

# THE RULE OF LAW IN OUTER SPACE- A Call for International Cooperation

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## Abstract

*Preventing outer space from becoming an arena of conflict is essential for strengthening strategic stability. Consistent with this notion, for the past decades States have been working together through a network of multilateral treaties, conventions, resolutions and declarations to face the challenges presented by the exploration and use of outer space and to adopt approaches for responsible space activity. These multilateral treaties and conventions which are but a drop in a greater pool of space agreements underscore the importance of international cooperation in developing the rule of law and creating the foundation for the outer space legal framework we have today.*

*Nevertheless the conferences and committees that have created a platform for such cooperation face impossible political hurdles and impasse on de-weaponisation of outer space among other things, which continue to date. This article discusses some of these developments in light of the prospects of the development toward a global rule of law. The article proposes that perhaps this is the opportune time to heed the decades' long call for the establishment of a World Outer Space Authority. This Authority will galvanize and coordinate all the efforts made by the above conferences and committees to develop the rule of law. It will provide an alternative platform where binding decisions can be made by majority vote versus consensus to ensure enforcement of the rule of law. It maybe that, an Authority with power is required in this period of weaponisation of outer space to spearhead the governance of the unique legal and technological context of outer space to ensure its peaceful use and long term sustainability.*

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## **INTERNATIONAL COOPERATION AND THE RULE OF LAW**

Over the years outer space law has been transformed into a relatively progressive system of international law, anchored in a network of treaties, at the core of which lay a series of law-making international conventions, resolutions and declarations. This system underscores the role of multilateral treaty processes in promoting and advancing the rule of law.<sup>1</sup>

The rule of law is an important foundation for universal respect for the principles of justice in accordance with the United Nations Charter. It is relevant to all three pillars of the United Nations — peace and security, development, and human rights. It is however important to maintain a comprehensive approach to the concept as multilateral treaty processes are constantly evolving and, every treaty is deemed a sign of trust and international cooperation. The rule of law cannot therefore, be described simply as a legal doctrine or set of principles, for it is only our actions that give meaning to our principles.<sup>2</sup>

The importance of international cooperation in developing the rule of law is evidenced by the promulgation of the Outer Space Treaty<sup>3</sup> (OST) and the refining and expansion of the OST's core principles in later treaties and conventions. Four general multilateral treaties<sup>4</sup> together with Principles<sup>5</sup> adopted by the General Assembly have resulted from this exercise.

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<sup>1</sup> A discussion on the role of multilateral treaty processes in promoting and advancing the rule of law was held at the UN Sixth Committee seventieth session designated as “the role of multilateral treaty processes in promoting and advancing the rule of law” 14 October 2015.

<sup>2</sup> Ibid, as per RASMUS BØGH JOHANSEN (Denmark), also speaking for the Nordic Countries,

<sup>3</sup> (General Assembly resolution 2222 (XXI), annex)—adopted on 19 December 1966, opened for signature on 27 January 1967, entered into force on 10 October 1967.

<sup>4</sup> The four include:

a) Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (Resolution 2345 (XXII)) – adopted on 19 December 1967, opened for signature on 22 April 1968, entered into force on 3 December 1968;

b) Convention on international Liability for Damage Caused by Space Objects (Resolution 2777 (XXVI)) – adopted on 29 November 1971, opened for signature on 29 March 1972, entered into force on 1 September 1972;

With the above in mind, weaponisation of outer space brings to the fore the question of whether the threat or use of force in outer space was prohibited in all circumstances. The question that begs an answer is whether the above action gives meaning to the principles found on weapons based treaties on the placing of nuclear weapons and weapons in general, in outer space.

In considering this question, the work of the following committees deserves mention. Greater efforts to prevent the militarization of outer space have been made by the First Committee on Disarmament and International Security which holds a yearly Conference of Disarmament (CD) and the Committee on the Peaceful Uses of Outer Space (COPUOS) and many other International Committees, in particular by drawing up international agreements to prevent an arms race in outer space. These agreements were concluded to prohibit the deployment of weapons in outer space.

The COPOUS, in its endeavor to maintain outer space for peaceful purposes, expressed a view that it was imperative to address the issue of weaponization, since military activities in outer space were seriously affecting international cooperation in the exploration and peaceful uses of outer space.<sup>6</sup> However, the deadlock in both committees reflects a flaw in the general weight States place on resolutions and in the consensus system of decision making respectively. One must point to the rarity of the

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c) Convention on Registration of Objects Launched into Outer Space (Resolution 3235 (XXIX)) – adopted on 12 November 1974, opened for signature on 14 January 1975, entered into force on 15 September 1976; and

d) Agreement Government the Activities of States on the Moon and Other Celestial Bodies (Resolution 34/68) – adopted on 5 December 1979, opened for signature on 18 December 1979, entered into force on 11 July 1984.

<sup>5</sup> Principles adopted by the General Assembly

a) Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, adopted on 13 December 1963 (resolution 1962 (XVIII));

b) Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting 10 December 1982 (resolution 37/92);

c) Principles Relating to Remote Sensing of the Earth from Outer Space adopted on 3 December 1986 (resolution 41/65);

d) Principles Relevant to the Use of Nuclear Power Sources in Outer Space adopted on 14 December 1992 (resolution 4768); and

e) Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries adopted on 13 December 1996 (resolution 51/122).

<sup>6</sup> [Report of the Committee of the Peaceful Uses of Outer Space](#), United Nations General Assembly, Fifty-eighth Session, Supplement No. 20 (A/58/20), 11 to 20 June 2003, pp. 7–8 “40.

COPOUS's ability in recent years to convert draft legal instruments into treaties. That has largely been due to the Committee's insistence on concluding treaties by consensus, rather than voting.

Thus, owing to the difficulty in formulating a new legally binding treaty at the multilateral consultations related to outer space including the above mentioned committees, States have resorted to creating so-called "soft law" to structure the space governance and to ensure appropriate implementation of related treaties among different countries.

Towards the end of 2000, the UN General Assembly had a vote on a resolution from the CD called the Prevention of Arms Race in Outer Space (PAROS). It was adopted by a recorded vote of 163 in favor to none against, with 3 abstentions. The three that abstained were the Federated States of Micronesia, Israel and the United States of America.

Since then, each year in the CD and then again in the General Assembly as a whole, the PAROS has been introduced and adopted by an overwhelming majority of UN member states.

The PAROS resolution is seen as building on the efforts of the OST to preserve space for peaceful uses. However, the resolution also notes that the current outer space legal regime "does not in and of itself guarantee the prevention of an arms race in outer space." The PAROS resolution calls for states, especially those with space capabilities, to refrain from actions contrary to the objective of PAROS and to "contribute actively" to that objective. It argues for consolidation and reinforcement of the outer space legal regime, and states that the CD is the place for a new OST on PAROS to be negotiated.

If technically there are no bans on weapons, then certainly such weaponization would go against the spirit of OST and the above resolution. However, some States with missile capabilities still choose to ignore such laws.

Another important development worth mentioning is the International Code of Conduct for Outer Space Activities (the Code). This Code places increased emphasis on international cooperation in space. An interesting debate for our purposes hereof lies in

the outcome of some of the main disagreements that have remained throughout the multilateral consultation meetings of the Code, whether: - the Code should focus solely on peaceful uses of space, if it should include security related issues and how it will relate to already existing international space law and UN processes.

The Code emphasizes the ban on weapons although the ban is more cautiously worded than the OST and to the dismay of many, invokes self-defense from the UN Charter; it places increased emphasis on international cooperation and consultation in space, with particular emphasis on "the benefit and the interests of developing countries." It calls for adherence to space related treaties such as the OST, and its four general multilateral treaties and the convention on International Telecommunications and Radio Regulations. It also urges members to formulate and publicize their national space policy and procedures in tandem to maximize security, minimize accidents and incorporate consultative resolution of disputes based on "equitable balance of interests".

Needless to say, the Code ought to be commended for the above efforts. However, with that said, the Code is found wanting on some of the real issues such as space debris mitigation and further; it is transparent that substantive statements of the Code are a mere reiteration of the provisions already contained in the existing operative space law.

Subsequent to the Code, there has been a series of codes of conduct by different States advancing their specific national perspective. These include the US Code and the Chinese Code (or PPWT). It can be surmised that the plethora of soft-law that has flooded the international community since the last treaty on outer space in 1982 is a direct reason for the current state of public order in space today.

It is evident that States rather prefer to implement Codes or measures through relevant national mechanisms, on a voluntary basis and in a manner consistent with the national interests of Member States. In this regard outer space transparency and confidence-building measures (TCBMs) have been more successful. More States (such as the US) have undertaken bilateral transparency and confidence-building measures with a number of other space-faring nations. This set of TCBMs is open for implementation by States and international organizations on a voluntary basis. The measures include:

information exchange on space policies; information exchange and notifications related to outer space activities; risk reduction notifications; contact and visits to space launch sites and facilities; international cooperation; consultative mechanisms; outreach; and coordination. However, it is important to note that while transparency and confidence-building measures could foster cooperation, they are no substitute for legally binding norms. They effectively contribute to, but are not a substitute for, measures to monitor the implementation of arms limitation and disarmament agreements. Moreover, no voluntary measure could entirely reflect the complexities of outer space security.

The above efforts to structure space governance by creating soft-law, commendable as they may be, do nothing to dispense of the fact that non-binding decisions and resolutions are not capable of enforcing the rule of law, more so because they are either ratified by States with no missile capabilities nor weapons program or the States dominating the arms race refrain from their support. Be that as it may, this current status *quo* underlines the need to intensify international exchanges and cooperation in the governance of outer space on the basis of security and stability and peaceful use.

It may be in the best interests of the international community to start negotiations on establishing an organization or unified structure equipped with decision making powers where decisions are made on a two thirds majority rule as compared to consensus: an authority that will oversee the negotiations of new treaties and conventions to prevent placement of any kind of weapon in space. Further discussion on this issue will follow in this Article.

## **WHY WEAPONIZE OUTER SPACE?**

In developing the rule of law, perhaps the best place to start the discussion is by considering the reason behind weaponization of outer space. There are a number of reasons for doing so of course, but for our purposes hereof, focus is limited to the main reason - Defence. Most States, if not all governments, have terrestrial military to protect their country (citizens) and assets. As such States cannot be faulted for wanting to

protect their citizens and related interests beyond earth. In actual fact, it may be considered irresponsible not to do so. It follows that outer space being uncharted territory States would want to be prepared for any unforeseen hostile confrontations. Of course the issue would be easier to deal with if there was a world outer space police or navy. However, the matter is made complicated by the very State assets sought to be protected in space and the legal uncertainties relating to the use and control of the right to self-defence in outer space.

As it appears, States have for a long time been undertaking in outer space what might be termed 'passive' military activities but outer space is now increasingly being used as part of the 'active' conduct of armed conflict.<sup>7</sup> For instance, currently the information gathered from outer space through, for example, the use of remote satellite technology and communications satellites is used to plan military engagement on earth, and space assets now also direct military activity, and thus represent an integral part of the military hardware of the major powers.<sup>8</sup>

In this regard most space equipment has a dual purpose - both civilian and military.<sup>9</sup> This presupposes that most space objects designed to be used for peaceful purposes in outer space, have the potential to become space weapons and destroy or damage other active space systems. In addition, fast technology advancements mean more sophisticated weapons and high potential for unorthodox forms of warfare. All of these possibilities, compounded by the fact that most of these dual purpose and sophisticated weapons are not prohibited by the OST or any other weapons based treaties, form some of the reasons States continue to introduce operations weapons systems in outer space.

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<sup>7</sup> Steven Freeland: LEGAL REGULATION OF THE MILITARY USE OF OUTER SPACE. Technological Challenges for the Humanitarian Legal Framework, 11th Bruges Colloquium 21-22 October 2010 at page 92. Available at [https://www.coleurope.eu/sites/default/files/uploads/page/collegium\\_41\\_0.pdf](https://www.coleurope.eu/sites/default/files/uploads/page/collegium_41_0.pdf) (accessed 27 February 2017)

<sup>8</sup> Ibid.

<sup>9</sup> GA/DIS/3487. On 25 October 2013, at the Sixty-eighth General Assembly, the first Committee was informed that - information and communication technologies (ICT) were "dual-use", which meant they could be used for legitimate or malicious purposes. Threats had become more acute, and incidents more damaging, with their sources comprising both State and non-State actors. The lack of common understanding on acceptable State behaviour with regard to the use of those technologies increased the risk to international peace and security.

In June 2003, the United Nations reiterated concerns about the militarization of space and it not being used for peaceful purposes in a U.N. General Assembly session.<sup>10</sup> On 14 January 2013 the UN General Assembly adopted Resolution 67/113 "International Cooperation in the Peaceful Uses of Outer Space." The resolution reaffirmed the importance of international cooperation in developing the rule of law for space, noted the concern regarding a possible arms race, and advised that States with major space capabilities should actively contribute to the goal of preventing an arms race.

What is frightening perhaps is that without international cooperation to properly regulate and enforce the rule of law in outer space, there is nothing stopping States with space capabilities from engaging in an all-out war in outer space. In this context, it cannot be excluded that one day outer space will be the fourth dimension of warfare and, consequently, may attain its own *corpus of jus in bello spatiale*, a law of armed conflict in space.<sup>11</sup>

## **OUTER SPACE DEFENCE UNDER INTERNATIONAL LAW**

The United Nations Charter and the Outer Space Treaty (the Treaty) provide some guidance on the issue of weaponisation of outer space and how it relates to the concept of self-defense under international law. Firstly, the use of force by States is prohibited

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<sup>10</sup> [Report of the Committee of the Peaceful Uses of Outer Space](#), United Nations General Assembly, Fifty-eighth Session, Supplement No. 20 (A/58/20), 11 to 20 June 2003, pp. 7–8 “40. The view was expressed that the Committee had not been fulfilling the mandate given to it by the General Assembly in recommending ways and means of maintaining outer space for peaceful purposes. That delegation expressed the view that the Committee should address itself to that issue, since military activities in outer space were seriously affecting international cooperation in the exploration and peaceful uses of outer space. 43. Some delegations expressed the view that a greater risk of the introduction of weapons into outer space and the adoption of a concept of a use of force in outer space would undermine the basis for and the very logic of developing nonproliferation mechanisms and of the whole system of international security. 44. The view was expressed that, since an international legal mechanism capable of preventing the militarization of outer space had not yet been developed, the Committee should make greater efforts to prevent the militarization of outer space, in particular by drawing up an international agreement to prevent an arms race in outer space. 45. The view was expressed that an international agreement should be concluded to prohibit the deployment of weapons in outer space. That delegation recalled initiatives to that end that had been made in the Conference on Disarmament”.

<sup>11</sup> Arjen Vermeer: The Laws of War in Outer Space: Some Legal Implications for the Jus ad Bellum and the Jus in Bello of the Militarisation and Weaponisation of Outer Space 2007 at page 7. Online <http://inter-disciplinary.net/ptb/www/www4/Vermeer%20paper.pdf> last visited on 21 March 2018



under Article 2(4) of the UN Charter.<sup>12</sup> This prohibition has been held to be an obligation *erga omnes*, as the principle is considered to be *jus cogens* and thus binding on all States as a customary norm<sup>13</sup>. The only generally accepted exceptions to the non-use of force are a UN Security Council authorisation and forcible measures taken in the lawful exercise of the right of self-defence. It is generally accepted that although the Drafters of the Charter may not have been concerned with the inclusion of space limitations in the Charter, its application to outer space cannot be disregarded.<sup>14</sup>

The obligation to use force is provided for under Article 42 of the Charter. Article 42 authorizes the UN Security Council to ‘*take action by air, sea and land forces*’ where necessary to maintain or restore international peace and security.<sup>15</sup> States are under an express obligation to comply with decisions of the Security Council, including decisions arising from Article 42 of the Charter.<sup>16</sup>

Article 51 of the Charter, on the other hand, recognizes the inherent right of individual or collective self-defence if an armed attack occurs and prescribes a temporary response until the Security Council steps in. Undoubtedly, the right of self-defence is activated once an attack takes place against a military space asset wherever they may be located.<sup>17</sup>

Article IV of the OST bans nuclear weapons in outer space and provides for the non-weaponization of the moon and its celestial bodies. However, the Treaty is subject to the UN Charter. Article 103 of the Charter of the United Nations specifically provides

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<sup>12</sup> Article 2(4) of the Charter provides that States are to refrain “from the threat or use of force against the territorial integrity or political independence of any state, or use such threat or force in any other manner inconsistent with the purposes of the United Nations”.

<sup>13</sup> Military and Paramilitary Activities in and against Nicaragua (Merits) [1986] ICJ Rep 14. See also the Vienna Convention on the Law of Treaties, adopted on 22 May 1969, opened for signature on 23 May 1969, and entered into force on 27 January 1980 (hereinafter referred to as Vienna Convention on the Law of Treaties), Art. 53, for the effect of *jus cogens* on the treaty obligations of states. Available at <https://treaties.un.org/doc/Publication/UNTS/Volume%201155/volume-1155-I-18232-English.pdf> (accessed 21 March 2018).

<sup>14</sup> Arjen Vermeer supra note 12 at page 5

<sup>15</sup> In Certain Expenses of the United Nations [1962] ICJ Rep 151, at 167, the ICJ noted that use of military force may also be lawfully conducted with the consent of the subject state or based on the right of self-defence as provided under Art. 51 of the Charter.

<sup>16</sup> Ibid., Arts 25 and 48

<sup>17</sup> Arjen Vermeer supra note 12, at page 6

that obligations arising from the Charter are to prevail over any provision of other treaties. This consideration is underscored by Article III of the OST.

Having regard to Article 103 of the Charter, to the extent that Article IV of the OST does not constitute *jus cogens*, a decision made by the Security Council to use military force in outer space would prevail over any prohibitions or obligations under Article IV of the OST.<sup>18</sup>

With this construction there are others<sup>19</sup> who would suggest that the deployment of nuclear weapons and weapons of mass destruction, and the construction of military installations on the moon and other celestial bodies, would form part of the lawful use of force in terms of articles 42 and 51 of the Charter.

Indeed the question whether the threat or use of nuclear weapons was prohibited in all circumstances has not been answered conclusively.

However, in its advisory opinion on the *Legality of the Threat or Use of Nuclear Weapons*<sup>20</sup>, the International Court of Justice *inter alia* decided unanimously that -

“threat or use of nuclear weapons should be compatible with the requirements of the international law applicable in armed conflict, particularly those of the principles and rules of international humanitarian law, as well as with the *specific obligations under treaties and other undertakings which expressly deal with nuclear weapons ...*”<sup>21</sup>

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<sup>18</sup> Lee: “The Jus ad Bellum in Spatialis: *The Exact Content and Practical Implications of the Law on the Use of Force in Outer Space*”, 29 J Space L (2003) 93, at 98 – 111.

<sup>19</sup> Legality of the Deployment of Conventional Weapons in Earth Orbit: Balancing Space Law and the Law of Armed Conflict. Michel Bourbonnière and Ricky J. Lee, EJIL (2007), Vol. 18 No. 5, 873–901

<sup>20</sup> *Legality of the Threat or Use of Nuclear Weapons* 1996 ICJ Reports 226 *North Sea Continental Shelf Cases (Federal Republic of Germany v Denmark; Federal Republic of Germany v Netherlands)*, Merits, 1969 ICJ Reports 3 at page 226

<sup>21</sup> *Ibid*, emphasis my own.

This statement by the Court implies that a threat or use of nuclear weapons in outer space (even in the instance of self-defence) would not be compatible with article IV of the OST, which expressly prohibits the use of nuclear weapons in outer space.<sup>22</sup>

The relationship between international humanitarian law and the inherent right to self-defense must also be considered. It is accepted that the use of force is not only judged by the regime governing the legality of the resort to armed force, the *jus ad bellum*, but also by the law applicable in armed conflict, the *jus in bello*.<sup>23</sup> The following principles are applicable to any type of armed conflict: military necessity, humanity, proportionality and discrimination. Furthermore, customary international law places two additional constraints upon the lawful exercise of the right to self-defense, namely necessity and proportionality.<sup>24</sup>

Bearing in mind the discussion on operational weapons in outer space noted earlier, the real issue is whether these fundamental principles of international humanitarian law, developed to regulate terrestrial warfare and armed conflict, can be applied to the unique legal and technological context of outer space and if so how.

What is clear is that the defence must be *proportionate* to the attack.<sup>25</sup> The difficulty however, is that it is practically impossible to make a proportional defense without knowing yet the complexities of the presumed attack.<sup>26</sup> Furthermore, the use of space weapons with the capability to render massive destruction and injury (either directly or indirectly), may well violate the principles of proportionality.<sup>27</sup>

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<sup>22</sup> Ferreira-Snyman, A. (2015). Selected legal challenges relating to the military use of outer space, with specific reference to article IV of the Outer Space Treaty. *PER: Potchefstroomse Elektroniese Regsblad*, 18(3), 488-529. <https://dx.doi.org/10.4314/pelj.v18i3.02> at page 508

<sup>23</sup> Michael Walzer, *Just and Unjust Wars*, New York: Basic Books, 3rd ed. (2000), at 129. The *jus in bello* is also called international humanitarian law, the law of war or the law of armed conflict (LOAC).

<sup>24</sup> Arjen Vermeer *supra* note 12, at page 5.

<sup>25</sup> Ferreira-Snyman, A. (2015). Selected legal challenges relating to the military use of outer space, with specific reference to article IV of the Outer Space Treaty. *PER: Potchefstroomse Elektroniese Regsblad*, 18(3), 488-529. <https://dx.doi.org/10.4314/pelj.v18i3.02> particularly at note 130.

<sup>26</sup> *Ibid*, particularly at note 135.

<sup>27</sup> *Ibid*.

The view by some States<sup>28</sup> is that proposing self-defence in outer space encourages an arms race in outer space. For instance some States could (if they have not already) develop ballistic missile defense shields. The fear is that Missile defence allows countries to develop offensive technologies under the pretense of defence. For example, Kinetic Energy Interceptors (missiles) could be launched into space to take out enemy missiles by smashing into them. They also have potential applications as offensive anti-satellite weapons, because the same maneuvering abilities and set of controls is necessary to destroy satellites.

Indeed there are legitimate reasons to be concerned about the development of missile defence and space weapon technology, including the increased conventional military dominance by some States, the vast waste of resources that accompanies arms build-up, whether it's a race or an asymmetrical surge, and the physical results of fighting in outer space - especially space debris, which will destroy civil and commercial space infrastructure such as satellites.

It would be easier to suggest that *peaceful* uses of outer space should be interpreted to mean a prohibition on the use of all forms of force in outer space, similar to the prohibition in the Antarctic Treaty,<sup>29</sup> however the reality is that there continues to exist mistrust among the States, a considerable investment is made on militarization by some space faring nations, and most importantly lack of consolidated structure to develop competent mechanisms to prevent militarisation.

One may argue that the introduction of weapons into outer space and the adoption of a concept of a use of force in outer space would undermine the basis for and the very logic of developing nonproliferation mechanisms and of the whole system of international security. Albeit a substantial observation, caution dictates that a balancing exercise be conducted if international cooperation is to be achieved at all. Indeed if history is anything to go by, an outright prohibition will most probably than not, result in

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<sup>28</sup> Views by Brazil, Mexico, China, Chile and Pakistan at the Draft Code of Conduct open-ended consultations, Luxembourg 2014. China and Russia also consistently advocated for all references in the draft that deal with security, weapons or military related aspects and self-defence be removed.

<sup>29</sup> Article I of the Antarctic Treaty. The treaty entered into force in 1961 and has since been acceded to by many other nations. The total number of Parties to the Treaty is now 53.

majority of the space faring States with major space capabilities refraining from actively contributing to the goal of preventing weaponisation of outer space.

This statement by the United States of America of 2006 begs attention:

“The United States considers space capabilities—including the ground and space segments and supporting links—vital to its national interests. Consistent with this policy, the United States will: preserve its rights, capabilities, and freedom of action in space; dissuade or deter others from either impeding those rights or developing capabilities intended to do so; take those actions necessary to protect its space capabilities; respond to interference; and deny, if necessary, adversaries the use of space capabilities hostile to U.S. national interests;

The United States will oppose the development of new legal regimes or other restrictions that seek to prohibit or limit U.S. access to or use of space. Proposed arms control agreements or restrictions must not impair the rights of the United States to conduct research, development, testing, and operations or other activities in space for U.S. national interests;..”

*(Unclassified National Space Policy, Office of Science and Technology Policy, Executive Office of the US President, October 6, 2006)*

Although the position may have been toned down somewhat under the Obama administration, the statement denotes the main point of contention which relates to due consideration for the legitimate security and defense needs of States. A case in point is the Moon Agreement which calls for greater control of weapons in outer space. This Agreement has managed to garner only as little as 18 ratifications to date. Needless to say that none of the space faring States with major space capabilities and weapons programs are party to it.

Consequently, perhaps a wiser position would be one that incorporates the interests of all parties involved, that is, taking consideration of the others’ legitimate fears and the others’ needs. Whatever the outcome maybe however, as illustrated above, should space be weaponized, the basing of these weapons and their use will be subject not

only to international space law but also to the UN Charter and to international humanitarian law. The interface between these legal regimes consequently gains in importance, possibly forcing a reinterpretation of certain space treaties along with a correction in state practice.<sup>30</sup>

In the result, it may be prudent to achieve, before advancing a position on the right to self-defence in any international regulatory instrument, a shared understanding in the framework of an Outer Space Authority concerning the legal basis and modalities for exercising such right as applied to outer space.

### **TIME FOR A UNITED NATIONS' LED OUTER SPACE AUTHORITY?**

A proposal for the establishment of an Outer Space Authority is by no means a new one nor is it a dismissal of the vast efforts already made through varying institutions and committees to harness international cooperation and ensure that outer space is used for peaceful purposes. It is true that international cooperation does occur and is in fact occurring without an authority to govern outer space. However, one cannot ignore the fact that most of the agreements made so far are not fully respected; have fallen apart or as illustrated in the earlier paragraphs that political hurdles and the impasse in the Conferences have thus far blocked their realization.

A case in point here includes: the Convention on Registration of Space Objects which has not been fully respected by states even after ratification. The Moon Agreement which calls for greater control of weapons in outer space has the most negligible effect on outer space with only 18 ratifications to date. The Agreement on the Biological Weapons Convention may have been held to be a success substantively but is deficient in providing an effective mechanism for verification of compliances stipulated under the Convention. So too the Hage Code of Conduct against Ballistic Missiles Proliferation, 2002 (H-COC). This Code pertains to the arms control mechanism on proliferation, established to induct transparency in the missile domain. The success of the Code in

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<sup>30</sup> Michel Bourbonnière and Ricky J. Lee, *supra* note 20 at pages 873–901

motivating its members to honour the information sharing regime was limited, more so that most of its signatories have no missile capabilities.

The above agreements are important milestones in developing the rule of law in outer space, however their application and subsequent enforcement is debatable. What is required is a unified structure to coordinate all the processes of space governance in particular a legal framework for the exploration of extraterrestrial resources to oversee the implementation of the weapons based treaties.

Mathieu Deflem<sup>31</sup> writes that, “in the context of democratic societies, the rule of law is guaranteed by the legitimacy legal norms enjoy from those to whom such norms apply, on one hand, and by the threat of enforcement from specialized agents of control, on the other.”

States consider multilateral treaties as vitally important tools for promoting international relations in which justice and peace prevail. The treaties are an integral aspect of a comprehensive and robust legal framework that ensures that the rule of law governs relations between States. Consistent with this view, the enforceability or at least some form of verification of a treaty is paramount to building confidence between parties.<sup>32</sup> Both reassurance and verification when linked to cooperative obligations, serve to demonstrate peaceful intent, good faith and ongoing compliance with the rules.<sup>33</sup>

Given the dual purpose of space technology and potential military abuse of the same, verification is especially important in this area of international law. An established Authority that regulates outer space activities will provide a reliable and solid foundation for verification and enforcement of international obligations. This factor is further anchored by the fact that Article IV of the OST, which simply bans nuclear weapons in outer space, is clearly insufficient to build international confidence and allay global

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<sup>31</sup> MATHIEU DEFLEM, *Global Rule of Law or Global Rule of Law Enforcement? International Police Cooperation and Counterterrorism*. ANNALS, AAPSS, 603, January 2006.

<sup>32</sup> Ian Crawford: *A space Programme for Planet Earth*. Spaceflight at pg 121 Vol 34, April 1992.

<sup>33</sup> N. Tannenwald, *Law versus Power on the Higher Frontier: The Case for a Rule-Based Regime for Outer Space*, 29 *Yale Journal of International Law* 419 (Summer 2004).

security concerns relating to weaponization.<sup>34</sup> The limitations on Article IV discussed in the earlier paragraphs, and the difficulty in verification are case in point.

It seems more likely that only a joint international control of the exploration of space, and thus of any nuclear technology used to further it, will allay the global security concerns relating to weaponization of outer space.<sup>35</sup> This is particularly relevant today where it is necessary to employ nuclear technology in space on a significant level to power rockets for instance.

To achieve some degree of verifiability, Article VII stipulates that “all stations, installations, equipment and space vehicles on the Moon and other celestial bodies shall be open to representatives of other State Parties to the Treaty on a basis of reciprocity”.

Implementation of this article is said to be confounded with great difficulties most of which is the expense involved in conducting such visits.<sup>36</sup> This presents another major reason why international cooperation through an Authority would be important. A better way to implement such an article would be for the installations, equipment and space vehicles to be under the control, or even the ownership, of an international body.<sup>37</sup> This Authority will provide independent cooperative framework for joint projects that could involve everyone interested.

It follows therefore that international cooperation fostered through an Authority is imperative to non-weaponization of outer space. The expenses involved in conducting outer space projects and the lack of enforcement and verification mechanisms are enough to deter most States from participating. In addition, the Authority will deal with claims made in space; provide guidance as to the division of space with regard to scientific, environmental, or commercial needs; be the vehicle to ensure equitable development on behalf of all human kind, and that space exploration and utilization are not undertaken purely in the interests of the industrialized countries.

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<sup>34</sup> Ibid

<sup>35</sup> Ibid

<sup>36</sup> Ibid

<sup>37</sup> Ibid



The Moon Agreement provides for the establishment of an international regime to govern the exploration of the natural resources of the Moon as such exploration is about to become feasible.<sup>38</sup> No doubt this establishment will stabilize commercial opportunity. Already, the exploration of extraterrestrial resources is a reality considered by some States and private companies presently hence an Authority is required to regulate this area to oversee both asteroid mining licensing in the context of all relevant environmental impacts as well as planetary defense and the shared infrastructure and systems to support them.

It may be of great benefit for the Space environment to learn from a similar institutional model such as the International Seabed Authority which itself has become a working institution with practical exploration, mining, science and educational successes. On this issue Cockell<sup>39</sup> writes that the US navy as one of the greatest champions of the Law of the Sea Convention<sup>40</sup> and the Seabed Authority appreciates that developing country concessions, allowing key navigation rights for all, helps create equitable stability and greater security. In exchange, the Navy does not begrudge disadvantaged nation's interests in sharing common resources of the international seabed, and indeed can be called upon to protect these rights. This Authority may indeed be what space requires to creating equitable stability and greater security for all.

The next points of controversy involve the issue of funding for the Authority, its independence and mandate. One ought to simply look at other successful specialized organizations such as the ICAO, ITU, WTO, WHO etc to know that having an authority focused and specializing in governing outer space will succeed. It is clear that not only is an established and operational Authority a confidence building measure on the limitations of weaponization of outer space but it will stabilize commercial opportunity.

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<sup>38</sup> The Moon Agreement, Article 11 para 5. It provides that "State Parties to this Agreement hereby undertake to establish an international regime, including appropriate procedures, to govern the exploration of natural resources of the Moon as such exploitation is about to become feasible."

<sup>39</sup> Lewis Pinault, "*Towards a World Space Agency*". Article at page 190 in the book titled *Human Governance Beyond Earth: Implications for Freedom* Edited by Charles S Cockell. Springer, 14 Jul 2015.

<sup>40</sup> United Nations Convention on the Law of the Sea of 10 December 1982.

Although the purpose of this article is not to dwell on the “hows” of the Authority’s administration and management, suffices to say that the authority so proposed would, therefore need a proper mandate, a commensurate structure, judicial jurisdiction, the requisite teeth, standard procedures and administrative funding. It would regulate mining on the celestial bodies, grant commercial licenses and leases, and conduct inspections and verification.

## **CONCLUSION**

There is a saying that one cannot do the same thing time and time again and expect a different result. Different methods must be adopted in the governance of outer space if the rule of law is to be enforced. Indeed our actions must give meaning to our principles. All the groundwork has already been done. As international institutions and committees engage in a variety of international space activities, efforts must be made to forge an international cooperative structure or Authority that aims to foster collaboration in the effort to develop the rule of law in space. The work of the Conferences and the Committees must feed into wider efforts to strengthen the Authority’s capacity to prevent outer space weaponisation. The Authority is necessary to coordinate efforts: for developing an international legal mechanism capable of preventing the militarization of outer space; to understand the inter relation between the different international laws that would apply to conflict in space and develop the relevant applicable legal framework for that domain.

Effectively, the call to govern outer space and enforce the rule of law through concerted efforts of an Outer Space Authority has been echoing through the years. It may be that the existing political climate and the need for a coherent global security strategy for exploration of space; for a global rule of law; and a legal framework for the exploration of extraterrestrial resources make it opportune to put forward once again, proposals for the establishment of an Outer Space Authority, fully clothed with (binding) decision making powers.