



## Indian Space Policy 2023: Provisions and Gaps

This editorial is based on [A ground view of the Indian Space Policy 2023](#) which was published in The Hindu on 11/05/2023. It talks about ISRO's New Space Policy and the gaps in it.

**For Prelims:** [Indian Space Policy 2023](#), [NewSpace India Limited](#), [IN-SPACe](#), [Department of Space](#), [ISRO](#)

**For Mains:** Indian Space Policy 2023, Significance of Private Sector, Gaps in the Policy

This year, the [Indian Space Research Organisation \(ISRO\)](#) released the [Indian Space Policy 2023](#) that had been in the works for some years.

The policy has been welcomed as a progression towards India's entry in a New Space age. However, it needs to be followed up with suitable legislation, accompanied by clear rules and regulations.

Until the early 1990s, India's space industry and space economy were defined by ISRO. Private sector involvement was limited to building to ISRO designs and specifications.

**The Indian Space Policy 2023** unveils the government's plan to let private enterprises carry out end-to-end activities - from launching satellites and rockets into space to operating Earth stations.

### What were India's Past Quests to Reform in its Space Sector?

- **The First Satellite Communication Policy:** It was introduced in 1997, with guidelines for foreign direct investment (FDI) in the satellite industry that were further liberalised but never generated much enthusiasm.
- **Remote Sensing Data Policy:** It was introduced in 2001, which was amended in 2011; in 2016, it was replaced by a **National Geospatial Policy** that has been further liberalised in 2022.
- **Draft Space Activities Bill:** It was brought out in 2017, which went through a long consultative process and lapsed in 2019 with the outgoing Lok Sabha.
  - The government was expected to introduce a new Bill by 2021, but it appears to have contented itself with the new policy statement released by ISRO.

### Why there is a Need to Introduce Private Players into Space Sector?

- **India Lags far behind in Space Economy:** The global space economy is currently valued at about USD 360 billion. Despite being one among a few spacefaring nations in the world, **India accounts for only about 2% of the space economy.**
- **Harnessing the Full Potential of India's Space Sector:** Today, while ISRO's budget is approximately USD1.6 billion, India's space economy is over USD9.6 billion. Broadband, OTT and 5G promise a double-digit annual growth in satellite-based services.
  - It is estimated that with an enabling environment, **the Indian space industry could**

grow to **USD 60 billion by 2030**, directly creating more than two lakh jobs.

- **Private Sector has revolutionised the Space Sector:** Companies like [SpaceX](#), Blue Origin, Virgin Galactic have revolutionized the space sector by reducing costs and turnaround time while In India however, players within the private space industry have been limited to being vendors or suppliers to the government's space program.
- **Enhancing Security:** The security and defence agencies spend nearly a billion dollars annually to procure earth observation data and imagery from foreign sources. This much reliance on foreign entities can put India's security at stakes.
- **Bringing Aatmanirbharta in Space Sector:** Today, more than half the transponders beaming TV signals into Indian homes are hosted on foreign satellites, resulting in an annual outflow of over half a billion dollars.
- **Promoting Entrepreneurship in Space Sector:** There is a need to promote private sector activity in all high technology areas including space, to fully unlock the potential of India's youth and entrepreneurs.
  - To realize this vision, it is necessary to enable private entities within the Indian space sector to establish themselves as independent players capable of end-to-end space activities.
- **Making Space Industry at par with Global Industry:** Promoting the private sector will enable the Indian space program to remain cost competitive within the global space market, and thus create several jobs in the space and other related sectors.

## What is in Indian Space Policy 2023?

- **Vision:** The 'Vision' is to "enable, encourage and develop a flourishing commercial presence in space" that suggests an acceptance that the private sector is a critical stakeholder in the entire value chain of the space economy.
- **Key Highlights:**
  - The policy **creates four distinct, but related entities, that will facilitate greater private sector participation** in activities that have usually been the traditional domain of the ISRO.
  - **InSPACE (Indian National Space Promotion and Authorisation Centre):** It will be a single window clearance and authorisation agency for space launches, establishing launch pads, buying and selling satellites, and disseminating high-resolution data among other things.
    - It will also **share technologies, products, processes and best practices with NGEs** (non-government entities and this will include private companies) and government companies.
    - IN-SPACE will create a "stable and predictable regulatory framework" that will ensure a level playing field for the NGEs.
    - It will act as a promoter by setting up industry clusters and as the regulator, issue guidelines on liability issues.
  - **New Space India Limited (NSIL):** It will be responsible for commercialising space technologies and platforms created through public expenditure, as well as, manufacturing, leasing, or procuring space components, technologies, platforms and other assets from the private or public sector.
  - **Department of Space:** It will provide overall policy guidelines and be the nodal department for implementing space technologies and, among other things, co-ordinate international cooperation and coordination in the area of global space governance and programmes in consultation with the Ministry of External Affairs.
    - It will also create **an appropriate mechanism to resolve disputes arising out of space activity.**
  - **Rationalising the role of ISRO:** It states that ISRO will "transition out of the existing practice of being present in the manufacturing of operational space systems."
    - Hereafter, mature systems shall be transferred to industries for commercial usage. ISRO shall focus on R&D in advanced technology, proving newer systems and realisation of space objects for meeting national prerogatives".
    - **ISRO will share technologies, products, processes and best practices** with other government and non-government companies.
    - This will **make ISRO use its all its strength on cutting edge research and**

**development and long-term projects** such as [Chandrayaan](#) and [Gaganyaan](#).

▪ **Private Sector's Role:**

- The NGEs (this includes the private sector) are “allowed to undertake end-to-end activities in the space sector through establishment and operation of space objects, ground-based assets and related services, such as communication, remote sensing, navigation, etc.”.
- Satellites could be self-owned, procured or leased; communication services could be over India or outside; and remote sensing data could be disseminated in India or abroad.
- NGEs can design and operate launch vehicles for space transportation and establish their own infrastructure.
- **NGEs can now make filings with the [International Telecommunication Union \(ITU\)](#)** and engage in commercial recovery of asteroid resources.
- In short, the entire gamut of space activities is now open to the private sector. Security agencies can task NGEs for procuring tailor-made solutions to address specific requirements.

### What are the Gaps in the Policy?

- The policy sets out an ambitious role for IN-SPACe but provides no time frame for the necessary steps ahead.
- Neither is there an indicative timeline for ISRO's transitioning out of its current practices nor is there a schedule for IN-SPACe to create the regulatory framework.
- The policy framework envisaged will need clear rules and regulations pertaining to FDI and licensing, government procurement to sustain the new space start-ups, liability in case of violations and an appellate framework for dispute settlement.
- IN-SPACe is a regulatory body but doesn't have legislative authority.
- IN-SPACe is expected to authorise space activities for all, both government and non-government entities. Currently, its position is ambiguous as it functions under the purview of the Department of Space.

### What Should be Done to Fill these Gaps?

- The Space Policy 2023 is a forward-looking document reflecting good intentions and a vision. But it is not enough. What is urgently needed is a time frame to provide the necessary legal framework to translate this vision into reality, to successfully launch India into the Second Space Age
- The government should bring a bill that grants statutory status to IN SPACe and also sets out time limits for both ISRO and IN SPACe. The bill should also address the ambiguity related to Foreign Investment, government support for new space startups.

#### **Drishti Mains Question**

India has been thriving to introduce Private Players into its Space Economy since a very long time. In this context discuss the significance of Private Sector in Space Economy and also, discuss the Role of Indian Space Policy 2023 launched by ISRO towards achieving this goal.

### **UPSC Civil Services Examination, Previous Year Question (PYQ)**

**Q.1** What is India's plan to have its own space station and how will it benefit our space programme? **(2019)**

**Q.2** Discuss India's achievements in the field of Space Science and Technology. How the application of this technology helped India in its socio-economic development? **(2016)**

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