

The Development of Space Law: Applying the Principles of Space Law and Interpreting ‘Peaceful Purposes’ in the Outer Space Treaty 1967

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Abstract

This study analyzes the relevance of the proportionality, non-intervention, and unnecessary suffering principle's in the outer space perspective; and analyzes the 'peaceful purposes' at Outer Space Treaty 1967. This legal research uses primary and secondary legal materials to obtain an appropriate analysis of legal issues. This research states that the principles of international law must be applied in space activities by outer space actors. Furthermore, the ambiguity of the phrase 'peaceful purpose' in the Outer Space Treaty gives rise to different interpretations by each state. For this reason, a convention on outer space is needed to affirm the orientation of 'peace' in space activities.

Keywords: *peaceful purposes; outer space treaty; convention*

Abstrak

Tujuan dari penelitian ini adalah untuk menganalisis relevansi prinsip proporsionalitas, non-intervensi, dan unnecessary suffering dalam perspektif ruang angkasa; dan menganalisis 'tujuan damai' dalam Perjanjian Luar Angkasa 1967 (Outer Space Treaty 1967). Penelitian hukum ini menggunakan bahan hukum primer dan sekunder, untuk mendapatkan analisis yang tepat tentang masalah hukum yang ada. Penelitian ini menyatakan bahwa prinsip-prinsip hukum internasional harus diberlakukan dalam aktivitas ruang angkasa oleh aktor ruang angkasa. Selanjutnya, ketidakjelasan atas frasa 'tujuan damai' dalam Outer Space Treaty menimbulkan berbagai tafsiran yang berbeda-beda oleh setiap negara. Untuk itu, diperlukan suatu konvensi tentang outer space untuk memberikan penegasan atas orientasi perdamaian dalam aktivitas ruang angkasa.

Kata Kunci: *tujuan damai, outer space treaty, konvensi*

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INTRODUCTION

The existence of The Magna Carta of Space Law or the Outer Space Treaty 1967 is principal. The Magna Carta of Space Law can be defined as the law that governs relations between States and places their rights and obligations resulting

from activities on, into, and from outer space; including the Moon and other celestial bodies.¹ Until now, Magna Charta has given birth to several agreements; that's Space Liability Convention 1972, The Rescue Agreement 1968, The Registration Convention 1976, and The Moon Treaty 1979,²

, Because, the Outer Space Treaty 1967 is used to regulate the activities of all countries in exploration activities and all matters relating to outer space, and requires new international agreements for derivative symposiums in the future.³

The Outer Space Treaty 1967 is the basic framework of international space law; which contains several core principles, namely the unrestricted use of space by all countries, the prohibition of claims of sovereignty over outer space, free exploration, and the obligation to save astronauts in trouble.⁴ However, in facing the era of the new space race, international law must protect the space region in the face, which was masterminded by three main actors; like the United States of America, Russia, and China.⁵ Therefore, it is considered necessary treaty law by current conditions by providing a clear interpretation of the principles of international law in outer space.

On the other hand, among the legal issues that

have arisen and caused disputes in the new outer space race era are non-intervention, the principle of proportionality, and the principle of unnecessary suffering.⁶ The three principles above do not have universal guidelines that apply to all countries.⁷ Furthermore, in outer space, the Outer Space Treaty 1967 is considered a temporary guide related to all activities carried out in space with an orientation towards international peace. The Outer Space Treaty 1967 provides for the possibility of exploration and use of all commercial aspects of outer space including the moon and other celestial bodies, with conditions that must be by the principles and provisions of international law.⁸

The opening of the Outer Space Treaty 1967 gave legitimacy to the interests of all humanity together in the aspect of advancing exploration and use of outer space with 'peaceful purposes'. The function of the 'peaceful purpose' is the maintenance of international peace and security.⁹ However, the Outer Space Treaty 1967, which is considered a 'space constitution' in any activity, does not provide a strict definition of the term 'peace', giving rise to various interpretations from every country, especially the main actors in outer space.¹⁰

With the uncertainty of the definition of 'peaceful purpose', the provisions of Article 4 of the Outer Space Treaty 1967 seem to provide a large detailed question of all aspects of outer space, specifically the militarization and installation of a country. Practical steps in the form of relevant and comprehensive provisions

¹ Anel Ferreira-Snyman, "Challenges to the Prohibition on Sovereignty in Outer Space - A New Frontier for Space Governance," *Potchefstroom Electronic Law Journal* 24 (March 29, 2021): 1–50 p. 16..

² Annette Froehlich and Claudiu Mihai Tăiatu, *Space in Support of Human Rights* (Cham: Springer, 2020) p. 140-142.

³ Inesa Kostenko, "Current Problems and Challenges in International Space Law: Legal Aspects," *Advanced Space Law* 5, no. 1 (May 2020): 48–57 p. 51.

⁴ Michael K. Simpson, "Benefit in Space Law: Principle and Pathway," *Air & Space Law* 45, no. 2 (2020): 143–56.

⁵ Matthew T. King and Laurie R. Blank, "International Law and Security in Outer Space: Now and Tomorrow," *AJIL Unbound* 113 (April 1, 2019): 125–129 p. 125.

⁶ King and Blank.

⁷ Christophe Paulussen and Martin Scheinin, *Human Dignity and Human Security in Times of Terrorism* (Heidelberg: Springer Nature, 2019) p. 101.

⁸ Jack Mawdsley, "Applying Core Principles of International Humanitarian Law to Military Operations in Space," *Journal of Conflict and Security Law* 25, no. 2 (July 1, 2020): 263–290 p. 267

⁹ Danielle Ireland-Piper and Steven Freeland, "Star Laws: Criminal Jurisdiction in Outer Space," *Journal of Space Law* 44, no. 1 (2020): 44–75.

¹⁰ Ireland-Piper and Freeland.

must be taken immediately at the international level. Therefore, it is necessary to form a convention related to space that can be used as a general principle or principle for all matters relating to outer space activity.

Previous researchers have researched the principles of the outer space treaty. First, the research conducted by Satria Diaz Pratama Putra (2019) on *Juridical Analysis of the Jurisdiction of Space Satellite Jurisdiction According to International Law*. The results of this study. The results show that the regulation of the use of outer space has been clearly stated in the Space Treaty 1967 that the use of resources from outer space is owned by all countries, where any government cannot recognize the area by claiming a point of space territory. Second, research conducted by Harmoko Yaries Mahardika Putro (2020) on the *Mars Colonization Plan: The Possibility And Scheme For Appropriation On Mars*. This study confirms that the current Outer Space Treaty mainly related to the non-appropriation principle is not relevant to the development of space technology and activities. Then, in this study, the non-appropriation code will be revisited based on the customary international law mechanism.

Third, the research conducted by Sachrizal Niqie Supriyono (2014) regarding *the 1967 Outer Space Treaty Arrangements Towards Research Performed By The United States On The Planet Mars*. This research shows that the Outer Space Treaty 1967, which aims to regulate various activities in space, still requires additional regulations that control in more detail about activities in space. The three studies above are different from the research entitled *The Development of Space Law: Applying the Principles of Space Law and Interpreting 'Peaceful Purposes' in the Outer Space Treaty 1967*; because the study discusses the principles that apply and tend to be violated

within the scope of space law and discusses the meaning of the phrase “peaceful goals” in the outer space treaty. In addition, another difference between this study and the three previous studies lies in the orientation of the study. The research that the author does seek to describe the principles that apply in space based on various provisions of international law; and discusses the urgency of a convention on outer space to emphasize the orientation of peace in space activities, especially regarding the interpretation of ‘peaceful goals’ in the Outer Space Treaty. Meanwhile, the three previous studies were more oriented towards the general discussion of outer space treatment.

So, the legal issues in this research are: (1) How to implement the principles of proportionality, non-intervention, and unnecessary suffering from the perspective of space law? and (2) What is the nature of the ‘peaceful goals’ in the 1967 Outer Space Treaty? The purpose of this study is to analyze the relevance of the proportionality, non-intervention, and unnecessary suffering principle’s in the outer space perspective; and analyzing the ‘peaceful purposes’ at Outer Space Treaty 1967.

The approach method in this legal research uses the conceptual approach and the statute approach. This legal research uses primary legal materials, in the form of statutory regulation like Outer Space Treaty 1967, UN Charter, International Covenant on Civil and Political Rights (ICCPR), The American Convention on Human Rights (ACHR), Additional Protocol I of the 1949 Geneva Convention, Declaration of St. Petersburg 1868, Montevideo Convention on the Rights and Duties of States (1933), Additional Protocol on Non-Interventions (1936), and more recent resolutions of OAS AG / Res. 78; and secondary legal materials, in the form of legal publications including textual books, legal dictionaries, legal journals,

and other legal literature.¹¹ The legal material analysis technique used in this study is to use legal reasoning with the deduction method.

Discussion

The Principle That Applies in the New Space Race Era

First, regarding the principle of non-intervention, we should first complete the term ‘intervention’. Intervention is interference by force or supported by force, from one independent State in the internal affairs of another country; and, with the principle of non-intervention, rules that prohibit the disorder.¹² The principle of non-intervention can be said to be ‘respectful’ for the principle of state sovereignty.¹³ This sovereignty can be said to be the final and absolute political authority in the country.

If a country has the right to sovereignty, this implies that other countries have an obligation to respect that right by, *inter alia*, refraining from intervening in their domestic affairs. The principle of non-intervention identifies the country’s right to sovereignty as a standard in the international community. The principle of non-intervention explicitly states the respect needed for that in not intervening.¹⁴

The principle of non-intervention as a general term in international outer space law consisting of a group of normative rules, including general principles and a set of sub-principles, rules and institutions, which prohibit

interventions of various types in various concrete and circumstances.¹⁵ The principle function of non-intervention in international relations can be said to protect the principle of state sovereignty. The principle of non-intervention is enshrined in Article 2 (7) of the UN Charter.

A country can be said to follow a non-intervention principle when it chooses not to intervene in situations where intervention is also a possible policy. The International Court of Justice in its ruling in the Nicaragua case the principle of non-intervention.¹⁶ The court also cited the four General Assembly resolutions mentioned above, as evidence of the state’s attitude towards principles of non-use of force dan nonintervention.¹⁷

According to the International Court of Justice, the interference of a country’s coercion in the internal affairs of another country is unlawful intervention.¹⁸ The court noted in a Nicaraguan ruling, that coercive requirements are met, when a country loses ‘the choice of the political, economic, social and cultural system, and the formulation of foreign policy’.

In addition, the principle of non-intervention has been agreed by countries in the Montevideo Convention on the Rights and Duties of States (1933), Additional Protocol on Non-Interventions (1936), and more recent resolutions of OAS AG / Res. 78, entitled ‘Strength-

¹¹ Marzuki, Peter Mahmud. (2017). *Penelitian Hukum: Edisi Revisi*. 13th ed. Jakarta: Kencana, p. 75.

¹² Bernard, Mountague. (1860). *On the Principle of Non-Intervention*. London: J.H. And Jas. Parker.

¹³ Zwart, Melissa de and Stephens, Dale. (2019). The Space (Innovation) Race: The Inevitable Relationship between Military Technology and Innovation. *Melbourne Journal of International Law*. 20(1): 1-28, <http://classic.austlii.edu.au/au/journals/MelbJIL/2019/2.html>.

¹⁴ Kittichaisaree, Kriangsak. (2020). *International Human Rights Law and Diplomacy*. Cheltenham: Edward Elgar Publishing, p. 111.

¹⁵ Omba, Marthinus. (1994). Prinsip Kebebasan Di Ruang Angkasa Menurut “Outer Space Treaty 1967” Dan Perkembangannya. *Jurnal Hukum & Pembangunan*, 24(4): 335, <https://doi.org/10.21143/jhp.vol24.no4.453>.

¹⁶ Butchard, P. M. (2020). *The Responsibility to Protect and the Failures of the United Nations Security Council*. London: Bloomsbury Publishing, p. 89.

¹⁷ Murphy, Sean D. (2020). Peremptory Norms of General International Law (*Jus Cogens*) and Other Topics: The Seventy-First Session of the International Law Commission. *American Journal of International Law*, 114(1): 68–86,. <https://doi.org/10.1017/ajil.2019.74>.

¹⁸ Gaeta, Paola. (2020). The Super-Normativity of International Criminal Law. *AJIL Unbound*, 114: 82–86, <https://doi.org/10.1017/aju.2020.14>.

ening the Principles of Non-Intervention and Self-Determination of Communities and Steps to Ensure Their Obedience’.

Second, the principle of unnecessary suffering. The principle of unnecessary suffering has been stated in Article 35 Paragraph (2) of Additional Protocol I of the 1949 Geneva Convention, and is also mentioned in the opening of the Declaration of St. Petersburg 1868 and in Article 23 (e) Hague Regulation 1907.¹⁹ This principle follows from one of the basic rules of international humanitarian law, precisely the custom of international humanitarian law registered in Rule 70 in the 2005 ICRC Study.

The principle of unnecessary suffering gives meaning that prohibits the use of weapons which causes unnecessary suffering.²⁰ In fact, the International Court calls the principle of unnecessary suffering as one of the main principles in international humanitarian law.²¹ Regarding the level of determining ‘excessive injury’ or ‘unnecessary suffering,’ there is a SIrUs project carried out by the International Committee of the Red Cross (ICRC).

According to Christensen²², from that project, the standard of ‘excessive injury’ or ‘unnecessary suffering’ was divided into four conditions: (a) Weapons cause specific diseases, specific abnormal physiological states, specific abnormal psychological states, specific and permanent disabilities or ‘specifically’ dis-

abilities; (b) The mortality rate in the field is more than 25% or the hospital mortality rate is more than 5%; (c) Having third-degree injuries, as measured by the classification of Red Cross wounds (10 cm or more in the skin cavity); (d) An effect where no treatment is recognized and proven well.

Some examples of banned weapons include bullets that can explode, projectiles filled with glass, “dum-dum” bullets, poisons, poisons and ready-made weapons, asphyxia gas, bayonets with jagged edges, all of which increase suffering without increasing military advantage.²³

However, this principle seems to be taken for granted by the presence of counterspace capabilities from a number of outer space actors such as America, China and Russia that are competing to publish such as antisatellite rockets (ASATs), space lasers or satellites based on the atmosphere, and other technologies in outer space.²⁴ In fact, the shuttle, satellites that are in an area of national sovereignty, ballistic missiles, *Manned Orbital Laboratory*, X-37B *Orbital Test Vehicle*, nuclear weapons, and all things that have high destructive properties, can threaten human life also.²⁵

Of course, such technology and equipment, if used intentionally or unintentionally, will cause unnecessary suffering.²⁶ It is conceivable,

¹⁹ Hosang, J. F. R. Boddens. (2020). *Rules of Engagement and the International Law of Military Operations*. New York: Oxford University Press, p. 197.

²⁰ Crawford, Emily and Pert, Alison. (2020). *International Humanitarian Law*. Second Edition. New York: Cambridge University Press, p. 79.

²¹ Esparza, Ryan M. (2018). Event Horizon: Examining Military and Weaponization Issues in Space by Utilizing the Outer Space Treaty and the Law of Armed Conflict. *Journal Of Air Law and Commerce*. 83(2): 333–49, <https://scholar.smu.edu/jalc/vol83/iss2/4>.

²² Christensen, Stian Nordengen. (2016). Regulation of White Phosphorus Weapons in International Law, FIHCL Occasional Paper. Brussels: Torkel Opsahl Academic EPublisher.

²³ Solis, Gary D. (2010). *The Law of Armed Conflict: International Humanitarian Law in War*. New York: Cambridge University Press, p. 165.

²⁴ Dennerley, Joel A. (2018). State Liability for Space Object Collisions: The Proper Interpretation of ‘Fault’ for the Purposes of International Space Law. *European Journal of International Law*, 29(1): 281–301, <https://doi.org/10.1093/ejil/chy003>.

²⁵ Freeland, Steven. (2016). Peaceful Purposes? Governing the Military Uses of Outer Space. *European Journal of Law Reform*. 18(1): 35–51, <https://doi.org/10.5553/EJLR/138723702016018001003>.

²⁶ Deeks, Ashley. (2020). Introduction to the Symposium: How Will Artificial Intelligence Affect International Law ?. *AJIL Unbound*, 114: 138–40, <https://doi.org/10.1017/aju.2020.29>.

the number of people who die if there is a outer space war with technology that can cause a high level of damage.

On the other hand, this raises stigma related to the difference in ‘power’ between the main actors who have military space forces that emerge, and other actors who only have limited abilities.²⁷ In fact, this problem has been regulated in Article IV of the Outer Space Treaty 1967 which contains provisions prohibiting countries from launching objects carrying nuclear weapons or other mass destruction weapons, building such weapons in orbit around the earth, celestial bodies or placing them in outer space.

The provisions of the Outer Space Treaty 1967 (OST 1967) have made it clear that the state maintains jurisdiction and control over the space objects they launch, and ownership is not affected by their presence in outer space.²⁸ In fact, every country must collaborate to provide assistance to spacecraft that are in distress.

Third, the principle of proportionality. The principle of proportionality is a general rule of international law. With regard to principle of proportionality, it means that the power to be used in war must be natural; and is carried out in response to the nature and level of threat to the power to be used; in other words, the strength to be used must reflect the severity of the threat.²⁹ The principle of proportionality is outlined in Additional Protocol I, stated in Article 51 (5) (b) that disproportionate proportions are ‘attacks that may be intended as relating to civilian life,

damage to civilians, damage to civilians, or a combination thereof, which would be more great in its consideration with concrete and directly anticipated military advantages’.

Article 57 (2) (a) (iii) and 57 (2) (b) of Additional Protocol I also provides recognition of this principle. Proportionality is closely related to the principles of differentiation and necessity in efforts to limit damage, injury and death to civilians and civilian objects. According to Hosang,³⁰ there are three elements that can be extracted from this principle, namely: (a) when taking action to prevent, the injured state (in battle) must choose the action that is least disruptive from the reasonably effective actions available against the opposing party; (b) these actions must be consistent with the injury suffered; (c) the scope of measurements taken must be limited to what is needed to get the goal of the countermeasure.

Article 12 (3), 14 (1), 19 (3), 21, 22 (2) and 25 of the International Covenant on Civil and Political Rights (ICCPR) and Articles 12 (3), 13 (2), 15 , 16, and 22 (3) The American Convention on Human Rights (ACHR) implicitly incorporates the principle of proportionality in the limitation clause, according to which the limitation of rights can be permitted only to the extent that it “needs” to ensure a legitimate public purpose.

The Rome Statute also includes the principle of proportionality in criminalizing war crimes, which is indicated in Article 8 (2) (b) (iv) which prohibits inadvertently launching attacks with the knowledge that such attacks will cause casualties or accidental civilian injury or damage on civilian or widespread objects, the long-term and severe damage to the natural environment is clearly excessive in relation to the concrete and immediate anticipated overall military advantage.

²⁷ McDougal, Myres S. and Lipson, Leon. (1958). Perspectives for a Law of Outer Space, The American Journal of International Law. 52(3): 407, <https://doi.org/10.2307/2195459>.

²⁸ Burwell, Jennifer. (2019). Imagining the Beyond: The Social and Political Fashioning of Outer Space. Space Policy. 48: 41–49, <https://doi.org/10.1016/j.spacepol.2018.10.002>.

²⁹ Hayashi, Nobuo. (2020). *Military Necessity: The Art, Morality and Law of War*. New York: Cambridge University Press, p. 252.

³⁰ Hosang, *Rules of Engagement and the International Law of Military Operations*, p. 211.

The principle of proportionality is not a mathematical concept, but rather a guideline to help ensure that military commanders weigh the consequences of certain attacks.³¹ In the current situation, we can take an ‘outline’ that the principle of proportionality has a positive impact, such as prohibiting attacks, which is feared could endanger civilians.³²

The above certainly relates to Article VI of the Outer Space Treaty 1967, which stresses that each country must be internationally responsible for its national space activities, whether carried out by a body or non-government, and ensure that national activities are carried out in accordance with the provisions contained in the Outer Space Treaty 1967. Private authorities that reflect all acts that are in space must obtain formal authorization and continue controlling by local official authorities.³³

In addition, it was also emphasized that the state or group of countries that are members of an intergovernmental organization must be responsible for practical problems arising from the activities of the state or intergovernmental organization. However, the negative impact of outer space utilization activities is the possibility of their use for peaceful purposes or war. This is evident in the placement of military satellites and the construction of weapons in outer space.

Also dangerous when debris has entered the vortex of the earth’s orbit,³⁴ it is feared that it could afflict landmasses in the world, and result in huge losses. And also, the possibility

of the explosion of the “space shuttle” is also become a threat to the citizens of the earth.³⁵

But, space shuttle is the only new manned space program that can be achieved on a modest budget; it is also needed to make operating space more complex and cheaper; and that is needed to do many useful things, and the space shuttle will encourage greater international cooperation in space flights.³⁶ In essence, damage that is predicted to be large if there is damage caused by the use of technology (especially in space), will have a negative impact.³⁷

The ‘Peaceful Purpose’ in the Outer Space Treaty 1967

The principle that every outer space actor must have a ‘peaceful purpose’ in carrying out all activities in outer space in accordance with Article IV Paragraph II of the Outer Space Treaty 1967. This provision only applies to countries that have ratified the Outer Space Treaty 1967.

However, there is ambiguity that is indicated in that this provision also gives permission for the use of military personnel, war equipment, scientific research, which according to researchers is very vulnerable to cause horizontal or vertical conflicts between countries and authorities within a country. Until now it can be concluded that there are no rules of international law, or space law, which oppose military use in outer space area.

Some thoughts state that the term peace in the Outer Space Treaty is the use of ‘non-military principles’ in outer space,³⁸ but on the

³¹ Gardam, Judith Gail. (1993). Proportionality and Force in International Law. *The American Journal of International Law*. 87(3): 391, <https://doi.org/10.2307/2203645>.

³² King and Blank, “International Law and Security in Outer Space: Now and Tomorrow.”

³³ Isnardi, Christina. (2019). Problems with Enforcing International Space Law on Private Actors. *SSRN Electronic Journal*. 58(1): 1–44, <https://doi.org/10.2139/ssrn.3397463>.

³⁴ Aoki, Setsuko. (2019). Domestic Legal Conditions for Space Activities in Asia. *AJIL Unbound*. 113: 103–8, <https://doi.org/10.1017/aju.2019.14>.

³⁵ Gangale, Thomas. (2019). *Space Exploration in the United States: A Documentary History*. California: ABC-CLIO, p. 200.

³⁶ Gangale, p. 215.

³⁷ Ginsburg, Tom. (2020). Authoritarian International Law ?. *American Journal of International Law*. 114(2): 221–60, <https://doi.org/10.1017/ajil.2020.3>.

³⁸ Johnson-Freese, Joan and Burbach, David. (2019). *The Outer Space Treaty and The Weaponization*

other hand there is an argument that the term 'peace' is interpreted as 'the principle of non-aggressive'.³⁹

The principle of non-aggressive means that all activities in space must comply with the provisions of Article 2 paragraph 4 of the UN charter, which in principle is not permitted to use excessive force of weapons; and the giving of threats and interventions by a party. However, this principle is also considered unclear; because it does not rule out there are some activities such as espionage via spy satellites, remote sensing satellites, the use of nuclear power, and so forth. While the principle of non-military (in space) is not permitted to use any type of weapon in any military destination in the outer space area.

However, there has been no standard certainty regarding the phrase 'peaceful purpose' in the OST 1967 until now.⁴⁰ The phrase 'peaceful purpose' in the Outer Space Treaty 1967 was treated differently by each outer space actor. The United States of America states that the 'peaceful purpose' in the Outer Space Treaty does not mean that the US is not aggressive, thus the US allowing outer space to be used in national security activities.⁴¹

That's interpretation illustrates that outer space is a legitimate system for performing important functions that facilitate military activities on land, in the air, and security in view

of offensive facts under the sea.⁴² US policy states that the use of force must be in a manner consistent with the principles of international law, as well as the space agreement which the United States attaches to self-defense and is subject to these provisions.

Therefore, the US considers access to unlimited freedom to operate in space is of vital importance to prevent aggression against the principle infrastructure of space that supports US national security. However, the United States should apply the principle of 'enacting quasi-territorial jurisdiction' of space objects in accordance with Article VIII of the Outer Space Treaty 1967, which asserts that a State (Outer Space Treaty 1967 Party) that has registered space objects must continue to have jurisdiction and control over the object This includes personnel as long as the object is in outer space.⁴³

In the above problem, jurisdiction for space activities is classified into quasi-territorial jurisdiction. Quasi-territorial jurisdiction is the total amount of state power in terms of ships, airplanes and spacecraft (to what extent they are also given legal personality to have citizenship).⁴⁴ It must be noted that quasi-territorial jurisdiction is different from personal jurisdiction.

Quasi-territorial jurisdiction not only for the vehicle or aircraft concerned, but also for all persons and matters relating to the aircraft, including the activities of such persons, whether on the fuselage or elsewhere.⁴⁵ Meanwhile, the

of Space. Bulletin of the Atomic Scientists. 75(4): 137–41, <https://doi.org/10.1080/00963402.2019.1628458>.

³⁹ Su, Jinyuan. (2010). The 'Peaceful Purposes' Principle in Outer Space and the Russia-China PPWT Proposal. Space Policy. 26(1): 81–90, <https://ssrn.com/abstract=1662224>.

⁴⁰ Smith, Bryant Walker. (2020). New Technologies and Old Treaties. AJIL Unbound. 114(1): 152–57, <https://doi.org/10.1017/aju.2020.28>.

⁴¹ Death, SAS. (2020). United States Creates the U.S. Space Command and the U.S. Space Force to Strengthen Military Capabilities in Space. American Journal of International Law. 114(2): 323–26, <https://doi.org/10.1017/ajil.2020.13>.

⁴² Fedorchak, Viktoriya. (2020). *Understanding Contemporary Air Power*. New York: Routledge, p. 179.

⁴³ Palkovitz, Neta. (2019). *Regulating a Revolution: Small Satellites and the Law of Outer Space*. Alphen aan den Rijn: Kluwer Law International B. V., p. 117.

⁴⁴ Djauhari, R.A.Z. Kartini. (1990). Yurisdiksi Negara Dan Penguasaan Pesawat Udara Secara Melawan Hukum. Jurnal Hukum & Pembangunan. 20(3), <https://doi.org/10.21143/jhp.vol20.no3.902>.

⁴⁵ Cheng, Bin. (1995). International Responsibility and Liability for Launch Activities," Air & Space Law. 20(6): 14, <https://heinonline>.

Chinese outer space doctrine addresses the ‘peaceful purpose’ by wanting a reform in the aspect of outer space through the C4ISR network. With this scheme, China is not only developing a national defense system that utilizes all defense components, but China is also willing to engage in direct military confrontation activities carried out in space by the opposing party.⁴⁶

This is done in order to achieve legitimacy and supremacy in a certain period of time in outer space. This is what is called a ‘defensive-inclusive strategy’, that China will not attack other countries, unless China is attacked by other countries.⁴⁷ The strategy provides China the benefit of not harming others when using legitimate space rights and ensuring space only when there are other problems that intentionally violate space rights and interests.⁴⁸

The annual report from the Office of the Secretary of Defense reveals that the People’s Liberation Army (PLA) uses information-shaped warfare to describe the process of how to acquire, transmit, process, and use information in conducting joint military operations throughout land, sea, air, space, cyberspace, and electromagnetic spectrum during the conflict.⁴⁹

Then, the Russian doctrine in responding to the ‘peaceful purpose’ is carried out by noting that the militarization aspect is “space danger”

and recognizing the potential for conflict in outer space,⁵⁰ with emphasizing the importance of the legitimacy of self-defense statements.⁵¹ Russia has an active outer space force and is developing counterspace capabilities, including RPOs and antisatellite lasers. But in its development, it was found that⁵²:

“Russian military doctrine and authoritative writings clearly articulate that Russia views space as a warfighting domain and that achieving supremacy”

Practically, this reveals that Russian military doctrine views space as the domain of military power; and also Russia will achieve supremacy in space which will be the deciding factor in winning conflicts in the future. The Russian military believes the importance of space will continue to expand due to the increasing role of precision weapons and supported satellite information networks in all types of conflicts.⁵³

The Russian strategy above is referred to as an inclusive strategy, which aims to prevent any threat to Russia, activities aimed at preventing direct aggression against Russia, and activities focused on the meaning of ‘total surrender’ in confrontation with the conditions set by Russia.⁵⁴ Then, how to overcome the problematics of the phrase ‘peaceful purpose’?

org/HOL/LandingPage?handle=hein.kluwer/airlaw0020&div=50&id=&page=.

⁴⁶ Wortzel, Larry M. (2019). *The Chinese People’s Liberation Army and Information Warfare*. Independently Published, p. 33.

⁴⁷ Bitzinger, Richard A. and Char, James. (2018). *Reshaping the Chinese Military: The PLA’s Roles and Missions in the Xi Jinping Era*. New York: Routledge, p. 201.

⁴⁸ McReynolds, Joe. (2017). *China’s Evolving Military Strategy*. Washington: Brookings Institution Press, p. 117.

⁴⁹ Office of the Secretary of Defense, “Annual Report to Congress Military and Security Developments Involving the People’s Republic of China 2017” (New York, 2017).

⁵⁰ Garthoff, Raymond L. (2019). *Soviet Military Doctrine*. Auckland: Pickle Partners Publishing, p. 387.

⁵¹ Renz, Bettina. (2019). Russian Responses to the Changing Character of War. *International Affairs*. 95(4): 817–34, <https://doi.org/10.1093/ia/iiz100>.

⁵² Doug Messier, *DIA: Russia Sees Reliance on Space as U.S. Military’s Achilles’ Heel*. Available from <http://www.parabolicarc.com/2019/02/17/dia-russia-sees-reliance-space-militarys-achilles-heel/>. (Diakses 20 Mei 2020)

⁵³ Craven, Matt. (2019). ‘Other Spaces’: Constructing the Legal Architecture of a Cold War Commons and the Scientific-Technical Imaginary of Outer Space. *European Journal of International Law*. 30(2): 547–72, <https://doi.org/10.1093/ejil/chz024>.

⁵⁴ Барциц, Игорь. (2020). *Constitutional Space: Doctrine, Legal Reality and 3D Illusion*. Moscow: РАНХиГС.

The most appropriate strategic step is to hold an international convention on outer space which will become a source of customary law for the international community. Conventions are 'slightly' different from other treaty or international treaties. Conventions include the classification of law making treaties, not treaty contracts.⁵⁵

International agreements with the category of law making treaties (like a international convention) will give birth to the formation of methods. The purpose of international treaties in the law-making category is that countries are expected to behave in certain ways.⁵⁶ Law making treaties provide a principle that all parties (parties who make agreements and those who do not participate in making agreements) can use the agreement as a guide or orientation.

Thus, the legal effect of the convention does not only concern those who form it, but those who do not form it. On the other hand, the legal effect of the results of this convention can stop some pre-existing rules. However, this is optional, depending on the norms from the results of the convention. At least, the international convention contains four elements, that's uniformity of the strategic views of each country, achieving clarity and consistency of juridical aspects, consolidating laws, and making customary laws.

For this reason, the convention is coordinative, because the implementation and arrangement of the results of the convention is in accordance with the wishes of each subject of international law, both those who contributed

to the convention, and those who did not participate in making the Convention.

Law making treaties encourage other countries to participate as parties who are subject to the results of the convention. That's different from international treaties which are only binding for participating countries to make agreements only.⁵⁷

In general, Law making Treaty is a classification of multilateral agreements oriented to world development. That is, multilateral agreements made through conventions are international forums to regulate all activities and actions of all countries which will be carried out in the future. The special feature of an agreement with the classification of Law making Treaty is that it lasts for a long time and can create an obligation for the national law of a country.

Conventions are a reflection of customary international law which are also part of the source of international law.⁵⁸ That's in accordance with Article 38 paragraph (1) of the Statute of the International Court of Justice (as well as contained in the UN Charter 1945) which states that in hearing cases submitted to the International Court of Justice, they will be used: (a) International Treaties; (b) International customs; (c) General Legal Principles; and (d) Decisions of Courts and Doctrines. International customs or customary international law are international obligations which have implications for international practices that are carried out repeatedly in a series of events that are surrounded by a subject of international law.⁵⁹

⁵⁵ Brölmann, Catherine. (2005). Law-Making Treaties: Form and Function in International Law. *Nordic Journal of International Law*. 74(3-4): 383-403, <https://doi.org/10.1163/157181005774939887>.

⁵⁶ Juwana, Hikmahanto. (2019). Kewajiban Negara Dalam Proses Ratifikasi Perjanjian Internasional: Memastikan Keselarasan Dengan Konstitusi Dan Mentransformasikan Ke Hukum Nasional. *Undang: Jurnal Hukum*. 2(1): 1-32, <https://doi.org/10.22437/ujh.2.1.1-32>.

⁵⁷ Gragl, Paul and Fitzmaurice, Malgosia. (2019). The Legal Character of Article 18 of The Vienna Convention on the Law of Treaties. *International and Comparative Law Quarterly*. 68(3): 699-717, <https://doi.org/10.1017/S0020589319000253>.

⁵⁸ Oppenheim, L. (2019). *The Future of International Law*. Glasgow: Good Press, p. 91.

⁵⁹ Chimni, B. S. (2018). Customary International Law: A Third World Perspective. *American Journal of*

International customs will be accepted as law by the international community if carried out in the same set of events, with a repetitive period of time, of a general nature, and can be binding as law.⁶⁰ Of course, convention as a primary source of international law will provide strong legitimacy for countries, especially countries as outer space actors.

In general, only the results of conventions ratified by a number of large countries can establish general international law, especially in the aspect of custom as a source of international law.⁶¹

There are two cumulative elements so that something can be considered an international custom. *First*, the practice is carried out by most countries, or generally recognized as a series of actions on a matter relating to international relations. In the aspect of the space convention, each country is expected to follow everything that has been stated in the results of the convention; which reflects a pattern of continuing and similar actions. *Secondly*, this habit must be accepted as law by the international community, usually as long as the rights and obligations of the state are in accordance with the principles and regulations of international law as well.

The convention is considered to be able to cover more widely the international community, because the discussion in the convention has the substance of the problem which covers all problems felt by every country in the world.

In other words, conventions function to solve world problems. In fact, this is a momentum for newly independent countries to

International Law. 112(1): 1–46, <https://doi.org/10.1017/ajil.2018.12>.

⁶⁰ Wood, Michael. (2019). Customary International Law and the General Principles of Law Recognized by Civilized Nations. *International Community Law Review*. 21(3–4): 307–24, <https://doi.org/10.1163/18719732-12341404>.

⁶¹ Henriksen, Anders. *International Law*. Second Edition. Oxford University Press, p. 79.

show their existence in the international world by wanting to participate in the formulation of international legal norms, including in making conventions. The convention gave birth to certainty over the uncertainty of the parties who made a single interpretation of the peaceful aims in the 1967 OST.

It was this uncertainty that was initially feared could lead to war outbreaks from parties who entered into an agreement in the Outer Space Treaty. Of course, the legal instruments resulting from this convention will be legally binding. It is hoped that the latest Outer Space Convention will be able to regulate all aspects of outer space, from objects circulating in outer space, to those who can carry out commercial actions in space, activities that are permitted in outer space, infrastructure and space installations, and military activity in space.

In order to face the ambiguity of the meaning of ‘peaceful purpose’ while waiting for the outer space convention to be carried out, the aspects of outer space security for every state actor should be strengthened to ensure military operations in outer space are increasingly important,⁶² also for national security and to avoid interference from other countries.⁶³

The program being implemented must be able to create an offensive and defensive system for objects in orbit. Outer space security has been defined as safe and sustainable access to and use of outer space, and freedom from outer space-based threats.⁶⁴ Outer space actors

⁶² Porras, Daniel. (2019). Anti-Satellite Warfare and The Case for an Alternative Draft Treaty for Space Security. *Bulletin of the Atomic Scientists*. 75(4): 142–47, <https://doi.org/10.1080/00963402.2019.1628470>.

⁶³ Dehm, Julia. (2017). Authorizing Appropriation?: Law in Contested Forested Spaces. *European Journal of International Law*. 28(4): 1379–96, <https://doi.org/10.1093/ejil/chx086>.

⁶⁴ Mainura, Tunku Intan. (2018). Outer Space Law in Retrospect. *The International Journal of Social Sciences and Humanities Invention*. 5(5): 4661–71, <https://doi.org/10.18535/ijsshi/v5i5.04>.

have so far been able to access and use space for a variety of civil and military applications without having a significant negative impact on access to and use of space by others, or without exporting land-to-outer space conflicts.⁶⁵

According to Abeyratne,⁶⁶ there are nine indicators of outer space security, namely the space environment, space awareness, space security law, policies and doctrines, civil space programs and global utilities, commercial space, space support for terrestrial military operations.

CONCLUSION

The protection of the outer space region in the new space race era must of course 'pay attention' to the principles of international space law which also apply in humanitarian law, including the principle of non-intervention, the principle of unnecessary suffering, and the principle of proportionality. For this reason, each outer space actor is expected to obey and implement these principles in outer space activities. Furthermore, the uncertainty over the phrase of 'peaceful purpose' in the Outer Space Treaty 1967 made several countries have different doctrines in interpreting the phrase of 'peaceful purpose', such as the Doctrine of the United States of America, China, Russia which has a different space doctrine. United States of America stated that 'peaceful purpose' in the Outer Space Treaty 1967 did not mean 'not aggressive,' so it was very possible that outer space could be used in national security activities. While China wants a reform in the aspect of outer space from the C4ISR network. This Chinese doctrine encourages China to

have an 'inclusive defensive strategy,' that China will not attack other countries, unless China is attacked by other countries. Then, Russia has a outer space doctrine by actively developing counterspace capabilities. However, current developments illustrate that Russia has an 'inclusive strategy', which encourages Russia to prevent any threats including aggression from other countries, as well as the implementation of 'surrender totality' in outer space confrontations. Therefore, a convention related to outer space is needed, from which the convention is expected to give birth to an international custom which is the source of international law in various activities in outer space.

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⁶⁵ Martinez, Peter. (2019). Challenges for Ensuring the Security, Safety and Sustainability of Outer Space Activities. *Journal of Space Safety Engineering*. 6(2): 65–68, <https://doi.org/10.1016/j.jsse.2019.05.001>.

⁶⁶ Abeyratne, Ruwantissa. (2011). *Space Security Law*. Heidelberg: Springer Science and Business Media, p. 104.

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