Open-Ended Working Group on “Reducing space threats through norms, rules and principles of responsible behaviours”

Topic 4: Applicable elements of the legal regimes governing aviation and the sea in the context of threats arising from State behaviours with respect to outer space

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Almudena Azcárate Ortega, UNIDIR

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Mr Chair, Excellencies, distinguished delegates,

Firstly, I would like to thank the Chair and the Secretariat of this Open-Ended Working Group for organising this panel and for inviting UNIDIR to be part of this important discussion. It is an honour to be part of such a distinguished group of panellists as the ones we have been hearing from during this week.

The topic that I will be talking about today pertains to the relationship between space law and other legal regimes, most notably the law of the sea. More specifically I will be examining what concepts, principles or rules can be taken from the law of the sea to address security challenges related to operations in outer space.

The domain of the sea is often compared to outer space. Therefore, law of the sea is often cited as an area of international law that can aid in interpreting how certain legal concepts can be applied to space, as well as a source of law that can be analogized to fill certain gaps of the space law regime. While it is true that the laws and regulations applicable to the sea domain can provide clarity for conducting space activities, this legal regime cannot be applied verbatim to outer space.

This presentation does not seek to be an exhaustive analysis of all law of the sea, but rather, it seeks to explore some key concepts, principles and rules, the understanding of which could aid in addressing security concerns in space.
The high seas and outer space

The high seas is often compared to outer space due to one shared characteristic: it is a common space. A domain where a State may not exercise sovereign rights as it does on Earth.

1. Like in space, it is an area that enjoys certain freedoms, such as freedom of navigation, overflight and scientific research. Art 87 UNLCLOS (freedom) and 89 (sovereignty). This is reflected in the OST in articles I and II respectively.

2. The high seas, like space, is reserved for peaceful purposes. Art. 88 UNCLOS. The use and exploration of outer space for peaceful purposes is one of the most often cited principles of outer space law, and funnily enough this is only mentioned twice in the OST. Once in art. IV in relation to the use of the Moon and celestial bodies, and another one in the non-binding preambulatory text of the treaty. Nevertheless, it is considered that such concept has now achieved the status of customary international law. There are some differences in interpretation about what this concept means, as we have seen these past few days. Some interpret that peaceful equates to non-military, while others that peaceful means non-aggressive. This latter interpretation is the most generally supported, although it is not universal, and the concept of what constitute an aggressive action, as well as its scope is interpreted differently by different people.

In the law of the sea there have been similar debates, with the majority agreeing (although not in a universal manner), that peaceful equals non-aggressive, and like it happens in space, the high seas has several military uses:

- Warships and other military vessels may navigate the high seas.
- Military vessels can conduct certain types of research in the high seas.
- Certain uses of cables and pipelines placed under water.
- Military exclusion and warning zones can be established to carry out certain actions, like the testing of weapons → this is more than what can be done in space and on celestial bodies

Due regard

Like in space, the high seas is a domain where although States and other actors enjoy certain freedoms, they cannot act with impunity and they are restricted by the obligation of due regard (87 UNCLOS and IX OST).
As we heard from Professor Aoki the first day, the concept of due regard is not defined in the OST, but it does appear in other sources of international law. This concept appears often in the law of the sea and UNCLOS mentions it in several instances, and case law on the law of the sea can also aid in interpreting this concept: under such principle States are bound to refrain from any acts that might adversely affect the use of outer space by other stakeholders in space prior to and while conducting space activities. In other words, States should seek to avoid any action that could hamper the activities others may carry out, exercising their freedom to use and explore outer space for peaceful purposes.

**Duty to render assistance**

Related to the principle of due regard is another principle that, while less broad and all encompassing, it shares its spirit of cooperation: the duty to render assistance. This is something that is considered in the law of the sea, an also in outer space (art V OST, and Rescue agreement). While the regulations established for space on this matter seem to focus mostly on the human component, a lesson can perhaps be learned from the law of the sea here, as it also establishes a duty of assistance to the ship

**Status of vessels and space objects**

I just talked about principles of law of the sea that can be easily adapted to the outer space domain, and in many cases they already have. However, it is not always so easy. Now I will talk about one such case: the classification of vessels and how this is different to the classification of space objects.

All vessels operating in international waters should bear markings (for example hospital ships are white and generally bear a red cross or other identifier), and if possible be internationally registered in a manner that will identify them or flag them with a State (art. 90 UNCLOS).

In space, visible markings become less important because satellites are not visible to the naked eye, but there is a registration regime that ties them to a State of registry, which bears jurisdiction and control over the space object.

At sea, vessels are traditionally classified as warships, auxiliary vessels (which provide support to warships, but can also be ships operated by the government —generally the navy— to perform non-commercial tasks such as certain types of research from which civilians also benefit. An example of this is meteorological research). Lastly there are merchant vessels.
In space, we can also divide satellites into military satellites on the one hand, and civil and commercial on the other, but as we have seen these past few days, such division is not as smooth or clear.

**Dual-use and dual-purpose space objects**

In space many objects are dual-use, which means the same object can be used for military and civilian purposes. An example of this are GNSS satellites.

This should be distinguished from dual-purpose. Dual-purpose objects are those that are designed to fulfil a benign objective (such as debris removal or on orbit servicing), but they can be repurposed to harm other space objects.

I cannot stress enough how important it is to make this distinction, as clarity on this will help reduce tensions among stakeholders.

**Neutrality**

An issue that is also related to dual-use is neutrality. We talked about it yesterday, so I will not spend long on this, but this is another example of law of the sea (neutrality rules, as Cassandra Steer explained yesterday, emerged from the law of the sea applicable during conflict, and the desire to allow merchant vessels of neutral States to carry on with their activities without being affected by the conflict between the belligerents).

- The dual-use nature of many space objects makes it hard to determine whether some services provided by certain satellites would be considered strictly commercial or civilian, or rather, they could be considered to be significantly contributing to war fighting capabilities and therefore could potentially cause that State to lose its neutral status.
- The case of space is also special because many States, beyond those that are launching States or the State of registry, might profit from the services of the satellite, so targeting one such satellite could raise concerns of a belligerent’s breach of its obligations towards those neutrals.

Neutrality is thus another example of regulations that present challenges when we try to adapt them to fit the outer space domain.
Mechanisms to reduce tensions and prevent incidents at sea

Lastly, I’d like to talk about a series of mechanisms that exist in the law of the sea realm that have come about by bringing States together to reach common understandings about what mechanisms can be established to increase transparency and communication that could aid in mitigate tensions and prevent incidents at sea.

UNCLOS establishes that States have the duty to ensure safety and security at sea through several mechanisms, including the use of signals, the maintenance of communications and the prevention of collisions (art. 94).

All States must comply with the Convention on the International Regulations for Preventing Collisions at Sea on issues of collision avoidance, but beyond that, States have come up with agreements —bilateral and multilateral, as well as binding and non-binding— to further contribute to reducing tensions and prevent incidents at sea.

Two examples of this are:

- 1972 US–Soviet Incidents at Sea Agreement (INCSEA) → binding & bilateral agreement which has inspired many other similar agreements, particularly among European States.
- 2014 Code for Unplanned Encounters at Sea (CUES) → non-binding & multilateral agreement.

Initiatives such as these are something that the space domain could benefit from, and that this OEWG could seek to work towards.

UNIDIR stands ready to support this OEWG in gaining further understanding on the issue of space law concerning threats arising from State behaviours.

Thank you very much for your attention. I look forward to continuing the conversation with you.

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