



**INDIAN DRAFT SPACE ACTIVITIES  
BILL IN THE LIGHT OF  
INTERNATIONAL SPACE TREATIES:  
FROM GENERALITY TO MORE  
GENERALITY**

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**ABSTRACT**

India is a State Party to the United Nations Outer Space Treaty and has been conducting space activities in compliance with the same for over five decades. For orderly performance, growth and entry of private entities in the space sector, the Draft Space Activities Bill, 2017 was unveiled. However, this Bill is not devoid of legal loopholes and flaws.

It is well settled that the Outer Space Treaty was drafted in the cold war era and the terms of the treaty was deliberately left vague by the drafters in order to reach a quick consensus between the erstwhile USSR and the United States. The Indian Draft Space Activities Bill had the opportunity to be specific with respect to the key terms and to set an ideal example of 21st century national space legislation. The author in this article shall address the general framework of the Bill, its inconsistencies with that of the Outer Space Treaty and the Liability Convention, its lack of clarity regarding some significant terms, and the establishment of specialized courts for taking cognizance of the violations. The author will highlight the loopholes of the Draft Bill by putting forth hypothetical claims. It is imperative that the first step towards error rectification is error identification. It is in this vein, that the author

will highlight the aspects of the Bill where significant improvements can be made.

In the first part of the article, the author shall discuss and examine the terms used in the Bill that needs further clarity and explanation. Specifically, how the word “contamination” has been used without any prefix which renders this term wide open for legal interpretation and makes the provision redundant. Furthermore, a definition of “adverse changes” and “pollution” would be proposed by the author that has not been discussed in the Bill. Moreover, the author shall examine the definition of the terms “space activity” and “space object” which are fundamental to dispute settlement under any effective space legislation and shall mention the definitions of the key terms provided by the eminent space lawyers across the world.

In the second part of the article, the author will discuss the cognizance of cases by the courts. Only the Judicial Magistrates of First Class are empowered to take cognizance of violations of the Act. However, the author in this part will propose an establishment of special space courts which will be more efficient in solving space law disputes. Lack of expertise of the regular magistrates in space law will not only be inefficient in solving disputes but as a consequence will also hamper the private investment in outer space industry.

Considering the exponential growth of India’s space sector, effective and legally sound space legislation is the need of the hour. In this light, the article shall conclude by putting forth the flaws of the Bill and suggesting solutions to the problem.



### INTRODUCTION: THE NEED FOR A ROBUST NATIONAL SPACE LEGISLATION IN INDIA

In the beginning, only States were involved in the space activities. Today private investment is significant and as such has a profound influence on the nature of space activities and space based applications.<sup>1</sup> Space activities at the international level is regulated by the “Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies” (*hereinafter Outer Space Treaty*) came into force on October 10, 1957. It is the Magna Carta and the Constitution of the international space law in place today. India has signed the Outer Space Treaty on March 3, 1967 and it was deposited on January 18, 1982. Article VI of the Outer Space Treaty require States to authorize and supervise the activities of non-governmental entities. It is the responsibility of the State to ensure that the activities of non-governmental entities comply with their obligations under the Outer space Treaty. Any damage caused by a private space actor may make the state internationally liable because the activity is private but liability is public.<sup>2</sup>

One commentator has rightly highlighted the significance of having national space legislation:

“Some countries that do not have national legislation are beginning to feel that those states that have national legislation exert too much influence over the launch services

market in countries without national legislation. These countries are therefore motivated to adopt national legislation. The increasing private commercial uses of outer space are regulated in detail by national provisions that implement both multilateral and bilateral international laws and also impose national regulations that are not inconsistent with international laws. Such domestic legislation can regulate more intensively and extensively than can the space law treaties. Space law is therefore made more certain by the intelligent adoption of appropriate national provisions.”<sup>3</sup>

In this light, one Indian scholar writes: “States have realized even if they do not perform space activities themselves or participate in limited extent, responsibility and liability may be imputed by virtue of procurement of space activities, thereby the necessity of national space legislation.”<sup>4</sup>

Questions may arise as to why India needs robust national space legislation? S.G. Sreejith has rightly answered this question and writes that, “India needs space legislation, for India is neoliberally modern, searching for participatory rights and opportunities in the market.”<sup>5</sup>

V. S. Mani also called for a domestic implementation of space treaties through the enabling provisions of the Constitution of India. It is pertinent to note here that Article 51 and 253 of the Constitution of India

<sup>1</sup> Kumar Abhijeet, Space Legislation for Developing Countries, 58 Proc. on L. Outer Space 577, 577 (2015).

<sup>2</sup> Id. at 579.

<sup>3</sup> Francis Lyall & Paul B. Larsen, Space Law: A Treatise 37 (2009).

<sup>4</sup> Abhijeet, supra 1, at 578.

<sup>5</sup> S. G. Sreejith, Unmaking a National Space Legislation for India: Indigenizing Space Law Through the “Organic Science” of the Indian Space Program, 83 J. Air L. & Com. 109, 131 (2018).



provides for implementing international treaty obligations.

Therefore, a national space legislation was required create order, to authorize and supervise activities of private entities, and to encourage growth of the space sector in India as well, taking into consideration that private sector is showing interest in space sector. A less thought-out national space legislation that merely harmonizes to ensure market access is likely to restrict the state's pursuit of its domestic preferences.<sup>6</sup> India needs robust national space legislation for growth and orderly performance of space activities by both the governmental and non-governmental entities. Specially, investment by private sector in space technologies is highly improbable in legal void. Hence, the Draft Space Activities Bill, 2017 (hereinafter **Draft Bill**) was an effort towards achieving this goal.

By establishing the need for robust national space legislation in India, the article will highlight the loopholes, flaws and inconsistencies in the Draft Bill. The second chapter of the article will focus on highlighting the inconsistencies between certain terms used in the Draft Space Activities Bill, 2017 and those used in the international space treaties. These inconsistencies have been discussed and examined in detail in light of the interpretation of international space treaties. The author has also given hypothetical claims to highlight the existing loopholes and flaws in the law. Subsequently, the suggestions have been given by the author. In the third chapter of the article, the author has discussed the problems related to taking cognizance of

cases by the Judicial Magistrates of First class and in this light has proposed the establishment of a specialized space tribunal for the same. The article concludes by appreciating the efforts of the drafters of the Space Activities Bill.

#### **DRAFT SPACE ACTIVITIES BILL: INCONSISTENCIES WITH THE INTERNATIONAL SPACE TREATIES**

The certainty regarding the interpretation and scope of the terms used in space legislation is paramount when it comes to determining the liability for violations of such legislation. Liability in the legal sense is probably best defined as “an obligation one is in law or justice to perform”, or more to the point, the “condition of being responsible for a possible or actual loss, penalty, evil, expense, or burden”, or even a “duty to pay money or perform some other service”.<sup>7</sup>

Both the Outer Space Treaty and the Liability Convention contain provisions dealing with the damage caused by space objects of State Parties. Article VII of the Outer Space Treaty dictates that, “Each State Party to the Treaty that launches or procures the launching of an object into outer space, including the Moon and other celestial bodies, and each State Party from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty.”<sup>8</sup>

Article II of the Liability Convention recognizes the standard of absolute liability when damage is caused by the space object of a launching state on the surface of the Earth or to aircraft in flight. Article III of the

<sup>6</sup> Id. at 135.

<sup>7</sup> Black's Law Dictionary, 823 (5th ed. 1979).

<sup>8</sup> Outer Space Treaty, Article VII.



Liability Convention adopts a fault based liability approach when the damage is caused “elsewhere than on the surface of the Earth.” It dictates as,

“In the event of damage being caused elsewhere than on 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, the latter shall be liable only if the damage is due to its fault or the fault of persons for whom it is responsible.”

Although the international space treaties provides for provisions dealing with damage caused by space objects but did not answer some vital questions. What is the definition of a space object? How can it be determined that a State Party has caused contamination of the celestial environment? These fascinating questions remain unanswered by the international space treaties. The drafters of the National Space Activities Bill could have settled the interpretation and had the opportunity to demonstrate a strong state practice as Republic of India is a major space faring nation in today’s era but they had miserably failed to do so.

Section 8 of the Draft Space Activities Bill stipulates about the terms and conditions of license. Section 8 (2) (g) lists down certain obligations upon the licensee. Furthermore, the Draft Bill stipulates about the liability for damage arising out of the commercial space activity and dictates that,

“Licensee shall indemnify the Central Government against any claims brought against the Government in respect of any

damage or loss arising out of a commercial space activity or in relation to a space object covered under the license.”<sup>9</sup>

It is well settled in the academic literature that the Outer Space Treaty was drafted in the era of Cold War and the drafters intended the terms used in it to be vague so as to reach a quick consensus of both the super powers of the time. Some fifty years down the line, India has undertaken to enact its own national space legislation but which, in the view of the author, reinstates the vagueness and lacunas of the Outer Space Treaty and other international space treaties. There are inherent inconsistencies between the terms used in the Outer Space Treaty, the Liability Convention and the Draft Bill. Moreover, the Draft Bill makes no attempt to resolve the vagueness and ambiguities present in the international space treaties. The national legislations should comport to the relevant international treaty and should be specific in its scope and interpretation. The Draft Bill, however, has led us from generality to more generality.

This section of the paper shall discuss and examine the terms which are of extremely significant in determining the liability of the licensee under the Act and which are not in line with their use in the international space treaties. The terms shall be examined in light of their scope and interpretations in the international space treaties.

#### A. “Contamination”, “adverse damage” and “pollution”.

Pursuant to Section 8 (2) (g) of the Draft “Space Activities Bill, 2017”, the licensee is

<sup>9</sup> Space Activities Bill, No.E.11020/2/2015-Sec-VI S.12 (1) (2017). (hereinafter **Draft Bill**)



under an obligation to conduct its operations in such a way as to “*prevent the contamination of outer space or adverse damage or pollution to the environment of the earth.*” This provision is an obligation of result and is inspired by Article IX of the Outer Space Treaty. Recourse must be taken to the second sentence of Article IX of the Outer Space Treaty in order to better elucidate upon the scope of the provision. The second sentence of Article IX of the Outer Space Treaty dictates that,

“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.”<sup>10</sup>

**Firstly**, it should be noted here that Article IX of the Outer Space Treaty does not put blanket prohibition on contamination. Not all contamination is prohibited but only “harmful” contamination is prohibited. The use of the word “harmful” before contamination narrows down the scope of contamination.

However, Section 8 of the Draft Bill puts a blanket prohibition on all kinds of contamination. It is pertinent to note here that any kind of space activity will contaminate the outer space in one way or the other. Space

objects while carrying out space activities emits emissions which would fall within any reasonable interpretation of the scope and ambit of the term “*contamination*” and would thus be prohibited under Section 8 of the Draft Bill. Consequently, every space activity would violate this provision. This would defeat the object and purpose of the provision.

**Secondly**, Article IX of Outer Space Treaty directed nations to “pursue studies of outer space, including the Moon and other celestial bodies, and conduct exploration of them so as to avoid their harmful contamination.”<sup>11</sup> The risk that spacecraft may cause forward contamination of a celestial body is dependent upon the initial microbial burden of the craft at launch, the ability of the organisms to survive launch, transit and deposition into an alien environment, and the receptivity of the alien environment to support and sustain the terran life forms.<sup>12</sup> This provision prohibits harmful contamination of both the “*outer space*” and the “*celestial bodies*” including the Moon.

Section 8 of the Draft Bill, however, states that in conducting operations a licensee shall prevent contamination of outer space. The provision does not make any reference to the “Moon and other celestial bodies.” This implies that any contamination of the environment of a celestial body will fall outside the purview of Section 8 and is thereby not prohibited by it. It is reflective of the fact that Section 8(2) (g) (i) of the Draft

<sup>10</sup> Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, 27 Jan.1967, 18 U.S.T. 2410, 610 U.N.T.S. 205. Art. IX. (hereinafter **Outer Space Treaty**)

<sup>11</sup> Outer Space Treaty, Art. IX.

<sup>12</sup> Patricia M. Sterns & Leslie I. Tennen, The Future Of Planetary Protection: Is There Reason For Optimism?, 49 Proc. on L. Outer Space 391, 392 (2006).



Bill is inconsistent with Article IX of the Outer Space Treaty.

**Thirdly**, the definition of the term “*harmful contamination*” has not been provided in the Outer Space Treaty. There is an absence of any established threshold to determine when a “*contamination*” becomes a “*harmful contamination*.” The degree of contamination that would be considered “harmful” to other entities’ interest is also not clear.

The Draft Bill also does not provide any definition of the term “*contamination*”. The same vagueness with regard to the scope of the term “*contamination*” in the Outer Space Treaty has been reiterated in the Draft Bill. The lack of intention on the part of the drafters of the Draft Bill to associate with a certain interpretation of the law can be discerned here.

**Fourthly**, Elon Musk, the founder of SpaceX, revealed his idea to detonate thermonuclear devices over the poles of Mars.<sup>13</sup> His intention is to terraform the Martian atmosphere so as to make it habitable for humans. The term “*terraform*” means to alter or transform the atmosphere of another planet to have the characteristics of landscapes on Earth.<sup>14</sup> There is an ongoing debate in the space lawyers’ fraternity regarding the legality of such terraforming missions under the current outer space treaty regime. Although, the Planetary Protection Policy of Committee on Space Research (*hereinafter* COSPAR) suggests that a terraforming mission, which could alter the whole planet, falls within the ambit of

harmful contamination,<sup>15</sup> but the definition of “*forward contamination*” put forward by experts do not support this contention. Forward contamination takes place through the introduction of undesirable elements into outer space by some form of human intervention.<sup>16</sup> Under this interpretation, terraforming of celestial bodies do not fall within the scope of forward contamination enshrined in Article IX of the Outer Space Treaty. Furthermore, a plain reading of Article IX reflects that “*harmful contamination*” and “*adverse changes in the environment*” are two distinct concepts. “*Adverse changes in the environment*” of Earth is explicitly prohibited, but adverse changes to the environment of celestial bodies are not.

Similarly, Section 8 (2) (g) (i) of the Draft Bill prohibits “*contamination*” of outer space. Subsequently, it prohibits “*adverse damage*” or “*pollution*” to the environment of the earth. A plain reading of this provision also reflects that “*contamination*” and “*adverse damage or pollution*” is two distinct concepts. “*Adverse damage or pollution*” to the environment of the earth is explicitly prohibited, but “*adverse damage*” or “*pollution*” to the environment of celestial bodies are not. Instead of solving the ambiguity, the Draft Bill has reiterated it and with greater degree.

Article IX imply that celestial bodies should be preserved in their pre-existing

<sup>13</sup> Thomas J. Herron, Deep Space Thinking: What Elon Musk’s Idea to Nuke Mars Teaches Us about Regulating the Visionaries and Daredevils of Outer Space, 41 Colum. J. Env’tl. L. 553, 554 (2016).

<sup>14</sup> Id.

<sup>15</sup> Id. at 569.

<sup>16</sup> Stephen Gorove, Pollution and Outer Space: A Legal Analysis and Appraisal, 5 N.Y.U. J. Int’l. L. & Pol. 53, 54 (1972).



conditions.<sup>17</sup> It should be noted that terraforming of celestial body is, at the very least, “adverse changes” or “adverse damage” or “pollution” in the environment of celestial body, which in turn is not prohibited in any law. Consequently, a private corporation such as SpaceX, carrying out a terraforming mission on Mars cannot be held accountable either under the Outer Space Treaty or under the Draft Bill. This loophole in the law can be exploited by the corporations and States.

The terraforming of celestial bodies could not have been thought by the drafters of the Outer Space Treaty. However, making national space legislation today without even mentioning the term “terraforming” reflects the regressive nature and short sightedness of the legislators. Terraforming of celestial bodies, the legality of which is a burning topic in contemporary space law discussions, should have been covered by the drafters of the Bill. By incorporating the prohibition against terraforming of celestial bodies, India could be the pioneer for the world in environmental protection of outer space and celestial bodies.

**Way Ahead:** First and foremost, a prefix “*harmful*” shall be added before the term “*contamination*” in Section 8 (2) (g) (i) of the Draft Bill.

Secondly, the term “harmful contamination” would warrant a legal definition. In this regard, the definition can be formulated as, “harmful contamination of celestial environment can be described as not just loss

of resources or amenities of economic value, but also any destruction of the intrinsic worth of the celestial atmosphere, including biological diversity and natural areas of aesthetic significance.”<sup>18</sup> Reference may be made to the COSPAR guidelines in this regard. The COSPAR guidelines restrict the interpretation of the term “contamination” to “biological contamination.”<sup>19</sup> This interpretation is also supported by the preparatory materials of the Outer Space Treaty.<sup>20</sup>

Thirdly, the phrase “moon and other celestial bodies” should be added after the term “outer space” in Section 8 (2) (g) (i) of the Bill. This would prohibit the harmful contamination of not just outer space but celestial environment as well.

### B. Space Object

Section 2 (g) (i) of the Draft Bill defines a space object as “any object launched or intended to be launched, on an orbital trajectory around the earth or to a destination beyond the earth orbit.” Article I (d) of the Convention on International Liability for Damage Caused by Space Objects (*hereinafter Liability Convention*) defines a space object as “space object includes component parts of a space object as well as its launch vehicle and parts thereof.”

Furthermore, under Article VII of the Outer Space Treaty, a State Party is internationally liable for damage to another State Party only if such damage is caused by

<sup>17</sup> Michael Gerrard & Anna Barber, Asteroids and Comets: U.S. and International Law and the Lowest-Probability, Highest Consequence Risk, 6 N.Y.U. Env’tl. L. J. 4, 34-35 (1997).

<sup>18</sup> Patricia Birnie, Alan Boyle & Catherine Redgwell, International Law and the Environment, 184 (2009).

<sup>19</sup> Philippe Achilleas, Planetary Protection: Legal Issues, 46 Proc. on L. Outer Space 214, 215 (2003).

<sup>20</sup> Id.



its space object. Under Article II and III of the Liability Convention, liability to pay damage will only arise if the damage in question has been caused by the space object of the launching state.

One of the most challenging fields of space law relates to the area of liability.<sup>21</sup> It is clear that as far as the determination of liability is concerned, the interpretation of the term “space object” is of paramount significance. Individuals and organizations will have to know whether a particular object in a given set of circumstances is to be regarded as a “space object” because significant legal consequences follow from such determination.<sup>22</sup> The certainty regarding the definition of “space object” is vital as it will play a crucial role in determining the liability in case of any accident or damage, whether intentionally or negligently, caused by such objects in outer space to space objects of other entities. At the international level, it is only after a Soviet satellite called Cosmos 954 carrying a nuclear power source, on January 24, 1978, crashed in Canada and spread radioactive debris that the focus of the international community was shifted on aspects of liability for damage caused by space objects.

Consequently, questions may arise as to the meaning of the term “space object.” What is the meaning of the term “component parts” of a space object? Are objects landed or constructed on a celestial body a space object? Does a space object lose its identity

as such when it is permanently installed on a celestial body? What about objects built in outer space or celestial bodies from materials not originating from earth? These are questions which were left answered by the drafters of the Outer Space Treaty and the Liability Convention. And unfortunately, no attempt has been made in the Draft Bill to address these questions.

In this section of the article, the author will examine the definition of “space objects” under the Draft Bill and compare it with the definition of space objects given under the Liability Convention as well as those propounded by space law experts and shall try to bring out any discrepancy therein.

#### **Space Object under the Liability Convention:**

Under Article III of the Convention on International Liability for Damage Caused by Space Objects (hereinafter **Liability Convention**), a State is only liable for damage caused by a space object of one launching state to a space object of other launching state. In other words, for invoking liability under Article III of the Liability Convention, the damage must have been caused by the space object. Liability Convention also stresses that any “*component parts*” of the space object shall also be considered as a space object.<sup>23</sup> The registered component parts are without any doubt “space objects”.<sup>24</sup> “*Object*” refers to a

<sup>21</sup> Stephen Gorove, Liability in Space Law: An Overview, 8 Annals Air & Space L. 373, 373 (1983).

<sup>22</sup> Stephen Gorove, Major Definitional Issues in the Space Agreements, 35 Proc. on L. Outer Space 76, 77 (1992).

<sup>23</sup> Convention on International Liability for Damage Caused by Space Objects, Oct. 9, 1973, 24 U.S.T.

2389, 961 U.N.T.S. 187. Art. I (d). (hereinafter **Liability Convention**)

<sup>24</sup> Fabio Tronchetti, The Exploitation of Natural Resources of the Moon and Other Celestial Bodies- A Proposal for A Legal Regime, 265 (2009).



material thing that can be seen or touched and is stable in form.<sup>25</sup>

Both the Liability and the Registration Conventions state that the term “space object” includes “component parts of a space object” as well as its “launch vehicle” and “parts” thereof. The fact that the partial definition of “space object” refers back to itself when speaking of “component parts” of a “space object” and “its” launch vehicle leaves the fundamental issue of what is or is not a space object or under what circumstances an object becomes or ceases to be a “space object” and the question of the applicability of the relevant space treaty provisions unanswered.<sup>26</sup>

#### **Space Object under the Draft Space Activities Bill, 2017:**

The Draft Bill defines “space object” as “(i) any object launched or intended to be launched, on an orbital trajectory around the earth or to a destination beyond the earth orbit; (ii) any device, the purpose of which is to launch an object on a trajectory under sub clause (i), even when such a device is operated without payload for the purpose of its development and validation phase; and any constituent element of an object referred to in sub clauses (i) or (ii).”<sup>27</sup>

This definition of the term “space object” adopted by the drafters of the Draft Bill is inspired by the definitions propounded by Professor Stephen Gorove and Stephen Hobe. Prof. Stephen Gorove is of the view that the definition of space object that would

likely receive the widest support among scholars and policy makers would be to regard it as “*an object launched or attempted to be launched in orbit around the earth or beyond.*”<sup>28</sup> Stephen Hobe also stated that the term “*space object*” includes “*any object that is launched or attempted to be launched into outer space.*”<sup>29</sup>

It is pertinent to note that there is a material difference between the definitions propounded by these scholars and that mentioned in the Draft Bill. Draft Bill uses the terms “launched” or “intended to be launched.” However, scholars had propounded the terms “launched” or “attempted to be launched.” The drafters have clearly failed to realize the difference between “attempted” and “intended.” As a repercussion of this failure, serious consequences would flow. The same is being highlighted by the author below.

#### **A Hypothetical Claim:**

Imagine a circumstance in which a payload containing a nuclear power source is being developed in the laboratory. This payload is “intended” to be launched in the outer space with a space object. After the preparation of payload in the laboratory, it is being transported to the launch site. During the transportation, an accident occurs and the radioactive substance gets emitted in a highly populated area. Will the licensee be liable under the Space Act even though the payload has yet not reached the launch site and has nothing to do with the space object? Now, since the payload was “intended to be

<sup>25</sup> Stephen Gorove, Definitional Issues Pertaining To “Space Object”, 37 Proc. on L. Outer Space 87, 95 (1994).

<sup>26</sup> Id. at 88.

<sup>27</sup> Draft Bill, S. 2 (g).

<sup>28</sup> Stephen Gorove, Evaluating Policy Alternatives Pertaining to the Legal Definition of Space Object, 38 Proc. on L. Outer Space 266, 267 (1995).

<sup>29</sup> Stephan Hobe, Legal Aspects of Space Tourism, 86 Neb. L. Rev. 439, 443-44 (2007).



launched”, it falls within the definition of “space object” under the Draft Bill. Or should the drafters use the word “attempted to be launched” instead of the words “intended to be launched” in order not to render the provision manifestly absurd?

**Way Ahead:** A well drafted definition of the term “space object” should be formulated that would fill in the gaps and answer possible questions regarding the term. With regard to the formulation of a proper definition of “space object”, following definitions proposed by the space law experts can provide guidance.

- “A space object is an object or a part thereof launched or attempted to be launched in orbit around the earth or beyond from the time of its launch or attempted launch through its ascent from earth to outer space as well as during its orbit, de-orbit, reentry and landing on earth. A space object includes stations, installations and other objects, whether terrestrial or extra-terrestrial, constructed or used by humans in outer space, including the moon or another celestial body. Any space object landed on the moon or another celestial body which became part of an immovable structure ceases to be a space object or a part of it.”<sup>30</sup>
- Most international lawyers view that the term “space object” includes any object launched by man for the purpose of orbiting or

escaping the celestial body from which it is launched.<sup>31</sup>

- Analysts maintain that the “minimal requirements of a space object are that it be an object designed for movement in outer space.”<sup>32</sup>
- Space objects landed on the celestial bodies should no longer be regarded as space objects after their landing or during their stay on a celestial body.<sup>33</sup>
- Scholars have also taken the view that “any object capable of performing space activities”<sup>34</sup> and “any object onboard a spacecraft which becomes detached, ejected, emitted, launched or thrown”<sup>35</sup> shall be considered as a space object.
- Any space object landed on the celestial body which became part of an immovable structure ceases to be a space object.<sup>36</sup>

The drafters shall take recourse to these definitions propounded by the experts in the field and shall formulate a more exhaustive definition of the term “space object.”

#### PROPOSAL FOR ESTABLISHING SPECIALIZED TRIBUNALS

Chapter V of the Draft Bill incorporates the provisions relating to offences and penalties. Section 19 (2) of the Bill stipulates that, “*No court other than that of a Metropolitan Magistrate or a Judicial Magistrate of the First Class shall try any offence punishable under this Act.*” However, section 29 (2) of

<sup>30</sup> Gorove, supra 28, at 268.

<sup>31</sup> Carl Q. Christol, International Liability for Damage Caused by Space Objects, 74 Am. J. Int’l. L. 346, 349-62 (1980).

<sup>32</sup> W. F. Foster, The Convention on International Liability for Damage Caused by Space Objects, 10 Can. Y. B. Int’l. L. 137, 142 (1972).

<sup>33</sup> Gorove, supra 25, at 93.

<sup>34</sup> Esquivel De Cocca, International Liability for Damages Caused by Persons to Space Objects in Outer

Space or on Celestial Bodies to Persons, Properties or Environments in Outer Space or Celestial Bodies, 42 Proc. on L. Outer Space 50,52 (1999).

<sup>35</sup> Bruce A. Hurwitz, State Liability For Outer Space Activities In Accordance With The 1972 Convention On International Liability For Damage Caused By Space Objects 26 (1992).

<sup>36</sup> Gorove, supra 28, at 268.



the Code of Criminal Procedure, 1973 (hereinafter CrPC) stipulates that, “The Court of a Magistrate of the First Class may pass a sentence of imprisonment for a term not exceeding three years, or of fine not exceeding ten thousand rupees, or of both.” *Prima facie* it appears that the fine prescribed for these offences are *ultra vires* of the Judicial Magistrate of First Class.

It should be noted that if special law authorizes the Magistrate of First Class to exercise special jurisdiction or power conferred under the said law, then Section 29 gets ousted and in such an event, the Magistrate of First Class shall be entitled to exercise the jurisdiction and the powers enjoyed under the provisions of such special law. There are such provisions in certain special enactments, wherein the Judicial Magistrate of First Class has been specifically empowered by the Legislature to pass a sentence of fine exceeding the limits prescribed under Section 29 (2) of CrPC.<sup>37</sup>

In this section of the paper, the author shall discuss the problems associated with the cognizance of cases by the Judicial magistrates of First Class and in this light would propose an establishment of a specialized tribunal to look into such disputes.

#### **Reasons for establishment of specialized space tribunal:**

The author is of the view that there is a high need of establishing specialized courts for space law related matters. The Judicial

Magistrates are often not even introduced to the domain of space law. Moreover, their jurisdiction under the Draft Bill far exceeds that under the Code of Criminal Procedure, 1973. Thus, it would be not be reasonable to empower Judicial Magistrates of First Class to take cognizance of violations of Space Activities Act.

In this light, the author is proposing an establishment of specialized space tribunals take cognizance of such matters. The reason for proposing such a tribunal is twofold.

**Firstly**, space law is a very niche area of law and the current fraternity of Judicial Magistrate is not well versed in space law, be it national or international. Reference to Section 5, 6 and 7 of the Draft Bill establishes that the licensee will be under an obligation to comply with India’s international obligations. It signifies that knowledge of international space treaties would be required. So, the significance of specialization cannot be undermined here.

Professionals across a spectrum of fields focus on mastering and practicing in narrow subspecialties.<sup>38</sup> “No lawyer could grasp the whole of the legal system because the system became simply too big”<sup>39</sup> “In many fields of law, increasing complexity has encouraged increasing specialization.”<sup>40</sup> Courts have become specialized too. Lawrence Baum, in this light, has argued that, “the movement toward greater judicial specialization has

<sup>37</sup> Bhimavaram v. State of A.P., Cr. L. J. 1168 (2005).

<sup>38</sup> Chad M. Oldfather, Judging, Expertise, and the Rule of Law, 89 Wash. U. L. Rev. 847, 847 (2012).

<sup>39</sup> Lawrence M. Friedman, Heart against Head: Perry Miller and the Legal Mind, 77 Yale L. J. 1244, 1249 (1968).

<sup>40</sup> Deborah L. Rhode, The Profession and Its Discontents, 61 Ohio St. L. J. 1335, 1337 (2000).



been a product of inadvertence rather than design.”<sup>41</sup>

Establishment of specialized courts has been advocated by commentators.<sup>42</sup> “What commentators generally mean when they talk about expertise seems to be the possibility that expertise will enhance the quality of court decisions: more expert judges, who know more about the field in which they are deciding cases, are more likely to get decisions right.”<sup>43</sup> Commentators have also suggested that specialist courts will generate law that is more uniform and predictable.<sup>44</sup> One commentator has put it:

“Even if expert judges cannot necessarily ensure right answers, their decisions are more likely to fall within the subset of better answers owing to their greater experience and understanding of a field.”<sup>45</sup>

**Secondly**, private corporations would be investing a huge amount of money in space industry. Violations of the Space Activities Act would require an immediate and effective decision by a court of law as these investors cannot afford to wait for years for their disputes to get resolved and hence lose their money. If such a situation exists, then it would scare off the big investors and consequently it will hamper the growth of the space sector in India. A strong and expert dispute solving mechanism is needed to counter this problem. Furthermore, generalist courts could achieve the same level of quality as specialized courts; doing so would require an additional investment of time that might

be unwise or impracticable given institutional constraints.<sup>46</sup>

Therefore, an effective dispute settlement mechanism is required to create an environment of trust and belief among the private investors.

#### **Proposal for a specialized space tribunal:**

In the light of the above mentioned problems pertaining to the cognizance of cases by the Judicial Magistrates of First Class, the author suggests a three member tribunal to take up the matters. The tribunal should comprise of the following members:

**Judicial Magistrate of First Class:** The Judicial Magistrate of First Class should preside over the bench and would be required to look into the basic principles of law, such as the procedural issues, evidentiary issues, principles of natural justice etc.

**One space law expert appointed by the Central Government:** One space law expert to be appointed by the Central Government. The Central Government may decide the eligibility criteria for appointment of such experts. Presence of a space law expert would help in deciding the correct interpretation and scope of the core space law issues.

**One space law expert appointed by the consent of the parties:** One space law expert to be appointed with the prior written agreement of the parties to the dispute. The appointment of such person would help the investors repose faith in this dispute

<sup>41</sup> Lawrence Baum, *Specializing the Courts* 5 (2011).

<sup>42</sup> Oldfather, *supra* 38, at 855.

<sup>43</sup> Lawrence Baum, *Probing the Effects of Judicial Specialization*, 58 *Duke L. J.* 1667, 1676 (2009).

<sup>44</sup> Ellen R. Jordan, *Specialized Courts: A Choice?*, 76 *NW. U. L. Rev.* 745, 748 (1981).

<sup>45</sup> Edward K. Cheng, *The Myth of the Generalist Judge*, 61 *Stan. L. Rev.* 519, 524 (2008).

<sup>46</sup> Oldfather, *supra* 38, at 856.



settlement mechanism and in turn would encourage them to invest freely.

The tribunal shall have the powers to take cognizance of matters enumerated under Chapter V of the Draft Bill. The tribunal will follow the rules of procedure and evidence as agreed upon by the parties to the dispute. It will ensure the expeditious disposal of cases. Moreover, this tribunal will have the required expertise to resolve the space law disputes and the presence of Judicial Magistrate of First Class in the bench would connect it with the facets of the Indian judicial system. Also, the presence of a space law expert who is to be appointed by the prior written consent of the parties to the dispute would go a long way in ensuring transparency in the system. In any event, this tribunal will be able to give a more informed and reasoned decision as compared to that of the court of Judicial Magistrates of First Class.

#### CONCLUSION

Space is one such domain where law shall precede man. India needs around sixty satellites in the next three years to meet the needs of its civilians and defense. The global space business is around twenty three lakh crore INR and there is huge money out there for India private sector. National space legislation is an enabling tool for space commerce promoting private space activity.<sup>47</sup> After around thirty years of becoming a State Party to the Outer Space Treaty, India has drafted its national space bill, but still it is one of the few countries to do so. The United States of America and Luxembourg have enacted their own national space legislation and India and China have drafted their space bill which is yet to be enacted as an Act. The work of the drafters of the Space Activities

Bill, 2017 is praiseworthy. Some scholars are critical about the degree of control that has been provided to the Central Government under the Draft Bill to control and authorize the activities of private entities. However, in view of the author, it is correct as space is still a less ventured territory and strict supervisory laws should be made to secure strict compliance with the international obligations.

It is said that the best and the worst part of international space law is the uncertainty regarding this law. However, national space legislations should be more specific regarding the terms used in it and should provide for a strong dispute settlement mechanism for space law violations. The need for a robust and unambiguous Space Act in India is undeniable. The Space Act of India should be far sighted and should cover all the aspects of current and anticipated future space law challenges. The provisions concerning the damage and liability should be clear and unambiguous and the terms associated with it should be well defined their scope and application. Only then can an environment of trust can be built to attract big investors.

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<sup>47</sup> Abhijeet, supra 1, at 580.