Singapore’s MPA on a drive for sustainable development

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The Maritime and Port Authority of Singapore (MPA) was created in 1996 following the passing of a Bill in Parliament. This said that the MPA would take over the functions of the Marine Department in the Ministry of Communications, the National Maritime Board and the regulatory departments of the Port of Singapore Authority (PSA). The MPA would regulate the newly corporatised PSA. This move was seen as vital for Singapore to maintain its position as a hub port and major international maritime centre.

MPA’s functions include promoting the use and development of the port, controlling vessel movements and ensuring navigational safety, and regulating marine services and facilities. As such MPA acts as the key driving force behind Singapore’s port and maritime development. An important part of this role is to act in partnership with industry to ensure the port and maritime activities operate safely and effectively, to expand the cluster of maritime services, and to promote maritime research and development to be at the forefront of innovation.

In January Singapore’s minister for transport Lui Tuck Yew outlined these strengths as he reviewed developments in 2014. He said: “As one of the world’s leading international maritime centres (IMCs) Singapore continues to attract a broad range of maritime enterprises. Last year, we welcomed new shipping companies and maritime service providers to Singapore, including shipowner operator Bumi Armada and International Group Protection & Indemnity (P&I) Club, Gard. With Gard’s new branch office, we now have a total of seven P&I clubs operating in Singapore. At the same time, a number of maritime enterprises have expanded their operations here. These include ship operators Berge Bulk and Milestone Chemical Tankers, and Italian shipbroking company Bancosta (Oriente).

“Looking ahead, there is room for cautious optimism in 2015. Lower oil prices will provide some cost relief to shipowners and operators. Economic growth is expected to pick up, and Asia and Australasia will remain the world’s fastest growing region.”

The transport minister said that the Government remains committed to growing a vibrant maritime Singapore as a key driver of Singapore’s economy. “To sustain our position as a global hub port and a leading IMC, we have to stay ahead of competitors. This is why we invest significantly in port infrastructure so that we can consistently provide good connectivity and service levels. MPA will continue to work with stakeholders to test-bed new technologies for our state-of-the-art hub port terminal.”
“As Singapore celebrates its 50th birthday this year, we can take pride in the progress we have made since our beginnings as an entrepôt. The success of maritime Singapore would not have been possible without this close partnership between the Government, industry and the unions. We must build on this partnership to enable maritime Singapore to scale greater heights,” Mr Lui concluded.

An annual business survey in Singapore voted MPA the most business-friendly government agency in 2014. This was the third consecutive year that MPA has won this accolade. The survey was conducted by the Singapore Pro-Enterprise Panel and asked business customers of government agencies how well the agencies have performed in delivering their regulatory functions. Over 4,000 responses assessed customer responsiveness, transparency, reviews of rules, pro-enterprise orientation and the cost of compliance.

One of the key roles of MPA is regulating the sprawling bunkering sector by implementing standards for traders and physical suppliers.

Late last year MPA introduced new incentives to ease the transition to a mass flow metering (MFM) system and encourage the uptake of LNG fuel. The MFM system will be made mandatory for bunkering of marine fuel from 1 January 2017 as MPA moves to raise the transparency and efficiency of bunkering operations at the Singapore port. To establish safety and operation protocols for LNG bunkering, MPA is enrolling industry support for a pilot programme to start by early 2017 (see the full article here).

A test for MPA came with the bankruptcy in November 2014 of OW Bunker. MPA acted in concert with the Singapore Shipping Association to ensure that there was no disruption to bunker supplies in the port following the forced cessation of the operations of a leading bunker supplier and the arrest of several vessels. Industry dialogue was quickly established with about 50 companies involved in bunkering to minimise any impact. They were urged to carefully inspect their contractual obligations, and to work closely with their stakeholders to avoid or minimise disruption in their operations.

“This has been a useful session for the shipping and bunkering community to come together to understand the current situation and to discuss practical steps forward. MPA will continue to work closely with SSA to manage the situation. We will also work with our licensed bunker suppliers to minimise any disruption to bunkering operations in Singapore,” said Andrew Tan, chief executive of MPA.

Another vital role of MPA is to ensure the safety of navigation in Singapore waters. This is no easy task given the volume and intensity of shipping that calls into Singapore’s many terminals and anchorages and transits the Singapore Strait.

Part of this role involves maintaining the most up-to-date navigation and information services for vessels. Last year MPA awarded a contract to develop and implement an integrated hydrographic management system (IHMS) to US-based company Jeppesen. The contract is for two years, with an optional three-year extension.

The IHMS will incorporate bathymetric data handling, management and storage, and integration with Jeppesen’s dKart source management system and dKart Office tools for electronic navigation chart (ENC) and paper chart production and maintenance.
The system will provide MPA with a range of functionalities which include covering the production cycle of both ENCs and paper charts, involving the compilation, quality control and validation of ENCs. MPA can use the system for the handling, management and storage of existing and new bathymetric data.

In November 2014 MPA launched the Maritime Safety Forum as part of the inaugural Safety@Sea Week to share and promote safety practices for the maritime community based in Singapore.

The main topics discussed included navigation and shipboard safety, passenger ferry and cruise safety, and accidents and follow-up actions that will address priority concerns for different types of vessels.

As part of its drive to create a sustainable maritime industry in Singapore MPA signed a memorandum of understanding (MoU) with the Singapore Management University (SMU) to promote research and innovation for a clean and green next generation port. The MoU outlines areas for collaboration on research and development between MPA and SMU. Topics include clean energy and a clean environment, energy management, simulation and data analytics for maritime applications.

Mr Tan said: “Singapore is committed to promoting a maritime industry that is not only competitive but also efficient, responsible and sustainable.” He said that by the end of October 2014, 90 companies had signed the Maritime Singapore Green Pledge, and close to 200 Singapore-flagged ships were recognised as green ships under the Green Ship Programme to encourage maritime companies to develop and adopt green technologies.

Companies signing the Green Pledge employ an array of solutions, ranging from environmental management technology to green design initiatives for vessels and infrastructure. About 3,000 vessel calls have enjoyed port dues concessions under the Green Port Programme and S$17 million of co-funding has been approved under the Green Technology Programme.

Mr Tan said: “MPA recognises that some maritime companies are ready to go beyond the minimum mandated requirements of IMO. The Maritime Singapore Green Initiative was conceptualised in 2011 to encourage first movers to adopt higher standards of environmental sustainability.

“MPA believes in providing the right conditions for maritime businesses in Singapore to thrive. The MPA Sustainability Office was established in April 2014 to promote a culture of good practices in governance, resource management and environment sustainability within MPA as well as the wider maritime industry in Singapore. This new office seeks to better co-ordinate and drive MPA’s overall sustainability efforts with the industry.”

Another key role of MPA is to promote the Singapore Registry of Ships. Singapore’s registry ranks as the fifth largest in the world. “As we grow the tonnage of the Singapore flag, MPA is also actively engaging the industry to bring about greater awareness of sustainability trends and best practices,” Mr Tan said (see page 26).

“In our drive to promote environmental sustainability, we were the first ship registry to provide incentives under the Maritime Singapore Green Initiative to encourage the industry to adopt clean and green technologies and practices. Some examples of green technologies for ships include hybrid diesel-electric engines, new scrubber systems, emulsified fuel systems and drag reduction solutions. For port operators, these include electric rubber-tyred gantry cranes and variable speed drive.
“We are developing our maritime cluster by attracting maritime companies to Singapore. Compared to about 30 groups 10 years ago, we now have over 130 international shipping groups covering the container, tanker, bulk shipping and offshore energy sectors. Today, there are also over 30 law firms with maritime practices, 20 Lloyd’s insurance syndicates, more than 25 banks with shipping portfolios and over 30 key shipbroking companies in Singapore.

“Singapore’s maritime industry is rich in heritage and is a dynamic industry that offers good career prospects. For all of us to stay relevant in this changing world, we must all adapt as the world changes. That’s basically how Singapore has survived since independence.” SS