

## NEED FOR ROBUST SPACE LAW IN INDIA

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### 1. INTRODUCTION

Space law is the body of law that governs things and actions that take place outside of the Earth's atmosphere. It originally originated as a branch of public international law, mostly composed of treaties and non-binding legal agreements that control the behavior of states. Private international law, which regulates interactions between non-state actors of various nationalities, as well as domestic rules and regulations passed by national governments have all been included in the development of space law.

#### 1.1 HISTORY OF OUTER SPACE LAWS

In the 1960s the space race between the USA and the Soviet Union caused a lot of attention towards outer space activities which lead the international communities to fear the weaponization of space by the then superpowers that were the USA and the Soviet Union. As a result of which the Outer Space Treaty was signed in January 1967 by three countries that were USSR, the United States of America, and The United Kingdom. Later the very same year the outer space treaty came into force. The outer space treaty provides the fundamental framework for international space law and India became a signatory to this treaty in March 1967 but it was ratified by India in 1982. India in the year 1982 also signed the agreement on governing the activities of states on the moon and other celestial bodies. This agreement is also known as the moon treaty. India is also part of the Convention which is on international liability for Damage caused by Space objects in 1979 and the Convention on the Registration of Objects launched in outer space in 1982.

#### 1.2 PRINCIPLES OF SPACE LAW

Members of the United Nations adopted an outer space treaty in 1967. All previous standards for international space conduct were reiterated by this agreement. Additionally, it established each state's ownership of and responsibility for its space projectiles and components, urged cooperation in the preservation of the space and terrestrial environments, and allowed for the

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open observation and inspection of each state's operations and installations by outsiders. It also outlawed some military activities, such as the deployment of weapons of mass destruction in space and on celestial bodies. This document is regarded as a turning point in the evolution of international space law, and like the majority of later space law accords produced by the UN, it is still in force among signatory nations. This agreement was upheld in 1968. The safety of people in space was furthered by an agreement made in called the Agreement on the Rescue and Return of Astronauts and the Return of Launched Objects. This agreement also assigned financial responsibility to each nation for the recovery of its equipment and confirmed each space power's control over the launch vehicles. The 1972 Convention on International Liability for Damage Caused by Space Objects, another significant treaty, laid out specific guidelines for the recovery of damages for losses brought on by space objects. Good for everyone. The "cradle of humanity" may eventually become the "coffin of humanity" since, according to scientists, the planet Earth is not eternal. The idea that space is useful to humans extends to both public and private space firms. The latter should act in conformity with the rules of international space law, the national space law of the state of registration, and the state in which these businesses have been granted permissions (licenses) for the manufacture and launch of launch vehicles and artificial satellites.

**A. Openness.** In general, any state that possesses the necessary assets has the right to engage in specific operations in space. The moon, Venus, Mars, and other planets and celestial bodies are possibly not the owner of any state or person. Roman classical law does not apply to private ownership in space.

**B. Cooperation.** Because using space is an extremely expensive sort of human activity, space powers collaborate and engage with one another in the area of space study and utilization, incorporating private enterprises in the interaction. 7

## 2. BACKGROUND

The origin of the Indian Space Programme is traced to 1962 when Dr. Vikram Sarabhai, who is known as the Father of the Indian Space Programme, established the Indian National Committee on Space Research.

India's then Prime Minister Jawaharlal Nehru realized the prospect of rocket science and consequently understood the necessity for a sound policy on outer space matters. Under his

supervision, Indian National Committee on Space Research opened the doors for the foundation of the Indian Space Programme on 21 November 1963, when the first rocket was launched from the Thumba Equatorial Rocket Launch Station in Trivandrum (now known as Thiruvananthapuram) in Kerala.<sup>1</sup> India had only begun making its space program in the world by taking baby steps towards it and whereas the then superpowers like the United States and the Soviet Union were already in Space Race. The Soviet Union had begun the space race with the launching of Sputnik 1 on 4 October 1957 while the USA replied by assembling a strong institution like NASA in 1958 devoted to showing American dominance in outer space. Indian leadership knew that for a recently independent, third-world country like India, making up a space program would guarantee that India discovers an appropriate position for itself in the comity of countries.

### SPACE LAWS IN INDIA

India still lacks a space law to oversee its extra-terrestrial operations. The Indian Space Research Organisation (ISRO), which is in charge of the space sector in India, is a monopoly of the government. The government has received numerous requests from the corporate sector to open up the Indian Space Programme so that corporations can contribute to the development of India's space capabilities. The government still controls the space program, and there have been no significant changes. 2017's Space Activities Bill was introduced by the Indian Government to make a change in terms of the space policies of India. After undergoing an extensive public and legal review, the draught bill has now been forwarded for additional approvals. Since the Department of Space was established in 1972, it has been in charge of all administrative aspects of India's space program. Prior to that, the Department of Atomic Energy handled those duties. Up until recently, India never recognized the need for national space laws or policies because it was considered more of an international problem than a domestic issue.<sup>2</sup>

**The Space Activities Bill 2017**<sup>3</sup> – India's Space Activities Bill. The Department of Space initially released the draught for feedback in November 2017. The bill includes There are many aspects of India's space aspirations, such as international and national commitments, guidelines for crimes and associated penalties, access restrictions for private businesses,

<sup>1</sup> <<https://www.isro.gov.in/genesis.html>> Accessed 10<sup>th</sup> April 2023

<sup>2</sup> Tandon Akshita, 'Space Laws in India'

<<https://www.legalserviceindia.com/legal/article-9212-space-laws-in-india.html>> Accessed on 11<sup>th</sup> April 2023

<sup>3</sup> Space activities Bill <<https://en.wikipedia.org/>> Accessed 11<sup>TH</sup> April 2023

responsibility for space debris harm, etc. The Space Activities Bill is in its final stages, according to K Sivan, Secretary of the Department of Space and Chairman of ISRO, who spoke on July 5, 2020. The Bill will therefore be introduced in both houses of Parliament.

The Space Activities Act would pave the stage for the creation of space rules after the proper parliamentary procedure. The Act must be in force for private enterprises to begin space launches in India. Jitendra Singh, Union Minister of State for Science and Technology, claims that as of February 9, 2022, public and legal consultation on the draught bill has been finished. It has since been forwarded for additional permissions for inter-ministerial discussions. Every Indian citizen will be subject to it, as well as every industry involved in space-related activities both inside and outside of India. The Central Government shall grant non-transferable permission to anyone engaging in commercial space activities. The Central Government would create the necessary licensing procedures, eligibility standards, and fees while also maintaining a register of all space objects (any object launched or intended to be launched around the planet). It will oversee the conduct and operation of space activities and offer expert and technical support for commercial space activity. It will oversee all Indian space activities, uphold safety standards, and conduct investigations. any mishap or accident involving the conduct of space activity. It will disclose information regarding the costs of goods made possible by space activity and technology to any individual or organization in a prescribed manner.<sup>4</sup>Any person who engages in any commercial space activity without authorization faces a sentence of up to 3 years in prison, a fine of more than \$1 million, or both. Additionally, it contains rules for the defense of IPR produced by space activity.

### 3. WHAT DOES THE BILL AIM FOR?

- At the moment, laws like the Remote Sensing Data Policy of 2011 and the Satellite Communication Policy of 1997 govern space activities.
- The proposed Bill addresses the need for a legislative framework to support the space industry's growth and orderly operation.
- The Bill specifically makes it easier for non-governmental/private sector organizations to participate in space activities in India. Its goal is to encourage both the public and commercial sectors to participate in the space program.

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<sup>4</sup>Space bill, <<https://www.drishtiias.com/daily-updates/daily-news-analysis/draft-space-activities-bill-2017>> Accessed on 14<sup>th</sup> April 2023

#### 4. WHY DOES INDIA NEED ROBUST SPACE LAWS?

Current evolutions in outer space-related activities in India have further intensified the discussion on the necessity of extensive domestic space law to cover an expansive range of subjects to enable India to incorporate its status as an emerging global space power. The function of the Indian judiciary is to analyze the existing legislation of the country. Nevertheless, in the absence of explicit legislation about space activities, the judges become helpless in resolving such issues. Also, with the current inclusion of private participants in the space sector, the lack of extensive legislation forms a void and lacks the much-needed transparency for such private participants. It's time that the government considers seriously developing a robust space law to elevate and accelerate the spectrum of space activities driven by ISRO, which has created its impact by making India one of the leading countries after its victorious missions to the Moon and Mars.

Even<sup>5</sup> though there are legally binding treaties that regulate the expansion of outer space there is a need for domestic space laws to regulate space activities in consonance with international treaties. Even though India is one of the leading countries in the space sector still has not formulated any robust domestic law to control and check space activities. This puts India in a disadvantageous position as it hinders India's space activities growth at the global level.

A recent instance was in 2019 when India shot down one of its satellites that created orbital debris, which fell on a Japanese village causing a lot of damage<sup>6</sup>. As India is the signatory of the Convention on international liability for damage caused by space objects, it became the absolute liability of India to pay compensation for the damages caused by the action. As we know the international space station is a joint project of the USA, Russia, Europe, and Canada which helps various countries conduct research and space experiments. India being the center of this controversy is not beneficial, and this is the major reason why India needs a robust space law.

Space mining is one of the space activities in which the extraction of invaluable minerals from the space objects such as the moon, planets, and other celestial bodies. India has no law

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<sup>5</sup>Senjuti Mallick, 'Why India needs a space law' (June 19, 2017, 12:10 am) <<https://www.thehindu.com/opinion/open-page/why-india-needs-a-space-law/article19094453.ece>> Accessed on 11<sup>th</sup> April 2023

<sup>6</sup>Surendra Kumar Yadav, 'International Space Law Applicability in Indian Perspective' ( 7<sup>th</sup> July 2016)

relating to space mining or for the regulation of the space mining industry which puts the country in a very disadvantaged position again.

Additionally, safeguarding intellectual property rights is a subject of highly intricate legal issues. Even though India is striding steadily forward in its space agendas it lacks a sufficiently developed legal regime to safeguard its own as well as the intellectual property rights of foreign participants involved which has an unfavorable impact on the industry as well as the national security of the country. The Indian Copyright Act, of 1957 must be updated to conform to the current transformations in the space sector. Even though the Information Technology Act, of 2000 came as a breather about "electronically transmitted information" yet, no explicit legal regime, concerning data protection puts the nation in a dangerous standing in this area too. Hence, the government must correspondingly take serious action concerning the implementation of the Personal Data Protection Bill, 2019.

To lessen the burden shouldered by ISRO, it is high time the government extends the entrances for private parties to contribute to space-related activities. Possibly, it would be the greatest assistance of any suggested space law for the country to allow the private sector participation in making space launch vehicles and corresponding space activities, which may cater to both national and international clients. Regardless, just extending the Indian space sector to private participation is not sufficient. The government needs to elucidate the laws and regulations for any potential unexpected misfortune on the part of private companies while embarking on space exploration activities.

Also in an interview, Dr. V. Balakista Reddy, head of the Centre for Aerospace and Defence Laws, NALSAR University, stated that approximately fifteen countries have almost forty legislations that deal with space technology and its applications, and it is high time that India learns from them by passing its own national space legislation. Therefore, there is a growing need for an adequate and robust national space law providing shelter for all the current space-related issues and concerns to improve the status of the country on the outer space front.

India currently holds a highly esteemed position in space technology. Although there is no specific legislation governing remote sensing, the Indian Space Research Organisation (ISRO) was given a data policy in 2001. It is unusual to state a precise resolution, 5.8 m, as a criterion because India has adopted a more expansive interpretation of the access policy than the original Non-Discrimination Principle. India is actively developing international space

and legal policy through participation in organizations like the International Council of Scientific Unions (ICSU), the International Astronautical Federation (IAF), and the United Nations Committee on Peaceful Uses of Outer Spaces (UNCOPUS). India attained the ability to launch satellites domestically with the 15 October 1994 launch of the Polar Satellite Launch Vehicle (PSLV). In India

India now has two custom-built satellite launch vehicles: the PSLV and the GSLV. India is starting to take a significant role in the global commercial space market. For space assets, significant challenges relating to control and safety, authorization, agreements, and conflict resolution processes need to be addressed. To incorporate space-related issues into domestic law, it is necessary to amend the laws governing contracts, property transfers, stamp duties, registration, copyright, and patents, among other pertinent statutes. Private satellite systems are allowed to participate, but there is no legal framework protecting the operator and the state from culpability in the event of damage. Current domestic laws, particularly those governing intellectual property rights (IPR), have not been updated to take space-related issues into account. A special law needs to be passed. The current procedure has to be reviewed, especially in light of Article 51 of the Indian Constitution. It should be underlined that the national space law should be balanced with the business and should not benefit just one party. Since the Indian Space Programme has always benefited the country, the national space legislation and legal framework ought to continue to do the same going forward.

The Remote Sensing Data Policy, adopted in 2001, includes measures for collection and dissemination, national security, and meeting social requirements and developmental concerns. Later, the government's High-Resolution Image Clearance Committee eased limits on the availability of satellite data up to 1m resolution. This was made possible by the Remote Sensing Data Policy, 2011, which went into effect. The National Remote Sensing Centre (NRSC) is in charge of collecting and making available satellite remote sensing data for both Indian and international satellites for use in development. When matters of national security, commitments under international treaties, or foreign policy are involved, the Government of India (GOI) has the authority to impose control. Many doubts surround the uniform application of the policy in all circumstances (beginning on the day it was announced) and its limited efficacy.

For instance, U.S. Commercial satellite imagery has a resolution of about 0.5 m. In order to balance the needs of the user community, policies, acts, treaties, and authorities must do so. technology development technological advancement.

A comprehensive space policy that can coordinate data from domestic and foreign satellites is required as the necessity and demand for higher-resolution data grow as technology advances. The fundamental goal and objective of Satcom policy, as evidenced by 95 of the 263 transponders used by domestic operators, is the development of a vibrant satellite, ground, and service communication industry in India. Additional satellite development capabilities include the design of launch vehicles and base infrastructure. the use of INSAT capacity by non-governmental organizations, the creation and operation of Indian satellite systems, and the utilization of foreign satellites for the advancement of space sciences; (x) Environment and ecology protection (xi) International cooperation.

## 5. CONCLUSION

As humans expand their reach in outer space, laws controlling human actions in that region are evolving more and more relevant and important for both states and the commercial sector. Technological advancements have made space operations feasible for private operators who however are not included in the existing legal system. Up until recently, India never recognized the need for national space laws or policies because it was considered more of an international problem than a domestic one the potential of India's advanced space technology to simultaneously launch 20 satellites into orbit has been demonstrated. In order to ensure economic efficiency, Indian space must adopt organizational paradigms and collaborative tactics that will prepare it for a quantum leap in technical development. India must play a significant part in establishing a legal framework that is supportive of the space industry, balancing public and private interests, and adapting to the changing global environment.