

# UNMANNED UNDERWATER SYSTEMS – A FORCE MULTIPLIER TOOL FROM OPERATIONAL PERSPECTIVE

*Commander Eng. Daniel-Cornel TĂNĂSESCU, PhD candidate\**

**Abstract:** *The accelerated development of autonomous systems within the defense industry raises a series of legal, ethical, political, operational and technological challenges. The concept of autonomy applied to military equipment and systems is fundamentally reflected in the options for complementarities between human operators and autonomous systems, on the one hand, but also on the diversity of existing military capabilities, depending on the specific technological development stages.*

**Keywords:** development, autonomous systems, challenges, military capabilities.

## **I**ntr**o**duction

The increasingly important role of artificial intelligence and the concept of autonomy in the design and realization of new military capabilities lead us to the need to adapt and reconfigure military operations at the doctrinal level. As intelligent robotic technologies and processing algorithms will increasingly occupy the field of military engagement, and network warfare begins to become a constant aspect of current conflicts, military decision-makers will need to be prepared to act and make decisions in a completely changed operational environment as compared to 15-20 years ago. Computational engineering and software solutions will offer customized action variants to the military, with a much reduced response time, simplifying decision-making and providing an accelerated response to the opponent's initiatives. In addition, autonomous systems will be able to perform missions and tasks with greater accuracy and efficiency, while at the same time reducing the risks to military personnel.

---

\* Romanian Navy Captain; PhD candidate at „Carol I” National Defense University Bucharest, email: cornel.tanasescu@gmail.com.