AN ANALYSIS OF THE CLAIMS AND COMPENSATION AVAILABLE TO VICTIMS AS A RESULT OF DAMAGE IN OUTER SPACE

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Abstract

The legal maxim 'Ubi Jus IbiRemedium' is to the extent that it is expected that injured party gets remedy for the injury suffered. Unlike individuals cum domestic activities/legal system, to determine who is/are wrong in outer space activity, the result of damage, is quite dicey. Firstly, states are of course parties to space regimes as such expected to be actors in space activities to which one or many states jointly with international intergovernmental organisations can be the one conducting the activities (launching state) that led to the damage or even the injured party. Secondly, outer space with its activities is an international subject regulated majorly by international law, so that questions involving what amounts to damage, who can present a claim, the quantum of damages, determination of adequate compensation, parties to a claim amongst others are the subject of analysis in this article. To answer these questions, this article intends to examine the relevant international law i.e. International Space Law and Customary International Law, on the claims and compensation available to victims of damage in the course of outer space activities, assess the adequacies of the claims and compensation and proffer recommendations where necessary.

Keywords: *Outer space, activities, damage, claims, compensation, victim.*

Introduction

The area of outer space be described "as any region of Space beyond limits determined with reference to the boundaries of a celestial body or system, especially (a) the region of space

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immediately beyond Earth's atmosphere (b) Interplanetary or Interstellar Space".[1] According to Fraser,[2] "space is defined by the point at which the Earth's atmosphere ends and the vacuum of space takes over". The National Advisory Committee for Aeronautics was the first to officially come up with the definition of Space,[3] and it decided that Outer Space is "on the point where atmospheric pressure was less than one pound per square foot which was the altitude that Airplane control surfaces could no longer be used and corresponded roughly 50 miles or 81 Kilometres."[4] Engineer Theodore Von Karman also calculated Outer Space to be "above an altitude of 100 Km, the atmosphere would be so that an Aircraft would need to be traveling at orbital velocity to derive any lift which is later known and adopted as the Karman Line."[5]

Outer space can also be referred to as the area outside the atmosphere of the Earth where the other stars and planet are situated. According to Scott, giving the exact definition of Outer Space has proven to be an issue and suggestions on the point of demarcation ranges between 80 Km to 100 Km.[6] In fact, issues on spatial delimitation have affected how 'outer space' is described in the domestic Laws of Some States. For instance, the National Aeronautics and Space Act[7] defines Outer Space as "the areas outside the Earth's atmosphere" while the National Space Law of South Africa defines[8]it as "the space above the surface of the Earth from a height at which it is in practice possible to operate an object in an orbit around the Earth."[9]

There came a period where space-corporation was necessary among the space-faring nations on the best way to utilise Outer Space as a meaningful foreign policy or instrument; especially with some developed countries capitalizing on space technology to further their military prowess. At a point, freedom of Space was extremely significant to those space actors with orbiting satellites,

[1] *The American Heritage Dictionary of English Language* <http://ahdictionary.com /word/search.html?q=outer+space> accessed 5 November 2024.
[2] Fraser Cain, '*How High is Space*?' 2013 <https://phys.org/news/2013-07-high-space.html> accessed on 5 November 2024
[3] *The predecessor to the National Aeronautics and Space Administration*
[4] '*How High is Space*?' 2013
[5] Ibid. (By the World Airsports Federation)
[6] Scott James, 'The Tragedy of the Common Heritage of Mankind' 2008 Stanford Environmental Law Journal Vol. 27, 101-157.
[7] Section 51, USC S 40302 (5) 2010.
[8] *Space Affairs Act* 1993 [No. 84 of 1993] G 14917. S. 1(xv).
[9] Ibid.

as the thought of obtaining permission from another national as a requirement to launch satellite was feared[10]

As a result, there are currently five major outer space treaties; Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies 1967[11] generally called the Outer Space Treaty was inspired by the reality of mankind entry into outer space[12] with the realization that Outer Space be utilised for states benefit notwithstanding 'the differences in the level of development hence leading and contributing to the advancement of understanding and cooperation among states and people;[13]Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space 1968[14] which sets out the legal framework for the provision of emergency assistance to astronauts.[15] It makes provisions as regards the immediate notification of the launching authority or public announcement regarding astronauts in distress as well as immediate assistance. The Agreement also covers the search and rescue operation and prompt return of the astronauts and recovery of space objects. The agreement deals with space objects likely damaged and or posing certain threats to cause damage in the course of their return to earth. The purport of the legal regime provided by the Agreement, however, is to provide for assistance-related obligations and a safe and expeditious return home of the space object and possible astronauts on board, not to deal with any potentially harmful aspects of such space

[10]American Foreign Relations, 'Outer Space-The Freedom of Space Doctrine' <htpps://www.americanforeignrelations.com/O-W/Outer-Space-The-freedom-of-space-doctrine.html#:~:text="Freedom%20of%20space"%20was%20extremely%20significant%20to%20those,permission%20of%20those%20nations%20that%20might%20be%20overflown> accessed on 4 November 2024

[11]"*Outer Space Treaty*, adopted by the General Assembly in its Resolution 2222 (Xxi)), opened for signature on 27 January 1967, entered into force on 10 October 1967, 98 ratifications and 27 signatures (as of 1 January 2008)." www.oosa.unvianna.org/oosa/spacelaw/outerspace.html> accessed on 5 November 2024

[12] Bakke Monika, *'Art for Plant's Sake?* Questioning Human Imperialism in the Age of Biotech' (2012) Parallax 18 (4) 9-25. <http://www.researchgate.net/publication/263523210_Art_for_Plants'_Sake_Questioning_Human_Imperialism_in_the_Age_of_Biotech> accessed 5 November 2024

[13] Preamble to the *'Outer Space Treaty'* <http://www.oosa.unvienna.org> accessed 5 November 2024

[14] "*Rescue Agreement*, adopted by the General Assembly in its Resolution 2345 (Xxii), opened for signature on 22 April 1968, entered into force on 3 December 1968, 90 ratifications, 24 signatures, and 1 acceptance of rights and obligations (as of 1 January 2008)" www.oosa.unvianna.org/oosa/spacelaw/outerspace.html> accessed 5 November 2024.

[15] See also Art. V, Outer Space Treaty 1967.

objects in their possible quality of space debris.[16]The purpose and essence of the Agreement is to call on states parties to render prompt assistance to astronauts in the event of emergencies and ensure the safety of astronauts and space objects;[17] Convention on Registration of Objects Launched into Outer Space 1975[18]often referred to as Registration Convention, is contributing immensely towards the preservation of outer space for peaceful purpose. According to Ijaiya,[19] the Convention has two essential functions. Firstly, that it is not possible to identify a spacecraft that has caused damage without a system of registration and secondly, that a well-ordered complete and informative system of registration would minimize the likelihood and even the suspicion of weapons of mass destruction being furtively put into orbit. The establishment of the Registration Convention for a large part was motivated by the desire to provide for means of identifying the launching state or states of a particular subject, in the event such space object would cause damage recoverable under the Liability Convention of 1972; Agreement Governing the Activities of States on the Moon and Other Celestial Bodies 1979.[20]The Moon Treaty, as it is commonly referred to as also applicable to Outer Space as well as other celestial bodies.[21] It is not applicable to the surface of the earth[22] and extra-terrestrial material that found its way back to earth by natural means.[23]And the Convention on International Liability for Damage Caused by Space Objects 1972,[24] main focus of this article, borne out of the acceptance of the inevitability

[16] Von der Dunk. F, 'Space Debris and the Law. Law, College of Space and Telecommunications Law Program' Faculty Publications. 3- 2001. University of Nebraska-Lincoln.<http://digitalcommons.unl.edu/spacelaw/4> accessed 5 November 2024.

[17] Preamble to the Rescue Agreement 1968.

[18] "Registration Convention", adopted by the General Assembly in its resolution 3235 (XXIX)), opened for signature on 14 January 1975, entered into force on 15 September 1976, 51 ratifications, 4 signatures, and 2 acceptances of rights and obligations (as of 1 January 2008)" www.oosa.unvianna.org/oosa/spacelaw/outerspace.html>accessed 5 November 2024.

[19] Ijaiya H, *"The Legal Regime Regulating The Environmental Aspect Of Outer Space. Seventh International Conference on Legal Regimes of Sea, Antarctica, Air and Space. 15-17* January 2010, New Delhi conference papers.

[20] "*Moon Agreement or Treaty"*, adopted by the General Assembly in its resolution 34/68, opened for signature on 18 December 1979, entered into force on 11 July 1984, 13 ratifications and 4 signatures (as of 1 January 2008)." <https://www.oosa.unvianna.org/oosa/spacelaw/outerspace.html>accessed 5 November 2024.

[21] Bohlmann Ulrike, 'The Need for a Legal Framework For Space Exploration' 'Studies in Space Policy Series-Human In Outer Space' Vol 1 (Springer, Vienna, 2009) Pg 182-195.

[22] See Art. L.

[23] Ibid.

[24] "*Liability Convention"*, adopted by the General Assembly in its Resolution 2777 (Xxvi)), opened for signature on 29 March 1972, entered into force on 1 September 1972, 86 ratifications, 24 signatures, and 3 acceptances of

of space accidents by the International community as damage by space objects is inevitable. The Convention observes that notwithstanding that precautionary measures might have been taken by a launching State, damage may still be caused and such calls for rules concerning responsibility for space accidents and prompt payment of compensation to be put in place.[25] International Organisations involved in outer space activities include the United Nations, the International Maritime Satellite Organisation (IMSO), International Telecommunication Unions (ITU) and the International Telecommunication Satellite Organisation (ITSO)[26]

The incident of Russia's Sputnik 4 (Space Satellite) which re-entered the earth in 1962 informed the need to set in motion a regime on international responsibility and liability for damage in respect of outer space activities. This is so when Russia denied that a fragment of the satellite did not belong to it in order to avoid liability under international law. The Russian Government's attitude and the need to curb future denial informed the UN Committee on Peaceful Uses of Outer Space (UNCOPOUS) to put in place the '1963 ***Declaration on Legal Principles Governing the Activities of State in the Exploration and Use of Outer Space, '***which was subsequently modified as Outer Space Treaty 1967[27], to include the provision that states that launch or procure the launching of space object are 'internationally responsible for damage caused on earth.'[28]

No definition or description of damage is provided for in the whole of the provisions of the Outer Space Treaty. It also failed to describe what would amount to damage in the event of a specific happening but provided succinctly for a liability regime[29] which was subsequently *blown-up* or expanded by the provisions of the Convention on International Liability for Damage Caused by

rights and obligations (as of 1 January 2008)" <https://www.oosa.unvianna.org/oosa/spacelaw/outerspace.html> accessed 5 November 2024.

[25] See Preamble.

[26] Others include the International Institute of Space Law (IISL) established in 1959, International Astronautical Federation (IAF) established in 1950 and the International Academy of Astronauts established in 1960.

[27] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (the "Outer Space Treaty", adopted by the General Assembly in its resolution 2222 (XXI)), opened for signature on 27 January 1967, entered into force on 10 October 1967.

[28] Article XVIII (8). "Declaration on Legal Principles Governing the Activities of State in the Exploration and Use of Outer Space" 1280TH Planetary Meeting, UN General Assembly Resolution 1962 .18th Session, 13 December 1963 < accessed 13 October 2016.

[29] Outer Space Treaty 1967, Art. VII.

Space Objects 1972.[30] This Liability Convention defines 'damage' as regards Outer Space activities thus;

> The term 'damage' means loss of life, personal injury or other impairment of health; or loss of or damage to property of States or of persons, natural or juridical, or property of international intergovernmental organizations[31]

Generally, claims can be seen as a legal assertion or demand taken by a person wanting compensation in form of payment or reimbursement for a loss under a contract, or injury due to negligence.[32] Well, this description of claim may not be suitable for claims for damages in respect of damage which is as a result of activities in space (damage caused by space object) as envisaged by the Liability Convention and the Outer Space Treaty, as '*…injury due to negligence'* may not be totally true in ascribing liability to a Defendant in the context of absolute liability[33] but may pass for claims arising from breach of contract on space activities.[34] It is observed that both Outer Space Treaty and Liability Convention failed to provide for the definition of claim, what constitute a claim and its proof. It, however, gives parties the opportunity to present a claim where such a party has suffered damage as described in the Convention.[35]

It is important to state at this point that there is a difference between a launching state and a state of registry.[36] While a launching state would be liable in the event of damage, a state of registry is only responsible for the registration of the space object and most importantly, to make sure that the activities of such registered space object conforms to the provisions of space laws.

[30] Herein referred to as the "Liability Convention 1972".
[31] Ibid, Art. I.
[32] The Law Dictionary, 'Free online legal dictionary' Black's Law Dictionary (2nd Ed) <https://thelawdictionary.org/claims/> accessed 16 September 2024.
[33] Liability Convention 1972, Art. II and IV (1)(a).
[34] Ibid, Art. III and IV (1) (b).
[35] See the Basic principles and guidelines on the right to a remedy and reparation for victims of gross violations of international human rights law and serious violations of international humanitarian law. UN General Assembly Resolution 60/147 2005.
[36] Registration Convention, Art, I (c).

Nature of Parties and Claims in Outer Space

Parties to Outer Space activity suits are the State, intergovernmental agency and natural or juridical persons (represented by a state). 'A State which suffers damage, or whose natural or juridical persons suffer damage, may present to a launching State a claim for compensation for such damage.'[37]Claims concerning states can be an inter-party or third party claim. State A can sue State B for injury sustained as a result of State B's Space activities as seen in ***Canada V. Russia*** **(**Cosmos 954 incident).[38]Cosmos 954 is a Soviet nuclear power Satellite launched in on the 18th September 1977. This Satellite showed signs of abnormal behavior and on the 23rd January 1978 at about 6:53 Eastern Standard Time, before the startled eyes of a few Northwest Territory residents, it re-entered the earth atmosphere to the north of the Queen Charlotte Islands and disintegrated. This caused radioactive debris to scatter over portions of Canadian territory, particularly along a strip of land starting near Great Slave Lake and continuing north eastward toward Baker Lakel and on the other side, the launching State for Space Object. And on the other side, the launching State for Space Object *A* can sue both the launching States for Space Object *B* and space object *C*.[39]

Just like an international intergovernmental organisation can incur liability, it can also be a Claimant in respect of damage suffered. Any claim made by any organisation arising out of the provision of the Liability Convention for compensation in respect of damage suffered by it and which a declaration has been made in accordance with the Convention should be presented by a member of the organisation which is also, of course, a party to the Convention.[40] Hence, Just like an International Inter-governmental Organisation can incur liability for damage caused jointly and severally, it can also present a claim where it is the Organisation that has suffered

[37] See Art VIII (I).

[38]Settlement of Claim between Canada and the Union of Soviet Socialist Republics for Damage Caused by Cosmos 954 (Released on April 2, 1981) <https://www.jaxa.jp/library/space_law/chapter_3/3-2-2-1_e.html> accessed 7 October 2024. Bryan Schwartz & Mark L.Berlin, After The Fall: Analysis of Canadian Legal Claims for Damage Caused by Cosmos 954 (1982) 27 McGill Law Journal, 678- 680.

[39] (a) If the damage has been caused to the third State on the surface of the earth or to aircraft in flight, their liability to the third State shall be absolute; (b) If the damage has been caused to a space object of the third State or to persons or property on board that space object elsewhere than on the surface of the earth, their liability to the third State shall be based on the fault of either of the first two States or on the fault of persons for whom either is responsible. See Art IV (1) (b).

[40] See Art XXII (4).

damage as a result of space activities. Where it suffered damage, 'a claim for compensation for such damage shall be presented by a State member of the organisation which is also a State Party to the Liability Convention.'[41]

An individual or Corporation are also given opportunity to lay claims for injuries sustained as a result of damage caused by space object. This right cannot be fulfilled personally as the injured individual private person or entity cannot lay claim personally but through his State of nationality.[42] However, where 'the State of nationality has not presented a claim, another State may, in respect of damage sustained in its territory by any natural or juridical person, present a claim to a launching State. If neither the State of nationality nor the State in whose territory the damage was sustained has presented a claim or notified its intention of presenting a claim, another State may, in respect of damage sustained by its permanent residents, present a claim to a launching State.'[43]

Position of private entity, is quite different. Unlike the State and an International Intergovernmental organisation, a private entity cannot present a claim directly, as with Customary International law generally, an individual is not seen as a subject of international law. The doctrine of diplomatic protection is retained as individual are only connected with the state through the concept of Nationality which could be acquired through different methods. Therefore a party that has suffered damage must be able to be represented by a State (whether of Nationality, State, in whose territory damage is suffered or another State that deems it fit) for the purpose of presenting the individual entity's claim.[44]

Claims Procedure under the Liability Convention

Time-Limit

The Liability Convention establishes a statute bar regime to the effect that a Claim for compensation cannot be brought after one year of the occurrence.

[41] Art XXII (4).

[42] Lawrence P.W, Substantive Bases for Recovery for Injuries Sustained by Private Individuals as a Result of Fallen Space Objects (1978) (6) (2) Journal of Space Law; 161-169. Julian H, Legal Basis for a National Space Legislation. (Kluwer Academic Publishers 2004) 69.

[43] See Art VII (2 & 3).

[44] Fabio T, Fundamentals of Space Law and Policy (Springer Science & Business Media 2013) 51.

> A claim for compensation for damage may be presented to a launching State not later than one year following the date of the occurrence of the damage or the identification of the launching State which is liable.[45]

This time-limit is, however, pardonable where a Claimant is not aware 'of the occurrence of the damage or has not been able to identify the launching State which is liable for the damage. Where such is the situation, the Claimant may present its claim within one year following the date on which it become aware of the aforementioned facts. This should not exceed one year following the date on which the State could reasonably be expected to have learned of the facts through the exercise of due diligence.'[46] This is a reflection of the Conventions motive in ensuring adequate, prompt and effective compensation regime, hence, the convention does not expect a Claimant to sleep over a claim thinking it can be presented at anytime. Again, even though the time-limit is extended, the provision still does not give room for a claimant to relax as suggested by the subjective test of 'reasonable' being put on the Claimant to exercise due diligence in observation and awareness.

In order to prevent being 'out of time' a Claimant is allowed to present its claim even where the severity of the damage is not fully ascertained. A Claimant is entitled, after becoming aware of the full extent of the damage, 'to revise the claim and submit additional documentation after the expiration of such time-limits until one year after the full extent of the damage is known.'[47] It is still possible that identifying a space fragment could seem difficult despite being registered at the national registry and with the UN secretary-general. Identifying a whole object would be simpler that just fragments. This was the situation with the US-Russia where some unidentified space object fragments were found in the United States territory. US communicated the presence of the

[45] See Art X (1).
[46] Ibid, (2).
[47] Ibid, (3).

fragment to the UN Secretary-general and the fact that it is yet to identify its origin and extent of impact or damage.[48]

Revising a claim after identification of the origin of space object and extent of damage may include the Claimant bringing in fresh claims, additional claims, increasing the amount of compensation payable under the claim or claiming other forms of reparation as it deems fit.

Presentation of Claim

The first step in the presentation of claim under the Convention is to seek remedy through diplomatic channel.

> A claim for compensation for damage shall be presented to a launching State through diplomatic channels. If a State does not maintain diplomatic relations with the launching State concerned, it may request another State to present its claim to that launching State or otherwise represent its interests under this Convention. It may also present its claim through the Secretary-General of the United Nations, provided the Claimant State and the launching State are both Members of the United Nations.[49]

This provision on negotiation is a 'classical rule of international law'[50] so that parties can sit and resolve issues of claims amicably through diplomatic avenue. This procedure, though envisages diplomatic relationship between parties, it still takes care of the situation where the Claimant and the launching State do not maintain diplomatic ties. Where parties do not have diplomatic relationship, the Convention provides for two possible way out that the claimant can present its claim, to wit; another state having diplomatic tie with the other state may, upon solicitation, present the claim to the state or represent its interest under the Convention as the case may be, or Secretary-General may present the claim on behalf of the Claimant and this is only allowed where both parties are members of the United Nations. One may wonder if the time limit would

[48] The fragments were later identified to belong to Russia. See UN Doc. (A/AC.105/87) & (A/AC.105/87, Add.I) September 1970.
[49] See Art. IX.
[50] Valerie Kayser, Launching Space Objects: Issues of Liability and Future Prospects" (Kluwer Academic Publishers 2004) 54.

not run out in the process of negotiating with the State interested in presenting such a claim as well as other expenses that may be incurred for such 'generosity' by the other State.[51]

Where the damage is caused by an International Intergovernmental Organisation, 'any claim for compensation in respect of such damage shall be first presented to the organization. It is only where the organisation has not paid, within a period of six months, any sum agreed or determined to be due as compensation for such damage, may the Claimant State invoke the liability of the members which are States Parties to this Convention for the payment of that sum.' And on the other hand, where it is the International Intergovernmental organization has suffered damage, 'any claim for compensation in respect of such damage shall be presented by a State member of the organisation which is a State Party to the Convention.'[52]

Seeking local remedy for damage is not a prerequisite for presentation of a claim for compensation under the Convention.[53] A Claimant can go ahead and present its case to the launching State for compensation under the Convention without first going to its national court or administrative tribunal or any other local means of remedying the wrong in the launching State and neither does a Claimant need a local permission or authorisation from the local means in order to so present its Claim. Also, a claimant is free to consider any local means to remedy the wrong it has suffered, however, doing that would preclude or prevent such a Claimant from presenting a claim in respect of the same damage under the Convention. According to Article XI (2) 'Nothing in this Convention shall prevent a State, or natural or juridical persons it might represent, from pursuing a claim in the courts or administrative tribunals or agencies of a launching State. A State shall not, however, be entitled to present a claim under this Convention in respect of the *same damage* for which a claim is being pursued in the courts or administrative tribunals or agencies of a launching State or under another international agreement which is binding on the States concerned.'

[51] Art. IX.

[52] Art. XXII (1-5).

[53] Art. XI "Presentation of a claim to a launching State for compensation for damage under this Convention shall not require the prior exhaustion of any local remedies which may be available to a claimant State or to natural or juridical persons it represents".

As logical as this provision seems, preventing multiplicity of claims, it still opens up a situation where a Claimant can pursue its claim under the Convention on damage, subject of claim, not part of its claim in the national court of the launching state but both damage, subject of the claims, arising from the same occurrence.

The operating word in the provision '*same damage*' would allow a Claimant to split its claims, each on different damage, but as a result of the same space activity mishap. For example, assuming the US space satellite fall and exploded on Russia's territory as a result of which properties were destroyed, people injured physically while some suffered psychological trauma either from the injury, losing a loved one or from witnessing the horrific event. Russia can seek or pursue a claim in respect of damage to its people on both direct and indirect damage such as loss of earnings and interest in US court or administrative tribunal or agency and at the same time pursue a claim under the Convention for direct damage (not part of claims in the court) from the same mishap under the provision of Article XI(2). Claims for damage which happened as result of space activities like the *Cuban Cash Cow Claims* (supra), *Canada V. Russia* (supra), *Skylab-1*(Supra) were resolved through diplomatic negotiation

The Liability Convention provides for the establishment of 'a Claims Commission at the request of either party (Claimant or the Launching State) if no settlement of a claim is arrived at through diplomatic negotiations as provided for in Article IX, within one year from the date on which the Claimant State notifies the launching State that it has submitted the documentation of its claim.'[54]

A Claims Commission of three members is to be set up by the parties. The parties are required to appoint the chairman of the Commission while the other two members are to be appointed by the parties respectively. Once the request for the establishment is made, such appointment is to be made not later than two months of the request.[55]

Where no decision is arrived at on the appointment of within four months of the request for the establishment of the commission, the Secretary-General may on request of either party makes such appointment within another two months upon the request. Where a parties fails or refuses to appoint its member as provided in Article XV, the other party is at liberty to request the so

[54] Art. XIV.
[55] Art. XV.

appointed chairman to proceed with the claims as a sole-member of the claims commission[56] and in the event of any vacancy in the composition of the membership of the commission, the mode of appointment of the new member(s) would be as the same with the initial appointment.[57]

"No increase in the membership of the Claims Commission shall take place by reason of two or more claimant States or launching States being joined in any one proceeding before the Commission. The Claimant States so joined shall collectively appoint one member of the Commission in the same manner and subject to the same conditions as would be the case for a single claimant State. When two or more launching States are so joined, they shall collectively appoint one member of the Commission in the same way. If the claimant States or the launching states do not make the appointment within the stipulated period, the Chairman shall constitute a single-member Commission."[58]

The Convention allows the Claims Commission to determine its procedure, place(s) where it shall sit and all other administrative matters while expenses in regard to the commission shall be borne by both parties unless the Commission determines otherwise.'[59] Hence, there is no formal and specific procedure for a Claims Commission. The implication is the absence of precedent, as there could be as many procedures as there are cases. The decisions and award of the Commission is determined by the majority vote except where its sit as a single-member commission.[60] While acting 'in accordance with international law, principles of justice and equity, the Commission has the mandate of deciding the merit of the claim for compensation and thereupon determines the amount of compensation to be paid.'[61]

Article XIX makes provision on the status of the award to be final and *binding* on the condition that such *bindingness* and finality of the award and decision is dependent on the wish and agreement of both parties. Where the parties agree otherwise or disagree on the binding effect of such award, the Commission's award is deemed final and *recommendatory* and the parties are enjoined to consider it in good faith. This article views this provision as good as not made, as it

[56] Art. XVI.
[57] Art. XVI(2).
[58] Art. XVII.
[59] Art. XX.
[60] Art. XVI (3,4,5).
[61] Art. XVIII & XIX.

still made negotiation through diplomatic channel viable. Why have a claims commission, whose award may likely be disregarded by making the *bindingness* of the award subject to the consent of both parties, otherwise the Commission's award is merely recommendatory to be considered in good faith.[62]

The award or decision[63] of the commission which is required to be made public must be made within a year from the setting up of the Commission. No extension of this period may be granted except it is found to be necessary.[64]

Though the Convention provides that States are not prevented from entering into further bilateral or multilateral agreement to compliments its provisions, it however omitted to provide or suggest another way out for disputant where diplomatic negotiation failed which led to the establishment of a Claims commission whose decision is also not agreed to as binding by the parties.

Situation of Individual Victims under the Convention

The question which the Convention failed to provide an answer to is; what happens in the event that the individual affected dies, will his claim die with him? What if the injury he sustained is from a space object belonging to a private entity of a State who is not a party to the Convention? The dicey issue as it concerns individual whether private or juridical is this; the Convention has been able to borrow from the customary international law so that a state responsible, that is State of registration in most cases, or state in whose territory, damage is suffered or another state that deems it fit may present a claim on behalf of the individual. Now what if the table is turned and the Individual is not the claimant but the defendant knowing the assumption that space launch is deemed to be conducted by entities with enough financial resources like a State or international inter-governmental organisation. The quick answer that may come to mind is that the claim would be presented to the state of registry. Where this is the case, then the thin line between responsibility and liability arose. Where would the sum for compensation come from or rather who pays the compensation? The Convention has totally failed to consider this scenario. Efforts

[62] Armel K. *"Space Law: Current Problems and Perspectives for Future Regulation"* in Marietta B & Kai-Uwe S (eds), Essential Air and Space Law Series (2) (Eleven International Publishing 2005) 117.

[63] "Certified copies of the award is to be delivered to each parties and to the Secretary-General of the United Nations and reasons for reaching such award must be given by the Commission." Art, XIX (4 & 2).

[64] Art. XIX.

to offer a solution to this could be that the state of registry would be responsible for the payment. This is because it must have collected monies for licenses, permit, registration and some other space launch fees and, as such, has assumed responsibility for the payment of compensation in respect of damage as a result of the registered space object. Also, the state of registry must have put some domestic measures into place such as insurance and indemnity policies in cases of damage.[65] For example, where a launch is been undertaken by Corporate entities, the United States through NASA 'requires every non-united states government user of its launch services to provide a third party liability policy covering each launch and naming as additional named insured to U.S Government, its contractors and subcontractors.'[66]

National of a launching state and a 'foreign nationals, during such time as they are participating in the operation of a space object from the time of its launching or at any stage thereafter until its descent, or during such time as they are in the immediate vicinity of a planned launching or recovery area as the result of an invitation by that launching State, are precluded from filing a claim under the Convention.[67] Foreign nationals under this provision will include engineers, astronauts or any other foreigner participating whether in launching, fixing, operating the space object by invitation of the launching state.[68]

[65]See Registration Convention on the responsibility of a State of Registry.

[66]S308. (a) The Administration is authorized on such terms and to the extent it may deem appropriate to provide liability insurance for any user of a space vehicle to compensate all or a portion of claims by third parties for death, bodily injury, or loss of or damage to property resulting from activities carried on in connection with the launch, operations or recovery of the space vehicle. Appropriations available to the Administration may be used to acquire such insurance, but such appropriations shall be reimbursed to the maximum extent practicable by the users under reimbursement policies established pursuant to S 203(c) of this Act. (b) Under such regulations in conformity with this section as the Administrator shall prescribe taking into account the availability, cost and terms of liability insurance, any agreement between the Administration and a user of a space vehicle may provide that the United States will indemnify the user against claims (including reasonable expenses of litigation or settlement) by third parties for death, bodily injury, or loss of or damage to property resulting from activities carried on in connection with the launch, operations or recovery of the space vehicle, but only to the extent that such claims are not compensated by liability insurance of the user: Provided, That such indemnification may be limited to claims resulting from other than the actual negligence or willful misconduct of the user. Carl Q C, *'International Liability for Damage Caused by Space Objects*(1980) (74) 346-371. American Journal of International Law. 348.

[67]Liability Convention 1972, Art. VII.

[68] Ibid.

A further rethink of this provision may occasion a probe such as: what would happen to a national of a launching state who suffered damage as a result of its state space activity while he is in another state for, maybe, a short visit? Again would the state of the foreign nationals fold their arms and do nothing where the right to claim is taken away from its national?

Again, any claim arising from the Outer Space Treaty and the Liability Convention would be for the damage[69] suffered as a result of a launching State Space Activities, that is, 'damage resulting from space object fallout to earth surface, aircraft in flight or harm caused elsewhere than the surface of the earth to a space object of one launching state or to persons or property on board such a space object by a space object of another launching state.'

Compensation

Usbi jus ubiremedium, a cardinal principle of law, dictates that where a legal right has been violated, there must also be a legal remedy or action at law.[70] This principle is embodied in the Liability Convention which makes provision for compensation for victims of damage. The term 'compensation' can be put down simply as payment of monetary damages for breach of law and for the purpose of this article, for a breach of international space law which often stem from State responsibility.[71] There are numerous international agreements, cases, and states practice on international responsibility and subsequent compensation. For example, the Draft Articles of State Responsibility provides that 'the responsible state is under an obligation to make full reparation for the injury caused by the International wrongful act.'[72]The UN Declaration on Conference on the Human Environment is to the effect that 'the States have, in accordance with the Charter of the United Nations and the principles of international, sovereign right to exploit their own resources pursuant to their own environmental policies, the responsibility to ensure

[69]See Art, IV (1) (b).

[70] Dinah Shelton, Remedies in International Human Rights Law (Oxford University Press 1999).

[71] Arzt D.E, '*The Right to Compensation: Basic Principles Under International Law. Compensation as Part of a Comprehensive Solution to the Palestinian Refugee Problem. Palestinian Refugee*' 1999 PRRN <https://prrn.mcgill.ca/research/papers/artz4.htm> accessed 3 October. 2024.

[72] Art 31. See also Article 38 Second Protocol to the Hague Convention for the Protection of Cultural Property, Article 51First Geneva Convention, Article 52 Second Geneva Convention, Article 131 Third Geneva Convention and Art 148 Fourth Geneva Convention.

that activities within their jurisdiction or control do not cause damage to the environment of other States or areas beyond the limits of national jurisdiction.'[73]

The application of the foregoing principle can be found in cases like the *Corfu Channel (United Kingdom) V. Albani (1949)* where the ICJ ordered Albani to pay the compensation claim of £843,947 to the United Kingdom after the court had held in 1948 that Albani is responsible under international law for the explosions that happened on 22nd Oct, 1946, in Albani waters for the loss of human life and damage suffered by the United Kingdom.[74] Also in *Ahmadou Sadio Diallo (Republic of Guinea) V. Democratic Republic of Congo,* where the court held that 'the Democratic Republic of Congo was under obligation to make appropriate reparation, in the form of compensation to the Republic of Guinea for the injurious consequences of the violations of international obligations (under the African Charter on Human and Peoples Rights and the International Covenant on Civil and Political Rights)' and thereafter awarded the sum of $85,000 for non-material damage and $10,000 for material damage suffered by the complainant's national[75](A case of diplomatic protection). The International Tribunal for the Law of the Sea (ITLOS) held the Republic of Guinea responsible for the violation of the rights of Saint Vincent and the Grenadines under UNCLOS[76] by stopping and arresting MV Siaga (ship) and detaining its crew and therefore awarded compensation against Guinea.[77] In *Pulp Mills Case (Argentina V. Uruguay)*, the ICJ held that:

> a state is thus obliged to use all the means at its disposal in order to avoid activities which take place in its territory or in any area under its jurisdiction, causing significant damage to the environment of another state. This court has

[73] Principle 21, Stockholm 1972.

[74] *Corfu Channel* case (Assessment of amount of compensation). Judgment of 15 December 1949 <https://worldcourts.com/icj/eng/decisions/1949.12.15_corfu.htm#:~:text=The%20Court%20considers%20the%20true%20measure%20of%20compensation> accessed 25 September 2024.

[75] Re Compensation owed by the Democratic Republic of Congo to the Republic of Guinea. Judgment of 19 June 2012. ICJ Reports. 24 <https://icj-cij.org/case/103#:~:text=Democratic%20Republic%20of%20the%20Congo)%20%20(Compensation%20owed> accessed 25 September 2024.

[76] Article 56(2) & 58 United Nations Convention on the Law of the Sea 1982.

[77] *MV Siaga (Saint Vincent and the Grenadines V. Guinea)* case No. 2. Judgment of 1 July 1999 Award of $2,123,357 as compensation for the arrest and detention of vessel and crew in violation of the United Nations Convention on the Law of the Sea <https://itlos.org/en/main/cases/list-of-cases/case-no-1/#:~:text=The%20Application%20dealt%20with%20a%20dispute%20concerning%20the> accessed 30 August 2024.

> established that this obligation is now part of the corpus of international law relating to the environment.[78]

The customary international law on remedying international wrong is also upheld in the outer space regimes. The Outer Space Treaty makes States involved in outer space activities to which such activities have occasioned damage to another state, its nationals whether natural or juridical to be internationally liable for the damage.[79] However, the Liability Convention expands the provision by giving a succinct procedure for claiming compensation.

Even though none of the Agreements define or describe compensation, the provisions of the Liability Convention suggest what may be described as compensable damage for claimant to identify his interest and where he finds the provision wanting he can resort to other international agreements for compensation claim.[80] Compensable damage under the convention are (a) loss of life (b) personal Injury (c) Health Impairment (d) loss or damage to property caused directly by space object only.[81]

The restrictive attitude of the Convention on damage to which compensation may be sought has led many writers, including this article, to assert that the Convention does not envisage compensation on indirect damage. According to Diederiks-Verschoor and Kopal,[82]'reading the article, it is clear that only direct damage and not indirect damage, is contemplated by the convention'[83]One may state that the form of reparation under this Convention is a further testimony to the need for expansion of some of its provisions to accommodate salient issues.

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[78]*"Pulp Mills on the River Uruguay (Argentina V. Uruguay)"* 2010 I.C.J Judgement of 20 April 2010 Gen. List No 135; Provisional Measures, Order of 13 July 2006. ICJ Reports 2006, 113, J.

[79]See Article VII. *"States Parties to the Treaty shall pursue studies of outer space, including the moon and other celestial bodies, and conduct exploration of them so as to avoid their harmful contamination and also adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter and, where necessary, shall adopt appropriate measures for this purpose. 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."* Art. IX.

[80] Liability Convention 1972, Art. XXII.

[81] Art, 1 (a).

[82]Isabella Henrietta Diederiks-Verschoor and Vladimir Kopal authors of 'An Introduction To Space Law' (Kluwer Law International 2008)

[83]Ibid. 38-39.

Compensation is the only form of reparation contemplated under this convention coupled with the few situations of compensable damage. What will be the situation where the compensation granted is not adequate?

The list of forms of damage to which a claim for compensation may be brought are more comprehensive in some other international law on liability like the Convention on Supplementary Compensation for Nuclear Damage constituting an integral part of the world nuclear liability regime, provides inter alia for '(i) loss of life and injury to persons, (ii) loss of or damage to property, (iii) economic loss arising from loss or damage as in (i) and (ii) (iv) costs of measures of reinstatement of impaired environment (v) loss of income deriving from an economic interest in any use or enjoyment of the environment (vi) cost of preventive measures and further loss or damage caused by such measures (vii) any other economic loss other than any caused by the impairment of the environment.'[84] Also, the opinion expressed in *Lusitania case*[85] supports other kinds of damage thus 'that one injured is under International law entitled to be compensated for an injury inflicted resulting in mental suffering, injury to his feelings, humiliation, shame, degradation, loss of social position or injury to his credit or to his reputation, there can be no doubt, and such compensation should be commensurate to the injury. Such damage is very real and the mere fact that they are difficult to measure or estimate by money standards makes them nonetheless real and affords no reason why the injured person should not be compensated therefore as compensatory damages, but not as a penalty…'[86]

The compensable damage as provided in the liability convention though restrictive in text has been given wide possibility in practice as observed in the *Canada V. Russia (Cosmos 954 Incident) supra*[87] wherein Canada was able to claim compensation for clean-up operation, mitigation against radioactive contamination that wasn't even present in the environment, trespass for the mere fact of entry of the satellite into the territory and psychological harm.

[84] Convention on Supplementary Compensation for Nuclear Damage 1997, Art ll.

[85] Opinion in the Lusitania cases. November 1, 1923; 17-32. < https://www.worldcourts.com/iatc/eng/decisions/1923.11.01_USA_v_Germany_3.pdf#:~:text=PARKER,%20Umpire,%20delivered%20the%20opinion%20of%20the%20Commission,> accessed 28 September 2024.

[86] Garcia-Amador F.V, Louis B.S & Baxter R.R, Recent Codification of the Law of State Responsibility for Injuries to Aliens (Oceana Publications INC. New York 1974) 116.

[87] Settlement of Claim between Canada and the Union of Soviet Socialist Republics for Damage Caused by Cosmos 954 (Released on April 2, 1981).

Almost none of these claims were material damage. Nonetheless, Canada was able to secure the sum of $3miiloin from Russia after lengthy negotiation as provided for in the Liability Convention.[88] The compensable damage here is more of the expenses in the clean-up operation undertaken by the by Canada after the Russian Nuclear powered satellite disintegrated into Canada territory.[89] Canada's success has in fact laid precedent for future claims under the space regime that non-material claims could also arise under the Convention such as interest or loss of income as a result damage to property and a Claimant may not necessarily rely on other international law and cases.

It suffices to assert that this principle go hand in hand with other international regimes on state responsibility as seen in the provision of Article1-3 & 31 (2) that injury includes 'any damage, whether material or moral caused by the internationally wrongful act'[90] and the *Trail Smelter case*[91]involving transnational pollution and the court upheld the principle that no state should destroy or unnecessarily interfere with the environment of another.[92] This principle has been emphasised in a number of cases including *Corfu Channel case (supra), the Nuclear Test Cases,*[93] *Geogia V. Tennessee Copper Co. & Ducktown Sulphur, Copper and Iron Co.*[94] *Spain V, France*[95] *and Chorzow Factory case.*[96]

[88] Ibid.

[89] Atsuyo Ito, Legal Aspects of Satellite Remote Sensing (Martinus Nijhoff Publishers 2011) 73-74, 269

[90] Draft Articles on State Responsibility 2001.

[91]*United State V. Canada Arbitration* 3 R. International Arbitration Awards 1905 (1938, 1945).

[92]Bryan Schwartz & Mark L.Berlin, After The Fall: Analysis of Canadian Legal Claims for Damage Caused by Cosmos 954(1982).

[93]*Australia V. France* (1973) International Court of Justice Report, 99 <https://www.icj-cij.org /case/58/summaries#:~:text=INTERNATIONAL%20COURT%20OF%20JUSTICE.%20Nuclear%20Tests%20(Australia%20v.> accessed 28 September 2024and *New Zealand V. France* (1974) International Court of Justice Report, 253 & 457 < https://www.worldcourts.com /icj/eng/decisions/1974.12.20_nuclear_tests2.htm> accessed 28 September 2024.

[94](1907) 206 U.S 230.

[95]*Lake Lanoux (Spain V. France) Arbitration*, (1957) 12 Report of International Arbitration Award, XII 281-317.<https://legal.un.org/riaa/cases/vol_XII/281317_Lanoux.pdf#:~:text=Par%20un%20compromis%20signé%20à%20Madrid%20le%2019> accessed 28 September 2024.

[96]*Chorzow Factory (Germany V. Poland)* (1928) P.C.I.J Ser. A, No. 17 (Sept. 13). File No.E.c.XIII. Docket No. XIV:I.

Measuring Compensation in Outer Space Regimes

The compensation regime established by the Liability Convention did not create a fixed compensation for claimant except that it created types of damage that may be occasioned to warrant claim for compensation. According to the Convention, the Claims Commission to which dispute may be referred is given the discretion to determine the appropriate amount payable as compensation and it envisages a 'prompt payment under the terms of the Convention of a full and equitable measure of compensation to victims of damage[97]. Awarding compensation under the Convention is to be determined in accordance with international law and the principles of justice and equity'[98]

It is observed, the first yard stick in measuring damages is to resort to the principle of international law, this is so even where taking the principle into account would lead to awarding lesser amount to the claimant as long as the principle of international law is considered; this is where justice and equity would be well utilised.[99] Under the Convention, a Claimant may not be able to recover full cost where such is against international law but the application of the principles of justice and equity would be used in mitigating any rigidity which may be occasioned from the application of international law as equity preaches conscience. This would enable the tribunal to use their discretion to remedy the wrong suffered appropriately fitting the particular situation and circumstance.[100] According to McClintock 'in this general juristic sense, equity means the power to meet the moral standards of justice in a particular case by a tribunal having the discretion to mitigate the rigidity of the application of strict rules of law so as to adapt relief to the circumstances of the particular case'[101] Hence, the tribunal upon a claim can decide to award to a Claimant compensation equaling the market value or owner's use value of his property as the case may be.

[97] Liability Convention 1972, Art. XII.
[98] Ibid.
[99] This is due to the huge financial commitment involved in space launch and the disastrous effect of a fallout.
[100] Pablo Mendes De Leon' Settlement of Dispute in Air and Space Law' in 'The Use of Airspace and Outer Space for all Mankind in the 21st Century [Proceedings of the International Conference on Air Transport and Space Application in a New World held in Tokyo from 2-5 (Kluwer Law International June 1993) 337.
[101] McClintock, McClintock on Equity 1 (2 ed 1948) in Ronald E.A 'Measuring Damages under the Convention On International Liability for Damage Caused by Space Objects' (1978) 6 (2) *Journal of Space Law.* 153.

The second yard stick is the concept of restoration which according to the convention 'in order to provide such *reparation* in respect of the damage as will restore the person, natural or juridical, State or international organisation on whose behalf the claim is presented to the condition which would have existed if the damage had not occurred.'[102] Again this is in the spirit of customary international law to the effect that a victim be compensated enough to *status quo ante,* as though nothing had happened. In other words, the responsible state is expected to clear up the consequences of the wrongful doing and restore the situation which would have existed if the mishaphad not occurred (*restitution in integrum*).This would include cost of restoring the properties not only directly affected but that which got destroyed as a result of actions taken by the Claimant on mitigation, control, repair or restoration of the damage. An extension of the principle is found in Article 34[103]which provides for:

> Full reparation for injury caused by the internationally wrongful act shall take the form of restitution, compensation and satisfaction, either singly or in combination, in accordance with the provision of chapter

This provision reaffirms the forms which reparation may take, that is, the appropriate court or tribunal may order for restitution or compensation or satisfaction or a combination of the forms of reparation as the case may be to remedy the wrong complained. Restitution would, of course, take the form of re-establishment of the situation, be it rebuilding, reconstruction, or release of detainees as in ***Saint Vincent and the Grenadines V. Guinea*.**[104] Thus, 'a state responsible for an internationally wrongful act is under an obligation to make restitution, that is, to re-establish the situation which existed before the wrongful act was committed, provided and to the extent that restitution is not materially impossible and does not involve a burden out of all proportion to the benefit deriving from restitution instead of compensation.'[105]

[102] Liability Convention 1972, Art. XII.
[103] Article of State Responsibility dealing with forms of reparation, Chap II
[104] See the award of the International Tribunal on the Law of the Sea in *MV Siaga, ITLOS case No 2 1999 and Panama V. France (the Camouco Case) 2000 Case No. 5* https://www.worldcourts.com/itlos/eng/decisions/2000.02.07_Panama_v_France.pdf#:~:text=(PANAMA%20v.%20FRANCE)%20APPLICATION%20FOR%20PROMPT%20RELEASE.%20JUDGMENT..
[105] Liability Convention 1972 Art 35.

The *Chorzow Factory case (supra)*[106] is a typical example of the application of two forms of reparation (restitution and compensation) by the Permanent Court of International Justice. This is because, often time, mere restitution or re-establishment may not be adequate as other incidental damage may have been incurred as a result of the loss of property which could be economic loss or indirect damage as the case may be or where restitution could not be effected.[107]The 'State responsible for an internationally wrongful act is under an obligation to compensate for the damage caused thereby, where only restitution is not adequate.' The compensation shall cover any financially assessable damage including loss of profits insofar as it is established. Unlike restitution, this is in form of monetary payment to the victim of the damage (State, natural or juridical persons) which payment, must be commensurate with the actual damage. This dictates that an award for compensation is on a payment that has been assessed with the damage. Hence, a Claimant may not be able to apply for a sum of money over and above the actual worth of the damage as compensation. This was what played out in *Lusitania* case (supra) where the payment was described as a judicially ascertained *compensation* for the wrong. The remedy should be proportionate with the loss, so that the injured party may be made whole[108] and all he suffered remedied while not serving as a punitive measures.[109] Majority of the outer space related cases on damage as a result of fallout always end in the payment of compensation as seen in the Skylab 1 *(Australia V. United States) (supra)* and *Cosmos 954 (supra)* where a full payment of the sum of $ 6 million was paid to the government of Canada. Although Canada spent close to $14 million in its clean-up of debris and radioactive materials and other expenses, it only filed for a claim of $ 6 million. This payment is in tandem with the international law standard of compensation which is provided to be full and adequate as enshrined in the Liability Convention

[106] Publications of the Permanent Court of Justice Series A-No.17, Collection of Judgments (A.W Sijthoff's Publishing Company, Leyden, 1928). The Factory At Chorzow (Claim for Indemnity) (The Merit) Germany v. Poland 1928 Docket XIV: I.<http://worldcourts.com/pcij/eng/decisions/1928.09.13_chorzow1.htm>accessed 12 August 2024

[107] Ibid 'the responsible State was under the obligation to restore the undertaking and, if this be not possible, to pay its value at the time of the indemnification, which value is designed to take the place of restitution which has become impossible".

[108] *Lusitania Case (Supra), Judgment of November 1923, Report of Arbitral cases Vol II.*

[109] Octavio Amezcua Noriega, 'Reparation Principles under International Law and their Possible Application by the International Criminal Court: Some Reflections. Transnational Justice Network. 2011 University of Essex. ETJN, Reparation Unit. Briefing Paper No. 1.

which requires 'the prompt payment under the terms of the Convention of a full and equitable measure of compensation to victims of such damage.'[110]

Whether *only* satisfaction as a form of reparation in space-related damage would be sufficient is a food for thought, owing to the immense destruction space objects fallout could create. Article 37 provides that 'the State responsible for an internationally wrongful act is under an obligation to give satisfaction for the injury caused by that act insofar as it cannot be made good by restitution or compensation. Satisfaction may consist in an acknowledgment of the breach, an expression of regret, a formal apology or another appropriate modality. Satisfaction shall not be out of proportion to the injury and may not take a form humiliating to the responsible State.' While restitution and compensation can be adequate reparation severally, satisfaction alone, according to this article, cannot be adequate reparation in where there is a claim under the Convention except to serve as *sui generis*. Except for where there is no actual damage and all that the Claimant based its claim on is 'trespass', for the illegal entry of space object[111] or particle into its territory which is not envisaged by the Liability Convention.[112] Maybe awarded jointly with one or the two other forms of reparation but not singly. Evidently, Satisfaction can be an adequate form of reparation in some other cases like the *Nuclear Test Cases (supra)* where the case was not concluded on the merit but on the French's promise to New Zealand that it would put a halt to the further conduct of the atmospheric testing.[113] and the situation of US-China in 2001 where the United States had to apologise for its intrusion when its military aircraft landed in Huinan, China without any prior authorization.[114]

Again, compensation under the convention is just for direct damage caused by space object. It is further observed that the only form of remedy available to a Claimant under the Liability

[110] See the preamble to the Convention.

[111] OlatinwoKhafayatYetunde: Ex-Raying the Freedom of Passage of Spacecraft through the Airspace of a Foreign State. 2017 (11) Journal of the National University of Advanced Legal Studies, 109. <https://heinonline.org/HOL/LandingPage?handle=hein.journals/nualsj11&div=9&id=&page> accessed 1 October 2024.

[112] Ibid. COSMOS 954 (Supra). Canada's claim of trespass on the presence of Cosmos 954 in it territory was not considered in the negotiation between it and Russia.

[113] *New Zealand v. France*, 1973 I.C.J. Pleadings, vol. II, (Nuclear Tests) 3, 8 (Application dated 9 May 1973). See also Australia v. France, 1974 I.C.J. 372, 388 (Judgment of 20 December 1974) in Bryan Schwartz & Mark L.Berlin, After The Fall: Analysis of Canadian Legal Claims for Damage Caused by Cosmos 954 (1982) 683

[114] Boleslaw Adam Boleslaw, International Law: A Dictionary. Dictionaries of International Law, No. 2 (Scarecrow Press Inc 2005) 111.

Convention is compensation. The Convention does not provide for other forms of remedy such as restitution and satisfaction even though, as observed in the cases analysed, that restitution can be a good remedy in claims under the Convention, more particularly, where mere compensation will not be adequate. Though most of the cases cited are not in outer space activities, it shows that other forms of reparation can be effective in space-related claims and it would, therefore, be wise where these forms of reparation such as restitution, more especially, is considered under the Liability Convention.

Conclusion and Way Forward

It is observed that the Liability Convention does not contemplate indirect and consequential damage as a compensable damage, subject of a claim for compensation under the Convention. One of the reasons averred by Canada in their claims is that the presence of Radioactive contamination caused by Cosmos 954 amounted to devaluation of the Canadian Territory and that such presence has also caused anxiety to its people and the governments of its nation, hence, the Canadian population are subjected to mental stress and anxiety generated by fear of the debris and this is a cause of injury to them.[115] This is a form of consequential damage not contemplated under the Convention. A person could suffer mental stress just by being informed of the presence of or an impending fall-out of a space object even if such fall-out was averted. The provision is not wide enough to accommodate such claims but as seen, it is very possible from Canada's situation

A state may present its claim directly, or upon request, through the UN Secretary-General as long as both the Claimant and the Defendant are members of United Nations,[116]to another state where it does not maintain diplomatic ties with the state concerned with the launch or otherwise represent its interest as enshrined in the Convention. The position of a claim of an individual whose death is as a result of damage as a result of space object is also not provided for. The cause of damage, space object, is limited in scope as space debris is not considered as a source of damage.

[115] Ibid.
[116] Liability Convention 1972, Art. IX.

It is further seen that compensation is the only form of reparation considered under the Convention and the effect of the decision of a Claims Commission under the Convention on dispute of damage depends on the parties, that is, the parties can choose to be bound by the decision or not. This means that a victim, who has been awarded compensation by the commission, may be paid or not.

The lack of explicit procedure for claims commission may also prevent precedent as each Claims Commission may adopt procedure of its choice, the time limit for the presentation of claim could also prevent a claimant bringing his/her or claim outside the time-limit of one-year, where the damage is identified after a year of the occurrence.

Finally, the Liability Convention fails to make provision for execution of the award (which is only binding at the instance of the disputants) of the claims commission even though it preaches prompt payment of compensation.