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# International Legal Regulations Concerning Launching of Russian Anti-Satellite Weapon Missiles Reviewed in Space Law Perspective

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**Abstract:** The development of weapons technology is currently very advanced and competitive, one of which is the Anti-Satellite weapon (ASAT) technology. ASAT has become a real threat to the sustainability of the space environment, this is because ASAT has the potential to damage international peace and security, trigger an arms race, and increase the amount of space debris orbiting the earth. The absence of regulations that specifically regulate ASAT makes countries feel free to conduct antisatellite missile test launches. For example, in 2021 Russia conducted an ASAT test targeting the Cosmos-1408 satellite. Using normative juridical research and research approaches with statute approach, case approach, and analytical approach, the author wants to study and analyze international legal arrangements regarding the launch of Anti-Satellite Weapon (ASAT) missiles and the legal consequences against Russia as the country that launches Anti-Satellite Weapon (ASAT) missiles. Based on the results of the study, the researchers found that there were no regulations specifically limiting ASAT, but the regulation in question should have been contained in the Outer Space Treaty 1967 as the basis for regulating all activities related to space, then further legal consequences against Russia for launching anti-missile missiles. -satellite, namely Russia is obliged to be responsible in terms of responsibility and liability in terms of liability and is strengthened by the principle of liability based on fault as stated in the Liability Convention 1972.

Keywords: Legal Arrangements; ASAT; Space Law

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#### 1. Introduction

The development of outer space began with the advancement of human technology in 1957 through the Sputnik I program, the first satellite to be flown into space belonging to the Soviet Union.<sup>1</sup>Rapid technological developments affect the intensity of state activities in space.<sup>2</sup>Density of activity in space has consequences that must be experienced.<sup>3</sup>According to data to date, a total of about 8,000 man-made objects have occupied Earth's orbit. Satellites are estimated to number around 3,000 and according to the Space Surveillance Network (SSN) there are currently a total of 24,500 space objects orbiting the earth.<sup>4</sup>

With the rapid development of space technology, satellites launched into space have increasingly expanded their functions and roles, which are no longer limited to research research purposes but for the purpose of space domination and specifically to support national defense and security, by launching reconnaissance satellites that can monitor and spy. spy on the conditions of certain areas to the point of damaging satellite transmissions of other countries.<sup>5</sup>As a result of the satellite function like this, causing<sup>6</sup>anxiety and fear that prompted to immediately create technology with functions such as anti-ballistic missiles with a target to bring down satellites, created a guided missile that has traceability to earth orbit, the main purpose of which is to eliminate or destroy satellites orbiting the earth. As it is called Anti-Satellite Weapon or ASAT.

Anti-satellite weapons or ASAT, are guided missiles used to destroy or damage satellites either physically or non-physically.<sup>7</sup>There are two types of ASAT, kinetic and non-kinetic. Kinetic ASAT is used to strike an object and then physically destroy it like a ballistic missile. Meanwhile, non-kinetic ASAT is used to disable or destroy space objects using non-physical means such as frequency jammers, lasers, or cyberattacks.<sup>8</sup>

The latest news that also shocked the international community due to the test of an anti-satellite weapon (ASAT) missile by Russia as the latest case study that occurred in 2021, the surprising thing from this news is because Russia as a country that the whole world knows about its space capabilities is assessed should no longer need to demonstrate tests like this, even Russia is known as a country that supports the prevention of arms races in space. But in fact on November 15, 2021, Russia's anti-satellite weapon (ASAT) missiles went into the air as a step and a way for Russia to

<sup>&</sup>lt;sup>1</sup>T. May Rudy, 2002, International Law 2, (Bandung: PT Refika Aditama, 2002), p. 39.

<sup>&</sup>lt;sup>2</sup>Marthinus Omba, "The Principles of Freedom in Space According to the 1967 Outer Space Treaty and Its Development", Journal of Law & Development, Vol. 24 No. 04, 1994, p. 2.

<sup>&</sup>lt;sup>3</sup>Selvie Ruthyarodh, Regulation of Commercialization of Space in International Law (Thesis), Faculty of Law, University of North Sumatra, Medan, 2001, p. 1-2.

<sup>&</sup>lt;sup>4</sup>http://www.amazine.co/14488/berapa-nomor-satellite-yang-orbit-earth/ (accessed on February 17, 2022 at 02:00 WITA)

<sup>&</sup>lt;sup>5</sup>Nugraha Pranadita, Imas Rosidawati, and Tansah Rahmatullah, Space Law Theory, (Yogyakarta: Deepublish, 2019) page 1.

<sup>&</sup>lt;sup>6</sup>Moh Rusdiyanto U. Puluhulawa and Riski Husain, "Body Shaming Through Social Media As a Digital Crime in the Era of Disruption", Jambura Law Review, Vol. 3 No. 1, (2021). page 120.

<sup>7</sup>David Wright, 2008, China's Kinetic Energy Anti-Satellite Test. Harvard Asia Review

<sup>&</sup>lt;sup>8</sup>https://www.firstpost.com/world/russia-earns-global-ire-over-anti-satellite-missile-test-how-these-tests-create-problem-of-space-junk-10140511.html ( accessed on 17 February 2022 at 04:14 WITA)

show its defense and security military power to countries that have reconnaissance satellites in space, as confirmed by the Ministry of Defense of the Russian Federation, Sergei Shoigu:

"Мы ействительно али ешно ерспективную ему. а елирно оразила арый "9 (We actually managed to test that promising system, it hit the old satellites amazingly)

These tests have produced large debris in Low Earth Orbit (LEO).<sup>10</sup>According to the official statement from the National Aeronautics and Space Administration (NASA), the destruction of the Kosmos 1408 satellite created about 1,500 pieces or fragments of satellites that propagated into orbit at very high speeds. This test can obliterate other satellites that are in the same trajectory because the satellite that is hit by an ASAT rocket will shatter into pieces, which will float freely and spin at incredible speeds, making it highly potential to cause a collision and cause damage to satellites of other countries in its path. the same orbit, this amount of debris also allows collisions between objects or better known as Kessler syndrome<sup>11</sup>.

After a test launch of an anti-satellite weapon (ASAT) missile by Russia in 2021 a year later, on January 21, 2022 it was confirmed by Beijing that their satellite Tsinghua Science Satellite had been hit by fragments of the cosmos 1408 satellite as a result of the Russian ASAT firing test, so that this incident caused technical problems for the operation of the Chinese satellite, and this also strengthened the argument that such a test would only have a negative impact on the sustainability of the space environment.

The massive adverse effects generated by the test firing of an anti-satellite weapon (ASAT) leaves some interesting questions to be studied in international law, more specifically the law of space, namely whether the test launch of an anti-satellite weapon (ASAT) missile by Russia can be justified. according to space law, how it is regulated and what are the legal consequences for Russia as an anti-satellite weapon (ASAT) missile launching country for the harmful effects caused by space law. The above description is considered an important matter to be understood carefully and is very interesting to study, especially the legal study of anti-satellite missile launches with a case study of the anti-satellite weapon (ASAT) missile test by Russia in terms of several legal instruments. specific international law on space law through a thesis entitled "International Law Arrangements Regarding the Launch of Russian Anti-Satellite Weapon (ASAT) in the Perspective of Space Law"

<sup>&</sup>lt;sup>9</sup>ойгу аявил, о оенные а аниях "ювелирно" оразили арый , https://www.interfax.ru/russia/803315 (accessed February 17, 2022 at 23:45 WITA).

<sup>&</sup>lt;sup>10</sup>https://carnegieendowment.org/2021/11/17/dangerous-fallout-of-russia-s-anti-satellite-missile-test-pub-85804 (accessed February 17, 2022 at 00:27 WITA).

<sup>&</sup>lt;sup>11</sup>Kessler Syndrome is a scenario in which the density of objects in low earth orbit is high enough that collisions between them are unavoidable and cause a cascade.

# 2. Method

Normative juridical law research is the choice of researchers as a form of this research. Research (normative legal research) is research on legal documents related to a legal event that is adjusted to the standards contained in international legal regulations and instruments.<sup>12</sup>The research approach method uses the Written Rules Approach (statute approach), Case Approach (case approach), and Conceptual Analysis Approach (analytical conceptual approach). The technique of analyzing legal materials in this study uses descriptive normative techniques<sup>13</sup>namely by analyzing the legal materials that researchers collect such as international conventions or agreements, international/national legal journals, research results, books, and publications such as theses, theses or dissertations.

#### 3. Analysis or Discussion

- 3.1. International Legal Arrangements Concerning the Launch of Russian Anti-Satellite Weapon (ASAT) Missiles on the Dangerous Impacts Caused from the Perspective of Space Law
- 3.1.1 Purpose and Importance of Launching Russian Anti-Satellite Weapon (ASAT) Missiles

There are several things we need to know about what Russia's goals and interests are in launching its action, namely launching an anti-satellite missile on November 15, 2021, here the author will describe some of the reasons for Russia, including:

1. Maintaining the Defense and Security Regime

Several countries, including the United States, is a country that has demonstrated ASAT twice and the second demonstration was a reaction to China's testing of ASAT in 2007, it made Russia pay more attention to this technology, especially since it broke from the Soviet Union. , Russia has by no means carried out similar tests as those carried out by the United States, China and India.

Russia's most important reason is to maintain the security of its defense regime because until now satellites have switched functions from those that used to support long-distance telecommunications, gps, or for weather forecasting, to a satellite that can spy on a country and can spy on numbers. defense equipment or troop movements that should be an intimidation movement for countries that do not yet have ASAT technology. That is the reason that Russia considers the security of its defense regime to be achieved if they develop this technology and test it in the near future to demonstrate and/or improve its defense and deterrence capabilities against spy satellites of other countries

<sup>&</sup>lt;sup>12</sup>Soedjono Soekanto and Sri Mamudji, Normative Legal Research: A Brief Overview, (Jakarta: Rajawali Press, 2006), p. 23.

<sup>&</sup>lt;sup>13</sup>Peter Mahmud Marzuki, Legal Research, (Jakarta: Kencana Prenada Media Group, 2005). p. 133.

which at times threaten its defense and security can be countered with missiles. anti-satellite they have.

2. Self Defense

The anti-satellite missile owned by Russia has become a means to compete with other countries that have succeeded in updating this technology, this missile can also determine the value and policy decisions of Russia to maintain its security regime, despite so much criticism from the international community or the bloc countries. In the west, they remain firm to develop this technology in order to support self-defense measures for the continuity of their country's defense and security.

Russia also thinks that their self-defense action is meant to try to continue to be present in every technological development that poses a threat to its country, especially big countries like America and its allies who will never stop showing their existence in the field of weapons technology.

3. Projecting power

As stated by deganit payikowsky, one of Russia's goals is to destroy its satellites in space in order to conduct tests or demonstrations of its newest technology and project its power to measure how much capability this technology can destroy satellites in space and it is also supported by the desire to use this capability. ASAT before any significant prohibition or restriction<sup>14</sup> by mechanism<sup>15</sup> international.

However, on the other hand this has backfired against Russia because even though there are no specific regulations that limit or reduce ASAT, this missile launch activity must still refer to the outer space treaty as a regulation made to regulate all activities related to outer space. or any space utilization activity.

#### 3.1.2 Test Firing of Russian Anti-Satellite Weapon (ASAT) According to Space Law

To preserve and protect outer space, international law has regulated issues related to the use of outer space through space law. Space law regulates the activities of states in space and guarantees the protection of terrestrial and non-terrestrial life. With the existence of space law, all parties to the agreement without exception are required to follow the rules contained therein. The Treaty of Principles which regulates the activities of States in the exploration and use of outer space, including the Moon and other celestial bodies, or commonly known as the Outer Space Treaty 1967.

<sup>&</sup>lt;sup>14</sup>Ahmad Wijaya and Nasran, "Comparison of Judicial Review: A Critical Approach to the Model in Several Countries", Journal of Legality, Vol. 14 No. 2, (2021). page 90.

<sup>&</sup>lt;sup>15</sup>Nur Mohamad Kasim and Indra Saputra Daud, "Application of the Concept of Maslahah by Judges to Issuance of Marriage Dispensation Due to Pregnancy in eligious Courts, Jambura Law Review, Vol 4 No. 1, (2022). page 130.

This agreement is designed to reduce the intensity of potential conflicts that will inevitably arise over space and its physical resources in the future. The establishment of the Outer Space Treaty is a basic guideline for countries in their space activities. This agreement includes principles governing the use of outer space, including the moon and other celestial bodies, which all users of outer space must comply with. These principles include:<sup>16</sup> The principle (common heritage of mankind), as stated in Article I the first paragraph of the Outer Space Treaty, which reads:

"The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind"

Article 1 of the first paragraph, the Outer Space Treaty explains that the exploration and use of space, including the moon and other celestial bodies, must benefit all countries, this is because outer space belongs to all mankind or a common property which makes it permissible for all countries to explore carry out activities in space, with the limitation that these activities are for the benefit of mankind. When referring to the ASAT system, which works by immobilizing satellites through barracking methods and producing explosions, it causes debris from the satellite fragments which can lead to the accumulation of space debris and have a negative impact on the safety of other celestial bodies, mankind and the universe. Therefore, it is certain that the launch of ASAT has violated the principle of the common heritage of mankind and Article 1 of the first paragraph of the Outer Space Treaty. This is none other than because ASAT threatens the security of space as a common area of mankind.

The next principle is the principle (general international law applies), while this principle is contained in article III of the outer space treaty which reads:

"States Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the Moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international cooperation and understanding"

The purpose of this article is that all States parties to this treaty, in the use and implementation of their activities in outer space, including the moon and other celestial bodies, must comply with international law, including the Charter of the United Nations, with a view to maintaining peace and security and promote international cooperation. Most importantly, Article III of the Outer Space Treaty warns all space users to apply the United Nations Charter and international law in general.

Regarding the existence of ASAT and the success of ASAT testing in destroying targets or satellites, ASAT is one of the advanced technologies that poses a fairly dangerous threat to international security and can endanger international peace. Consideration

<sup>&</sup>lt;sup>16</sup>IDG Palguna, International Space Law (Outer Space Law): Study of Utilization for Peaceful Purposes, (Depok: Rajagrafindo Persada, 2019) pp. 12-13.

that every country or space user must understand that any technology, especially ASAT launched in space, must take into account the resulting impact. However, from a handful of experiments that have been carried out, there is a fact that the calculation of the consequences and impacts is not taken into account by the launching country. Therefore, The next principle is the principle (peaceful goals). This is contained in article IV of the second paragraph of the outer Space Treaty which reads:

"The Moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military maneuvers on celestial bodies shall be forbidden. The use of military personnel for scientific research or for any other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the Moon and other celestial bodies shall also not be prohibited"

Article IV, the second paragraph of the Outer Space Treaty, explains that the moon and other celestial bodies must be used exclusively for peaceful purposes by all participating countries. Then it was also explained related to the prohibition on the construction of military bases, fortifications as well as the testing of all types of weapons and the implementation of military exercises.

The essence of Article IV, the second paragraph of the Outer Space Treaty, explains that the use of the moon and other celestial bodies, as well as by military personnel, is permitted but for peaceful purposes. Interpretation of peace can be understood as a situation where everything goes as usual and there is no conflict between the parties.<sup>17</sup>This is also in accordance with what is stated in one of the principles of the Outer Space Treaty, namely the principle for peaceful purposes that exploration and exploitation of outer space must ensure the implementation of peace in outer space.<sup>18</sup>In addition, Article IV of the Outer Space Treaty is also in line with the goal of the Prevention of Arms Race in Outer Space (PAROS) to preserve space by prohibiting the race and development of weapons in outer space.

Regarding the aftermath of the successful ASAT test-firing, there has been some reaction from other countries that are currently developing the technology, so there is some speculation that the ASAT test has the potential to spark an arms race in space. This is reinforced by the reactionary test theory presented by Nivedita Raju who said that when a country owns or develops a technology and then tests it, it will trigger other countries that have similar technology to develop the same technology and update it to be able to test it out and improve it. shows the dominance of weapons technology it has. Therefore, most countries worry that in the future there will be a race for ASAT or other modern weapons that could damage relations between countries and destroy international peace. Based on what has been explained above, it can be said that the ASAT test violates Article IV of the Outer Space Treaty because

 <sup>&</sup>lt;sup>17</sup>Haryomataram, Introduction to Humanitarian Law, PT Rajagrafindo Persada, Jakarta, 2005, page 217.
<sup>18</sup>Lucy Stojak, The Non-Weaponization of Outer Space, Prepares for the International Security Research and Outhreach Programme, International Security Bureau, 2002, p. 50.

it is considered not to carry out peaceful use of outer space, for the safety of mankind, celestial bodies, and outer space.

Next is the principle of (protection and preservation of the outer space environment). This is in accordance with what is stated in Article IX of the Outer Space Treaty which states:

"...If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, including the Moon and other celestial bodies, would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space including the Moon and other celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment"

Article IX of the outer space agreement explains that the exploration and exploitation of outer space carried out by a country if it is known that it can harm or hinder the exploration and exploitation activities of other countries, then that country needs to hold international consultations before the action is taken.<sup>19</sup>This article also emphasizes that states parties should not carry out experiments or activities using space that can harm the space environment.

In the case of missile launches, another effect that comes after a successful test fire of the ASAT is the result of the satellite target being destroyed in fragments. Satellites that are targeted by ASAT will of course explode to pieces and cause debris. The debris will be scattered around the Earth's orbit without a direction and will become space junk. As a result, space debris will accumulate to the point of threatening the safety of mankind, the moon, and other space objects, as well as space itself. This is based on concerns about the possibility of debris from satellites falling to the earth's surface or even hitting other celestial bodies. With this fact, it can be ascertained that the ASAT test has violated Article IX of the Outer Space Treaty.

#### Table 4.1

The principles that have been violated by the test launch of the Anti-Satellite Weapon (ASAT) missile by Russia targeting the satellite cosmos-1408 according to

space l	aw

Space Law Principles	Chapter	Violation Act
The Principle of Common Heritage of Mankind / The principle of Space belongs to mankind	<b>Article I</b> first paragraph of the 1967 Outer Space Treaty	Russia's ASAT test resulted in the accumulation of space waste that could threaten the safety of space, so that future generations are threatened with not being able to carry out space exploration and utilization activities.

<sup>&</sup>lt;sup>19</sup>Julio Barboza, The Environment, Risk, and Liability in International Law, Martinus Nijhoff Publisher, Leiden Boston, 2011, p. 22-30.

General principles of international law apply	<b>Article III</b> Outer Space Treaty 1967	Russia's ASAT test has the potential to be dangerous to international security so that it can damage international peace which is the main goal of international law and the UN Charter
Principle of Peaceful Purpose	<b>Article IV</b> second paragraph of the 1967 Outer Space Treaty	The ASAT launch test conducted by Russia does not reflect peaceful purposes at all, because this test only triggers tension between countries and has the potential for conflict, far from the provisions for using space for peaceful purposes.
Principles of Environmental Protection and Preservation	<b>Article IX</b> Outer Space Treaty1967	The Russian ASAT test has violated the principles of environmental protection and preservation, especially the space environment because the collision of ASAT missiles and satellites in space has produced debris that is scattered in thousands and becomes space debris, this also triggers the occurrence of Kessler syndrome.

#### 3.1.3 Legal Regulations Regarding Anti-Satellite Weapon (ASAT) Missiles

From some of the descriptions that have been discussed, it is a fact that if you look at it explicitly there is no regulation that mentions or has a regulatory diction regarding ASAT missiles as well as regulations on anti-ballistic missiles. However, because ASAT is based on a missile launched from earth into space to target satellites, meaning that its activities include activities related to space, the launching country should be guided by the outer space treaty that has been agreed as a regulation that regulates all matters related to exploitation, exploration activities., or exploitation<sup>20</sup>space. So in this case, Russia as an anti-satellite missile launching country and at the same time as a party to the outer space treaty should make the outer space treaty a guideline in carrying out its activities that are in contact with space, the massive danger impact caused by anti-satellite missile tests. This makes Russia's anti-satellite missile launch activities unjustifiable and this causes Russia to have to bear the legal consequences as a consequence<sup>21</sup> for their anti-satellite missile launch event on November 15, 2021.

The existence of the ASAT firing test which is so massive and causes a general hazard impact, the researcher hopes that in the future countries developing this technology can present an agreement to form a regulation that can limit or reduce the development of ASAT technology. The regulations that were formed specifically regarding ASAT are a form of belief in providing opportunities for future generations

<sup>&</sup>lt;sup>20</sup>Nuvazria Achir, "Fulfillment of the Constitutional Right of Abandoned Children Victims of Economic Exploitation", Jambura Law Review, Vol. 4 No. 1, (2022). Pg 163.

<sup>&</sup>lt;sup>21</sup>Ishaq, Fundamentals of Law, Cet. I, Sinar Graphic, Jakarta, 2001, p. 45.

to enjoy the enormous economic and scientific benefits that space has. If countries need a reference for how this regulation should be formed, then countries can look in the mirror or look at past regulations that have succeeded in stopping the development of similar destructive missile technology, Going forward, with this analysis, the researchers strongly suggest and pursue countries with space power to immediately make multilateral agreements to limit and reduce the development of ASAT, especially the destructive kinetic ASAT and its testing, with three main points that must be included in the agreement, such as;

- 1) All member parties must ensure not to deploy or launch their ASAT kinetic, without permission from UNOOSA (United Nations Office for Outer Space Affairs) to ensure space and human safety caused by ASAT kinetic debris,
- 2) All member parties must obtain permission, if they wish to test the ASAT kinetic system, by providing special data to UNOOSA and,
- 3) All member parties must act to monitor the development and kinetic testing of ASAT.

Because once again the author needs to emphasize to countries with space power that future generations are far more important to be protected than mere national egos. However, the real obstacle is on the political stage, whether countries that develop ASAT technology are willing and able to achieve this concern.

#### 3.2. Legal Consequences on Russia as an Anti-Satellite Weapon (ASAT) Missile Launching Country for the Dangerous Impacts Caused by the Perspective of Space Law

Russia cannot ignore the legal rules contained in the Outer Space Treaty.<sup>22</sup>The ASAT test conducted by Russia is an act that has violated the rules and principles in the implementation of space activities as regulated in the Outer Space Treaty. These violations, as previously described, include:

- a) Principles of Common heritage of mankind and Article I the first paragraph of the Outer Space Treaty. This is because, the Russian ASAT test has caused the accumulation of space debris that could threaten the security of space in the future.
- b) The principles of general international law apply to Article III of the Outer Space Treaty. ASAT has the potential to endanger international security, and threaten international peace, which is the main objective of international law and the UN charter.
- c) Peace Interest Principle article IV, second paragraph of the Outer Space Treaty. The impact of the successful Russian ASAT test has sparked an arms race and a threat to space security and the scattered debris can lead to conflict between countries.
- d) Article IX of the Space Treaty, Russia's ASAT test has the potential to cause an adverse collision due to the presence of space debris from the test, with this fact it is very clear

<sup>&</sup>lt;sup>22</sup>Huala Adolf, Aspects of the State in International Law, Rajawali Pers, Jakarta, 1991, p. 173.

that Russia does not respect the principle of conservation at all.<sup>23</sup>space environment in Article IX of the Outer Space Treaty.

With regard to the violation committed by Russia against the ASAT test mentioned above, it can be concluded that Russia cannot fulfill its obligations under the Outer Space Treaty as a country, because the ASAT test was carried out not in accordance with what is specified in the terms and principles of the Outer Space Treaty. Whereas Russia is bound to be responsible for its actions in accordance with the principle of responsibility in the Outer Space Treaty as Russia is a party to the treaty, according to the theory of international legal responsibility, Russia must be responsible.

In 2022, concerns about space debris are growing as a result of the test of a Russian anti-satellite weapon (ASAT) missile targeting the cosmos-1408 satellite, causing the satellite to disintegrate into rubble and present a real threat to the environment. space. One of the incidents of the collision of space debris and active satellites occurred on January 18, 2022, a fragment of space debris cosmos-1408 collided with a satellite belonging to China called the Tsinghua satellite. As a result of the collision, the Tsinghua satellite underwent significant changes, and experienced technical problems related to its orbital system, there were damaged and detached parts of the Tsinghua satellite that did not function optimally and even moved erratically in orbit, China,<sup>24</sup>as an aggrieved country based on the description above, it can act by holding Russia accountable for the damage it suffered, namely the damage to the Tsinghua satellite. But China can't just file a lawsuit, because it must first prove whether the damage it suffered was Russia's fault. This, of course, refers to the principle of Liability based on fault,<sup>25</sup>where the responsibility can be carried out by carrying out previous evidence and calculating the losses suffered in outer space. China then proceeds with evidence of liability based on the principle of liability based on fault. China and the Institute of Precision Instruments Engineering (IPIE) detected significant changes in the scientific satellite orbiting Tsinghua in the form of changes in the rotational axis and rotational speed of the reflecting satellite. These results are then reported to CSSI as the Center for Spatial Standards and Innovation. The Cosmos-1408 satellite was shot by Russia's ASAT near the orbit of the Tsinghua satellite. Therefore, based on this evidence, China can claim damages against Russia for the damage it suffered.

*Liability based on fault* may apply in the case of China's claims for damages suffered. With the evidence at hand, China can sue Russia for the damage to the Tsinghua Satellite after it was hit by debris from the cosmos-1408 satellite. This is in accordance with Article III of the Liability Convention, which forms the basis for the principle of liability based on fault. With Russia's fault causing losses to other countries, Russia is obliged to account for its actions in accordance with the principle of responsibility contained in the Outer Space Treaty, namely international liability and this is reinforced by the principle of liability based on fault.

<sup>&</sup>lt;sup>23</sup>Novendri M. Nggilu, Lisnawaty W. Badu, and Suwitno Y. Imran, "Legal Protection Bonda and Bulango Language: in Reality and Prospect", Jambura Law Review, Vol. 3 No. 1. (2021). page 28.

<sup>&</sup>lt;sup>24</sup>Melisa Towadi, Etc. "An Indication of China's Policy Towards Uighurs and its Implications by International Law Aspects", Jambura Law Review, Vol. 3 No. 1, (2021). p. 59.

<sup>&</sup>lt;sup>25</sup>Shawn N. Malcolm, International Law, Nusa Media, Bandung, 2013, p. 774.

# 5. Conclusion

Based on the analysis above, it is concluded that currently there is no specific regulation that limits or reduces the destructive ASAT anti-satellite weapon. However, this does not mean that the countries that develop this technology can freely and freely conduct trials with great hazard and threat impacts on the space environment and the Earth in particular. So, regarding the regulation in question, countries should refer to the Outer Space Treaty 1967 as a regulatory guide for the exploration and use of outer space as well as guidelines governing all activities related to outer space.

Furthermore, based on space law, countries in ASAT activities, in this case Russia must bear the legal consequences as a consequence of the ASAT missile launch event that they carried out on November 15, 2021, namely taking responsibility for international responsibility and liability. With the incident, Russia is obliged to compensate and provide compensation on the basis of the principle of liability based on fault as stated in the Liability Convention 1972.

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