The Atlantic Testing Platform for Maritime Robotics

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Promotional videos of Coastal Test Center based on the demonstrations of the robotic solutions 2

ABB OY and INESC TEC





GROUP



Actions

	Action	Organisation	Date
Technical Manager	Requested deliverable from the deliverable Responsible.	VTT	21.10.2023
Deliverable Responsible	Prepared draft of the deliverable.	ABB OY	08.11.2023
Technical Manager	Approved the draft as the first version.	VTT	09.11.2023
Quality Manager*	Approved the final version of the document and saved to the "Final" folder.	UdG	29.11.2023
Project Coordinator	Approved the final version and sent to the EC.	INESC TEC	30.11.2023

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CALIFICATION The Atlantic Testing Platform for Maritime Robotics

1. Introduction

In 2023, several institutions participated in comprehensive validation and demonstration activities at the Coastal Testbed of ATLANTIS, evaluating the capabilities of various autonomous underwater, surface and aerial vehicles. The tests encompassed a wide range of scenarios, pushing the boundaries of autonomous technologies in maritime operations. Notably, successful trials included the autonomous docking of ASVs. Additionally, cleaning and cathodic protection measurements were efficiently conducted using an AUV equipped with a robotic arm, demonstrating the potential for remote inspection and maintenance tasks in underwater environments. Close-range navigation of AUVs around the intricate DURIUS structure showcased the vehicles' agility and versatility in complex structures. Furthermore, aerial inspections of the DURIUS top-side from UAVs provided valuable insights into the structure's condition and accessibility. Lastly, the inspection and cleaning of subsea structures using ROVs demonstrated the potential for automated maintenance operations, enhancing the efficiency and cost-effectiveness of offshore maintenance tasks. These successful validation and demonstration activities serve as a testament to the advancements in autonomous vehicle technologies, further propelling the development of cutting-edge solutions for underwater, surface and aerial applications in the maritime industry.

A video capturing some of these trials was released on the social media. This video is available at <u>https://www.youtube.com/watch?v=wS6miWY0_ik</u>



Figure 1-1: Video of the Coastal Testbed: activities conducted by consortium members and open call participants during 2023.

