JOINT NEWS RELEASE

INTELLITUG PROJECT - AUTONOMOUS HARBOUR TUG TAKES A BIG STEP TOWARDS REALITY

Singapore, 7 November 2019 – The technology group Wärtsilä, in collaboration with PSA Marine, has achieved a breakthrough in its IntelliTug project. Following the successful installation of a first-of-its-kind Dynamic Positioning (DP) system onboard the harbour tug 'PSA Polaris', trials are now being carried out in the Port of Singapore under real-world conditions. This phase of the project implementation, which has been approved by Lloyd's Register, moves the bar higher on safety standards for vessel automation and autonomy. The Wärtsilä and PSA Marine IntelliTug project is also supported by the Maritime and Port Authority of Singapore.

The new DP system, also known as the Joystick Maneuvering System (JMS), enables easier and more intuitive control of the tug's movement. With the push of a button, the tug master can achieve 'virtual anchoring' to hold position and/or maintain the tug's heading. The DP system also forms the foundational technology layer for the IntelliTug project, enabling digital navigation instructions to be passed to the vessel's propulsion systems. The system has received a Statement of Compliance from Lloyd's Register for the DP notation, thereby endorsing its safety, reliability and performance.

PSA Marine is a leading harbour and terminal towage operator in Singapore, the world's busiest transhipment hub. To meet the challenges of the evolving port, which is expected to double its capacity by 2040, Wärtsilä and PSA Marine are developing and field-testing intelligent vessel capabilities and viable pathways to achieve safe and sustainable autonomous operations. The IntelliTug project is bringing to life a smart tug that can enhance the capabilities of the tug master by autonomously performing a range of routine missions. This will ease the task of addressing the complex demands faced by tug masters on a daily basis.

"The IntelliTug project is about discovering smarter, safer, and more efficient ways of operating a harbour tug. It incorporates human-centric technology, design thinking, and man–machine collaboration. We are on a journey of turning today's ideas into tomorrow's reality," said Bernard Wong, PSA Marine's Head of Fleet Management.

"Safety and productivity are key areas being improved with our autonomous vessel technology. As we develop and learn from these technologies, the values we are able to provide to our customers will grow exponentially, providing a very clear path for businesses needing to compete in the new intelligent maritime industry," said Paul Kendall, Wärtsilä's Director of Sales, Dynamic Positioning.

"With the growing interest in repurposing existing vessel systems for autonomous navigation, Lloyd's Register is taking the lead in making sure that control systems are safe and compliant as both a human-machine interface for vessel control, as well as the foundational layer for digital navigation instructions. We are delighted to advise that Wärtsilä's DP system has met the requirements of our DP notation," said Andrew Watt Lloyd's Register's Centre of Excellence Manager for South Asia, the Middle East & Africa.

The PSA Marine tug masters involved in the IntelliTug project underwent simulation and onboard training before commencing actual operating trials onboard 'PSA Polaris'. Wärtsilä and PSA Marine will continue development of the IntelliTug project throughout the coming months, including physical test-bedding and trials in Singapore port waters.

Links to information related to the IntelliTug project can be found at:
IntelliTug on wartsila.com
Twentyfour7 article: IntelliTug: Assisting Singapore's Tug Masters with smart technology
Twentyfour7 article: Singapore Acceleration Centre: The birthplace of innovation

Background

About PSA Marine

PSA Marine, a wholly-owned subsidiary of PSA International Pte Ltd, is a leading harbour and terminal towage operator, and pilotage services provider. PSA Marine owns and operates more than 60 tugs in Bangladesh, China, Hong Kong, India, Oman and Southeast Asia with flagship operations in Singapore.

www.psamarine.com

About Wärtsilä Corporation

Wärtsilä is a global leader in smart technologies and complete lifecycle solutions for the marine and energy markets. By emphasising sustainable innovation, total efficiency and data analytics, Wärtsilä maximises the environmental and economic performance of the vessels and power plants of its customers. In 2018, Wärtsilä's net sales totalled EUR 5.2 billion with approximately 19,000 employees. The company has operations in over 200 locations in more than 80 countries around the world. Wärtsilä is listed on Nasdaq Helsinki.

www.wartsila.com

ENDS

JOINTLY ISSUED BY:
PSA MARINE (PTE) LTD AND WÄRTSILÄ CORPORATION

For more information, please contact:

PSA Marine
Ms Anna Fong
Senior Manager (Human Resource & Corporate Communications)
Direct : +65 6379 9883
Mobile : +65 9171 1219
E-mail : annafong@globalpsa.com

Wärtsilä Corporation
Ms Marit Holmlund-Sund
General Manager, Positioning, Marine Business Marketing
Direct : +358 10 709 1439
E-mail : marit.holmlund-sund@wartsila.com