iXblue and ECA Group demonstrate successful subsea asset tracking to Polish Naval Academy

Saint-Germain-en-Laye (France) 26/07/2022 – iXblue and ECA Group recently demonstrated successful subsea asset tracking in shallow waters using iXblue Gaps M7 USBL (Ultra Short BaseLine) positioning system and ECA Group new R7 ROV (Remotely Operated Vehicle).

Hosted by their local partner THESTA, a Polish company providing maritime navigation services and communication systems for the defense sector, the demonstration was organized for the Polish Naval Academy and NAVSUP 2022 attendees with the aim of showing that accurate positioning of underwater targets is possible in a potentially hostile and fast-approaching environment, in coastal regions characterized by shallow waters and often limited access.

As part of the mission scenario, ECA Group's R7 ROV investigated objects and structures submerged in the shallow waters of the Baltic Sea in Gdynia harbor. iXblue Gaps M7 USBL acoustic positioning system was deployed to geolocate the R7 ROV and correct its trajectory in real time. A fixed transponder was also placed several hundreds of meters away from the vessel, at only 5 meters deep. The trials were carried out in water depths of 7 to 10 meters, surrounded by many docks and vessels causing significant acoustic echoes.

Despite challenging acoustic conditions, the positioning of the ROV and the transponder was stable and accurate. Extremely efficient in shallow waters, Gaps M7 ensured excellent horizontal tracking capabilities with omnidirectional coverage and 200° acoustic aperture. With no calibration required, it was easy to deploy and ready to use, saving precious operational time on the field.

The ROV inspection was successful despite the low visibility. Such environments make the use of traditional cameras impossible, but the HD acoustic inspection camera performed remarkably, providing high-resolution data with superior localization accuracy. The R7 combines the compactness and maneuverability of mini-ROVs with the performance and power of professional observation-class ROVs. It embeds a wide range of fast-equipped payloads and operates well under harsh sea conditions, making it the perfect ally of Navies for quick and efficient subsea interventions.

“The R7 ROV along with the Gaps M7 USBL acoustic positioning system is able to transmit information accurately, even in noisy and difficult acoustic environments. They both enable fast operation as well as regular and quick position updates, even in very shallow waters, which is a definite asset for the navies, given their need for a fast, clear and concise picture of the battlespace to quickly maneuver naval forces in the field.” says Cezary Majchrowicz, Technical Director at THESTA.
About iXblue:
iXblue is a global high-tech company specializing in the design and manufacturing of advanced marine, photonics and autonomy technologies. The group in-house expertise includes innovative systems and solutions devoted to inertial navigation, subsea positioning, underwater imaging, as well as shipbuilding and test & simulation. iXblue technologies support Civil and Defense customers in carrying out their sea, land and space operations with maximum safety, efficiency and reliability. Employing a workforce of 750 people worldwide, iXblue conducts its business in over 60 countries.
www.ixblue.com

About ECA Group:
ECA Group is a subsidiary of Groupe Gorgé since 1992, owned at 100%. The company is one of the world leaders in the field of autonomous robotics and integrated systems, particularly in the naval sector. The company provides its customers with the most efficient and technologically advanced solutions in the field of naval, land and air drones. ECA Group also offers innovative technological solutions for the Aeronautics and Space sectors.
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