# The Atlantic Testing Platform for Maritime Robotics

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ATLANTIS
The Atlantic Testing Platform for Maritime Robotics: New Frontiers for Inspection and Maintenance of Offshore Energy Infrastructures.
871571
31.10.2020
D4.1
Public
ABB OY

# Press releases about the Decision-making 1

ABB



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# Actions

	Action	Organisation	Date
Technical Manager	Requested deliverable from the Deliverable Responsible.	VTT	01.10.2020
Deliverable Responsible	Prepared draft of the deliverable.	ABB	29.10.2020
Technical Manager	Approved the updated draft as the first version.	VTT	30.10.2020
Quality Manager	Approved the updated first version as the second version.	UdG	31.10.2020
Project Coordinator	Approved the updated second version as the final version and sent to the European Commission.	INESC TEC	31.10.2020

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# **Table of Contents**

1.	Introduction	.4
2.	The OCTOPUS plays a role in the ATLANTIS project	.4
2.1.	Objective	.4
2.2.	Press release by ABB OY	.4
3.	References	. 7





## 1. Introduction

The purpose for this report is the documentation of the press release 'descision-making 1': ABB's OCTOPUS software to uncover savings for offshore wind farms as part of EU project ATLANTIS.

## 2. The OCTOPUS plays a role in the ATLANTIS project

## 3. Objective

The main objective is the public announcement of the deliverables for WP4.1 (D4.1): the development of the mission planning tool for the ATLANTIS project. This press release will be distributed by ABB's Marketing department on the ABB's website and media partners.

## 4. Press release by ABB OY







FORNEBU, NORWAY, NOVEMBER XX, 2020

# ABB's OCTOPUS software to uncover savings for offshore wind farms as part of EU project ATLANTIS

ABB optimization software for EU-funded ATLANTIS research project will advance remote maintenance of offshore wind farms to reduce costs, increase efficiency and safety, and improve sustainability

ABB Marine & Ports has been selected as a key technology partner for a far-reaching EU project exploring the use of remote offshore inspection and maintenance techniques for wind farms. With funding from the biggest EU research and innovation program Horizon 2020, the project is targeting a more efficient, cost-effective and sustainable offshore ecosystem. The project results will be made available under EU's Community Research and Development Information Service (CORDIS).

In a project milestone, ABB is supplying a new module of the ABB Ability<sup>™</sup> Marine Advisory System – OCTOPUS optimization software. The software has been enhanced to allow onshore operators to plan a vessel mission from port to wind farm in the most optimal way, backed by data-driven decisions. This will enable improved efficiencies by cutting the transfer times between land and wind farms, as well as by reducing the vessel waiting time and working time on-site.

"ATLANTIS is a unique project that promises to unlock new potential in the operation of offshore wind farms – the fastest-growing segment of the offshore industry," said Dr. Andry Maykol Pinto, Project Coordinator, ATLANTIS. "Research projects like ATLANTIS are crucial to this industry's ongoing development, and solutions like OCTOPUS allow stakeholders to leverage the benefits on an increasingly electric, digital and connected marine environment. Together, we will help the offshore wind market to cut costs while enhancing efficiency, sustainability and safety in inspection and maintenance operations."

In addition to planning missions from port to wind farm, the new module of OCTOPUS will be taking into consideration the operational limitations of the ship and personnel, as well as assess deployment opportunities for remotely operated underwater vehicles (ROVs), unmanned surface vehicles and unmanned aerial vehicles.

As an industry-leading solution for optimizing performance in marine operations, OCTOPUS has been drawing on ABB hydrodynamic expertise to deploy its real-time data capability and ship-specific information to maximize efficiency across a growing range of vessel types.

"OCTOPUS is about turning data into actionable insights to support decision making at sea," said Antto Shemeikka, Vice President Digital Services, ABB Marine & Ports. "The new module is an industry first as it allows the user ashore to plan offshore operations according to the performance of the vessel, crew and equipment in the conditions they face. This is a significant step forward for remote decision making: in adverse weather or rough seas, a mission or an ROV launch could be aborted to save a wasted deployment or worse. There are clear benefits for safety as well efficiency."

The ATLANTIS research project is being staged at two monitoring testbeds in the Atlantic Ocean – one off the coast of Viana do Castelo, Portugal, and the other further out to sea. By better understanding how vessels and robots behave, researchers will identify opportunities to improve inspection and maintenance procedures.

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Although the latest addition to the OCTOPUS suite was developed with ATLANTIS in mind, its potential applications extend beyond the offshore wind industry. ABB's vision is to develop this module as a tool to serve multiple sectors – such as planning short routes for passenger ships or supply operations for rigs and floating offshore units. In addition, if a vessel of any kind is caught in unfavorable conditions, OCTOPUS would be able to determine a smoother, safer course.

#### About ATLANTIS

The ATLANTIS project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 871571. For further information about the ATLANTIS test center, research work and the partners, please visit https://www.atlantis-h2020.eu

#### About CORDIS

The Community Research and Development Information Service (CORDIS) is the European Commission's primary source of results from the projects funded by the EU's framework programmes for research and innovation. https://cordis.europa.eu/project/id/871571

ABB Marine & Ports supplies world-leading technologies that are driving the evolution of sustainable shipping. Electrical propulsion, data-driven decision support and integrated solutions for ship and shore from ABB are paving the way to a zero-emission marine industry, providing greater efficiency and reliability to shipowners, and preparing vessels to meet the demands of tomorrow. Our automation and electrical solutions are making port and terminal operations safer, greener and more productive. ABB Marine & Ports operates in 26 countries and has 2,000 employees. www.abb.com/marine

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ABB'S OCTOPUS SOFTWARE TO UNCOVER SAVINGS FOR OFFSHORE WIND FARMS AS PART OF EU PROJECT ATLANTIS

2/2



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# 5. References

Primary distribution channel: https://global.abb/group/en/media

