## <DRONMAR>

## THE PERILS OF SEA DRONES: THE LEGAL IMPLICATIONS OF AUTONOMOUS VESSELS IN NAVAL WARFARE

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Maritime operations are paramount in contemporary warfare. The recent Russo-Ukrainian armed conflict has underscored the significance of the maritime domain through Turkey's closure of the Black Sea to military vessels, Russia's naval blockade of Ukrainian ports, and the sinking of the Russian Flagship *Moskva*, to name just a few important events that have taken place on the Black Sea. In this context, Ukraine's deployment of sea drones has captured international attention, highlighting that the reliance on AI-driven autonomous vessels signifies a leap towards a future where autonomous and unmanned systems could play a central role in both strategic deterrence and operational engagements at sea.

Technological development has rendered autonomous and unmanned vehicles standard on land, air, and water surfaces. Nonetheless, scholarship has traditionally focused on its civil implications. Furthermore, while international public law has briefly analyzed the challenges emerging from air and land autonomous vehicles, sea drones remained mostly untested by legal scholarship.

DronMar aims to formulate a legal theory on sea drones regulating their deployment in naval warfare. The unclear legal situation of sea drones constitutes a critical obstacle to their global operation, impacting their compliance with naval warfare regulations. To do so, the Project tackles the possibility of the sea drones' operation in the contemporary law of the sea and the law of naval warfare systems by hypothesizing that contemporary international law does not offer a satisfactory legal framework for the deployment of sea drones during naval warfare operations and highlighting the critical domains prone to breaching.

DronMar will tackle the research through 4 Working Packages (WP). Working Packages 1-3 will determine the legal statutes of a sea drone, the drone's operator, and the legal requirements pertaining, among other things, to the rule of engagement (ROE) for sea drones. The integrative WP4 will provide a comprehensive legal *status quo* of sea drones in international law. It will also attempt to assess whether or not the normative categories of a proposed sea drone's typology are compliant with international public law. Furthermore, DronMar will approach the determinants or reasons that make challenges for sea drones different from those of their civil counterparts.

As a result, the Project will render a novel theory of the legal status of sea drones alongside a typology outlining their compliance with the international legal order. The results will be reflected, among others, in at least eight peer-reviewed English papers published in the leading international academic journals and one edited monograph in one of the main international editorial houses.