

*The authors' views are their own and do not represent the official position of the Institute of Defence and Strategic Studies of the S. Rajaratnam School of International Studies, NTU. These commentaries may be reproduced with prior permission from RSIS and due recognition to the authors and RSIS. Please email to Editor IDSS Paper at [RSISPublications@ntu.edu.sg](mailto:RSISPublications@ntu.edu.sg).*

No. 097/2024 dated 15 November 2024

## **The Unresolved Legal Status of Maritime Drones: (War)ships or Weapons?**

Mei Ching Liu

### **SYNOPSIS**

*Ukraine's use of armed maritime drones to disable a significant portion of Russia's Black Sea Fleet signals a new era in naval warfare, with other militaries likely to adopt similar strategies. However, maritime drones do not meet current international legal requirements to be classified as ships/warships or weapons. The ambiguity surrounding their legal status presents security and legal challenges.*

### **COMMENTARY**

Despite having no navy of its own, Ukraine recently [succeeded](#) in using armed maritime drones to disable at least one-third of Russia's Black Sea Fleet. This feat has led some observers to argue that we are witnessing a new era of naval warfare, and that more militaries across the globe will seek to incorporate maritime drones into their strategies for warfare at sea.

However, comparatively less consideration has been given to complications caused by the unresolved legal status of maritime drones should they be adopted more widely. Under current international law, it is unclear whether maritime drones should be categorised as ships/warships or weapons. This ambiguity creates opportunities for exploitation, complicates accountability for illegal activities, and increases the risk of unintended conflicts, especially in contested maritime regions.

The development of maritime drones indicates that it is impractical to assign the same legal status to all such drones, given their diverse operational capabilities, technological specifications, sizes, and uses. It is recommended that states classify maritime drones on a case-by-case basis, ensuring compliance with international law.



A maritime drone that operates on the water's surface. *Image by National Museum of the U.S. Navy via Wikimedia Commons.*

## **Maritime Drones and the Implications of Their Legal Ambiguities**

Maritime drones are vehicles that operate either on the surface of water or underwater and do not have passengers or crew on board. They can operate autonomously, be remotely controlled or pre-programmed for missions. In technical terms, maritime drones are known as unmanned or uncrewed maritime systems.

The legal status of maritime drones carries critical implications for international maritime security, legal accountability, and sovereignty. Ambiguities in their legal status create exploitable gaps for both state and non-state actors. For instance, State A might deploy maritime drones to obstruct shipping lanes or to harass commercial vessels, exerting economic pressure on State B without direct military engagement. The legal ambiguity of maritime drones might allow State A to strategically avoid classifying its drones, making it challenging for State B to justify defensive actions against the drones in such hybrid warfare scenarios.

Furthermore, the ambiguity surrounding the legal status of maritime drones presents serious risks to security and stability, especially in contested maritime regions like the South China Sea. As militaries seek to incorporate maritime drones into their naval strategies, drones from different states may operate in close proximity, heightening the risk of unintentional collisions or interference that could easily be misinterpreted as hostile actions. These unintended incidents could rapidly escalate tensions, leading to conflicts that might otherwise have been avoidable with clearer legal classification and oversight.

In cases involving illegal activities conducted by maritime drones, the legal status ambiguity leaves the question of accountability uncertain. For example, if maritime drones were classified as ships under the [UN Convention on the Law of the Sea \(UNCLOS\)](#) and engaged in illegal actions, responsibility might lie with the state with which they are registered. However, if these drones were instead classified as weapons and used unlawfully, military commanders who oversee their deployment

might be held accountable. In this example, the fact that maritime drones could be classified either as ships or weapons not only complicates the enforcement of international laws, but also potentially undermines the pursuit of legal recourse following unlawful drone operations.

During an international armed conflict at sea, warships are the only vessels that can exercise the rights of a warring party. Limiting these rights to warships helps avoid misunderstandings and unintended conflict escalations. The distinction between warships and civilian vessels is especially important in high-tension waters as it makes it easier for all parties to differentiate between routine military movements and potential threats. Additionally, granting these rights solely to warships establishes clear accountability and helps prevent civilian vessels from being mistakenly targeted.

### **Maritime Drones as (War)ships**

To be categorised as warships, maritime drones must first be considered ships. The requirement that a warship must first attain the status of a ship was established in the [1907 Hague Convention VII](#) and is replicated in [UNCLOS](#) and the [San Remo Manual on International Law Applicable to Armed Conflicts at Sea](#). But the classification of maritime drones as ships faces some challenges.

First, Article 94 of UNCLOS requires ships to be crewed. This requirement complicates the possibility of classifying maritime drones as ships as they are uncrewed, or unmanned vehicles. Maritime drones also cannot meet the requirements to be legally defined as warships as there is a similar requirement that warships be manned by a crew subject to military discipline.

Second, the size and capabilities of maritime drones vary widely. For example, the length of surface maritime drones may range from [1 metre to over 50 metres](#). The wide range in size means that these drones have diverse operational capabilities and technological specifications. Small or medium-sized surface maritime drones may be designed for tasks such as [data collection](#), [mine countermeasures](#), or [coastal surveillance](#). Larger surface maritime drones, on the other hand, may be employed for complex military missions like [tracking submarines](#). It is therefore impractical to assign the same legal status to all maritime drones regardless of their size and capabilities.

Lastly, maritime drones do not meet legal obligations under the [1949 Second Geneva Convention \(GCII\)](#) — the most recent treaty establishing the rules of warfare at sea. For example, Article 18 of the GCII stipulates that warring parties have the [responsibility](#) to search for wounded, sick, and shipwrecked persons after an engagement, and to take them on board and provide them with necessary care. Space is extremely limited on board maritime drones, restricting their ability to take on board any persons in need of assistance under the stipulations of the GCII. Moreover, despite the rapid technological advancement of maritime drones, they are still unable to autonomously conduct search and rescue operations at sea.

### **Maritime Drones as Weapons**

An alternative school of thought is that maritime drones could be designated as weapons. This approach would ensure maritime drones are subject to legal reviews

under [Article 36 of the First Additional Protocol to the Geneva Conventions \(API\)](#). It would also clarify that human operators retain ultimate responsibility for the actions of drones. The approach would be consistent with other regulated weapons, such as mines and torpedoes, with which maritime drones share similar characteristics.

More importantly, this classification would be forward-looking. Drone technology is generally regarded as the precursor of autonomous weapon systems (AWS) because the foundational technologies such as sensors, navigation, and robotics that support drones are essential for developing AWS. In present military usage, maritime drones (or drones in general) can be differentiated from AWS as they are remotely controlled by operators. Nevertheless, they can be upgraded with technologies such as AI to autonomously select and engage a target without further human intervention, thereby transforming them into AWS. Should maritime drones incorporate this function in future, they may be prohibited under a potential international agreement governing lethal autonomous weapon systems (LAWS).

However, certain states such as [Russia](#) have consistently opposed including drones in LAWS governance discussions at the United Nations. [China](#), on the other hand, has argued that the definition of LAWS and their characterisation should not include drones for civilian use. Given the increasing adaptation of civilian drones for military purposes demonstrated in the Russia-Ukraine conflict as well as the clear intersection between AWS and drones, such an exclusion would undermine the purpose of prohibiting and regulating LAWS.

Notwithstanding the potential benefits of categorising maritime drones as weapons, there will be a further challenge of how non-armed maritime drones are to be categorised. A plain reading of the law suggests that non-armed maritime drones cannot be sensibly categorised as weapons. In this situation, what are maritime drones, really?

## **Conclusion**

State practice — particularly in the case of the [United States](#) — could pave the way for maritime drones used for military purposes to be regarded as warships. Alternatively, the prospect of maritime drones incorporating the capability to autonomously select and engage targets without further human intervention in the foreseeable future would further the case for their classification as weapons.

There is no one-size-fits-all classification for maritime drones as they vary in size, capabilities, and operational purposes. It ultimately falls on each state to classify maritime drones within the legal framework it considers appropriate, taking into consideration relevant legal obligations and requirements, drone specifications and purposes, and the potential impact on international maritime stability. This flexibility reflects both the strengths and challenges of international law as it enables tailored approaches but may also lead to inconsistencies.

The priority is to avoid leaving maritime drones unclassified or unregulated under any legal framework as unclassified or unregulated drones could create legal and security gaps that both state and non-state actors might exploit. Without a legal framework, states may struggle to hold drone operators or states accountable for illegal drone

actions, and the potential for misuse could escalate conflicts or disrupt international maritime stability.

To address these challenges, the most practical approach at present is to classify maritime drones on a case-by-case basis. The bottom line is that they must be classified under a legal framework and be employed in a manner consistent with international law. As ships, maritime drones must respect the navigational rights of other vessels at sea; as warships, they must be commanded by a crew under military discipline, whether remotely or through other means; and as weapons, their use must comply with international humanitarian law.

***Mei Ching Liu*** is an Associate Research Fellow with the Military Transformations Programme at the S. Rajaratnam School of International Studies (RSIS).

---

S. Rajaratnam School of International Studies, NTU Singapore  
Block S4, Level B3, 50 Nanyang Avenue, Singapore 639798