



## University of Rijeka, Faculty of Maritime studies

**PROJECT ACRONYM AND TITLE:** ARTEMIS - Autonomous Robotic Technology for Environmental Monitoring, Intervention and Safety

**FUNDING PROGRAMME:** DIGIT.2.1.02

**PERSON RESPONSIBLE:** Lovro Maglić, PhD., Associate Professor

### FINANCIAL DATA

Total budget	Budget assigned to the Faculty of Maritime studies
3,8 mil. EUR	216.104,85 EUR

### SUMMARY

The project aims to develop a secure, green, autonomous system for monitoring protected land and maritime areas, aligned with digital and green transition priorities.

The project consists of two main scenarios related to protected maritime and land areas, connected by a common infrastructure of energy, communication, situational awareness, surveillance, and manipulation systems. Each scenario contains a central green autonomous electrically powered vehicle: Unmanned Ground Vehicle (UGV) for land areas and Unmanned Surface Vehicle (USV) for maritime areas. The autonomous operation of robotic units in the real environment requires situational awareness of the environment specific to the individual robotic units (air, water, and ground perspectives). Situational awareness is an important prerequisite for safe navigation through the environment and will be one of the most important development directions in the project. The system will be able to detect and perceive possible obstacles, other vehicles, people, trash, flammable objects, and fire in the environment.

The main outcome will be two autonomous surveillance systems (land and sea) and key technologies such as perception systems, autonomous platforms, UAV mapping and recharging, robotic manipulation, sustainable energy solutions, and secure communication.

ARTEMIS focuses on large-scale autonomous monitoring of protected areas, introducing innovations in multi-robot coordination, data fusion from different robotic units for autonomous fire detection, UAV-assisted mapping, autonomous navigation and detection and identification of vehicles in the environment, threat and emergency detection, and long-term operation through sustainable energy and charging systems.

Start date	End date
01.10.2025.	30.09.2028.



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### PARTNERSHIP

Br.	Partner organization	Country	Role
1.	University of Zagreb, Faculty of Electrical Engineering and Computing	Croatia	Lead partner
2.	Centre of Excellence MARBLE	Croatia	Partner
3.	University of Rijeka, Faculty of Maritime Studies	Croatia	Partner
4.	ISKRA Shipyard 1 LLC	Croatia	Partner
5.	Visage Technologies Ltd.	Croatia	Partner
6.	DOK-ING Ltd.	Croatia	Partner

### WEBSITE: /



### ADDITIONAL INFO:

Project team members:

- Lovro Maglić, PhD., Associate Professor
- Livia Maglić, PhD., Associate Professor
- Vlado Frančić, PhD., Full Professor
- Igor Rudan, PhD., Full Professor
- Davor Šakan, PhD., Assistant Professor
- Matej Šuper, MSc
- Antonio Blažina, MSc