

Space Laws in India: An Overview

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“When asked about how India looked from Space, he said,

“Saare Jahan Se Acha Hindustan Hamara...”

Rakesh Sharma

Abstract: After the successful launch of Chandrayan 3, a third lunar mission following the earlier two Chandrayan missions, launched by the Indian Space Research Organisation, the Indian Space mission gained much popularity around the world. Although India is still a developing country it could proudly be placed with countries like the U.S.A. and Russia in space research. However, despite such advancements, India does not have any specifically defined space laws in its legal system. This article briefly provides an overview of several laws that deal with the management of space missions in India. This article also highlights the lacunas in the space laws in India and provides a way forward.

Keywords: *Space Law, India, International Treaty, Space Activities Bill*

1. INTRODUCTION

Space law, often known as the law of outer space, is a little-known area of law that has gained attention due to recent developments in Indian Space Research and Exploration programmes. The law of space governs the administration of national and international agreements as well as the management and operations of space research and exploration programmes. These rules also give organisations a defined legal framework to work within space-related issues. The use of weaponry, space exploration, protecting the environment from organisation operations, space exploration programmes, and unethical behaviour are some of the main topics covered by space law. Various other fields of law that simultaneously work with space laws are commercial law, intellectual property law, arms

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control law, and environmental law.¹ As the world is witnessing new advancements in the Space industry it becomes even more crucial to analyse the laws related to Space. India solidified its reputation as an economical and dependable nation on February 15, 2017, when it made history by launching 104 satellites into Earth's orbit. As a result, India gained significant clout in the private international space sector and saw an unexpected expansion in its space programs. With these developments, India is expanding its reach into scientific exploration, commercialising space programs, and providing launch services via the Polar Satellite Launching Vehicle (PSLV), an ISRO-built spacecraft.

A new era of space activities, space exploration, and scientific discovery is being ushered in by the nation, which is commercialising its satellite-building skills and providing launch services from the locally developed and tested ISRO Polar Satellite Launching Vehicle (PSLV).

2. DEVELOPMENT AND EVOLUTION OF SPACE LAWS

The body of laws, rules, guidelines, and other regulations that apply to or are relevant to any activity conducted in space is known as space law, as the name suggests. Both foreign and domestic components are present in these operations². Like ordinary international law, space law is composed of treaties, conventions, agreements, resolutions of the UN ordinary Assembly, and the guidelines established by international organizations. The history of space law during the Cold War can be connected to the space race between the Soviet Union and the United States to explore space.

The official beginning of space law dates to 1957 when US President Dwight D. Eisenhower introduced the idea to the UN during disarmament talks. International space policy has been successfully implemented by both the US and Russia. The International Space Policy guarantees the sovereignty of a specific country and forbids our country from claiming any space region outside of its sphere of influence. Populist international law acknowledged each nation's right to sovereignty in 1919 to promote harmony and peace. The Soviet Union's 1957 launch of "Sputnik," the world's first artificial satellite, was one of the achievements.³

3. SPACE LAWS IN INDIAN PERSPECTIVE

India's space history began with the country's first rocket launch in 1963, which was supervised by the visionary Dr. Vikram Sarabhai. It was then the first Indian research satellite, Aryabhata, was launched. Since then, India's efforts have culminated in several missions with applications in the fields of broadcasting, communication,

¹ Law Corner, 'Evolution and Historical Background of Space Law - Law Corner' (*Lawcorner.in* 30 August 2020) <<https://lawcorner.in/evolution-and-historical-background-of-space-law/>> accessed 10 March 2023.

² Nikhil Verma, 'History and Development of Space Law' (*legalserviceindia.com*) <<https://legalserviceindia.com/legal/article-10617-history-and-development-of-space-law.html>> accessed 3 March 2023.

³ Diganth Raj Sehgal, 'Space Legislation : The Way Forward' (*iPleaders* 5 April 2021) <<https://blog.iPLEaders.in/space-legislation-way-forward/>> accessed 5 March 2023.

meteorology, oceanography, natural resource surveying, monitoring the environment, and catastrophe prediction. As per ISRO's Chief K. Sivan *"A Space Act would help the government deal with legal issues arising from objects put up in space and for what happens to them in orbit, or because for them."* In India, the government has always had total control over space. Since it will help propel payloads into orbit and maybe beyond, it has only been made available to the private sector, enabling it to offer commercial services. The government will keep an eye on everything that travels into space, but it will also ensure that the industry is not overly regulated since this could discourage investment or cause a crash in countries with less stringent laws. India needed to set up a presence in the global space community long ago. All countries started to delve deeper after the Soviet Union launched Sputnik in 1957. India has concentrated on creating, launching, and managing satellites using domestic technology during the post-independence era. It founded the Indian National Committee for Space Research in 1962, and it is currently the Indian Space Research Organisation.

It paid off in 2007 when India sent the first unmanned spacecraft in history, Chandrayan-I, to the moon. In compliance with the terms of its Memorandum of Understanding with the National Aeronautics and Space Agency (NASA), the European Space Agency (ESA), Bulgaria, and several other agreements, India is required to create and revise its national space plan. Consequently, over the past 50 years, ISRO has launched over 300 satellites for 33 different countries, which is an amazing accomplishment.

It is well known that significant foreign investment has led to a greater degree of centralization in the Indian space industry. The Indian space sector has always been closely monitored, overseen, and controlled by notable individuals. One very good aspect is our country's excessive and broad control over the Indian space industry. On the other hand, ISRO has advanced space technology significantly and helped India become a more powerful military power and global superpower.

Since the government has overseen India's space industry, as was already mentioned, there is no need for comprehensive space legislation in India. However, as India moves closer to privatisation, India must have specific space legislation. It is currently impossible to say what the current regime of space law is as the entire space law in India is contained in the following policies:

(a) A FRAMEWORK OF POLICIES GOVERNING SATELLITE COMMUNICATION IN INDIA

In 1997, the Department of Space released the rewritten satellite communication policy. A comprehensive 100-page document outlining guidelines for the development of satellite, telecommunication, broadcasting, and space exploration, among other services, would have been expected given the extent and potential of India's space activities. However, the government only produced a two-page, five-point policy, which is now India's only legal

framework for satellite communication. Among the provisions made were the advancement of satellite communication launch capabilities and the encouragement of private investment in the space industry. However, the government quickly came to realise how inadequate the policy was and set standards, procedures, and guidelines for the SATCOM policy.

(b) NORMS, GUIDELINES AND PROCEDURE POLICY, 2000

The laws outlined the process for private Indian companies with less than 74% foreign equity to set up a satellite system. The policy established multiple subcommittees to authorize and sanction the commercial use of the INSAT satellite system by private enterprises, as well as to impose restrictions on transponder and satellite network capacity and capability sharing.

(c) REMOTE DATA SENSING POLICY, 2011

High-resolution imaging services up to one meter were approved for private use by the government, except for highly classified picture data from the nation's most important defence sites. Apart from providing opportunities for the remote sensing sector, the policy would ease restrictions, enabling a greater number of clients to obtain high-quality data for research and development purposes.

(d) THE TECHNOLOGY TRANSFER POLICY OF ISRO

By contracting with both domestic and foreign businesses to produce parts for satellites, space radars, rocket engines, batteries, space electrical components, and optical camera elements, ISRO hopes to increase private investment and involvement in the space sector. As a result, ISRO will be able to focus all of its employees on research and development, increasing the nation's space potential.

(e) POLICIES AND NOT A LAW

A policy is a plan of action, therefore when the government announces one, it is outlining its course of action. On the other hand, a law is a set of regulations that have been duly enacted by the legislature. While laws are binding, policies are merely pieces of paper. If the government or anyone else breaks the law, one can sue them in court. Laws have greater authority as a result. Even though a bill has been under consideration since 2017, India currently lacks a space law.

(f) SPACE ACTIVITIES BILL, 2017

There has always been a need for a legislative framework for space, not only to make room for the new private sector but also because the sector cannot continue to grow without the private sector, which encourages more innovation and development. Thus, the proposal was drafted in 2017 and is presently pending in the legislature. A bill has been drafted to oversee and facilitate India's space initiatives.⁴ It promotes the involvement of private companies in space operations in India, with oversight and approval from the Department of Space. This measure

⁴ Monica Shaurya Gill, 'NEED for COMPREHENSIVE and ROBUST INDIAN SPACE LAWS ' (2021) <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://ili.ac.in/pdf/3.pdf> accessed 26 February 2023.

considers that in addition to offering technical and professional support for commercial space operations, the government will ensure safety standards and oversee the execution of every space activity. Although there are many good things about the bill, there are some important areas where it fails. The legislation's stated goal is to assist and promote private commercial space activities, however, due to factors like its severe penalty clauses, it does not seem to have much of an impact in this area.

(g) THE INDIAN SPACE POLICY, 2023

In 2020, the Indian government started over when it came to commercializing the country's space industry. The Indian government opened the door for the private sector to participate in all facets of space activities. This is different from the previous situation where the private sector was only permitted to participate in the space-related manufacturing sector and not in the space services sector. An action of this kind was deemed necessary to stimulate the Indian economy, which had suffered greatly from the COVID-19 pandemic.⁵

The Indian government also quickly established the Indian National Space Promotion and Authorization Centre (IN-SPACe) in June 2022 to grant licenses for private space activities.⁶ The Indian Space Policy 2023 (2023 Policy) comes next, outlining the government of India's intention to heavily commercialize and privatize space activities in the country. Though the 2023 Policy has been praised in the last few days for being futuristic and a positive step, its implementation is in jeopardy because India does not yet have a national space law. Furthermore, some of the 2023 Policy's provisions raise questions about how well they align with India's obligations under international treaties. The vision statement of the 2023 Policy, which promotes a thriving commercial presence in space, reflects the policy's central idea.

To accomplish this, the 2023 Policy offers a stable and predictable regulatory framework to promote increased private sector involvement in space activities. The Department of Space has been given overall authority to carry out the 2023 Policy, including interpreting and resolving any ambiguities, allocating responsibilities under the 2023 Policy, coordinating international cooperation, and developing an appropriate space dispute resolution mechanism, among other things. The 2023 Policy sets a lofty objective for ISRO: it mandates the development of infrastructure and technology for human spaceflight, resource exploitation, and human presence in space, including habitation.

4. WHY DOES INDIA NEED A POWERFUL AND STRONG SPACE LAW POLICY?

India as a space superpower stands mightier than ever, but a law that protects the country's sovereign, public and commercial interests is needed. India's recent successes with Chandrayaan-3 and the Aditya-L1 solar probe have positioned it alongside major space-faring nations such as the U.S. and Russia. Yet India lacks its space laws.

⁵ Centre for Aviation and Space Laws, 'Outlining Inconsistencies in the Indian Space Policy 2023' (*Centre for Aviation and Space Laws* 1 May 2023) <<https://caslnujs.in/2023/05/01/outlining-inconsistencies-in-the-indian-space-policy-2023/>> accessed 1 March 2023.

⁶ ISRO, 'Indian Space Policy -2023' (2023) <https://www.isro.gov.in/media_isro/pdf/IndianSpacePolicy2023.pdf>.

India has the potential to become the global launchpad due to its transition from reliance to self-sufficiency in terms of launching proficiency.⁷ Due to India's affordable space missions, other countries and multinational organisations have formalised agreements with the country to support each other's space projects and launch satellites on their behalf. Therefore, the emergence of commercialisation necessitates updating domestic laws to take space-related concerns into account.⁸ These laws include contracts, property transfers, stamp duty, registration, insurance, and, most crucially, intellectual property rights.

The growing global concern over space debris has now permeated domestic affairs. The fall of debris from an Indian satellite on a Japanese town that was returning to Earth has put India at the focus of a global controversy.

India is obligated, as a party to the 1972 Convention on International Liability for Damage Caused by Space Objects, to compensate for any harm its space object may cause to aircraft whether they are in flight or on the Earth's surface. It is difficult for India to calculate the number of damages due, nevertheless, in the absence of a national space law and policy. The law would also aid in determining who would be responsible if space debris collides with suspended objects.

The government has been promoting private involvement in the nation's extraterrestrial explorations. The government introduced the Indian Space Policy of 2023 to close the legislative gap.⁹ However, specialists in space law identified several discrepancies. The policy states that non-governmental organisations are permitted to possess, move, utilise, and market space or asteroid resources that they have obtained by applicable laws, including India's international obligations. The policy statement does not adequately clarify the precise authority and duties of IN-SPACe.

Further, the promotion of space activities in India rests on the nation's ability to provide economic stability, a clear and uncomplicated procedure for licencing by a regulatory authority, and incentives for private players. Moreover, countries like Canada, Germany, the Netherlands, South Africa, and Ukraine, despite not being space technology giants, have established well-defined laws for space activities.

In addition to spearheading space research and development initiatives, India must draft precise laws covering the "space dimension" with the same rigour as we have the land, air, and water dimensions if it is to be at the forefront of innovation and the technology-driven new international order. The proposed Indian space law may have the

⁷ Senjuti Mallick, 'Why India Needs a Space Law' *The Hindu* (19 June 2017) <<https://www.thehindu.com/opinion/open-page/why-india-needs-a-space-law/article19094453.ece>> accessed 4 March 2023.

⁸ Free Law, 'The Need for Space Legislation in India' (*Free Law: Get Free Headnotes & Judgments* 28 October 2022) <<https://www.freelaw.in/legalarticles/The-need-for-space-legislation-in-India>> accessed 25 February 2023.

⁹ Charu Singh, 'India Needs a Space Law as It Joins an Elite League' (*BQ Prime* 13 September 2023) <<https://www.bqprime.com/business/india-needs-a-space-law-as-it-joins-elite-space-faring-league>> accessed 3 March 2023.

greatest impact on the country by enabling private companies to assume the responsibility of developing satellites and launch vehicles, as well as operating constellations of satellites to serve the needs of both local and foreign clients.

5. CONCLUSION

Indian law has not yet been specifically promulgated in the area of space law. Currently, there is no explicit legislation governing space-related activity in India. Transparency and clarity are the guiding principles that will allow the space industry to reap profitable profits. There is a pressing need for India to have space legislation.

India is a developed country that aspires to take the privatisation and commercialization of space assets one step further while also increasing the capacity for space research and scientific advancements and development of scientific research and space exploration capabilities to make them more advanced. The government needs to understand that it is inappropriate to have too much control and regulation, especially in situations where there is little transparency.