

The Recommended Definition of Threat in the Context of OEWG

Guoyu Wang

Academy of Air, Space Law and Policy, Beijing Institute of Technology, China

The OEWG is suggested to consider three key questions before going into detailed discussions on either the categories of threat or defining responsible/irresponsible behavior.

☞ What is the ordinary meaning of threat and what is the due meaning of threat in space domain?

- ⑩ In the context of space security and PAROS, the recognition of threats should focus on intentional and hostile behaviors, although the ordinary meaning of threats includes both natural reason and man-made reasons.

☞ What items are not appropriate to be discussed in the OEWG

- ⑩ natural event or phenomena
- ⑩ behaviors based on negligence, unintentional behavior or accident which may cause damages, such as collision or break-up in orbit, uncontrolled re-entry. 【a matter of space debris mitigation, falling with the ambit of safety issue】
- ⑩ general issue of transparency
- ⑩ The use of particular capability or technology in particular circumstances, rather than the capability or technology *in general* that could constitute a threat.

☞ Whether a so called “threat” would necessarily constitute an irresponsible or illegal behavior?

- ⑩ For instance, the harmful interference taken by State A against State B’s space system might be deemed as a threat, and subsequently defined as an irresponsible behavior by some delegations. However, assume (1) it were State B, who took an internationally wrongful act in the first place, such as taking malicious proximity operation against State A’s satellite without due regard, (2) State A’s harmful interference were aiming at urging State B to correct its wrongful act, then such “threat” might comply with the countermeasure regime under International Responsibility Law.
- ⑩ For another example, the use of force would be defined as a threat in general, as well as illegal, however, using force to excise self-defense right would exclude its wrongfulness under international law.

I. ordinary meaning of threat 【language, behavior; person, thing】

☞ *Collins British English dictionary (UK WORKING PAPER, 2022):*

- ⑩ The term “Threat(s)” can convey different meanings depending on its context. In the ordinary meaning of the term “threat” is defined as “(noun) (1) a

declaration of the intention to inflict harm, pain or misery 【author’s notes: express threat】 , (2) an indication of imminent harm, danger or pain, 【black look or implicit threat through other specific behavior】 (3) a person or thing that is regarded as dangerous or likely to inflict pain or misery”

☞ **Oxford Dictionary**

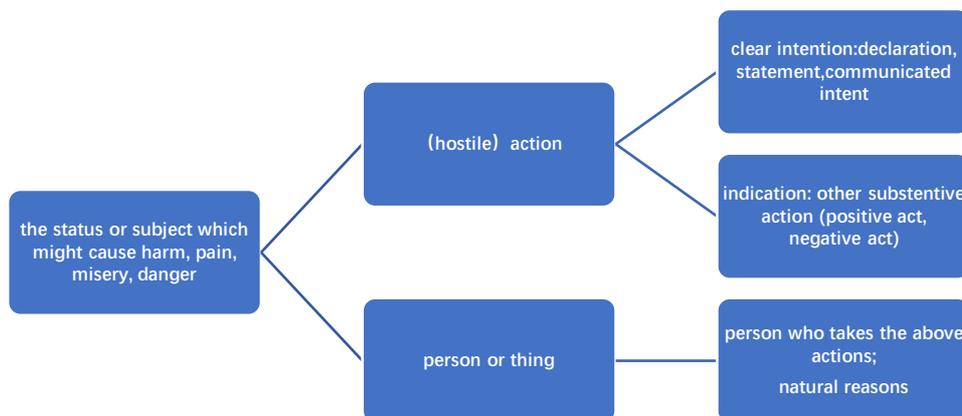
- ⑩ 1. a statement of an intention to inflict pain, injury, damage, or other hostile action on someone in retribution for something done or not done 【responses to a threat】 2. a person or thing likely to cause damage or danger.

☞ **Black’s Law Dictionary:**

- ⑩ 1. A communicated intent to inflict harm or loss on another or on another’s property, 【viable delivery, interactivity】 2. An indication of an approaching menace 3. A person or thing that might well cause harm.

☞ **Conclusion of the ordinary meaning of threat 【a broad meaning】**

- ⑩ **Threat means a status in which hostile actions, person or thing might cause harm, pain, misery or danger.**
- ⑩ **The status could be caused by either natural or man-made reason, as to the latter, it could be an intentional one or an unintentional one.**



II. Definition and Categories of Threat(s) in Space Domain

i. views from delegations

☞ Some views address threat from both natural and man-made reasons

- ⑩ US (2021): Space assets face many threats, both natural and man-made. Natural threats to satellites include solar activity, radiation, and natural orbital debris, whereas examples of man-made threats include satellite launch debris, radiofrequency interference, malicious cyber activity, and anti-satellite (ASAT) weapons such as directed energy systems, or direct-ascent missiles.
- ⑩ Delegations, for instance, Canada, Jordan, Romania, Slovenia, Sweden,

Ukraine have expressed similar views.¹

- ⑩ According to these views, “man-made” refers not only intentional but also unintentional or accidental state. However, the risks brought by space debris in normal operation is not appropriate to be deemed as “threats” in the context of space security, let alone the “threat” brought by natural reasons. Just like UK (2022)’s points that the OEWG should maintain a clear distinction between space security and space sustainability, in order to avoid unnecessary overlaps between different international platforms.
- ☞ Some views highlight the subjective status about threat, such as “conscious choice”
 - ⑩ France (2022): prevent intentional creation of debris, other intentional actions
 - ⑩ Netherlands (2021): space security concerns countering the threats and risks caused by intentional actions.
 - ⑩ Egypt (2021): Intentional complete destruction of space objects; Intentional fragmentation of space objects.
 - ⑩ Norway (2021): Any intentional disruption, damage or destruction of a space system can present a potential threat to international security.
- ☞ Some views emphasize damages to space systems or space assets.
 - ⑩ UK (2022), “The use of the term “threat” in the work of the OEWG should focus on the harmful effects that can result from the behaviours of States in terms of how they deploy or use capabilities that can inflict damage to, or interfere with, the space systems of another State.
 - ⑩ ROK (2022), “any activities intended to destroy, damage, deny, disturb or degrade space assets of other States should be deemed as a threat”.
 - ⑩ What if a behavior does not cause direct damage to space systems, assets or activities, but bring negative impacts to international relations? Is it a threat or not?
- ☞ Some views address other kinds of negative impacts on space relations, except “damage” to space assets, for instance, bringing misperception, misunderstanding, heightening tensions, triggering conflicts in space.
 - ⑩ China (2021): Space security refers to the risks of the weaponization of and an arms race in outer space, including actions such as declaring outer space as a new war-fighting domain, developing military capabilities in outer space, establishing an independent space force and space command, deploying weapons and equipment expeditiously and conducting military exercises in outer space. Such actions will increase the risks of strategic miscalculation, accidental clashes, or even conflicts, and therefore are the fundamental threats to outer space.

¹ Jordan: The current space debris environment posed a threat to spacecraft in Earth orbit; Romania: [Space debris](#) represents one of the most visible threats in outer space, which can result from natural causes, man-made causes or counter-space capabilities; Slovenia: Threats to vital space systems and capabilities are emerging, as a result of both natural and man-made hazards and possible counter-space capabilities; Sweden: Space debris constitutes the single largest threat to our space environment, both in a short-term and long-term perspective; Canada: Behaviours that purposefully or by negligence lead to the creation of debris would be irresponsible.

- ⑩ France (2022) : A degraded strategic context, increasing destabilizing behaviour and a heightened risk of miscalculations and escalation
 - ⑩ Germany (2021): With real or perceived threats to space systems comes a high risk of misperceptions and unwanted escalation.²
 - ⑩ New Zealand (2021): potentially pose significant risks of miscalculation and escalation leading to conflict in, or extending conflict to, outer space.
- ☞ Some views disclose the nature of threat as a hostile status
- ⑩ Russia (2021): Military threat is defined as a state of relations between or within States characterized by a real possibility of military conflict between opposing sides and a high degree of readiness of a given State (or group of States) or separatist (terrorist) organizations to use military force (armed violence).³

ii. the suggested definition and categories

In the context of space security, threat means a status which is based on intentional behavior which may cause negative impacts to space assets, activities and/or interests of another country, including undermining international peace and security.

It includes three constitutive elements: **intention, behavior and negative impacts.** Behavior is just like the fuselage of an aircraft, and intention, negative impacts are the two wings.

☞ **Intention**

- ⑩ Not only refers to specific military space activities, but also space security strategies, policies, theories, statements and so on, which contain or transmit clear hostile intention, like taking space as battlefield, pursuing absolute priority, absolute security, frequently taking military space maneuvers, building space military allies, publicly announcing some countries as its biggest threat.
- ⑩ Hostile intention *per se* is a potential threat.

☞ **Behavior**

- ⑩ Any behavior that may cause damage to space assets or activities, like jamming, spoofing, could constitute a threat in particular circumstances.
- ⑩ Any behavior which may make others feel unsafe or bring misperception, like the intense military use of large-constellation could constitute a threat in particular circumstances.
- ⑩ Both act and negative act could constitute a threat, for instance, intentionally hiding SSA message, standing by when others' space object suffers the risks of in-orbit collision.

² *Ibid.*

³ See Office for Disarmament Affairs, Report of the Secretary-General on reducing space threats through norms, rules and principles of responsible behaviours (A/76/77), released 13 July 2021, available <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N21/118/93/PDF/N2111893.pdf?OpenElement> (last visited: 28 August, 2022).

- ⑩ Both use of force and non-use of force could constitute a threat, the former is expressly refrained by the UN Charter.
- ⑩ Intention, but not possible consequences, is the decisive element when determining whether a behavior should be deemed as threat or not.

☞ **Negative impacts**

- ⑩ include both material, moral damage and other negative impacts like miscalculation, misperception, triggering or heightening arms race or conflicts.
- ⑩ reversible vs irreversible
 - ✓ US (2021), the threats can be described as 1) reversible, which include temporary effects such as interference with radiofrequency signals or dazzling of remote sensing systems, or 2) irreversible, which include measures that degrade or destroy a satellite.
- ⑩ Threat faced by a particular State vs threat faced by all, like the risks of militarization, weaponization and becoming battlefield in space domain, the hostile relations and deteriorating tensions among powers in space.

iii. items which are inappropriate to be discussed in this WG

- ☞ natural event or phenomena
 - ⑩ NEO, space weather
- ☞ behaviors based on negligence, unintentional behavior, accident which may cause damages
 - ⑩ collision or break-up in orbit, uncontrolled re-entry [a matter of space debris mitigation, falling within the ambit of safety issue]
- ☞ general issue of transparency
 - ⑩ exception: in certain circumstances, when it could be sufficiently proved that the untransparent behavior is based on an intention to cause damage, then such behavior might constitute a threat.
 - ⑩ EU (2021): "If these operations (author's notes: acts of security operation) are not performed with sufficient transparency, they could be considered irresponsible or threatening, as they could increase the risk of miscalculation and unintended escalation."
- ☞ The use of particular capability or technology in particular circumstances, rather than the capability or technology in general could be deemed as a threat.

III. Concluding Remarks

- ☞ Threat is an objective existence/status, as well as a subjective cognition. UNIDIR (2022), "Threat perception involves a certain degree of subjectivity: different stakeholders have different interests and therefore may hold different views regarding what constitutes a threat". In this regard, it should be noted that the State which is facing a particular threat from another State might have stronger perception to this threat than others have.

- œ Threat is not only a factual concept, but also a legal one. Without the analysis of the threat concept in *lex lata*, it would be hard to achieve a bundle of new rule, norms and principles compatible with the existing international legal system.
- œ Therefore, delegations are suggested to avoid preconceived ideas when identifying threats. Threat is a matter of status; thus, we might be trapped into logical problems to directly define a threat as an irresponsible behavior without examining it in particular circumstances. The more urgent and valuable work to do is to recognize the boundary of “legal” and “illegal” and to clarify legal terms, compared with defining “responsible/irresponsible”.
- œ All in all, the OEWG is encouraged to consider the comprehensive status in space security and international security, then deeply analyze the advantages and disadvantages of *lex lata*, during which consider drafting the relevant prohibitive and restrictive rules from a comprehensive perspective. It is the only approach to complement *lex lata* through a new set of legal norms, rules and principles, to provide more instructive and practical guidance, and to avoid getting trapped into political swamp or deviating the spirit of the rule of law in space. UNIDIR (2022) pointed out “[t]his makes space security threat identification and mitigation a dynamic endeavour requiring continual attention, rather than a task that can be solved through a single process or proposal”. Thus, it would be a long but valuable process to achieve political and legal common recognition in space.