
INTERNATIONAL JOURNAL OF ADVANCED LEGAL RESEARCH

LEGALITY OF STRATEGIC DEFENCE INITIATIVE

- Urooj Fatema¹ & Syed Imran Hussain²

ABSTRACT

President Ronald Reagan created the highly ambitious Strategic Defense Initiative (SDI) to make Soviet ballistic missiles "impotent and outdated" after claiming the U.S. was falling behind the Soviet Union in the nuclear weapons race. It was intended to be a global defensive shield with thousands of sensors and interceptors on land, at sea, in the air, and space that would shoot down Russian missiles as they flew, but it never materialized.

Strategic Defense Initiative was most successful not as an anti-ballistic missile defense system but as a propaganda instrument that could pressure the Soviet Union from a military and economic standpoint to build its anti-ballistic missile defense system. Reagan genuinely believed in SDI for national security and never meant it to be a negotiation chip, but many of his aides needed to recognize its potential. The Soviets thought they were about to make some unique technical advancement, which Shultz mentioned at the time, despite his reservations about SDI's deficiencies, as one viable means of defense acting as the most significant advantage to the USA.

Because SDI threatened the effective Mutually Assured Destruction (MAD) nuclear doctrine between the United States and the Soviet Union, it was controversial. MAD was a method of deterrence based on the idea that if one nation launched a nuclear missile at another, the target nation would respond with a nuclear attack, causing massive destruction. This idea was supposed to prevent either Party from provoking atomic war. The Anti-Ballistic Missile Treaty (ABM) of 1972 led to employing MAD as a deterrent. The deal stipulated that neither the Soviet Union nor the United States may possess more than one anti-ballistic missile defense system. Additional system development was prohibited.

¹Research Scholar at NUJS, Kolkata

²Research Scholar Jamia Millia Islamia, New Delhi

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

SDI became more of a publicity tool than a practical system. As a result, relations between the Soviet Union and America deteriorated as the war drew close. The Soviet Union wanted to spread communism worldwide while concentrating on enlarging its influence in Europe. America feared the effects of a Soviet Union expansion and was suspicious of its intentions. As a result, the two nations got caught up in a nuclear arms race.

SDI acted as a new strategy developed in response to the threat posed by the Soviet Union's expanding nuclear arsenal. It was not known whether such a step in the Cold War would lead to a new arms race or eliminate nuclear weapons from the world. Some perceived it as a provocative action. Some criticized the project for having an unattainable goal. Others cited the program's enormous cost as a critical issue. President Reagan anticipated that it would take many years and experience failures before SDI could be achieved. He was nevertheless prepared to gamble on the program.

The Treaty (ies) about the use of anti-ballistic missiles and space technology has loopholes that do not manifest themselves on a latent level, which has facilitated the USA's position to manipulate the terms of the treaties in their favor to legitimize the defense systems of the Strategic Defence Initiative. These accords require careful involvement to build a benign framework for missile development that would ensure a balance in the global defense regime and prevent nuclear proliferation.

Hence, the paper investigates the legality of such a program by examining the broad framework of provisions as mentioned in the treaties signed by both countries in the quest to become superpower nations during the Cold War era.

INTRODUCTION:

By the end of 1980, under the Reagan administration, the United States of America expressed the need for a space-based defense system against Soviet ballistic missiles. The ultimate objective was to secure the State's territories by constructing a shield to protect itself against attacks by other countries, specifically Soviet Russia.³ Therefore, in March 1983, the Strategic Defence Initiative came into existence, defined as a type of defensive system that could render the missiles from other countries ineffective and obsolete.⁴ According to the President

³ Donald G. Gross, Negotiated Treaty Amendment: The Solution to the SDI-ABM Treaty Conflict, 28 Harv. Int'l. L. J. 31 (1987) <https://www.HeinOnline/content/abmt> (last visited Jan 20, 2021).

⁴ Abram Chayes, *Dyson Distinguished Lecture: The ABM Treaty and the Strategic Defense Initiative*, 5 PACE LAW REVIEW 15 (2013).

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

of America, Ronald Reagan, “SDI is a proposal to use defensive measures to counter the Soviet Union’s strategic nuclear missile threat.”⁵

Popularly termed the “Star War,” Strategic Defence Initiative in the form of a research and development program was designed to explore the different dynamics of various technological advancements with the primary aim of finding a solution against the dangerous escalation of the nuclear arms race. The program consisted of a wide array of laser, space, and ground-based missile systems designed to intercept ballistic missiles at three stages of their flight path or trajectory. The first stage, or the boot phase, encompassed detecting, locating, tracking, and destroying many incoming warheads within minutes of launching the offensive missile.⁶ The midcourse interception or the Post-Boost phase provided for an interception after the decoys and warheads had been released traveling above the atmosphere. Finally, the terminal phase interception invoked the process when these warheads re-entered the atmosphere and propelled toward the target.⁷ Interception at each stage was done using nuclear weapons consisting of the laser beam, neutral particle beam, and hypervelocity gun or a non-nuclear projectile backed by chemical rockets.⁸

Even though SDI had put forward the intention for a larger purpose, it was caught in the web of complex international legal issues primarily responsible for going beyond the legal boundaries of two significant treaties, the Outer Space Treaty, and the Anti-Ballistic Missile Treaty. USA’s political system was critical and unappeased with the mutual vulnerability under the MAD agreement, which called for such defensive mechanisms to protect itself from unforeseeable nuclear attacks when both countries were engaged in massive atomic proliferation. USSR highly disregarded the program and viewed it as a medium of creating strategic instability, which compelled it to expand its defensive program.⁹

This paper investigates the legality of SDI, which has been said to contravene various international treaties where the USA has tried to defend itself by reinterpreting them to coincide with its preferred position. However, the USSR urged strict compliance with the Treaty to avoid conflicting interpretations and limit the program to the research phase.

⁵Major Chris G Wittmayer, *RULE FOR COURTS-MARTIAL 707: 1984 MANUAL FOR COURTS-MARTIAL SPEEDY TRIAL RULE 283* (1999).

⁶Chayes, *supra* note 2.

⁷Gross, *supra* note 1.

⁸*Id*

⁹Wittmayer, *supra* note 3.

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

While dealing with the legal implications of SDI, significant concerns arose in defining the limits of the program when it came to the use of ballistic missiles, as such use for the territorial defense was barred under the Anti-Ballistic Missiles Treaty, 1972 signed between USA and Russia as a result of the Mutually Assured Destruction. Another conflicting treaty included the Outer Space Treaty of 1967, signed between the two supercontinents and 100 other countries. From its inception, Soviet Russia started giving clear indications of not adhering to the Mutually Assured Treaty by building a force capable of eliminating a large part of the USA in one strike. This resulted in SDI responding to a colossal regime constructed in enemy states. Furthermore, SDI was said to be mainly in contravention of Article IV of the Outer Space Treaty, which prohibited placing or stationing any nuclear weapon of mass destruction in orbit or outer space.¹⁰ The second paragraph stresses using celestial bodies only for peaceful purposes restricted to research, not deployment.¹¹ Going by the USA's interpretation of the term "peaceful purpose," it tends to shift its focus to using military weapons for "non-aggressive" acts, justifying the purpose of SDI research. USA's approach to a liberal interpretation can be drawn from the Law of The Seas Treaty, which permits the use of military vessels on the high seas and makes no attempt to ban it, thereby implying the "non-aggressive" use of such high seas as peaceful and legal.¹² This led to more significant confusion and conflict between the two countries, with Russia alleging such an interpretation as vague and an attempt to bring SDI within the legal permit of international law. Likewise, Article III of the Treaty was highly debated because the United Charter shall follow rules of outer space to maintain peace and security, which brings in Article 51 of the Charter that warrants any anticipatory defensive systems under the purview of self-defense. Therefore, again creating an obscure ground for broad interpretation and backlash by other States.

Coming to the Anti-Ballistic Missiles Treaty, a result of the Salt-I Negotiation, became a hindrance to SDI development, also known as the "Heart of the Problems."¹³ Major clashing areas were an interpretation of Article II and Article V of the Treaty. Article II explains what an ABM is and the elements used in the trajectory, mainly consisting of ABM interceptor

¹⁰*Id.*

¹¹UNITED NATIONS TREATIES AND PRINCIPLES ON OUTER SPACE: TEXT OF TREATIES AND PRINCIPLES GOVERNING THE ACTIVITIES OF STATES IN THE EXPLORATION AND USE OF OUTER SPACE, ADOPTED BY THE UNITED NATIONS GENERAL ASSEMBLY. (2002).

¹²Wittmayer, *supra* note 3.

¹³Wittmayer, *supra* note 3.

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

missiles, launchers, and radars.¹⁴ The Treaty was made not to keep in mind the "exotic" technologies that would be developed to bring them under the garb of Article II. Here again, there was a high degree of uncertainty about what kinds of weapons shall be used to justify the SDI defensive system that should have been covered under the definition of the mentioned Article. For example, Article V did not prohibit fixed land-based systems and allowed for weaponry in a selected land-based mode.¹⁵ An ambiguous area can be noticed regarding the application of the treaty provision, which leads us to a pertinent question: What types of components and level of research are not barred by the Treaty, or, in simple words, is the SDI and ABM treaty working in the same tangent?

Article V, the corollary to the preceding paragraph, examines the extent to which SDI can be considered as research in which it states that parties shall not undertake to deploy or test any Anti-Ballistic Missile that is sea-based, space-based, air-based, or mobile land-based.¹⁶ Therefore, the immediate presumption would be that research is not prohibited and indirectly permits fixing land-based systems. However, the issue arises in understanding SDI as a research program that essentially moves beyond a laboratory research phase towards a stage of deployment that strictly falls under the restrictions of the treaty provisions. Critics view SDI as a program that is mainly focused on development rather than sticking to only research. Under its technical interpretation, a development stage is when a component after laboratory research moves towards the field-testing stage so it can be clearly understood that the program has exceeded its permissible limits of merely being research. Hence, it is taken to have violated the rules of the Treaty.

Therefore, SDI stands in transgression to international treaty provisions. However, only some terms in the Treaty have a clear-cut definition and meaning to hold the program as null and obsolete directly. However, according to the USA's contentions, SDI has been said to work well within the permissible limits of the provisions, thus not making it completely illegal or void.

The primary objective was to bring out the conflicting interpretations of the USA and the Soviet Union, primarily as the program of Strategic Defence Initiative was in retaliation to the growing Soviet Union's nuclear weapons. Thus, both have contravened the Treaty

¹⁴Frances V. Harbour, *The ABM Treaty, New Technology and the Strategic Defense Initiative The Reagan Legacy and the Strategic Defense Initiative: Articles and Essays*, 15 J. LEGIS 119–138 (1988).

¹⁵ Gross, *supra* note, 1

¹⁶Anti-Ballistic Missile Treaty, *supra* note 1.

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

provisions at some level due to ambiguity in important keywords that change the meaning of the Treaty altogether. The aim is to put into light these conflicting treaty provisions and the underlying principle of Strategic Defence Initiative, which primarily tilts upon the deterrent theory. Such a theory, though, is helpful for the present needs but is not workable in the long run, causing much distress and harm to society.

ELEMENTS UNDER STRATEGIC DEFENCE INITIATIVE

The research program of SDI encompasses four stages of research and development: the first stage decides whether or not to enter into systems development, the second stage discusses those systems development during which prototypes of actual defensive systems would be built and designed, the third stage includes a period of sequential deployment and lastly, in final phase multi-layered defensive systems would be deployed, and such terms shall be brought to the negotiating table for further amendment.¹⁷

The interception is done with the help of laser and particle beams with certain program elements consisting of:

2.1 Surveillance, Acquisition, Tracking, and Kill Assessment (SATKA): This element examines the sensing technologies needed to initiate defensive engagement and battle management and measures the status of forces during the launching of anti-ballistic missiles.¹⁸ It is also said to receive massive funding for its development as most of its technologies are preliminary.

2.2 Directed Energy Weapons (DEW): This element of the program consists of technologies such as high-power laser and particle beam machinery, lightweight mirrors, and magnets used for focussing the beam on the target, also concentrating on four phases of interception, from boost to post-boost phase ballistic missile defense taking into account space-based neutral particle beam and lasers.¹⁹

2.3 Kinetic Energy Weapons (KEW): These elements consist of hit-to-kill weapons to intercept incoming warheads from the ballistic missile and render them obsolete from

¹⁷ Gross, *supra note*, 1

¹⁸ Steven A. Hildreth, *Strategic Defence Initiative Program Facts*, Northern Kentucky University Library (1987)

¹⁹ Hildreth, *supra note*, 16

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

minutes of launch.²⁰ Such technological systems are the program's most developed and matured components.

2.4 Survivability, Lethality, and Key Technologies (SKLT): This system element uniquely calculates and determines the minimum energy required to destroy incoming ballistic missile attacks from the Soviets to protect its entire BMD systems.²¹

2.5 Systems Concepts and Battle Management (SC/BM): These elements develop technologies for survivable and enduring battle management control and communication systems used under simulation technologies to analyze technological risks and the cost of building such systems.²²

These elements, essential in every aspect, hold the system together, forming the basis of a successful Strategic Defence program.

LEGAL IMPLICATIONS OF STRATEGIC DEFENCE INITIATIVE:

SDI has been held to violate and affect various international agreements, most notably the Outer Space and Anti-Ballistic Missile Treaty. The allegations mainly concentrate on justifying the militarisation of outer space and to what extent SDI is encroaching upon the boundaries of illegitimate militarisation. The main agreements said to infringe are,

1. Outer Space Treaty Agreement. 1967:

The primary objective of the Outer Space Treaty was to curb military activities in outer space and to maintain it for peaceful purposes.²³ It is a culmination of United Nations Resolutions and heavily draws upon Resolutions 1721 and 1962.²⁴ The vast majority of inconsistency and debate surrounds Article IV of the Treaty, which bans the use of “any objects carrying nuclear weapons or any other kinds of weapons of mass destruction” in outer space, including the moon and other celestial bodies, and the use of these bodies shall be for peaceful purposes.²⁵ However, there has been a varied interpretation of such critical terms at different levels regarding the SDI program. Soviet Russia, going by the traditional view, claimed that the

²⁰ *id*

²¹ *id*

²² *id*

²³ Wittmayer, *supra* note 3.

²⁴ George Bernhardt, Sandra M Gresko & Thomas R Merry, *Star Wars versus Star Laws: Does SDI Conform to Outer Space Law; The Reagan Legacy and the Strategic Defense Initiative: Note*, 15 JOURNAL OF LEGISLATION 25.

²⁵ Merry, *supra* note 22.

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

term “peaceful purpose” shall bar military activities. Because of this reason, SDI should be debarred from further usage being military for defense purposes. However, the USA views “peaceful purpose” as the subjective intent of the user rather than the mere objective mention of it. The National Aeronautical and Space Administration, which transmits the idea of using outer space for peaceful and scientific usage, expresses the view that their policy of using outer space for peaceful purposes is indicative of the fact that military departments can conduct space activities related to the development of weapons systems, military operations or defense of its territory as long as it is “non-aggressive” in nature.²⁶ This implies that they had no intention of excluding outer space from military operations. If that were the backdrop to rely upon, all military activities or satellites used for varied purposes like surveillance, communications, and mapping would be rendered void and illegal. The Law of the Sea also follows this view where it does not attempt to ban military vessels, which comes under the group of “peaceful purposes.”²⁷ They seem to reinterpret “peaceful purpose” as “non-aggressive” use and justify the application of military activities in outer space, thereby making SDI fall under the legal permit of these international agreements. The general interpretation of the Treaty was not taken to prohibit all forms of military activity but only those with an aggressive tendency to cause harm to other States and the celestial bodies. Activities related to one state's defense are justified, as Article 51 of the UN Charter mentions.

Again, the question arises about stationing nuclear weapons in Earth's orbit, and whether SDI includes using a mass or atomic weapon. If affirmative, are they stationed in outer space or placed in orbit?²⁸ It has been argued that the characteristics of the X-ray laser used as a precision beam weapon in SDI result in a nuclear detonation, which releases uncontrolled nuclear energy resulting from the self-destruction of the gun and bringing it under the category of a nuclear weapon. The advocates of SDI defend this theory by explaining that the X-ray laser beam would only be used upon the warning of any missile being launched by the Soviets, and the device's passage in outer space would be brief without having to station the weapon in the orbit or exterior space.²⁹ The USA highlighted the chief concern of the drafters of the Treaty, which was to deter States from stationing orbital weapons of mass destruction that completed one full orbit before dropping upon command onto the designated target areas.

²⁶Wittmayer, *supra* note 3.

²⁷ U.N. Convention on the Law of the Sea, Dec 10, 1982, art. 88, U.N. Doc. A/Conf. 62/122 (1982)

²⁸Bernhardt, Gresko, and Merry, *supra* note 22.

²⁹Wittmayer, *supra* note 3.

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

However, many States during the 1960s were found to develop orbital weapons. Thus, the Treaty intended to prohibit State full-orbit nuclear weapons since anti-ballistic missiles did not travel a complete orbit before impact, and the laser beam was not stationed in orbit. It nevertheless complied with the Treaty in every aspect.³⁰

Contradicting the majoritarian view, the USA's interpretation of the Treaty did not agree with the provision's actual meaning, as the word "deployment" meant stationing. Therefore, when the SDI program's end purpose was to deploy multi-layered space-based weapons in outer space, more than loosely interpreting the Treaty to justify its standing was needed in bringing the program within its legal ambit. The USA's explanation of the Treaty was held to be baseless, and the attempt to legalize the program was rendered useless if they continued deploying weapons in outer space as deployment required stationing weapons in outer orbit.

2. Anti-Ballistic Missile Treaty, 1972

The United States and the Soviet Union signed the Anti-Ballistic Missile Treaty on May 26, 1972, as a result of Strategic Arms Limitation Talks (SALT-I), to put a restriction against uncontrolled missile race that leads to a risk of an outbreak of war using nuclear weapons causing rampant destruction.³¹ The Treaty is considered the "cornerstone of the present arms control regime."

Article V of the Treaty says that no Country shall be allowed to deploy, develop, or test any ABMs that are space-based, mobile land-based, or sea-based.³² The Treaty does not outright deny the research right. The Reagan administration had well-characterized SDI as a research program with the understanding that once the investigation proves to be successful, only then would the program be used to deploy any ABM Missile after making necessary amendments in the Treaty with the consonance of the other Party. Before such development took place, SDI *prima facie*, according to the existing Treaty, did not move beyond its permissible limit. Contradicting this view, Soviet Russia interprets this Article to restrict research only to the phase of "laboratory research." The ambiguity in defining a clear limit in "research" and "deployment" makes the Soviets accuse the USA's SDI of a step moving beyond the stage of laboratory research and entering into the background of making prototypes that will be tested, consequently leading to the deployment of arms owing to the primary objective of SDI

³⁰Arms Control in Outer Space on JSTOR, <https://www-jstor-org.ezproxy.nujs.ac.in/stable/40395376?S> Search (last visited Jan 18, 2019).

³¹Wittmayer, *supra* note 3.

³²*Id.*

program. But the USA points out that their current program has not exceeded the permissible limit of going beyond the laboratory stage to the field-testing location, and nothing in the ABM Treaty constrains the working of SDI, which made clear from the very inception that it is a research program. Another point of reference has been made to Article XII of the Treaty, which calls for monitoring treaty compliance by national technical means of verification with the help of satellite, aircraft, and sea-based surveillance.³³ Since these systems cannot detect laboratory research and for practical reasons, no party would intend to go beyond the unverifiable limits of research, so much monitoring acts as a bar on the activities of the States to stay within the permissible limit of the ABM Treaty.

However, analyzing the situation from a pragmatic point of view, the end purpose of SDI was to go beyond the scope of research and deploy its weapons to defend its territory. The argument of positioning SDI within the line of treaty compliance holds at the present stage, which is only restricted to research. However, the same is demolished when prototypes and weapons deployment are applied. A rigid dichotomy between research and weapons deployment holds the program in consonance when concerned with the initial part. However, it stands in contravention when actual multi-layered defensive systems would be built and deployed.

Also, the prohibition on space-based weapons under the Treaty does not hold for SDI components, as the main criterion involves using space-based weapons in outer space. The entire framework of the program, which hinges upon the use of these missiles and the primary function of intercepting ballistic missiles, was to be performed using such weapons, thereby contravening the requirement of not deploying a space-based gun for any purpose. The underlying feature of using space-based weapons forming the crux of the program, which required deployment, needed further explanation. However, the USA nullified such arguments, basing its answers only on the fact that SDI is still in its preliminary stage of research, and when the question of contravention crops up, the Treaty shall be further negotiated and amended if necessary to suit the needs of both Nations.

GRAY AREAS EXISTING UNDER TREATY PROVISIONS

³³Anti-Ballistic Missile Treaty, *supra* note 1.

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

<https://www.ijalr.in/>

Article VI of the Anti-Ballistic Missile Treaty explicitly states that “To enhance assurance of the effectiveness of the limitations on ABM systems and components provided by the Treaty, each Party undertakes,

- a) Not to give missiles, launchers, and radars other than ABM interceptor missiles, ABM launchers, or ABM radars capabilities to counter strategic ballistic missiles or their element in flight trajectory, and not to test them in ABM mode; and
- b) Not to deploy in the future radars for early warning of strategic ballistic missile attack except at locations along the periphery of its national territory and oriented outward.”³⁴

This Article does not mention that such systems, though initially not designed and launched in ABM mode, have the subsequent possibility of carrying ABM characteristics or capabilities. The ambiguity brings the Treaty provision under the purview of “grey areas,” which have not clearly defined hybrid or dual-purpose technologies utilized to gain subsequent ABM qualities. Much concern arose after the Soviet Union allegedly conducted tests of surface-to-air missiles in ABM Mode.³⁵ A similar threat was posed by using ASAT or Anti-Satellite weapons, ATBM or Anti-Tactical ballistic missiles, and large phased arrays whose components are not per se prohibited under the Article but have a likelihood of violating such a provision if upgraded to ABM capabilities. USA has also come under the radar for using these technologies in its SDI program, making it a medium to launch satellites developing ABM characteristics.

ATBM or Anti-Tactical ballistic missiles are subsumed under the umbrella of SDI since they share a similar characteristic with ABM systems of destroying medium and intermediate-range ballistic missiles.³⁶ The saving grace of the USA from outright infringement of the Treaty comes from the inability to draw a clear distinction between the systems and finding it difficult to verify their overlapping properties. Interestingly, NATO allies intended to use ATBM, a spin-off from SDI, to protect itself from Western powers and thus supported the new technologies.³⁷ An identical issue cropped up regarding using phased-array radars, which, according to Article VI, is only prohibited if deployed outside the periphery of its national territory. Such understanding highlights the twisted interpretation made to suit the

³⁴Anti-Ballistic Missile Treaty, *supra* note 1.

³⁵Wittmayer, *supra* note 3.

³⁶*Id.*

³⁷Wittmayer, *supra* note 3.

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

interests of the Nations that want to use the large phased array for military purposes. The focal point of the discussion was directed towards the construction of the Krasnoyarsk radar by the Soviet Union, which, according to the sitting, orientation, and capabilities, had been purported to have violated the conditions mentioned above.³⁸ USSR denied having violated the treaty provision and considered halting the construction provided the USA pulls up their project of modernizing two of its fixed array stations situated in Thule Air Base in northern Greenland and at Fylingdales Moor in Northern England, which constitutes American ballistic missile early warning systems built in the 1960s.³⁹ The Soviets contend that upgrading the system would amount to the deployment of such systems, which stands in contradiction to Article VI. The USA, in its defense, took the view that the Article extends its prohibitions to the deployment of “future” radar systems, and the term “future” is not clearly defined whether it dates back to radar systems already constructed by the USA or it forbids subsequent modernization of the same.

A similar line of reasoning is followed under Article V, which prohibits deploying ABM systems or sea-, air-, space-based, or mobile land-based components. Article II defines ABM systems to mean systems to counter strategic ballistic missiles, currently consisting of only ABM interceptors, ABM launchers, and ABM radar, and does not mention “exotic technologies.”⁴⁰ Adhering to Article 31 of the Vienna Convention on the Law of Treaties of interpreting Treaties in the ordinary sense, it can be well founded that exotic technologies are not violative. Therefore, the USA and the Soviets have interpreted the loophole or, to say, the grey area to bring ASAT and ATBM technologies under the garb of its legal definition of the provisions. Another notable example is the experiment on Talon Gold, which consisted of a land-based laser, space-based mirror, and pointing telescope.⁴¹ Because Article V only prohibits ABM launchers, lasers, and radars from a plain reading, it can be concluded that Talon Gold is not out of the scope. However, suppose all the elements work together. In that case, it can develop a large part of ABM qualities made to work and act as a substitute for restricted ABM systems only because of overlapping elements of anti-ballistic missiles, which have no clear-cut definition.⁴² USA has worked its way out with the ultimate objective of justifying the position of SDI, which stands legitimate due to unsettled meaning or lack

³⁸*Id.*

³⁹*Id.*

⁴⁰*Id.*

⁴¹Chayes, *supra* note 2.

⁴²Chayes, *supra* note 2.

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

of clarity of such provisions. The term "currently consisting of" was highly debated as the drafter speculated the possibility of ABM systems to incorporate new technologies not feasible at that time, so they signed another document, Agreement D, to address the issues of technologies based on other physical properties whose validation was subjected to further negotiation and discussion thus putting the use of exotic technologies safely within the ambit of SDI program.

The grey area of strategic military controversy also treads around the path of SDI, either being a natural defensive system or a sophisticated form of offense under the MAD agreement.⁴³ As observed by the critics, the program tended to dovetail its research into military technology, which may transcend beyond the outer limit of pure scientific research. The critics argued that the USA had used SDI as a platform to project its might when developing nuclear warfare and intimidating the USSR by gaining military superiority over them. The speed at which technology and scientific research were taking place led to speculation that the ultimate deployment of space-based weapons for defensive purposes would open avenues for other States to deploy the same, thus escalating nuclear warfare and destabilizing worldwide peace. According to Cordon reports, "a grey area of research" exists, which makes it difficult to draw a line between military and non-military research-intensive technologies where there is a possibility of basic research being done under the auspices of a civil realm that shifts its focus to the martial realm and using the analysis of such technologies having dual-purposes for offensive purposes rather than for defensive uses.⁴⁴ SDI's military-political and security aspects raise the question of this system being a medium for weapons production rather than just being researched.⁴⁵ The critics pointed out that the true intention of the makers of such a system is to create a pull towards the applied science to fit military strategic plans, destroying the very motive of research, which has been reduced to being a target and mission-oriented, leaving no possibility of discerning a boundary between what is legal for the benefit of humanity and what is illegal carrying the undertone of destroying human race. Furthermore, Mary Kaldor of the University of Sussex has observed that too much concentration of economic resources for research and development in the military sector is known for giving diminishing returns and creating an imbalance in scientific and technological development as well as distorting the direction of

⁴³Aant Elzinga, *Strategic Defense Initiative Research A Gray Area for Ethics*, 577 ANNALS OF THE NEW YORK ACADEMY OF SCIENCES 262–275.

⁴⁴*Id.*

⁴⁵*Id.*

the research due to increased participation limiting the potential subsidiary results that can be more commercially and socially valuable.⁴⁶

Thus, the direction of the vast amount of funds for research that goes beyond the scope of basic scientific research enters the subject of the grey area, which draws a thin line between research done for military and non-military purposes.

CONCLUSION AND SUGGESTION

Strategic Defence Initiative has precipitated a wide range of controversy and has been reckoned to work on the principle of deterrence as appended by some critics. The moral dimension revolves around whether it's a progressive step towards benefiting humanity or treading in the line of barbarism.⁴⁷ First and foremost, discussing the legal aspects of this program, it can be understood that the USA has made every attempt to justify the standing of its defensive system built to secure its territory from an unwarranted missile attack. From the perspective of extending protection to the people of its nation, the USA's theory of defensive attack stands valid following the UN Charter and customary international law that preserves the right of self-defense by Article 51. Though the concept is too broad to apply in this case on the other side, it helps to rationalize the program from the beginning till the end at the cost of more significant loss to people by making them vulnerable to future nuclear attack

Coming to the outer space treaty and Anti-ballistic missile treaty, the USA has interpreted the treaties from a broader viewpoint, going by its ordinary reading of what is allowed and not allowed. The ABM treaty concluded between the two parties has given the scope of further negotiation and interpretation by Article XIII, which establishes a Standing Consultative Commission to consider changes in the strategic situation leading to the amendment of the Treaty for mutual satisfaction of the USA and Soviet Union. However, both critics and proponents of SDI opposed the revision of the Treaty until the summit at Reykjavik for their reasons.⁴⁸ The proponents argued that SDI was still in its preliminary research stage and the Soviet Union would not support a formal modification for the causes of existing rivalry and might veto the USA SDI program during the Treaty negotiation. A hypothetical veto might compel the USA to act unilaterally in proceeding with the program, but this assumption should not deter them from first coming to the negotiating table. The critics feared that

⁴⁶Elzinga, *supra* note 41.

⁴⁷*Id.*

⁴⁸ Gross, *supra* note, 1

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

"wholesale and destructive revisions" might expand the boundaries of space-based defensive systems to be developed and deployed. ABM Treaty is the only barrier restricting further nuclear development that can harm society.⁴⁹

Even with probable recourse to negotiate the conflicting areas of the program, USA President George W. Bush withdrew from the ABM Treaty on Dec 13, 2001, citing exposed vulnerability and restraint on its program as unjustified as it hindered protecting its citizens.⁵⁰ The act of drawing was considered an ambivalent step where the President initially promising to abide by the Treaty through negotiating the terms pulled back from performing responsibly only to safeguard the future of SDI. Negotiation and amendment to the Treaty would've destroyed the Treaty itself, giving rise to an unconstrained arms race in offensive and defensive weapons, ending up in a dangerous situation. Taking the ABM Treaty as the last bulwark in defense of U.S. deterrence policy, any change in an illegitimate manner would've destabilized U.S.-Soviet relations, leading to a nuclear confrontation and maintain equilibrium; both sides needed to agree on fundamental doctrinal questions to retain its validity and efficacy embodying agreed Statements without having to exacerbate one side of the argument.⁵¹ Nonetheless, ignoring all repercussions, the President decided to abrogate the Treaty.

Looking at the USA's intent in interpreting the Treaties, it is possible to conclude that SDI is well within its legal boundaries until it is in the "research phase." Still, the moment SDI hits the second stage of deployment, it has the possibility of infringing a few aspects of a legal framework which, though the USA was obliged to negotiate the terms, later opted out of this Treaty to provide a solid defense system to its people and understanding from critics point of view, to glorify its might in the race of nuclear proliferation, especially against the Soviet Union.

In recent times the present President of the USA, Donald Trump, has called for a new "space force" to resurrect previous space-based missiles and add new technologies like anti-satellite weapons and cyber hacking to bring out SDI back to track in retaliation to Soviet's new

⁴⁹*Id*

⁵⁰Terence Neilan, BUSH PULLS OUT OF ABM TREATY; PUTIN CALLS MOVE A MISTAKE, <https://www.nytimes.com/2001/12/13/international/bush-pulls-out-of-abm-treaty-putin-calls-move-a-mistake.html> (last visited Mar 04, 2019).

⁵¹ Gross, *supra note*,1

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

ballistic and hypersonic missiles.⁵² Even though the deterrence policy blindly followed by the USA isn't a reliable solution to ongoing confrontation as such a program only leads to furtherance in nuclear warfare, harming humanity at large and benefitting only a few sections of people, it is nevertheless followed relentlessly by super nations who are devoid of ugly consequences. Therefore, future development cannot be based on deterrence policy, but considering SDI's situation at the time it came into force right after the Cold War, it can thus be seen as a requirement in that era also; it was well within the legal framework of the treaty compliance till its research phase. However, despite massive efforts, the Strategic Defence Initiative could not go beyond the preliminary stage due to a lack of necessary funding, which eventually got entangled in the web of political dilemmas.

BIBLIOGRAPHY

Book sources:

GroNyestuen, Stuart Casey, Nuclear Weapon under International law, Cambridge University Press, 2014, vol: 14

Edward Reiss, The Strategic Defence Initiative, Cambridge University Press, 2009

Major General Vinod Saighal, Global Security Paradoxes 2000-2020, Manas Publication 2004, vol: 4

Journal Sources:

Major John E. Parkerson, The International Legal Implications of Strategic Defence,

George Bernhardt, Sandra M Gresko & Thomas R Merry, *Star Wars versus Star Laws: Does SDI Conform to Outer Space Law; The Reagan Legacy and the Strategic Defense Initiative: Note*, 15 JOURNAL OF LEGISLATION 25.

Web Sources:

Donald G Gross, The Negotiated Treaty Amendment: The solution to the SDI-ABM Treaty Conflict: 28 Harv Int L.J. (1987) HeinOnline. 17 Jan. 2019 <http://www.heinonline.org.html>

⁵²Doug Tsuruoka, "STAR WARS" MISSILE DEFENSE IS BACK—BUT WILL IT WORK? THE NATIONAL INTEREST (2018), <https://nationalinterest.org/blog/the-buzz/star-wars-missile-defense-back%E2%80%94will-it-work-25197> (last visited Mar 04, 2019).

For general queries or to submit your research for publication, kindly email us at editorial@ijalr.in

Arms Control in Outer Space on JSTOR, Jan 18, 2019, <https://www-jstor-org.ezproxy.nujs.ac.in/stable/> (last visited Jan 18, 2019).

Steven A. Hildreth, Foreign Affairs and National Division Congressional Research Service, The Strategic Defence Initiative: Program Facts, Northern Kentucky University Library(1987) <http://www.everycrsreport.com/files/19870722>

Kim R. Holmes, The Impact of Strategic Defence on the US-USSR-PRC Strategic Triangle: Strategic and Military Dimension: Asian perspective Vol. 10, Lynne Rienner Publishers, JSTOR online. Mar 01.2019 <http://www.jstor.org/stable/24026038>

Frances V. Harbour, The ABM Treaty, New Technology and the Strategic Defense Initiative:15 J . Legis 119(1989) HeinOnline. Jan 13 2019 <http://www.heinonline.org.html>

Aant Elzinga, Strategic Defence Initiative, A Gray Area for Ethics, University of Gothenburg. Academia.edu 13 Jan. 2019 . <http://www.academia.edu.org.html>

Abram Chayes, Dyson Distinguished Lecture, The ABM Treaty and the Strategic Defence Initiative: Pace Law Review(1985) vol: 5, Dec 28, 2018, <http://www.digitalcommons.pace.edu/>

UNITED NATIONS ET AL., UNITED NATIONS TREATIES AND PRINCIPLES ON OUTER SPACE: TEXT OF TREATIES AND REGULATIONS GOVERNING THE ACTIVITIES OF STATES IN THE EXPLORATION AND USE OF OUTER SPACE, ADOPTED BY THE UNITED NATIONS GENERAL ASSEMBLY. (2002).

Major Chris G Wittmayer, Rule For COURTS_MARTIAL 707: the 1984 manual for courts_martial speedy TRIAL RULE 283. http://www.loc.gov/rr/Military_Law_Review/277C69

News article sources.

Terence Neilan, BUSH PULLS OUT OF ABM TREATY; PUTIN CALLS MOVE A MISTAKE, Mar 04, 2019 <https://www.nytimes.com/2001/12/13>.

Doug Tsuruoka, “STAR WARS” MISSILE DEFENSE IS BACK—BUT WILL IT WORK?THE NATIONAL INTEREST (2018), Mar 04, 2019 <https://nationalinterest.org>.