correct negative stereotypical perceptions, and make maritime careers more appealing to youths."



**“The MPA partnership was crucial in our decision to set up the CTC, which is our maritime R&D centre here in Singapore.”**

Bjorn Tore Markussen, managing director of  
Det Norske Veritas' Clean Technology Centre





## PARTNERSHIPS

### INDUSTRY

Partnerships between Maritime Singapore's different groups have also helped cement the Republic's standing as a premier global hub port and international maritime centre.

A key initiative is MPA's \$150 million Maritime Innovation and Technology (MINT) Fund, set up to support research and development (R&D) programmes for the maritime technology cluster.

For instance, the five-year Port Technology Research and Development Programme is a joint effort between MPA and port operator PSA Corporation. It aims to work with equipment and technology providers, local institutions, and other companies, to develop advanced port technologies for Singapore's container terminal needs. MPA is providing up to \$10 million from the MINT Fund, while PSA, local institutions and other industry partners are co-funding up to \$10 million.

The Green Port and Productivity Solutions Programme is also co-funded by the MINT Fund and Jurong Port – they have each committed \$6 million over five years towards green technology and productivity enhancement projects in the port.

Additionally, MPA has signed a partnership agreement with Det Norske Veritas' Clean Technology Centre (CTC) to promote R&D and test-bedding of maritime environment and clean technology projects. "The MPA partnership was crucial in our decision to set up the CTC, which is our maritime R&D centre here in Singapore," said Bjorn Tore Markussen, managing director of the CTC.

In 2012, the Joint Industry Project on the Operational Feasibility of LNG Bunkering in Singapore covered issues like technical feasibility and best practices of LNG bunkering. It is co-funded by MPA's MINT Fund, with 21 organisations taking part.

The Next Generation Container Port Challenge was a collaboration between MPA and the Singapore Maritime Institute in April 2012. Local and foreign companies and research institutes submitted proposals to improve performance, productivity and sustainability of the next generation of container ports.

### UNIONS

As part of the strong tripartite partnership among the Government, unions and employers, MPA works with the Singapore Maritime Officers' Union (SMOU) and the Singapore Organisation of Seamen (SOS) to improve seafarers' well-being and ensure harmonious labour relations.

Since 2003, MPA, SMOU and SOS have celebrated the annual World Maritime Day by distributing hampers to ships that call at Singapore, in recognition of seafarers' contributions to the industry.

“Seafarers play significant roles as more than 90 per cent of world trade is carried by ships. This is why MPA will continue to work in close partnership with the industry, unions and seafarers’ missions to enhance the welfare of seafarers and to attract new talents to the industry,” said MPA Chairman Lucien Wong during World Maritime Day 2012, which saw a total of 600 hampers given out to visiting ships.

MPA also offers welfare schemes such as relief funds, financial assistance, compassionate payments, and repatriation of seamen aboard Singapore-registered vessels stranded in foreign ports.

### INSTITUTIONS

One of Maritime Singapore’s goals is to encourage R&D innovation by expanding products, services and business operations. This is why cooperation from local tertiary and research institutions is invaluable.

MPA has signed various memoranda of understanding (MOUs) with these

institutions to strengthen the commitment needed to promote industry-relevant R&D in Singapore. One recently inked MOU is with the American Bureau of Shipping (ABS) and the Singapore University of Technology and Design (SUTD), for the ABS-MPA Maritime Technology Professorship Programme at SUTD. The programme will receive funding of up to \$12.5 million, and aims to build the university’s capabilities in maritime education and R&D.

“The Professorship is very much in line with our efforts to promote and develop maritime education and R&D in Singapore. Such tripartite partnership among the industry, tertiary institutions and the government is vital for the development of Maritime Singapore and we thank ABS and SUTD for their partnership and support,” says Lam Yi Young, Chief Executive of MPA.

Another successful partnership is with the National University of Singapore (NUS) Centre for Offshore Research and

Engineering (CORE), which is equally funded by MPA, NUS and the Agency for Science, Technology and Research. It aims to strengthen Singapore’s performance as an oil and gas hub.

### GLOBAL ARENA

Outside Singapore, MPA works on international cooperation initiatives in areas such as security, navigational safety and crisis management.

This year, MPA and the International Tanker Owners Pollution Federation renewed their MOU on Oil Spill Resources, which was first signed in 2007. The MOU is aimed at expediting the processing of oil spill compensation claims.

Singapore is also a founding member of the ASEAN Ports Association (APA), which was established in 1975 to provide port officials from the Association of Southeast Asian Nations (ASEAN) with a platform to meet, share, and address problems and emerging issues. APA continues to play



a vital role in balancing regional trade practices, thanks to close ties between its founding nations – Indonesia, Malaysia, Philippines, Singapore and Thailand – and members Brunei Darussalam, Vietnam, Cambodia and Myanmar.

Singapore has also been a dedicated contributor to inter-governmental technical organisation International Hydrographic Organization (IHO) since 1972. The IHO aims to support safety of navigation and protection of the marine environment by ensuring that nautical charts and documents are uniform, and encouraging reliable and efficient hydrographic surveys.

Additionally, Singapore was a founding member of the MOU on Port State Control in the Asia-Pacific Region, better known as the Tokyo MOU. As part of this agreement, regional authorities in member countries such as Australia, China and Thailand help to ensure that ships visiting their ports follow international shipping regulations.

In 2010, Singapore's representative, Ong

Hua Siong, then Assistant Director of Port State Control Department/Ship Regulation & Development Department at MPA, was unanimously elected Chair of the Port State Control Committee, the governing body of the Tokyo MOU on Port State Control.

What also bolsters Maritime Singapore's presence is its role in the International Maritime Organization (IMO), the maritime branch of the United Nations. Singapore has been an IMO Council Member since 1993, and continues to play an active role in contributing to the organisation's goal of ensuring safe and efficient shipping.

For instance, the Singapore-IMO Third Country Training Programme, launched in 1998, has benefitted over 1,400 participants from more than 70 countries. It conducts training in port state control and oil spill contingency planning.

Singapore and the IMO also worked with Indonesia and Malaysia to set up the Co-operative Mechanism on Safety of Navigation and Environmental Protection

in the Straits of Malacca and Singapore in 2007. Under the IMO's Protection of Vital Shipping Lanes Initiative, the Co-operative Mechanism seeks to maintain safety of navigation and environmental protection in the Straits, which is one of the world's most important waterways.

In the area of maritime security, the Regional Cooperation Agreement on Combating Piracy and Armed Robbery Against Ships in Asia (ReCAAP) aims to ensure safe, secure and efficient shipping in the region. The decline in piracy in the region is an example of collaborative efforts by ReCAAP member governments and other organisations. Last year, Singapore renewed its agreement with ReCAAP to host the Information Sharing Centre for another five years.

In a nutshell, the synergy and cooperation of Maritime Singapore's different components help to propel the local maritime industry forward, enabling it to grow, develop, and stay relevant.



GRAHAM PEACHEY, CEO OF THE AUSTRALIAN MARITIME SAFETY AUTHORITY, TALKS ABOUT THE CHALLENGE OF IMPLEMENTING INTERNATIONAL SHIPPING CONVENTIONS AND CONTINUED COOPERATION IN THE REGION. BY FRANCIS KAN

# SAFE WATERS

► Graham Peachey, chief executive of the Australian Maritime Safety Authority (AMSA), recently paid a visit to Singapore as part of the Maritime and Port Authority of Singapore's Distinguished Visitors Programme.

During his two-day visit, Peachey held discussions on maritime issues with MPA chief executive Lam Yi Young and also called on Singapore's Minister for Transport Lui Tuck Yew.

*Singapore Nautilus* speaks with him.

## How would you describe the state of Singapore-Australian maritime relations?

It is a very strong relationship, with a lot of common interests. Both nations are prominent members of the International Maritime Organization (IMO) Council, and we work closely together on matters of mutual interest and those affecting the Asia-Pacific region as a whole.

The Asia-Pacific accounts for some 40 per cent of the world's cargo-carrying fleet, and around half the world's seafarers. Giving the shipping industry's significant presence and role in the region, it is important that our countries continue to work together with neighbouring states, to provide a regional voice on the world stage for maritime reform and change.

## What other areas of cooperation with Singapore are you looking at?

Australia will be providing experts for a

regional forum on vessel traffic services to be hosted in Singapore later this year, in collaboration with the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA). IALA is a non-profit, non-governmental, international technical association based in France that aims to promote safety at sea.

Both Australia and Singapore are also members of the newly formed International Civil Aviation Organisation Asia/Pacific Regional Search and Rescue Task Force. This task force has developed a two-year programme to address impediments of efficient search and rescue in the region.

## What are the key issues facing the maritime industry in the Asia-Pacific region, and what is being done to overcome them?

Continued improvements in maritime safety, marine environmental protection, and the capacity of search and rescue authorities are all critical to the future prosperity and environmental sustainability in the Asia-Pacific region.

One of the biggest challenges facing the maritime industry in our region is finding ways to better help some of our developing nations implement the requirements of international shipping conventions and standards.

We have for many years worked with the global maritime community through the IMO, the Asia-Pacific Heads of

Maritime Safety Agencies forum, and other regional forums to identify and support the implementation of suitable responses to these sorts of challenges.

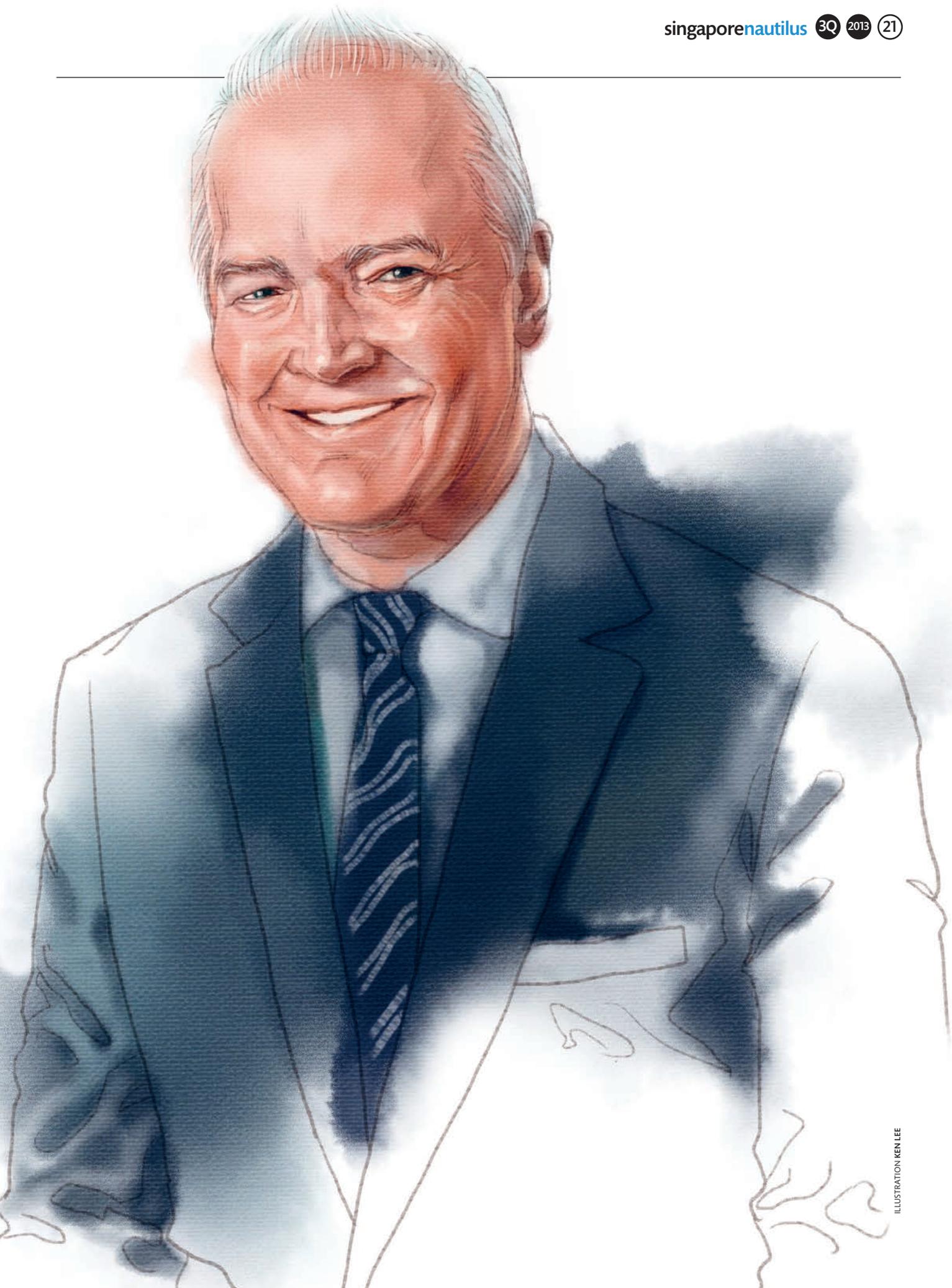
## How will increasingly stringent international environmental regulations affect Australia's maritime industry?

Issues of particular interest to Australia include increasing demand for waste reception facilities at ports, and a requirement for ship operators to assess whether solid bulk cargoes may be harmful to the marine environment.

The challenge for Australia is how to effectively apply the increasing number of international environmental regulations to the growing number of ships visiting our ports. In a country where 99.9 per cent of our trade is moved by sea, often through highly sensitive areas such as the Great Barrier Reef, protection of the marine environment from the impact of shipping will continue to be an extremely high priority.

## What drew you to the maritime industry, and what excites you about it currently?

The maritime sector is not just a source of prosperity, but also a tangible and important link with countries around the world. I have always felt an affinity with the sea, and the key elements of my work in a maritime safety agency – ship safety,



environmental protection, and responding to people in distress – are things I hold very dear to my heart.

There is much to remain excited about. The sector is experiencing significant change. For instance, we are seeing a trend towards larger ships which is expected to continue, meaning that growth in ship activity will, in most cases, increase at a lower rate than the growth in the volume of commodity exports in the coming years.

**What have been some of your memorable achievements and experiences during your maritime career?**

AMSA has recently been appointed the sole national regulator for commercial vessels, which is something we've all worked very hard to achieve.

With effect from July 2013, AMSA will be responsible for reviewing and optimising legislation covering all

Australian commercial vessels.

I also take great pride in the work we have done to strengthen protective measures around some of Australia's most pristine maritime environments, such as the Great Barrier Reef and the Torres Strait.

**What is your outlook for the growth of the industry?**

Australia is fortunate in that it derives most of its income from enormous mineral sources, all of which are exported by ships. The last 10 years have seen an average growth of 3 per cent each year in ship visits to our ports.

We see this growth continuing over the next 10 to 15 years, driven by the bulk cargo trades out of the sensitive maritime environments of the north-east and north-west of Australia.

The challenge we face is how best to respond to the effects of increased shipping in these areas.

**“I take great pride in the work we have done to strengthen protective measures around some of Australia's most pristine maritime environments.”**

Graham Peachey, chief executive of the Australian Maritime Safety Authority, on one of his career highlights.

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*Singapore Nautilus* is the quarterly corporate publication of the Maritime and Port Authority of Singapore. Reaching out globally, the magazine covers the latest maritime-related news and initiatives in Singapore, and provides a platform for thought leaders to share ideas on international maritime trends and developments. You can sign up for a free subscription to *Singapore Nautilus* by e-mailing us at [SN\\_subscribe@mpa.gov.sg](mailto:SN_subscribe@mpa.gov.sg)

# A TOWERING MESSAGE

THE HISTORIC TALL SHIP *LORD NELSON* IS SAILING AROUND THE WORLD TO SPREAD THE MESSAGE OF INCLUSION AND EQUALITY. BY JAMIE EE



TOP: Crew members Carolyn Broughton, from the US, and Vincent Li, from Hong Kong, when the ship berthed at VivoCity.  
ABOVE: Singaporean Paralympian Jovin Tan (first row, right) was part of the crew.

► It's easy to spot ships in the waters surrounding our island city, but it's not every day that a three-masted tall ship graces our shores – and one that's disabled-friendly to boot.

For three weeks in 2013, the tall ship *Lord Nelson* visited Singapore – one of 30 ports it will berth at during its maiden voyage around the world – to spread the message of inclusion and equality.

Tall ships are large, traditionally-rigged sailing ships that were once the vessels of choice for explorers. Today, they are considered a rarity.

What makes the *Lord Nelson* unique, however, is that it is one of only two square-rigged tall ships in the world that have been designed and purpose-built to allow able-bodied and disabled people to sail side-by-side as equals.

Both these tall ships – the other is called *Tenacious* – are owned and operated by Jubilee Sailing Trust (JST), a registered sail training charity in the United Kingdom (UK).

Fitted with disabled-friendly features such as hearing loops, wheelchair lifts and an audio compass, the *Lord Nelson* allows disabled people to become part of a fully working tall ship crew at sea. They include those on wheelchairs, people with cerebral palsy, and the visually impaired. The 55-metre barque (a sailing vessel with three or more masts), was constructed in Essex in the UK in 1984. It took about two years to build and can accommodate up to 50 voyage crew, including its eight permanent crew members.

Since the *Lord Nelson* first set sail in 1986 from

## ONBOARD FEATURES

The *Lord Nelson* is specially designed to allow the able-bodied and disabled to work side by side. Here are some of its unique aspects.



- Wide, flat aisles on all decks with wheelchair lifts between decks and at the stairwells.
- Fixing points throughout the ship to secure wheelchairs in rough weather.
- Power-assisted wheel and joystick steering for those with limited strength or movement to helm the ship easily.
- An audio compass with a digital screen and a feature that “speaks” the ship’s heading.
- Guidance tracks on the upper deck to keep visually-impaired crew central and away from the side of the ship.
- Arrows on handrails pointing to the bow.
- An audio induction loop system in the mess room to assist the hearing-impaired during briefing sessions.
- Vibration pads fitted to the bunks to alert hearing-impaired crew members of emergencies.

Southampton, over 10,000 physically disabled and able-bodied people have sailed on and crewed the ship, either by paying a subsidised rate to be on board or through sponsorships.

Alex Lochrane, JST’s chief executive, says the idea for a round-the-world voyage arose after organisers of the Royal Australian Navy International Fleet Review invited the ship to take part in their title event in Sydney in October.

He explains: “As a result of putting that programme together, we realised that there were actually some wonderful countries we can visit to bring our message. We know that disabled and able-bodied people need to work together in order to learn what each one of them is capable of and what each one is able to do, as opposed what they can’t do.”

The *Lord Nelson*’s current voyage is named the Norton Rose Fulbright Sail the World Challenge after its title sponsor Norton Rose Fulbright, the global legal practice.

At each stopover on the 23-month journey, which began last October, the ship picks up new crew, and runs short in-country voyages and day sails. In Singapore, 12 Singaporeans, including three-time Paralympic sailor Jovin Tan, 27, joined the tall ship as crew on a six-day voyage to Tioman Island.

### Sailing as a team

On board the *Lord Nelson*, it is all hands on deck. Regardless of physical ability, all crew members take part in duties like helming the ship, keeping watch, setting the sails, preparing food, and cleaning.

Chris Phillips, captain of *Lord Nelson*, says: “Sail training is a wonderful way to get people to work together as a team, whether they are able-bodied or disabled, or from different walks of life. It brings people together to work and think as a team.

“For disabled people who come on board, it’s a chance for them to do something out of their comfort zone, as much as for anybody else.”

While most societies have become more accepting of disabilities, Lochrane explains that the charity’s mission is still relevant today. He says: “There’ll always be a need to show people what they can do. When you give a spark of opportunity to a 14-year-old, someone who had a car crash a few years ago, or someone who was born with cerebral palsy, great things can happen.”

The shipping community can also benefit from JST’s sail training programme to mould its future leaders. JST works with cadet training agencies to train young sailors on board its tall ships. “Whether they are training to work in cruise ships, passenger liners or cargo

**“For disabled people who come on board, it’s a chance for them to do something out of their comfort zone, as much as for anybody else.”**

Chris Phillips, captain of *Lord Nelson*, on the benefits of sail training



## LORD NELSON IN NUMBERS



### DIMENSIONS

**54.7**

**METRES**  
LENGTH (INCLUDING  
BOWSPRIT)

**37.7**

**METRES**  
MASTHEAD HEIGHT  
(KEEL TO FORE)

**9**

**METRES**  
LENGTH OF BEAM

**1,024**

Square Metres  
Sail Area

**368**

Gross  
Tonnage

**4.12**

**METRES**  
SUMMER DRAFT



### PERFORMANCE & CAPABILITIES

**8**

**KNOTS**  
MAX SPEED  
UNDER POWER

**2x260**

BHP  
MAIN ENGINES

**10**

KNOTS  
MAX SPEED  
UNDER SAIL

ships, they will spend time with us learning real seamanship, bridge watching, navigation, ship husbandry, looking after a ship, and keeping it well-maintained," says Lochrane.

His main priority is to get the *Lord Nelson* safely back to Southampton in the UK in late 2014, after it completes the challenge. He has also set his sights on bringing the tall ship on its next adventure – plans have yet to be finalised.

He says: "The next challenge for me is to make the team realise that while this has been very hard work with a very steep learning curve, because we've never done anything like this before, we've broken so much new ground and made so many new friends that we have got to do it again.

"So the challenge is getting everyone behind the second programme, and building that programme. It'll probably be different, we may not visit all the same places, or we may well stay longer in some places that have welcomed us brilliantly, like South Africa and Singapore."

Captain Phillips adds: "On behalf of everyone at the Jubilee Sailing Trust, I would like to extend our sincere thanks to all the organisations and individuals that have supported Lord Nelson's inaugural visit to Singapore including the Maritime and Port Authority of Singapore, PSA Singapore, London Offshore Consultants, the British High Commission, the Singapore Police Force, Transmarine Navigation (Singapore), and our title sponsor for this unique voyage, Norton Rose Fulbright. Without the support of so many dedicated individuals, this visit would not have been possible."

# GOING STRONG



FROM A SMALL PORT AGENCY IN SINGAPORE, THE THOME GROUP HAS GROWN INTO ONE OF THE WORLD'S TOP SHIP MANAGERS TODAY, AS AJ LEOW FINDS OUT.

► The success story of the Thome Group – which celebrates its 50th anniversary this year – is one that is tightly woven into the growth of Singapore's maritime industry.

Founded here in 1963 as a port agency – initially called Thome & Co – that serviced Norwegian ships sailing to the Far East, it was also the first independent ship manager to be established in the city-state. The company later branched out into ship management, and Thome Ship Management's headquarters were set up in Singapore in 1976 because the bulk of its clientele and business was in Asia.

"We had our start here and were part of the evolution of Singapore becoming a leading maritime centre, which is why we are proud to call Singapore our home," says Captain Michael Elwert, the group's director for Group Strategy (HR & Support).

"What we like about Singapore is its extreme

focus in developing a maritime hub, not just as a port business, but also as a maritime cluster which includes shipyards, ship owners, managers, brokers and port agencies as well as other aspects of shipping, such as finance and education.

"The authorities are also willing to listen to the industry and are extremely fast in adapting, adopting and implementing changes."

### Leading ship manager

The Thome Group has retained its port agency business, which accounts for 10 to 15 per cent of overall revenues, but is now also a leading global ship manager – one of the world's top 10 third-party ship

management companies.

More than 300 vessels – owned by 50 major customers from Scandinavia, Asia, the Middle East and the Americas – are now under its watch. These ships are manned by 10,000 seafarers, including cadets trained by Thome, around the world. They are serviced by 550 shore-based staff – about half of whom are based here – handling activities from ship management, consultancy and port agency work to vessel inspection and crew training.

Claes Eek Thorstensen,

**KEY MILESTONES** We take a look at some highlights from the shipping company's illustrious 50-year history.

**1950s**  
Fridtjov Thome, a Norwegian, comes to Singapore to set up an office for shipping company Wallem.

**1963**  
Thome sets up Thome & Co, taking on work mainly for Scandinavian ship owners on top of chartering and shipbroking activities.

O

YEARS  
ON

President of the Thome Group, explains: "With our accumulated know-how and experience, we are constantly upgrading and improving on ways to manage a large fleet more cost-effectively.

"Our business model is not based on owning (shipping) assets, but on managing assets entrusted to us by ship owners, to whom we offer our shopping cart of tailored solutions."

### New developments

The Thome group's reputation for lean and efficient fleet

management has prompted many of its existing tanker fleet owners to request that the group's services be extended to the dry bulk business; in the last two years, to the oil and gas offshore segment of the shipping market as well.

Meanwhile, the company's ship agency business has been extending its global presence through new tie-ups in India, Thailand, Croatia, South Korea and Indonesia.

Thorstensen is optimistic that demand for third-party ship managers will continue to rise, due to the proliferation of new and more complex shipping regulations.

He explains: "The typical ship owner usually owns

seven to 15 vessels. This makes it difficult when you do not have the critical mass in areas such as crew recruitment and training, or the knowledge and resources to keep abreast of new rules in foreign ports.

"In-house expertise can be acquired but it's usually very expensive.

"So it's often better for the owners to outsource to a third party like us with the right mix in expertise, especially given the pressure on freight rates and costs in today's shipping markets."

By engaging the Thome Group, a ship owner gets to enjoy economies of scale by leveraging on the group's procurement programmes and existing agreements with different parties across the globe, Thorstensen said.

### Challenges ahead

The group acknowledges that there are rough waters ahead, however, as the global shipping industry – except for the oil and

gas sectors – continues to face difficult times this year.

It is why the Thome Group continues to invest greatly in staff training and education.

Captain Elwert said the group's motto – Words are cheap; deeds are dear – is not a mere corporate buzzword but a demand for concrete action, deeply enshrined in its human resource philosophy.

He says: "At Thome, we not only do what we say but also do it well. Quality and safety – these are our upmost priorities.

"We either do it well and safely or we don't do it at all, because what's at stake are the reputation of the owners and our people's welfare and safety.

"We believe in developing competency, attitude and performance.

"We have nationalities from more than 30 countries and that's where our competitive edge lies.

"It's also a reflection of who we are – a global company serving global customers."

1976

Thome Ship Management is started, and Olav Eek Thorstensen comes on board. The Singapore headquarters is set up.

1985

Thorstensen becomes the company's managing director.

1994

Fridtjov Thome retires.

1996

Thome is the first to receive the ISM Code Document of Compliance in Singapore.

2013

Thome Group remains under the full control of Chairman and Chief Executive Officer Olav Eek Thorstensen and his family. The group commemorates its 50th anniversary, with celebrations in Singapore, Manila, Oslo and Copenhagen.

# MASTER OF MANY TRADES

A RICH MARITIME HERITAGE LIES BEHIND THE FAMILY-FOUNDED IMC GROUP AND ITS SUBSIDIARY IMC INDUSTRIAL, AS **DESMOND NG** DISCOVERS.

► The IMC Group has a strong mission: “To serve human well-being and create wealth at the same time.”

While these two aims may not appear to be a common business pairing, the Group is no stranger to diversity.

What started out as a small transportation company in the 1900s is today an international enterprise, holding stakes in multiple areas of interest.

After World War II and a subsequent civil war in China, the Tsaos relocated and restarted their businesses in Hong Kong.

Building up from a small trading business, Tan Sri Frank Tsao founded International Maritime Carriers Ltd (IMC) in 1966. IMC initially served as an owner and operator of general cargo vessels, but grew and diversified into many different marine-related businesses.

#### Diversified group

Today, Tan Sri Frank Tsao's son, Frederick Chavalit Tsao, helms the IMC Group as Chairman. Strategic business units come under the banner of IMC Pan



Asia Alliance Group, which comprises many arms such as real estate and investments. Noteworthy projects include Suntec Singapore Convention and Exhibition Centre, and palm oil plantations in Indonesia.

The group has not lost sight of its maritime roots, however. Shipping operations are now entrenched in IMC Industrial's shipping and logistics and supply chain business.

True to its diversified nature, the IMC Group's maritime arm offers its clients a range of maritime services including shipping, shipyards, marine capital, logistics, and marine and offshore engineering.

### Singapore-centric

With headquarters set up both in Singapore and Shanghai, the IMC Group consists of about 9,000 employees worldwide, and more than 300 employees in Singapore.

On the relocation of the IMC Group's headquarters from Hong Kong to Singapore almost 20 years ago, IMC Industrial's Group Managing

Director Tai Sook Yee says: "We moved to Singapore because of its open and transparent climate. The authorities in Singapore are open-minded, but responsible at the same time, and that makes it a good business environment for us to operate in.

"Tan Sri Frank Tsao recognised Singapore as a crucial factor in capturing the Asian markets, and worked closely with the government and regulatory authorities in Singapore to move many maritime businesses here."

Tai, who leads IMC Industrial's business units, including integrated Transport Logistics, Marine & Offshore Engineering and Resources, also attributes Singapore's competitive edge to its strengths in financial and legal maritime services – an added incentive for businesses to set up here.

"Singapore offers all the maritime services needed by businesses. Because of its diverse opportunities, the maritime scene here is both diverse and welcoming to new businesses," she adds.

### Challenges ahead

But as the global shipping industry wrestles with the state of the world's economy, rising costs in Singapore are one of IMC Industrial's more immediate concerns.

Tai says: "It is quite alarming how inflation has crept up in the last three years, and it has increased our operating costs here considerably.

"The strength of the Singapore dollar is also affecting us as we are a US dollar-based revenue generator. It's like a double whammy for us – cost and currency are both against us."

She sees quality manpower for the company as a potential cure, but this doesn't come without its own set of problems.

"There is a lot of competition in the industry for human resources. Because Singapore has attracted so many maritime-related companies, there is a real crunch for good people at the moment," Tai says.

"This ongoing foreign talent debate is a tough one for us

all. Without a review in current policies, we will continue to have a shortage of quality manpower, and costs will simply continue going up."

### Future-ready

IMC Industrial plans to be ready for the future by being bold in making business decisions. Tai says: "We always want to be slightly ahead of the curve. The family has always maintained a firm stake in the shipping industry, so that we can continue developing our services here in the future."

IMC Industrial is already looking ahead, and has identified Indonesia as its next focus. Says Tai: "It's a huge market with a huge population. The country is not only rich in resources, but demand is also present. With the rise of industrialised needs in the country, imports will be required. So, we're growing and strategising our company's exposure there."

Aside from Indonesia, the company also sees new frontiers in Africa and South America.





AS A FAR-REACHING SHIP-RECYCLING LAW APPROACHES RATIFICATION, NORWEGIAN FIRM METIZOFT EYES A BIG OPPORTUNITY TO HELP ASIAN SHIPPING COMPANIES. **BY JAMIE EE**

► Shipping firms are facing a deluge of new environmental laws to comply with, thanks to the global call for green measures to be implemented in the maritime industry.

One that may soon come into force is the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, also known as the Hong Kong Convention.

Adopted by the International Maritime Organisation (IMO) in 2009, the new law aims to ensure that ships being recycled at the end of their operational lives do not pose any unnecessary risks to the environment, or to

the safety and health of ship breaking workers.

The Hong Kong Convention also aims to address all issues regarding ship-recycling, including the concern that ships sold for scrapping may contain environmentally hazardous substances such as asbestos, heavy metals, hydrocarbons, and ozone depleting substances, among others.

The aim is to have the convention ratified sometime in 2015. Part of the convention requires all ships that will eventually be sent for recycling to carry an inventory of hazardous materials (IHM).

This inventory documents all the materials on a ship that

are potentially dangerous, from the time it is built to the time it reaches the scrapyard for recycling. The convention requires three rounds of surveys, verifying a ship's IHM, to be carried out over its lifetime.

Already, many shipyards and shipowners are laying the groundwork for the new law. Some, however, are struggling to keep up.

#### Filling the gap

This is where Norwegian entrepreneur Gry Cecilie Sydhagen comes in. She set up



ABOVE FROM LEFT: Metizoft Chief Executive Officer Gry Cecilie Sydhagen, Chief Operating Officer Clement Chang and Chief Marketing Officer Øyvind Sundgot.

RIGHT: A recent Metizoft project was for PaxOcean Engineering's Posh Shearwater (PX1011), a clean-design vessel with IHM.

SINGAPORE  
IMMIGRATION

09 AUG 2010

SINGAPORE CHANGI INTERNATIONAL AIRPORT

Metizoft in 2006 to develop IT solutions that simplify the documentation process for shipbuilders, shipowners and marine-equipment suppliers.

Back then, shipyards and shipowners were encouraged (not obliged) to keep a "green passport" – a predecessor of the IHM – under the 2003 IMO Guidelines on Ship Recycling.

Sydhagen, Metizoft's Chief Executive Officer, says: "Shipyards in Norway were asking for help on how to meet this IMO regulation, as it was an extremely challenging burden for them to bear.

"They needed people to develop software solutions to make the documentation process simpler and more efficient. It was in this area that I saw a gap in the industry which needed to be filled."

Metizoft is now a world leader among consulting companies that provide IHM verification and approval, for both new and existing vessels, under the Hong Kong Convention. To date, it has delivered more than 500 projects to well-known shipyards worldwide.

In February this year, it set up its first overseas office, Metizoft Asia, in Singapore to tap into the Asian market.

Metizoft Asia is headed by Chief Operating Officer Clement Chang, who says: "We see great opportunities in the

region because environmental issues are becoming more important to shipyards and shipowners in countries like Singapore, Malaysia, Indonesia and India."

Furthering its goal to bring green and sustainable solutions to the shipping community, Metizoft has widened its range of services. These include helping shipbuilders maintain their asbestos-free declarations as required by the IMO, which bans the use of the harmful material on ships.

Metizoft also offers a complete documentation-handling platform for firms on major shipping projects, as well as project management for shipping companies. The latter involves holistic consultancy services covering the entire shipbuilding process, from conception to scrapping and recycling.

### Good to go green

As shipyards and shipowners begin to see the benefits of keeping an IHM, Metizoft expects to see its core business growing.

Having an IHM protects ship workers better, reduces the potential for compensation claims, and offers companies the chance to go green through ship-recycling, says Metizoft's

Chief Marketing Officer, Øyvind Sundgot.

There are cost advantages to this, too. Sundgot says: "Many shipyards and shipowners are already taking action because they know the convention is entering into force. It's cheaper and more efficient for them to prepare the IHM for their fleet now than wait till it becomes mandatory, when there will be an obvious bottleneck and rush to comply."

By outsourcing the documentation work to Metizoft, shipyards and shipowners "can focus on their core competency", he adds. "Companies can feel more reassured as the burden of manual documentation is lifted

from their shoulders, and can deploy resources internally to work on other aspects of development."

He does not think the recent shipping slump will affect demand for Metizoft's services. "Whether there is a slump or not, companies will still need to comply with the regulations, and we feel that this makes our services relevant and needed in the maritime community."

Still, Sydhagen says the company has its work cut out for it in Singapore. "There is more room to develop a deeper awareness on green issues in Singapore. Metizoft aims to show them that going green is easier than they think."

**Having an IHM protects ship workers better, reduces the potential for compensation claims, and offers companies the opportunity to go green.**



► Singapore is the busiest port in the world in terms of vessel arrival tonnage, and this makes its responsibility to all ships that enter its waters more challenging than most.

As the owner of the Singapore Registry of Ships, the Maritime and Port Authority of Singapore (MPA) also ensures that ships comply with international and national rules and regulations.

MPA inspectors conduct both port state and flag state control inspections. In other words, MPA surveyors board both visiting foreign ships as well as Singapore-flagged ships to ensure that they comply with international regulations.

### Control inspections

When a surveyor boards a vessel, he needs to have knowledge of the regulations that are applicable to its inspection. These regulations come from major international conventions on maritime safety, security and environmental protection.

Without a system to consolidate and digitalise

these data, vital information can only be retrieved from various sources across different mediums, such as the International Maritime Organization's (IMO) circulars and resolutions, the Korean Register of Shipping's KR-CON website, and the Lloyd's Register's Rulefinder CD.

MPA Deputy Director (Shipping) Mark Lim says: "The multiple-source medium and paper-based system, in which officers look for specific regulations or cases that we've dealt with before, is tedious. There are volumes of publications, which are difficult to track. A consolidated electronic system would be much faster."

Thus, the Maritime Legislation Management System (MLMS) was born.

### Need for speed

MPA embarked on the MLMS project in 2010 to collate all relevant legislation information into a single high-technology portal to strengthen the efficiency of both port state and flag state inspection duties.

Due to go live this year, the portal gives users speedy convenience and acts as a one-stop information centre.

MPA surveyors will be able to use their mobile devices – like smart phones and digital tablets – before and even during inspections, to access the information in the portal.

The MLMS portal also hosts a consolidated database of maritime legislation, regulations and case studies that MPA surveyors need

to refer to for each ship inspection.

### On the ball

Here's how the MLMS portal works: When a vessel is due to visit the Port of Singapore, an MPA surveyor keys the vessel's details into the system to retrieve any applicable regulations before boarding the ship for inspection. The system also allows the surveyor to narrow down search results by focusing on certain terms or

## REFERENCE GUIDE

Ship surveyors typically access these top references.

### WEBSITES

- The Korean Register of Shipping (KR) at [krcon.krs.co.kr](http://krcon.krs.co.kr)
- Singapore Statutes Online at [statutes.agc.gov.sg/aol/home.w3p](http://statutes.agc.gov.sg/aol/home.w3p)
- Singapore LawNet at [www.lawnet.com.sg](http://www.lawnet.com.sg)
- International Maritime Organization (IMO) at [www.imo.org](http://www.imo.org) and [docs.imo.org](http://docs.imo.org)

### OFFLINE FILES

- MPA Knowledge Management Respository: PDF files, word documents, scanned images
- Lloyd's Register: Soft copy on a CD

### BOOKS

- IMO publications

DESMOND NG FINDS OUT HOW A NEW WEB PORTAL CALLED THE MARITIME LEGISLATION MANAGEMENT SYSTEM WILL MAKE SHIP INSPECTIONS MORE EFFICIENT.

phrases, thereby cutting down the amount of time typically spent on the current system.

Clicking on a particular regulation in the MLMS reveals its various applications for different inspections, as well as reference materials – such as IMO and MPA shipping circulars – and other relevant documents.

MPA's Project Manager for MLMS Desmond Tay says: "Different regulations are applied to different vessels. And these regulations vary according to the vessel's age, gross tonnage, and country of origin.

"For example, the IMO code may say that a particular vessel needs a certain amount of lifeboats or fire extinguishers.

Using the portal, our surveyors will be able to get almost immediate access to this information prior to a ship inspection."

Additionally, users may register with the MLMS portal to receive alerts on any changes made to existing regulations, which happens quite often, says Tay. These alerts can be exported to users' digital devices as PDF files, thereby serving as points of reference during the inspections.

#### **Productivity boost**

The biggest benefit of the MLMS will be improved productivity and reliability, as MPA surveyors will be able

to easily retrieve up-to-date information via the portal.

Access to information is extended beyond the office desk and into the operational environment, such that users are able to work on the go – while patrolling the waters or performing inspections, for example.

MPA's customers also benefit from the new portal, as the new system will considerably shorten MPA's response time with regard to their enquiries.

With the current multi-source system, research and preparation processes take three to four days. With the MLMS, this response time will be more than halved.

#### **Looking ahead**

The new system – which cost \$1.1 million to develop and maintain – won a silver award at the International Association of Ports and Harbors (IAPH) Awards 2013, which recognise port authorities or companies that have used information technology to improve their processes.

Still, before the MLMS becomes the panacea to the multi-source system, one key obstacle remains. The level of mobile network coverage at the anchorages is sometimes low, making it impossible to access the system online.

To resolve this issue, the MLMS lets surveyors group and export information into PDF files prior to their inspections for easy offline access on their mobile devices or laptops.

Looking ahead, MPA may also develop a customised tablet application for the system with a lightweight local database, so that users are able to perform dynamic searches even when no mobile network coverage is available.



# PREPARING FOR THE FUTURE

Daniel Tan



David Chin



SINGAPORE MARITIME OUTREACH NETWORK MARITIMEONE – MADE UP OF THE MARITIME AND PORT AUTHORITY OF SINGAPORE (MPA), THE SINGAPORE MARITIME FOUNDATION (SMF), THE ASSOCIATION OF SINGAPORE MARINE INDUSTRIES (ASMI), AND THE SINGAPORE SHIPPING ASSOCIATION (SSA) – AIMS TO RESOLVE INDUSTRY CHALLENGES SUCH AS MANPOWER ISSUES. VINCENT WEE SPEAKS WITH THREE OF THE PARTNERS ABOUT THE ROAD AHEAD.

Tan Beng Tee



#### MaritimeONE partners

- Singapore Shipping Association (SSA) Executive Director Daniel Tan
- Singapore Maritime Foundation (SMF) Executive Director David Chin
- Maritime and Port Authority of Singapore (MPA) Assistant Chief Executive (Development) Tan Beng Tee

► **SINGAPORE NAUTILUS (SN):** What is the key challenge in developing future maritime manpower?

**MPA:** Public perception of the maritime industry needs to shift. People often tend to associate the industry with port operations or seafaring, and are not aware of other sectors that support it, such as shipping finance, marine insurance, and shipbroking.

As a result, many people, especially the young, are unaware of the diverse maritime career opportunities.

It is imperative to build a steady and sustainable manpower pipeline to support Singapore's development as a global hub port and international maritime centre.

**SSA:** The lack of awareness has affected seafaring and the shore-based maritime industry, where there is a low take-up rate among youngsters.

**SMF:** Maritime academic courses are often not top-of-mind for them, with many preferring more "glamorous" courses such as new media, business and finance.

**SN:** How has MaritimeONE addressed this challenge?

**SSA:** MaritimeONE does so in four different areas: publicity and media, outreach activities, talks and networking, and career-related initiatives.

MaritimeONE has commissioned a number of magazines over the years, with the latest publication coming out last year.

Spearheaded by the SSA, *New Waves* magazine is targeted at the youth, and highlights exciting maritime



**“As the industry continues to evolve, so must the industry’s manpower needs. The maritime education landscape must adapt to address these developments.”**

Maritime and Port Authority of Singapore (MPA) Assistant Chief Executive (Development) Tan Beng Tee

education and career opportunities. Other activities include a Chinese drama serial on Channel 8 and TV commercials.

As for outreach initiatives, one activity is the Maritime Open House, where upper-secondary school students learn more about the industry’s diverse education and career opportunities through talks by maritime professionals, and visits to restricted-access facilities like shipyards and the Port Operations Control Centre.

We’ve received a very encouraging response, with more than 1,200 students taking part in the event since it started last year. The Maritime Open House is continuing this year, with two

sessions in May and October.

Similarly, the new Maritime Campus@JCs event was led by ASMI and held at Victoria Junior College earlier this year. Apart from an exhibition on maritime education and careers, professionals also gave insights into the maritime world.

**MPA:** MaritimeONE continues to raise awareness of educational and career opportunities with outreach activities for students, such as those through career guidance counsellors and teachers.

**SMF:** As the Secretariat of MaritimeONE, SMF works closely with strategic partners to spearhead initiatives that aim to raise the “hip quotient” of the industry, correct negative stereotypes, and make maritime careers more

appealing to the youth, such as through career fairs and school talks.

To reach out to secondary school students, SMF commissioned The Necessary Stage to do a maritime skit earlier this year, to raise awareness of the industry in a light-hearted way. The show was staged at 38 schools and watched by over 29,000 students. More shows have been commissioned for 2014.

In addition, the MaritimeONE scholarship programme seeks to attract young people to pursue maritime education and careers.

Since the inaugural Scholarships Award Ceremony in 2007, some 160 scholarships

worth more than \$4 million have been awarded to outstanding and deserving students to pursue maritime-related courses in Singapore and overseas.

MaritimeONE has also revamped its Maritime Careers Portal ([maritimecareers.com.sg](http://maritimecareers.com.sg)), a one-stop resource on the industry that includes education, scholarship, training and career opportunities.

**SN:** What can maritime companies do to help?

**SMF:** They can play a part by supporting MaritimeONE scholarships, providing work attachment opportunities for students, speaking at school talks, taking part in career fairs at the universities, and so on.

## SELECTED MARITIMEONE ACTIVITIES FOR 2013

This year has seen a slew of targeted outreach activities for young people to gain a better appreciation of the maritime industry.

### • MARITIME OPEN HOUSE

The second Open House took place in May 2013, with 320 students taking part. Activities included a maritime drama skit and Maritime Learning Journeys, with visits to restricted-access facilities and the Singapore Maritime Gallery. The next Open House is due in October 2013.

### • MARITIME EXPERIENTIAL MUSEUM WORKSHEET

Recognising the importance of instilling maritime awareness in the young, SMF collaborated with the Maritime Experiential Museum to produce an informative activity worksheet for primary school pupils who visit the attraction.

### • CAREER FAIRS AND TALKS

SMF staged the Maritime Pavilion during the annual career fairs at Nanyang Technological University and the National University of Singapore in January and February. A Maritime Tea Talk was held at Singapore Management University in March for undergraduates, with companies in the port operations, marine insurance and shipping sectors sharing industry insights and career opportunities.

Companies can also make use of the revamped Maritime Careers Portal to post job opportunities and search resumes to find qualified job-seekers.

### SN: What role does each MaritimeONE partner play?

**MPA:** Besides supporting various activities and initiatives together, the four partners represent the different voices of key stakeholders.

As part of our role to champion the promotion and development of Singapore's maritime cluster, MPA drives the formulation of maritime manpower policies, and collaborates with strategic partners on some publicity and outreach-related initiatives.

**SSA:** Each partner serves to strengthen its respective focus. We discuss, share our expertise and form a cohesive front to achieve MaritimeONE's aims.

**SMF:** SMF administers the MaritimeONE scholarships. Activities range from finding sponsors and marketing to managing the interview process and disbursing funds to scholars.

We also work with partners to identify suitable candidates to be profiled in promotional campaigns, and advertorials in youth-centric magazines and campus publications.

### SN: What are your observations on manpower developments in Singapore's maritime industry?

**MPA:** Singapore has a wide range of maritime education programmes.

Various qualifications, from diplomas to postgraduate

degrees – and in disciplines such as technical and even business-related areas – cater to the different skill sets and competencies required.

However, as the industry continues to evolve because of factors such as globalisation, technological advancement and national policies, so must the industry's manpower needs.

The maritime education landscape must adapt to address these developments.

**SSA:** It certainly appears that MaritimeONE's efforts have made some headway, as we have seen many young people express their interest in taking up shipping and maritime careers.

But we really need to do something to get more Singaporeans in seafaring careers and to go out to sea.

One suggestion is to consider having national service done on board merchant ships.

This way, we'll be able to sustain the interest of students who have completed maritime courses at the Singapore Maritime Academy.

**SMF:** The need for manpower has never been so pressing. With the Government laying out plans to develop various clusters, while simultaneously clamping down on the inflow of foreign labour, different sectors are now vying for the same pool of local talent.

The maritime industry has also been hit by the labour crunch, as local talent movement between sectors is occurring at an alarming rate. The need to retain and retrain the people we already have is even more important now.

► After spending some time on a ship as a navigation officer, Abhishek Pandey stepped ashore, and eventually made his way to Singapore to become Standard Chartered Bank's Regional Head of Shipping Finance, South & Southeast Asia. He speaks to *Singapore Nautilus* about making the switch from nautical charts to balance sheets.

### How did you end up in shipping finance?

As an adventurous person, I have always felt pulled to travel and experience different cultures. I graduated with a Bachelor of Science degree in Nautical Science from the University of Mumbai, and

served as a navigation officer on a ship in the late 1990s. I then joined a shipping company in Hong Kong doing corporate strategy and project management.

After I got married, I looked for a job in Singapore with which to join my wife here. I ended up taking the job as a founding member of Standard Chartered Singapore's shipping finance team in 2007.

# IN THE MONEY

WORKING FOR OVER A DECADE IN SHIPPING OPERATIONS HAS EQUIPPED ABHISHEK PANDEY WITH ESSENTIAL INDUSTRY KNOWLEDGE FOR HIS CURRENT ROLE AS A TOP SHIPPING BANKER.

BY FRANCIS KAN



### What do you like about the shipping industry?

I chose to go into shipping as I was looking for an interesting job with a diverse scope. I have not regretted my choice. I have been in the industry for 19 years, and every day on the job continues to offer me different perspectives and experiences.

For instance, I've seen how day-to-day technology has evolved. It used to cost \$10 a minute to call home from on board a ship, using a satellite phone, and now it costs only about \$1 a minute!

### How did you make the transition from operations to finance?

I was equipped to make the change. I didn't just step off the ship and join the bank. I had already completed my MBA and had also gained corporate shipping experience in Hong Kong.

With prior industry knowledge and an understanding of the nuances of finance, all I needed to do was apply my experience to the job.

Every bank interested in the maritime sector needs to have sector and industry experts to interpret the market and give meaningful advice.

### What kind of skills are needed to work in shipping finance?

A mix of skills is required. This is a specialised industry utilising thousands of words that are unique to shipping, so prior industry knowledge is really important.

There is also a need to learn about banking, and the legal aspects of the job, but these can be acquired.

### Tell us about your team and role at Standard Chartered.

We provide financing to companies who want to acquire vessels. We also support customers by buying ships and leasing them back to these clients. This allows our clients to keep operating in a difficult environment without breaking the bank.

We started our leasing business in 2010, and this makes up about 20 per cent of our business today. Currently, we own over 30 ships.

Our global team is 30 strong, and I oversee the 13 staff who are based in Singapore. Since 2007, we have grown the business from scratch to one worth about \$5 billion today.

My team is very important to me. Working with them is what pulls me out of bed every morning because I know that we will work hard and enjoy our day at work together.

### Describe your typical day.

I travel a fair bit. However, when I am in Singapore, there are three key elements to my day: meeting with key stakeholders, such as risk officers and relationship managers; meeting clients; and finally, spending a lot of time with my team to discuss what's going on in the market and pitching for new deals.

### What roles are available in shipping finance?

Different banks have their own ways of covering the shipping sector. Some have sub-sector specialists, for example, with different people covering the various sectors like dry bulk, LNG (liquefied natural gas), tankers, and so on.

In other banks like ours, we have one team of generalists covering all the sectors – including the offshore sector.

The shipping finance sector also needs relationship managers to look after shipping

companies. This job requires personnel to cover all types of banking requirements for their assigned company.

Another job opportunity involves risk officers specialised in shipping. Private equity firms who are interested in this sector will require shipping experts to help them get started.

### What is the most satisfying part of your job?

I feel the most job satisfaction when the team is able to come up with new structures or solutions that really add value to our clients. We recently closed an acquisition deal that helped catapult the client into a part of the industry where they will now have more than 50 per cent market share. The strategic element of the job is very satisfying to me. It has been a difficult time for the industry as a whole, but we have maintained a strategy that has worked out very well.

### Do you miss being on board a ship?

Don't tell my wife – I do! The best part was the 60 to 90 days of continuous leave you get when you come onshore after months out at sea.

# BIG WINS

A MASSIVE NEW SHIP REPORTEDLY HAS THE LATEST TECHNOLOGY, DESIGN AND SUSTAINABILITY FEATURES ONBOARD. SINGAPORE NAUTILUS TAKES A LOOK AT THE APL TEMASEK.

- ▶ The largest container ship to be registered in Singapore, the APL Temasek can carry 14,000 twenty-foot equivalent units (TEU) of containers.
- Owned by APL, the container shipping arm of Singapore-based shipping giant Neptune Orient Lines, the APL Temasek is said to be the largest, greenest and most technologically advanced vessel in APL's fleet.
- The first of 10 fuel-efficient 14,000-TEU container vessels ordered by APL, the ship has several fuel-efficient features. An S-type long-stroke main engine with electronic fuel injection is designed to operate efficiently at different loads. She also has a redesigned bow and broader hull to accommodate slower speeds, in an industry practice known as slow steaming.



## Discover Maritime Singapore



How did Singapore transform to be one of the world's leading international maritime centres? And home to the world's busiest port? Why is maritime a vital part of our past, present and future?

Find out more at [maritimегallery.sg](http://maritimегallery.sg)

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31 Marina Coastal Drive Singapore 018988**

**Now open**

Admission is free

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