

AREAS FORMATION METHODOLOGY OF THE ROBOT SITUATIONAL AWARENESS ON THE BASIS OF MULTI-AGENT APPROACH



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OBJECTIVES

Monitoring of water, air and surface areas for scientific civilian and military purposes using groups of diverse robotic vehicles (unmanned aerial vehicles, autonomous uninhabited underwater vehicles, surface robots) and the creation of a situational awareness knowledge base



AREAS OF USE

Ecology, Agriculture, Fishing, Extraction of Mineral Resources, Military Industry (Dual-Use Technology)

IMPLEMENTATION

The project is being tested for dual-use tasks.

The area formation methodology of "group situational awareness" in the water areas is formed due to the capabilities of technical facilities of monitoring and assessing the environment state of all participating control objects that are presented in the form of hardware and software agents.



PECULIARITIES

For the first time unmanned aerial vehicle and autonomous uninhabited surface-underwater unit were combined together in a module construction. Multi-agent system of situational awareness was developed.



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CORE COMPETENCIES

#SITUATIONAL AWARENESS, #MULTI-AGENT TECHNOLOGIES, #UNMANNED AERIAL VEHICLES, #AUTONOMOUS UNINHABITED UNDERWATER VEHICLES, #SURFACE ROBOTS