

Svitzer, Kongsberg Maritime And Abs Join Forces To Develop The World's First Commercial Tug To Be Fully Remotely Controlled

February 22, 2021

Svitzer A/S, Kongsberg Maritime and ABS (American Bureau of Shipping) have signed a deal to jointly develop the RECOTUG™ – the world's first commercial tug to be fully operated from a remote operations centre on shore.

COPENHAGEN, 23 FEBRUARY 2021 – Today, global towage operator Svitzer A/S, Kongsberg Maritime and ABS announced that they have signed an agreement to jointly develop RECOTUG™, the world's first fully operational, and fully remotely controlled tugboat. While Svitzer is bringing the needed operational experience, a newly built tug with crew as well as tug-specific technical solutions, Kongsberg Maritime will provide the remote control systems and the autonomous technology and lead the integration of systems and technology. ABS will bring the guidance and expertise necessary to obtain regulatory approval.

The aim of the RECOTUG™ project is to develop a remotely controlled tug that will be able to perform a full towage operation with all operations controlled from a remote operations centre. The solution and the achieved safety level shall lead to maritime authorities (class and flag) approving the technology, ultimately permitting Svitzer to conduct commercial remote tug operations in the port of Copenhagen. The project is expected to run for the years to come.

Egil Haugsdal, President, Kongsberg Maritime, commented:

"We are delighted to work with Svitzer and ABS on this important collaboration. Kongsberg Maritime is leading the market in maritime autonomy and are involved in several projects that define the remote and autonomous vessel control systems for tomorrow; this venture takes that ground-breaking work a step further by integrating these key technologies into a new context of operation. At Kongsberg, we believe that digitalisation and enhanced automation are vital to ensuring a safe, sustainable and profitable future for the maritime industry, and the step forward represented by this project is of great importance in demonstrating the application."

The project is a natural continuation of the first Svitzer/Kongsberg Maritime (formerly Rolls-Royce Marine) project announced in 2017 centred around remotely operated navigation of the Svitzer Hermod tug in the Port of Copenhagen. As a result of the project, the partners safely conducted a number of remotely controlled, non-towage specific manoeuvres on water. From the quay side in Copenhagen harbour the vessel master, stationed at a remote operating centre, berthed the vessel alongside the quay, undocked, turned 360°, went for a sail and safely docked again.

The near-shore environment of harbour towage, where Svitzer operates, is well-suited for remote controlling which requires full connectivity and Svitzer is excited to be partnering up with Kongsberg Maritime and ABS.

Ingrid Uppelschoten Snelderwaard, Svitzer's global COO, commented:

"While we are still several years away from seeing remotely operated tugs with no crew on board in commercial operation, there is no doubt that advanced autonomy is progressing fast across the maritime industry. At Svitzer, we are determined to be at the forefront of the innovation in this space to ensure we are well positioned to meet changing demands. We start with one tug and explore from there how to best leverage technology, improve safety and efficiency and meet our customer's demand for reliable & cost-efficient services, also in the future. Technology is changing our lives across the board and at Svitzer we want to influence and drive how technology will transform towage over time. Safety comes first, and this entire project is first and foremost relying on the implied safety case."

Christopher Wiernicki, ABS Chairman, President and CEO, said:

"As a data-centric organization, ABS is a leader in the maritime application of digital technologies. As safety moves away from the things you can see and touch, to things you cannot see such as software and data, ABS has been spearheading development of next generation safety approaches that draw on our expertise as a technical integrator. As a result of this tradition of constant innovation, we are uniquely well placed to support this project, which is genuinely breaking new ground for the entire industry. Greater industry collaboration is going to be key to meeting the challenges of digitalization and maritime sustainability, so ABS is proud to be part of a team that has such a significant role to play in shaping the direction of both."

END

Gunvor Hatling Midtbø VP Communication, Kongsberg Maritime T: +47 9921 4209

E: gunvor.hatling.midtbo@km.kongsberg.com

Gareth Lewis ABS, Global Media Relations T: +44 (0)7824 374395 E: glewis@eagle.org

About Kongsberg Maritime

Headquartered in Kongsberg, Norway, Kongsberg Maritime is a global marine technology company providing innovative and reliable 'Full Picture' technology solutions for all marine industry sectors including merchant, offshore, cruise, subsea and naval. These solutions cover all aspects of marine automation, safety, manoeuvring, navigation and dynamic positioning, as well as ship design, energy management, deck handling and propulsion systems. Subsea solutions include single and multibeam echo sounders, sonars, AUV and USV, underwater navigation and communication

systems. Kongsberg Maritime is part of Kongsberg Gruppen (KONGSBERG), which supplies high-technology systems and solutions to customers in the oil and gas industry, the merchant marine, and the defence and aerospace industries.

Web: Kongsberg Gruppen | Kongsberg Maritime

Social media: LinkedIn | Twitter | Facebook

About Svitzer - Making global port operations safer and more efficient, every time, everywhere

Since 1833, Svitzer has provided safety and support at sea as a standalone towage operator and as part of A.P. Moller – Maersk. With 4,000 employees, a fleet of 440 vessels and servicing customers in operations all over the world, we are a global market leader within towage and marine related services.

Web: Svitzer.com

Social Media: LinkedIn | Facebook | Instagram

About ABS

ABS, a leading global provider of classification and technical advisory services to the marine and offshore industries, is committed to setting standards for safety and excellence in design and construction. Focused on safe and practical application of advanced technologies and digital solutions, ABS works with industry and clients to develop accurate and cost-effective compliance, optimized performance and operational efficiency for marine and offshore assets.