

Greensea IQ Partners with Water Linked in Successful Testing of IQNS Navigation and Autonomy System on VideoRay Defender ROV

November 12, 2024

Corporate, Defense

Greensea IQ is pleased to announce the successful completion of field testing IQNS edge processing and navigation system on the VideoRay Defender ROV. Developed in collaboration with the Defense Innovation Unit, this significant navigation and stability upgrade provides expanded capabilities for subsea operations, offering improved control and efficiency for operators in demanding environments. For the demonstration, Greensea IQ worked closely with Water Linked AS, integrating the IQNS with the DVL A125 to create a stand-alone underwater navigation solution.

The IQNS, built on an NVIDIA platform with integrated navigation sensors and a fiber optic gyro (FOG), is designed for compact ocean robots, ideal for systems with stringent Size, Weight, Power, and Cost (SWaP-C) constraints. Paired with Greensea IQ's defense-focused EOD Edge software package, IQNS enhances vehicle autonomy, sensor processing, and onboard data analysis, making it a comprehensive solution for underwater tasks that demand precision and adaptability.

In recent trials, while under contract to the US Navy and Defense Innovation Unit, IQNS demonstrated marked improvements in navigation and stability for the VideoRay Defender ROV. Notable advancements in long-distance navigation, target search capabilities, and underwater mapping reflect IQNS's robust performance. New features, such as auto-calibration and gyro-only mode, further empower operators with effective and flexible tools for a range of underwater missions.

The IQNS and DVL integration has been highly successful, marking a promising step forward in the partnership between Greensea IQ and Water Linked.

Scott McLay, Chief Commercial Officer of Water Linked, commented, "The Water Linked DVL A50 has set a new standard for what smaller underwater vehicles can achieve, with Greensea incorporating this world's smallest DVL into several of their existing systems. This latest integrated solution from Greensea IQ, built upon IQNS technology and our extended-range DVL A125, delivers a high-performance Inertial Navigation System (INS) with a minimal footprint, enabling smaller vehicles to perform tasks that demand highly accurate positioning."

The testing process highlighted the system's ability to support Automatic Target Recognition (ATR) software, enabling operators to locate, classify, and engage underwater targets with increased accuracy. The combined improvements in navigation and autonomy allow operators to carry out their tasks with enhanced confidence and control.

Ben Kinnaman, Founder and CEO of Greensea IQ, commented, "I am very pleased with the performance of IQNS. This product offers operators a modular upgrade in capability—it integrates seamlessly above the DVL in the VideoRay Defender's foam pack and provides a significant set of new capabilities for the operator. Navigation is everything in these operations; accuracy and efficiency relies on navigation, as does the operator's confidence. With IQNS, we are seeing operators do their job more confidently and with better results."

IQNS ships with Greensea IQ's EOD Edge software platform, tailored specifically for defense applications, adding a powerful suite of ROV capabilities for the unique needs of underwater missions.

Both companies are excited to continue their collaboration and will be showcasing their innovative products at Underwater Intervention 2024 from November 12-14. You can find Greensea IQ at Stand UI-3901 and Water Linked at Stand UI-3930—stop by to see the latest advancements in underwater technology firsthand.

About Greensea IQ

Greensea IQ is a dual-use robotics company transitioning mature solutions developed for and by the defense industry to the commercial markets for high impact.

Greensea IQ is uniquely positioned to capitalize on the growing Blue Economy that is being driven by the demands for scalable and persistent ocean protection, net-zero emissions in shipping, alternative energy sources from the ocean, and understanding the impact to the seas as our climate changes.

As a world leader in autonomous underwater robot technologies, we deliver high impact solutions to meet the growing demand for efficiency, safety, and scalability across the entire Blue Economy.

To learn more about Greensea IQ, visit greenseaiq.com or call +1-802-434-6080.

About Water Linked

Water Linked, based in Trondheim, Norway, develops advanced sensor technology that empowers divers and underwater vehicles to explore and communicate with greater confidence. The company's innovative products push the boundaries of autonomy and spatial awareness in underwater environments, with a vision to make underwater exploration as intuitive as it is on land.

Rapidly emerging as a comprehensive provider in the subsea sensing and surveillance market, Water Linked continues to expand its product portfolio, introducing technologies that redefine underwater perception. Through sensor fusion, Water Linked offers tailored, integrated solutions that meet the unique demands of its clients, supporting new levels of insight and capability in subsea applications.

In 2023, Water Linked was selected as part of NATO's DIANA accelerator program and ranked #35 on Deloitte's Technology Fast 50 list of fastest-growing tech companies in Norway

To learn more about Water Linked, visit waterlinked.com or send an email to post@waterlinked.com