

**OPENING ADDRESS BY MR PETER ONG
CHAIRMAN, MARITIME & PORT AUTHORITY OF SINGAPORE
AT THE SECOND INTERNATIONAL CONFERENCE ON
PORT AND MARITIME R&D AND TECHNOLOGY
10 SEPTEMBER 2003, 9.00 AM
PAN PACIFIC HOTEL, SINGAPORE**

Your Excellencies

Distinguished guests

Ladies and gentlemen

It is my pleasure to be here at this second International Conference on Port and Maritime R&D and Technology. I would like to extend a very warm welcome to all the speakers and participants, especially our foreign guests. I hope that you will have an enjoyable stay in Singapore.

Background

2 This Conference builds upon the success of the inaugural Conference held two years ago. At the inaugural Conference, it was acknowledged that information technology (IT) has transformed the shipping industry in many ways, and enabled many functions not previously thought possible. Shippers can have real-time tracking of their containers and goods enroute to the final destination. The integration of IT with advanced engineering technology allows us to make today's ships bigger, faster and safer. The increasing use of computers and automation facilitates the loading and unloading of cargo in the shortest possible time. Indeed, all these innovations and improvements are the result of the port and maritime industry's commitment to R & D.

Future Potential for R & D

3 These advances in the shipping industry today came about because the R & D efforts have been translated into commercially viable projects. Today, the commercial potential for the maritime R & D and technology sector continues to be very promising. The rising demand for greater process efficiencies, advanced maritime security and safety features, effective environmental protection measures, and innovative manpower and training methods, ensure that R&D and technology will play an increasingly important role in the maritime industry. For example, it is estimated that the global market for maritime equipment is about S\$30 billion annually. And in the marine sector alone, the global market for related equipment and systems is estimated to be worth about S\$18 billion over the next 10 years. These numbers are significant. We must therefore position ourselves to capitalise on this window of opportunity by investing in and building our R & D and technological capabilities.

4 To tap this potential, the Maritime and Port Authority of Singapore adopts a multi-pronged approach by working with both industry and academia to push development in these fields. To accelerate its efforts, MPA set up a Maritime R&D Advisory Panel last year to provide guidance and expertise in the formulation of a maritime R & D programme for Singapore. The Panel comprises representatives from the tertiary and research institutions (TRI), government agencies and the maritime industry. In the past year, it has worked in overdrive to formulate a bold Maritime Technology Cluster Roadmap to help build up Singapore's maritime R&D capabilities.

Maritime Technology Cluster Roadmap

5 The Roadmap shapes and focuses Singapore's efforts in maritime R&D and technology in 5 broad areas:

- a) Transport and Logistics;
- b) Environment and Resources;
- c) Offshore and Marine Engineering;
- d) Security; and
- e) IT and Communications.

Enhancing Maritime R&D Capability

6 To spur the development of maritime R & D and technology in these five areas, the Roadmap spells out two key thrusts. First, by enhancing the maritime R & D capability in our tertiary and research institutes to ensure that they are industry oriented; and by augmenting this collaboration through tie-ups with established overseas institutions.

7 To date, some of these collaborations have already yielded positive results. For example, an MOU between the Institute of Environmental Science and Engineering of the Nanyang Technological University (NTU) and the United States' Coast Guard Research Centre has enabled us to collaborate on the joint development of ballast water treatment technology verification and monitoring protocols. Another project arising from MPA's MOU with the Dutch Directorate General for Freight Transport is the development of an XML message standard for dangerous goods declaration. This standard will help to facilitate

information transfer between the Port of Singapore and the Port of Rotterdam and other parties.

8 However, we recognise that the regulator and academia cannot work without the industry's support and inputs. To ensure that R & D projects remain relevant to industry, MPA intends to involve industry partners in its collaborative R & D programmes with local tertiary institutes. The participation of industry will encourage greater R & D investments by maritime companies, as well as reduce the lead-time needed to commercialise and market successful projects.

Strengthening the Technology Cluster

9 The second thrust of the Roadmap is to develop a strong technology cluster in the port and maritime industry. We need to provide a supportive environment for researchers and start-ups to transform their ideas and R & D efforts into commercially viable products and services.

10 In this regard, MPA and the Economic Development Board (EDB) have jointly developed a test-bedding programme for innovations in maritime R & D. This programme for **T**est-bedding, **R**esearch and **D**evelopment for **N**ew-maritime **T**echnologies, or TRIDENT for short, will encourage both local and foreign maritime companies to undertake R & D, develop new ideas and use Singapore's port and maritime facilities as test-beds for their innovations. MPA will facilitate the process by linking up the technology companies with shipping lines and terminal operators. In addition, MPA will participate as an R & D partner by providing dollar-for-dollar co-funding of up to S\$300,000 for certain projects. Some potential TRIDENT projects being explored with the

industry include a Vessel Tracking Service, an Anti-Piracy Vessel Alarm System, and an upgrade to the current Ballast Water Treatment System.

Establishment of the Maritime Innovation and Technology (MINT) Fund

11 To finance the implementation of the Maritime Technology Cluster Development Roadmap, I am happy to announce that MPA will set up a S\$100 million Maritime Innovation and Technology Fund, or MINT Fund, to support the various programmes under the two key thrusts under the Roadmap over the next 10 years. Of the S\$100 million, S\$50 million will be used to enhance maritime R & D capabilities and the other S\$50 million will be used to strengthen the technology cluster in the industry. The MINT Fund underscores our commitment to the development of maritime R&D in Singapore. It will help to bring to fruition our vision to develop a technology cluster that ultimately, can be benchmarked against that of major maritime nations such as Norway and the Netherlands.

Conclusion

12 Let me conclude by saying that R & D and innovation are essential pillars for the port and maritime industry to develop new skills, capabilities and equipment to move up the value chain. This Conference is one such forum to exchange views and share experiences. I am confident that all of us will benefit from the papers and presentations that will be delivered at the Conference. It is now my pleasure to declare the Second International Conference on Port and Maritime R & D and Technology open.