KEYNOTE ADDRESS BY BG (NS) TAY LIM HENG, CHIEF EXECUTIVE, MARITIME AND PORT AUTHORITY OF SINGAPORE, AT THE OPENING OF THE 2nd INTERNATIONAL MARITIME-PORT TECHNOLOGY AND DEVELOPMENT CONFERENCE (MTEC 2007), 26 SEPTEMBER 2007, 9.15 AM, SUNTEC CITY CONVENTION CENTRE, SINGAPORE

R&D – ONE OF THE KEY PILLARS IN BUILDING SINGAPORE AS AN INTERNATIONAL MARITIME CENTRE

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

Your Excellency, Ms Janne Julsrud

Distinguished guests,

Ladies and gentlemen,

Good morning. On behalf of the Maritime and Port Authority of Singapore, I would like to welcome all of you to the 2nd International Maritime and Port Technology and Development Conference, as well as to Singapore's 2nd Maritime Week.

2 I would also like to take this opportunity to thank our MTEC 2007 organising partners, namely the Port of Rotterdam, the National University of Singapore, the Nanyang Technological University and Delft University of Technology for their help in putting together this conference. MTEC 2007 offers a unique platform for the global maritime industry and research community to exchange ideas, share R&D results, network and form collaborations to further R&D in maritime technologies.

I am happy to note that MTEC 2007 has attracted more than 250 speakers and participants from some 20 countries around the world.

3 R&D is an important area of focus in MPA's efforts to develop Singapore as an international maritime centre or IMC. It is a worthwhile investment in the future of the maritime industry, from which we can reap many benefits. For example, through the development and application of new technologies, we can advance the efficiency of our port operations, enhance navigational safety and ship security, reduce emissions and wastes to safeguard the environment, and create new business opportunities that will in turn sustain further R&D. All these will contribute to the competitiveness of our maritime industry and help stimulate the growth of a dynamic maritime cluster in Singapore.

MARITIME INNOVATION AND TECHNOLOGY FUND

4 The MPA embarked on its journey towards establishing a maritime R&D cluster in Singapore early in 2002, when we formed the first Maritime R&D Advisory Panel, which made up of industry experts and leaders in R&D from different fields. The first Panel backed the MPA's plan to set up the S$100 million Maritime Innovation and Technology or MINT Fund to support maritime R&D in Singapore and strengthen our maritime technology cluster. The Fund comprises several programmes that cover the entire R&D value chain, which includes supporting R&D-related education and training, test-bedding by the tertiary and research institutes and industry, and seed funding start-ups to commercialise R&D results.

5 To date, the MINT Fund has supported more than 90 R&D projects. Eight maritime technology companies have also made use of the Fund to spin off commercial products and services, ranging from satellite communications systems to environmentally-friendly technology that treats multiple waste streams and recycles them into value-add products.

CLUSTER APPROACH TO R&D

6 The second Maritime R&D Advisory Panel, set up in 2004, helped to map out Singapore's maritime cluster into sub-clusters covering Shipping, Port, and the Offshore and Marine Engineering or OME. As highlighted by the Minister earlier, this cluster approach has enabled the MPA to better focus its energies on R&D areas where we can further build upon existing strengths, and have a more efficient allocation of funding to achieve better results. Thus, we are currently putting our efforts into promoting R&D in OME, Shipping and Port technology areas, and have identified research centres to drive the R&D in each of these areas.

OME Technology

7 Leading the drive in OME R&D is the Centre for Offshore Research and Engineering of the National University of Singapore, also known as CORE. To help CORE better engage the industry to take on R&D projects, the MPA, together with the Agency for Science, Technology & Research (A*STAR) and the Economic Development Board (EDB) jointly

funded the Offshore Technology Research Programme in March this year. The programme has helped CORE to bring onboard a number of key industry partners to embark on various research projects for the OME sector.

Shipping and Port Technology

8 Compared to the OME sector, the Shipping and Port sectors are more diverse, and would need the support of several research institutes and agencies in promoting R&D for these two sectors. Currently, the MPA is working with the NTU's research centres, such as the Maritime Research Centre, to explore R&D in several Shipping and Port Technology areas, such as clean bunker fuel research, port automation and container terminal space research.

9 Beyond the universities, we are drawing on the expertise and capabilities of A*STAR's research institutes, and tapping into their expertise in computational science and engineering (CSE), and Info-communications Technology (ICT) to develop applications for the Shipping and Port sub-clusters. The MPA has firmed up collaborative plans with A*STAR's Institute of High Performance Computing to develop CSE-based research projects with the maritime industry. We are also exploring with A*STAR's Institute for Info-comms Research to develop ICT-based research projects for the Shipping and Port sectors.

10 The MPA has also engaged the industry in developing ICT systems for the Shipping and Port sectors. One example is the Intelligent Bunker Management System, which helps bunkering companies manage their

operations. Another example is the Marine e-Business Operation Services system, which computerises the ship chandling and supply processes. Other ICT systems targeting other maritime services, such as ship agency and ship management, are being developed.

11 Indeed, the maritime industry in Singapore plays a pivotal role in our maritime R&D push. Their active support and participation has helped to stimulate more R&D activities, and provide greater boost to our efforts. There are a number of maritime companies in Singapore that have leveraged on R&D in advancing their business. One of such maritime companies is Prosafe Production Pte Ltd, which won the Outstanding Maritime R&D and Technology Award for its innovative bearing system in the mooring turret for Floating Production, Storage and Offloading vessels at the Singapore International Maritime Awards last night. I would urge more maritime companies in Singapore to submit their R&D and technology projects for the Singapore International Maritime Awards next year.

MOU BETWEEN SHANGHAI MARITIME UNIVERSITY AND NANYANG TECHNOLOGICAL UNIVERSITY

12 To further strengthen our R&D capabilities and expertise, the MPA works with the research institutions in Singapore to seek partnerships with established overseas counterparts. We have signed an MOU with the Dutch Directorate-General of Civil Aviation and Freight Transport in July 2002, which led to the joint organization of the MTEC series of R&D conference with the Port of Rotterdam. In 2000, we signed an MOU with

the Research Council of Norway. This MOU, which was renewed in 2006, has led to a number of successful maritime R&D projects. Taking this partnership a step further, a MOU between China, Norway and Singapore on maritime R&D, education and training was concluded last August.

13 I am happy to note that another new maritime R&D collaboration will be established during Maritime Week. The Shanghai Maritime University and Singapore's Nanyang Technological University will be concluding a MOU on collaboration in port and ship technology related projects later this morning. I would like to extend my congratulations to Shanghai Maritime University and NTU.

CONCLUSION

14 Ladies and gentlemen, with its thriving port, good R&D infrastructure, resident expertise and strong government support, Singapore has the right factors in place for maritime R&D to grow and flourish. We welcome companies and research institutions with an interest in maritime R&D to explore such partnerships in Singapore.

15 With this, I wish you all a very fruitful conference and a pleasant day ahead.

Thank you.