

India's Space Ambitions

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India's Space Ambitions: The Need for a Comprehensive Space Law

Context

India is preparing to celebrate its **second National Space Day on 23 August** at a time when projects such as **Chandrayaan-3 follow-ups** and the **Gaganyaan mission** are expanding India's space ambitions. However, the absence of a **comprehensive national space law** has created uncertainty in regulating and supporting private and commercial activities in outer space.

Introduction

Space law is the framework that governs human activities in outer space, covering areas such as **exploration, commercialisation, safety, liability, and peaceful use**. It balances **international obligations** under treaties with **domestic regulations** for both state and private actors. As India transitions from a state-led space programme to one that increasingly involves the private sector, the lack of a clear legal structure poses challenges for governance, investment, and innovation.

Space Law and International Framework

- **Outer Space Treaty 1967** forms the foundation of international space governance.
 - **Key Principles** include:
 - Common Heritage → Outer space belongs to all humankind, no national ownership.
 - Peaceful Use → Outer space must not be weaponised.
 - State Responsibility → Nations are accountable for activities of both government and private entities.
 - Liability Clause → Nations are responsible for damage caused by objects launched from their territory.
 - International Cooperation → Promotes scientific exchange and sustainable exploration.
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Need for National Space Legislation

- **Legal Clarity and Predictability** → Provides a stable framework and reduces overlapping approvals.
 - **Safety and Compliance** → Establishes technical standards, licensing rules, accident investigation, and debris management.
 - **Boost to Private Sector and FDI** → Clear rules on licensing, IP rights, insurance, and investment encourage startups and attract global capital.
 - **Insurance and Liability Framework** → Affordable insurance mechanisms are essential to manage the high risk of space activities and reduce India's international liability.
 - **Promotion of Innovation and Talent Retention** → Protection of IP rights encourages research collaborations and prevents migration of talent abroad.
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India's Current Approach

- **Incremental Strategy** → India has signed UN treaties but lacks an umbrella space law.
 - **Policy Frameworks** →
Indian Space Policy 2023 promotes private participation.
IN-SPACe guidelines provide authorisation for non-governmental players.
Catalogue of Standards ensures safety and quality in space activities.
 - **Gap** → IN-SPACe lacks statutory authority, creating regulatory uncertainty.
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Challenges in Enacting Space Law

- **Regulatory Fragmentation** → Multiple ministries are involved, causing delays and duplication of clearances.
- **Absence of Statutory Backing for IN-SPACe** → Current authority is based on executive orders, which weakens investor confidence.
- **Liability and Insurance Concerns** → Under the Outer Space Treaty, India is liable for all space activities, making insurance costly for startups.

- **FDI Uncertainty** → Limited automatic routes discourage foreign capital, unlike countries such as Luxembourg and UAE.
 - **Intellectual Property Issues** → Weak IP protection discourages innovation and leads to loss of talent to more IP-friendly jurisdictions.
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Way Forward

- **Comprehensive Space Activities Law** → Align with treaty obligations, define roles of government and private actors, and clarify liability norms.
 - **Strengthen IN-SPACE** → Provide statutory authority and establish it as a single-window regulator.
 - **Affordable Insurance Mechanisms** → Develop pooled risk models or government-backed reinsurance.
 - **Liberalised FDI Policy** → Allow greater foreign investment in satellite components and services.
 - **Robust IP Protection** → Secure patents, encourage industry-academia-government collaboration, and retain talent.
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Conclusion

India's space sector is shifting from **state-led exploration to private-led commercialisation**. Without a **comprehensive national space law**, this transition risks being hindered by regulatory uncertainty, liability concerns, and lack of investor confidence. Enacting such legislation will strengthen India's compliance with international obligations, foster private investment and innovation, and establish India as a **global leader in space governance**.