

A New Draft for the Space Activities Bill: Amidst A Sea-Change in India's Space Sector

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The Road to Reform

On 25 May, Pawan Goenka, Chairperson of the Indian National Space Promotion and Authorization Centre (IN-SPACe), [told](#) *The Indian Express* that a new draft of the Space Activities Bill “will soon be circulated to the stakeholder ministries for consultations.” He [revealed](#) some key aspects of the draft bill, albeit without details, such as the grant of statutory powers to IN-SPACe and an insurance provision for private companies.

The announcement comes eight years after the first draft of the bill was introduced in 2017 and underwent an extensive public consultation process, only to be shelved amid heavy [criticism](#) from both industry representatives and independent analysts. The new draft has reportedly

incorporated concerns and suggestions previously received—such as a restrictive IP regime—and accounts for substantive changes in the industry.

In subsequent years, the Indian space sector has undergone a radical transformation. In 2019, the country had merely 11 private space companies. Today, the number is [estimated](#) to be over 400 (a large proportion of which are startups), with private players heavily involved in a wide range of space-based services across the value chain.

This growth has been enabled by a series of reforms introduced in 2020, aimed at opening up India's space economy to greater private sector participation. A key component of these reforms was the [creation of IN-SPACe](#), established to promote, authorize, and supervise (and 'hand-hold') the space activities of 'non-governmental entities'.

Later, (some) policy clarity was provided by the landmark [Indian Space Policy 2023](#), through a norms-, procedures-, and guidelines-based approach. Furthermore, the ISP-23 outlined a vision in which ISRO would eventually focus entirely on R&D of advanced space technologies and transition out of manufacturing and operating space systems—roles that would largely be taken over by the private sector. Since 2020, in fact, ISRO, IN-SPACe, and the Public Sector Unit NewSpace India Limited (NSIL) [have signed](#) 75 technology transfer agreements to empower the private sector in achieving this objective.

Why India Needs This Bill Now

Yet, the need for a legislative framework—namely, the Space Activities Bill—to boost privatization and regulate the space sector has persisted throughout, and has, in fact, become more pressing due to the dramatic transformation of India's space sector. There are several reasons for this, some of which are interconnected.

Statutory powers for IN-SPACe

IN-SPACe has been designated to act as a regulatory body for space companies and to create a “level playing field”—presumably between ISRO and the private sector. At present, however, contradictions and policy gaps considerably curtail and raise critical questions about its expected role.

Partly due to the dual-use nature of space technologies, private players often have to seek separate clearances from various Indian ministries even after receiving ‘provisional authorisation’ from IN-SPACe. This is, in part, because IN-SPACe does not yet possess legal authority of its own and relies upon the powers of Department of Space (DoS) and ISRO to function as a single window agency. Furthermore, if a firm is denied authorization, it can reapply—yet, ironically, IN-SPACe itself reviews the appeal, which “effectively makes it the judge in its own case”, as an independent analyst [pointed](#) out.

Adding to this irony, IN-SPACe has been set up as an ‘autonomous’ body under the DoS, whose head—Secretary (Space)—is none other than the Chairman of ISRO. This arguably creates a significant conflict of interest and undermines IN-SPACe’s ‘autonomy’. Analysts have further [highlighted](#) evidence of a capacity crunch within IN-SPACe, which is which is especially problematic given the complexity and wide variation across space sector activities..

To resolve these inconsistencies and other disparities, IN-SPACe must emerge as a regulatory body with statutory powers—a status that can only be granted through an Act of Parliament, namely, the Space Activities Bill. [\[1\]](#)

International obligations

Another key reason behind the need for a legislative framework is India’s obligations under international treaties—such as

the Outer Space Treaty, the Liability Convention, and the Registration Convention—which require the GoI to monitor space activities (further underscored by national security concerns) and to be responsible for any damages caused by such activities conducted within its jurisdiction.

India's international liability was exemplified by the Devas-Antrix case in 2015, when Antrix (the commercial arm of ISRO) lost a USD 562 million (over USD 1 billion with interest) international arbitration award to Devas. Although Devas was an Indian space startup, it registered the award/order in the US to [seize](#) Antrix's assets after a failed satellite deal.

It is worth noting that the Delhi High Court eventually cited fraud by Devas and [set aside](#) the tribunal's order in 2022. A US Court of Appeals also reversed the award in Antrix's favor in 2023. However, by then, the reputational damage had arguably already been done: Antrix Corp went defunct, and NSIL had to be created to replace it.

As an Indian analyst who specializes in space law [wrote](#), Antrix's (initial) loss “was based on the allegation that the allocation and cancellation of Indian state resources to Devas was arbitrary. Absence of well-defined policies often lends credence to allegations of arbitrariness and can be as counter-productive to the state as it is to the industry.”

This is a critical issue that the Space Activities Bill is expected to address. A punitive legal framework to ensure compliance with India's international obligations assumes further significance as private players increasingly assume a growing role in the country's space sector.

The needs of the private sector

On the other hand, a [key criticism](#) of the previous draft was that it prioritized India's international obligations over regulatory clarity for commercial space activities. However,

the new draft is expected to strike a more balanced approach—largely due to the rise of private players, as well as other factors, such as the liberalized FDI policy for the space sector—up to 100% through the automatic route for many sub-sectors is now allowed—implemented last year. There has been a stated shift in the GoI's approach to the space sector—from a 'supply based model' to a 'demand based model'.

The IN-SPACE Chairman has already indicated that a long-standing demand of private players—easy access to insurance for high-value space assets—will be addressed. Another significant concern with the previous draft was its restrictive Intellectual Property (IP) ownership clause. Ostensibly driven by national security concerns due to the dual-use nature of space tech, the clause stated that any “form of IP generated from any type of space activity will be deemed the property of the government.” Experts have [pointed out](#) that such a provision could severely deter investor interest (both foreign and domestic), and may even prompt Indian space-tech startups to relocate to jurisdictions with more liberal IP ownership rules. As a result, the new draft is likely to propose case-by-case examination of IP or allow the government access and control without full ownership.

There are several additional private-sector requirements that the new draft will need to address, inter alia:

- a streamlined process and defined timelines for approvals and licensing;
- an independent and transparent appeals mechanism in case of rejection; and,
- clarity in standards and definitions (for instance, how does the GoI define 'space objects of Indian origin' if they are co-produced with a foreign entity?)

Another critical issue is the blanket approach to regulating various space activities in the earlier draft. Experts have

since [argued](#) that the GoI should adopt a differential approach for regulatory clarity. For example, satellite communications and deep-space exploration involve distinct regulatory requirements. Given that ISP-23 acknowledges these variations, the new Space Activities Bill is likely to provide legislative guidance accordingly.

Next Steps and Implications

Much like the previous draft, the new Space Activities Bill will likely undergo a lengthy consultative process before it can be tabled in Parliament, especially since regulatory requirements and complexities have only increased in subsequent years. However, unlike the previous attempt, the GoI now has far greater imperatives, both economic and strategic, to ensure the bill's successful passage.

To begin with, India has ambitiously [targeted to grow](#) its space economy from USD 8.4 billion in 2022 (about 2% of the global share) to USD 44 billion by 2033 (approximately 8% of the global share); and reduce its dependency on foreign space technologies. Indian space companies and security agencies collectively spend roughly USD 1 billion annually to procure Earth Observation data. Simultaneously, the country's private space companies have demonstrated great potential in recent years with multiple technological milestones. For example, the Bengaluru-based (and Google-backed) Pixxel's recently launched the first three satellites of its Firefly constellation – the world's highest-resolution hyperspectral constellation. The GoI has [launched](#) a \$120 million venture capital fund to support Indian space start-ups with risk capital, and is clearly keen to sustain the momentum generated in India's space economy since the 2020 reforms.

Equally important is the strategic value of space-based assets for national security, which has assumed unprecedented significance, most recently [demonstrated](#) by India's precision strikes on Pakistan. In fact, news reports have [revealed](#) that

the Indian armed forces used foreign space firms (such as Maxar) for satellite imagery in addition to domestic space assets to plan and execute Operation Sindoor. This highlights a strategic dependency that India would undoubtedly prefer to eliminate.

Going forward, the defense sector's reliance on space assets will only intensify as space technologies—such as low-cost mini-satellites or AI-enabled 'super-satellites'—evolve and proliferate. Indeed, China has reportedly [built and launched](#) its first AI-enabled satellites and plans to eventually integrate them into an orbital supercomputer. Security experts believe this will be a game-changer for future ISR. Simultaneously, China has also reportedly [increased its satellite support](#) to the Pakistani army in the aftermath of the India-Pakistan ceasefire.

India is increasingly aware of these evolving trends and thus recognizes the urgency of creating a policy environment that enables its private sector to swiftly build and deploy inherently dual-use space capabilities. Consequently, the future of the Space Activities Bill, at least, looks far rosier.

^[1]The Reserve Bank of India was set up by the 1934 RBI Act, the Securities and Exchange Board of India (SEBI) by the 1992 SEBI Act, and the Telecom Regulatory Authority of India (TRAI) by the 1997 TRAI Act.