

SMI SEMINAR ON AUTOMATION & AUTONOMY WITH THE MOU SIGNING CEREMONY BETWEEN MPA AND PSA



The continued growth and competitiveness of Singapore's diverse maritime cluster is underpinned by maritime research and development (R&D) capability to discover and create new scientific knowledge and enabling technologies.

Government agencies, industry players, tertiary and research institutions have jointly worked together and developed maritime R&D to secure the future by ensuring that Singapore stays on top of technological advances in the maritime sector.

One good example was the creation of the Singapore Maritime Institute (SMI) in 2011 through the Whole-of-Government effort by the Maritime and Port Authority of Singapore (MPA), the Agency for Science, Technology and Research (A*STAR) and the Economic Development Board (EDB) in close partnership with local institutes of higher learning (IHLs). SMI is a national institution that aims to drive and coordinate research activities residing within the local IHLs and research institutions in all maritime areas including shipping, port operations and marine and offshore. The setup of an institute uniquely dedicated to maritime R&D demonstrates Singapore's commitment to drive knowledge and innovation in the sector, in supporting our vision to be a centre of excellence for

maritime R&D. This bolsters the competitive edge of Singapore's maritime cluster and strengthens our position as a leading international maritime centre.

As part of its R&D focus for breakthrough applications, SMI works closely with government agencies, industry players, IHLs and other relevant stakeholders. The objective is to ensure that SMI's work and projects meet the needs of the industry. In this regard, SMI sees the importance and need for the continued exchange of information and close collaboration between the IHLs and the industry through various different established engagement platforms.

One platform through which SMI is able to engage relevant stakeholders in the maritime community is the annual Singapore Maritime Week (SMW). During the 9th run of SMW in 2014, one of the 29 events featured was the SMI Seminar entitled "Automation and Autonomy", held on 11 April 2014. Jointly organised by SMI and Ngee Ann Polytechnic, and supported by MPA and PSA Corporation Limited (PSA), the seminar focused on technologies relating to automation and autonomy, and also featured industry leaders sharing their thoughts on how these technologies can be applied to the maritime industry.

"Automation and Autonomy is one of the key focus areas in the SMI R&D Roadmap. The biggest motivation for the industry behind automation and autonomy is labour productivity, elimination of human errors and the pursuit of new frontiers," said Mr Heng Chiang Gnee, Executive Director of SMI.



The seminar also saw a Memorandum of Understanding (MOU) Signing Ceremony between MPA and PSA. Being one of the major epicenters around the entire maritime leadership, PSA continues collaborating with MPA to conduct research and test new technologies for future container terminals. MPA and PSA signed the MOU in a commitment to extend their collaboration under the Port Technology Research and Development Programme (PTRDP). The extension of the Programme will allow MPA and PSA to continue with R&D initiatives to develop next-generation technologies for Singapore's future container terminal operations. The MOU was signed by Mr Andrew Tan, Chief Executive, MPA and Mr Tan Puay Hin, Regional CEO Southeast Asia, PSA International. Witnessing the signing was Mr Lucien Wong, Chairman, MPA and Mr Fock Siew Wah, Group Chairman, PSA International.

Under the MOU, MPA will fund the Programme with an additional S\$15 million over five years from the Maritime Innovation and Technology (MINT) Fund. PSA will provide additional co-funding of up to S\$15 million over the same period. This will bring the total amount committed towards the Programme to S\$50 million, up from the initial S\$20 million. The Programme will continue its focus on the key areas of port systems automation, intelligent and advanced planning and

optimization techniques and technologies, and green port solutions. Relevant concepts inspired from the Next Generation Container Port Challenge in 2012 will also be explored.

Mr Andrew Tan said, "With growing demands on ports to accommodate ever larger ships and growing amounts of cargo, it is imperative that we leverage on new technologies to increase our port efficiency and productivity. Through co-funding of such R&D efforts, we hope to see the adoption of new systems and technologies that will significantly enhance the competitiveness of Singapore as a global transshipment hub and bring benefits to the rest of the industry."

"PSA is pleased to continue this partnership with MPA, as we gear up for the development of the future terminals at Pasir Panjang Phases 3 and 4 as well as Tuas. The innovative technologies developed under the Programme will transform our terminal operations, and take our productivity and process efficiency to new heights. We will be better prepared to manage greater business complexities, as our customers' requirements evolve. This will also enhance the value proposition of Singapore as a global transshipment hub." said Mr Tan Puay Hin.

Speakers from Innovation Norway/Royal Norwegian Embassy Singapore, PSA, Cargotec and IHLs also shared their experiences, perspectives and work done on Automation and Autonomy with 100 representatives from the maritime industry, government agencies, IHLs and research institutes in participation.

The SMI Seminar has provided a platform for the industry and academia to get together for a meaningful exchange of ideas, knowledge and expertise. Through seminars and workshops, SMI hopes to continue promoting the exchange of ideas and views, and encourage more industry-relevant technology R&D collaborations to be undertaken in Singapore. ■