



VARUNA MARINE SERVICES

NAVIGATING MARITIME CYBERSECURITY COMPLIANCE

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Varuna Marine Services BV proudly helps ship owners and technical managers understand the complexity of – and comply with – the ever-changing maritime regulatory framework. Founded by a career seafarer, the company has enjoyed sustained growth and strong customer retention. Company Founder and Managing Director Sanjeev Wewerinke-Singh spoke with Richard Hagan.

Varuna Marine Services BV was founded in 2017, by current Managing Director Sanjeev Wewerinke-Singh, a career seaman with vast experience both at sea and onshore. As the head of Varuna Marine Services BV, and along with his global team of skilled professionals, Mr Singh has successfully leveraged this collective expertise and experience to assist clients with expert advice.

“We convert the laws into practical actions to help companies comply with them,” said Mr Wewerinke-Singh. “We provide Class-approved services to vessel owners and operators, as well as flag states.”

Since its establishment, Varuna Marine Services BV has grown from strength to strength, with a corresponding gradual increase in both its physical footprint and its headcount, as well as the services it is able to offer the industry. Today, the company has headquarters in Amsterdam and four additional offices located in the

major international shipping hubs of Houston, Singapore, Malaysia and Australia. Approximately 150 staff members operate from across these offices.

Varied verticals

Varuna Marine Services BV is a maritime services company providing a wide range of traditional and cutting-edge solutions to the maritime industry. An extensive portfolio of services includes maritime security, helping to protect vessels and operations from cyber threats, along with testing services for ballast water treatment systems to ensure that they meet all applicable regulations.

Other services focus on hazardous materials, helping businesses comply with Inventory of Hazardous Materials (IHM) regulations through documentation, sampling and testing, and compliance verification. Indeed, Varuna Marine Services BV provides a comprehensive IHM management service that includes ▾



all aspects of IHM lifecycle management. The company can also help businesses manage asbestos on their vessels, featuring surveys and removal plans.

The company provides vessel inspection services around the world, assessing the condition of a vessel and verifying compliance with regulations. Varuna Marine Services BV offers Vessel General Permit compliance testing services for vessels operating in the United States. The Circularity ESG module offers an all-encompassing approach to sustainability reporting, providing detailed insights into various key performance areas.

More technological services involve Flexible Satellite communication (VSAT) services to the maritime industry, delivering

connectivity between businesses and their vessels and operations. Likewise, CyberSmart is an Artificial Intelligence (AI) engine: a multi-modular platform digitizing maritime operations.

Varuna Marine Services BV is an ISO 9001:2015 company, also certified by major classification societies and flag states. This ensures that services meet the highest industry standards.

The company's ability to integrate technology into its service provision is a particular highlight, according to Mr Wewerinke-Singh: "We heavily leverage technology for everything that we do, including the development of custom software for different processes. This is at the core of what we offer."



Mobile BWM

Varuna Marine Services BV's ballast water management (BWM) service is rapidly becoming one of its busiest. This is thanks in part to a ground-breaking new mobile testing laboratory that the company has deployed at all five of its offices.

"Our mobile BWM labs are approved by all of the major class societies for the service that they provide," Mr Wewerinke-Singh explained. "While traditional physical labs cannot move, our BWM labs are able to go to the ship wherever it is and carry out the testing wherever it stops."

Each mobile lab is operated by a fully-trained and qualified staff member. The

labs finally provide stakeholders with a means of enforcing new BWM laws and are very popular with the industry.

"The arrival of our mobile labs is significant in terms of our ability to meet the substantial demand for this service," he said. "It's clear that demand for ballast water management services is still climbing and may only peak in late 2024."

Mr Wewerinke-Singh noted the growing demand for these BWM labs: "We're also seeing a lot of interest from port authorities who currently have no way of knowing whether a ship's BWM system is compliant and are therefore unable to enforce the responsibility of vessels to comply." ▾



Cybercrime on the high seas

Cyber security is another very popular service provided by Varuna Marine Services BV, and the company's Security Operations Centre (SOC) in Amsterdam is the heart of its operation. There, the company's cyber security research and testing operations are headquartered, giving Varuna Marine Services BV a critical advantage in the ongoing fight against internet crime.

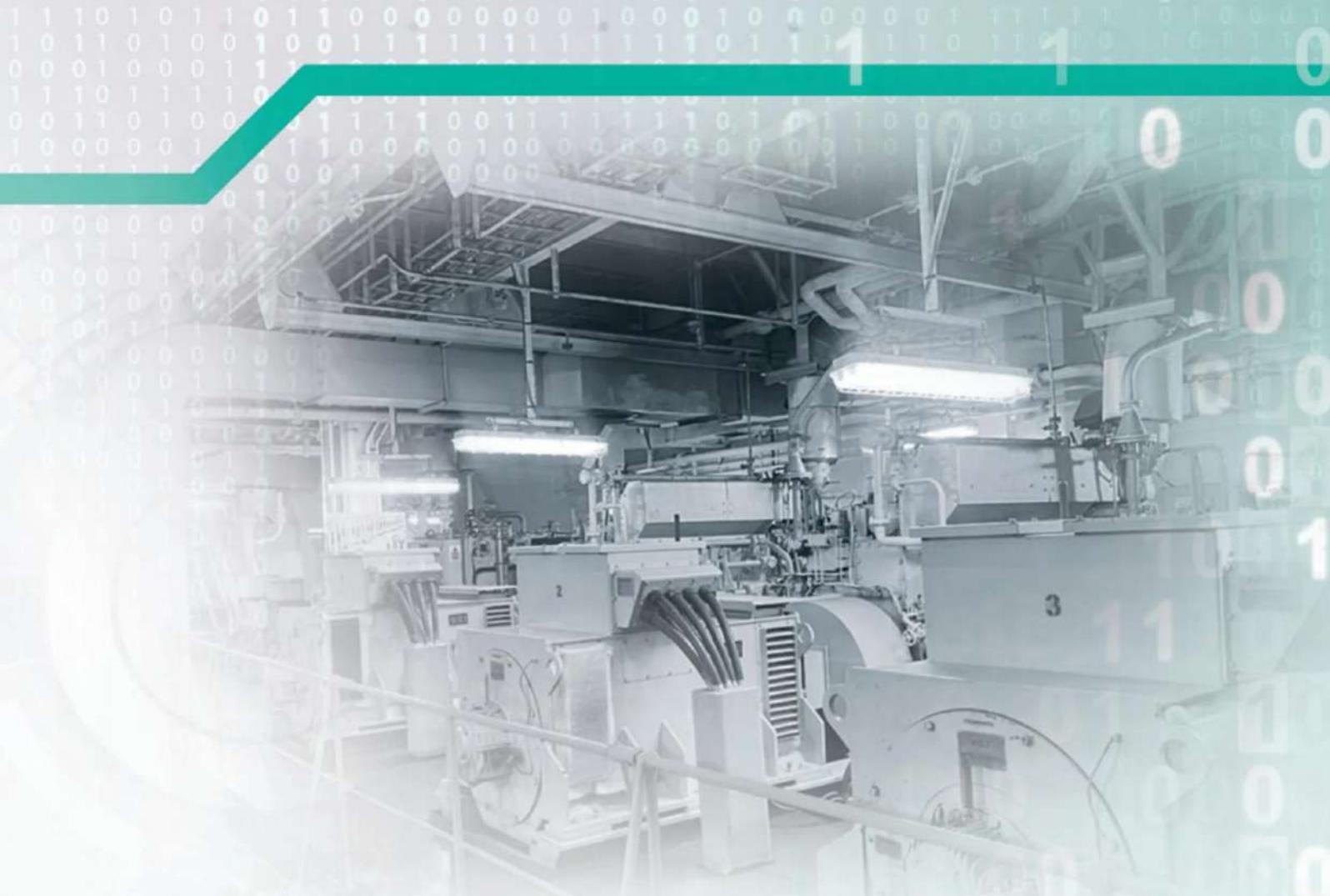
"We're up against very intelligent hackers and defending against them requires a proactive approach," Mr Wewerinke-Singh explained. "We have a network centre with an IT/OT lab where we do all kinds of vulnerability and penetration testing. We also have hardware that simulates various kinds of equipment on an ongoing basis, allowing us to build better defences."

AI has also already been incorporated into the company's arsenal of security tools. "Defending against automated threats

requires alerts and responses able to defend at machine speeds. It requires advanced algorithms," said Mr Wewerinke-Singh. "Therefore, we are now implementing advanced AI as part of our algorithm as well as working with leading industry peers to ensure that our services are in sync with emerging technologies."

Varuna Marine Services BV also offers a general maritime IT maintenance service – one that has grown rapidly, with approximately 1,000 vessels in the company's care.

The company is standing by to assist the industry through compliance with a major new incoming cyber security regulation for new build ships. All classed ships contracted for construction on or after 1st January 2024 will be required to comply with the International Association of Classification Societies' new Unified Requirements E26 and E27 for cyber security. The new rules require that onboard networks have a hardened digital footprint and be much more secure.



Redefining maritime SATCOM

Varuna Marine Services BV proudly offers satellite communications (satcom) products and service contracts from well-known providers including Intellian, BlueC Mobile and Starlink, as well as legacy VSAT services. While VSAT was traditionally the main source of at-sea communications for vessels, the industry has substantially embraced Starlink as a replacement, since it offers better coverage and much greater bandwidth.

"Starlink is becoming the primary solution that we're supplying to customers, and VSAT - which is expensive and relatively slow - has become a fallback," said Mr Wewerinke-Singh. "There's a corresponding shift in costs because Starlink is much more affordable, and so for all of those reasons,

many of our customers are interested in deploying Starlink to their vessels. It's a revolution in maritime connectivity; Starlink's speed will revolutionise the whole maritime ecosystem by opening up more datasets and more automation thanks to the improved bandwidth availability."

Varuna Marine Services BV provides flexible VSAT contracts to ship owners, keeping costs down while ensuring redundancy of connectivity should Starlink fail for any reason.

Concluding, Mr Wewerinke-Singh reflected on his love for the industry and the work he and his teams are doing: "I love solving challenges and resolving our customers' technical problems. The explosion of technology in the industry is very exciting and you have to constantly think ahead!" ■