Spanish Navy strengthens capabilities by teaming up with Maritime Robotics and Kongsberg





The hydrographic institute of the Spanish Navy, Instituto Hidrográfico de la Marina (IHM), has received three unmanned autonomous vehicles (USVs) from Norwegian company Maritime Robotics. Equipped with advanced sensor technology, the USVs will allow IHM to perform hydrographic data acquisition and processing remotely without needing to mobilize hydrographers to the field.

"This is a significant technological leap for the Navy," said Commander Salvador Espinosa Gonzalez-Llanos on receiving the Norwegian USVs for maritime data acquisition.

The <u>Instituto Hidrográfico de la Marina</u> (IHM) is the hydrographic institute of the Spanish Navy, which works to guarantee safety in navigation and obtains and distributes nautical charts and publications on the coast profile, seabed, winds, tides and currents.

"IHM has opted for a significant change in operations by incorporating unmanned autonomous vehicles that allow us to mobilize a minimum team of hydrographers in record time," said Navy Commander and director of IHM, Salvador Espinosa Gonzalez-Llanos.

IHM has increased its capacity for multipurpose operations with three uncrewed surface vehicles (USVs) from the Norwegian company Maritime Robotics. Under the umbrella of the VERIL project (Vehículo Explorador Robotizado Integral Ligero), IHM selected Kongsberg Discovery to provide both small and compact and medium- to long-range USVs fitted with a comprehensive ecosystem of sensors and equipment for seamless, remote high-quality hydrographic data acquisition, processing and online visualization and control.

"This has been a huge leap in our capabilities and a significant technological leap for the Navy. We can remotely monitor and control these vehicles from the Institute's operating room, wherever they are located. In this way, we avoid mobilizing hydrographers in the field. We have acquired another larger vehicle that will allow us to operate remotely in the open sea and areas that are difficult to access or dangerous for navigators," Gonzalez-Llanos stated.

Uncompromisingly robust technology

IHM is well covered for a range of subsea data acquisition and multipurpose operations tasks with the <u>Maritime Robotics</u>' USVs *Otter* and *Mariner*. The USVs are equipped with the Kongsberg-developed multibeam echosounder system EM2040 series, Seapath 130, MBR and µPAP, ideal for seabed mapping, inspections, scouting fish and data acquisition in ultra-high resolution. The *Otter* is designed for repetitive tasks such as bathymetric mapping, while the *Mariner* can be deployed from an existing fleet of vessels to enhance capabilities with reduced personnel.

"This project was the perfect challenge for the *Mariner*. We tested the vessel in winter conditions in the Arctic and a contrasting climate in Spain, all within a tight timeline. We pushed the limits of the number of sensors we could fit in without disturbing the data quality. With adjustments and collaborations with the Kongsberg team, we got the setup we wanted," said Erik Moholt, product manager Mariner USV Line at Maritime Robotics.

Collaboration is key

The collaboration between Kongsberg and IHM goes back to 2000, when the multibeam technology was integrated into the Spanish Navy fleet as the first technological leap.

"Since then, Kongsberg's relationship with IHM has been close and based on the quality of the product and our after sales service.

Incorporating these unmanned vehicles has been the second major technological change I can remember. We hope to maintain the confidence of the Institute towards the team now composed of Kongsberg and Maritime Robotics," commented Miguel A. Lleches, area sales manager SUBSEA/Underwater Science at Kongsberg Maritime Spain.

From enhanced safety for personnel to a reduced carbon footprint, increased efficiency and improved capabilities, the benefits of embracing this technology are undeniable, all without compromising data quality.

"We take great pride in supporting IHM with advanced uncrewed maritime survey capabilities. IHM is a forward-thinking customer, recognizing the numerous advantages of integrating uncrewed solutions into their operations. We have full confidence that our products will meet IHM's high expectations for this cutting-edge technology and look forward to continuing to support IHM in the future," said Kristoffer Fortun, chief sales officer at Maritime Robotics.



IHM is well covered for a range of subsea data acquisition and multipurpose operations tasks with the Maritime Robotics' USVs Otter and Mariner. (Image courtesy: Maritime Robotics)

https://www.hydro-international.com/content/news/spanish-navy-strengthens-capabilities-by-teaming-up-with-maritime-robotics-and-kongsberg