



IAFI & Forum Global Space Policy Conference 2026



From Policy to Implementation – Is India's Space Framework Delivering?

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www.ispa.space

Skyroot Aerospace - Mission Aagaman



- **Launch date:** July 18, 2026, from Satish Dhawan Space Centre, Sriharikota
- **Rocket:** Vikram-1 - Skyroot's first orbital launch vehicle
- **Result:** Reached ~450 km Low Earth Orbit, 60° inclination; successfully deployed payloads
- **Milestone:** First private Indian-built rocket to reach orbit, on its maiden attempt
- **Significance:** India becomes the 3rd nation (after US, China) with a private company achieving orbital launch
- **Name:** "Aagaman" - Sanskrit for "arrival"
- **Preceded by:** Mission Prarambh (2022) - Skyroot's suborbital debut with Vikram-S

Chronology of Events

- **Year 2019: Formation of Defence Space Agency**
- **June 2020: Government's Declaration Of its Intent to open space to private players**
- **June 2020: Formation of IN-SPACE**
- **Oct 2020: Issue of Draft Space and Remote Sensing Policy**
- **Oct 2021: Formation of Indian Space Association (ISpA)**
- **Feb 2022: Discussions on consolidated New Space Policy**
- **Dec 2022 : Release of the New Geospatial Policy 2022**
- **April 2023: Release of Indian Space Policy 2023**
- **Dec 2023: Indian Telecommunications Act 2023**
- **March 2024: New FDI Policy for Space**
- **May 2024: Norms, Guidelines and Procedure by IN-SPACE**

CHRONOLOGY OF EVENTS

**FORMATION
OF DEFENCE
SPACE
AGENCY**

YEAR 2019

**GOVERNMENT'S
DECLARATION OF ITS
INTENT TO OPEN
SPACE
TO PRIVATE
PLAYERS**

JUNE 2020

**FORMATION OF
IN-SPACE**

JUNE 2020

**ISSUE OF
DRAFT SPACE
AND REMOTE
SENSING
POLICY**

OCT 2020

**FORMATION OF
INDIAN SPACE
ASSOCIATION
IspA**

OCT 2021

**DISCUSSIONS
ON
CONSOLIDATED
NEW SPACE
POLICY**

FEB 2022

**DRAFT INDIAN
TELECOMMUNICATION
BILL, 2022**

SEPT 2022

**RELEASE OF THE
NEW GEOSPATIAL
POLICY 2022**

DEC 2022

**RELEASE OF
SPACE POLICY**

APR 2023

**INDIAN
TELECOMMUNICATIONS
ACT 2023**

DEC 2023

**NEW FDI POLICY
FOR SPACE**

MARCH 2024

**NORMS,
GUIDELINES AND
PROCEDURE BY
IN-SPACE**

MAY 2024

Navigating India's Space Regulatory Framework

Indian Telecommunications
Act 2023

Indian Space Policy
2023

Indian Geospatial Policy 2022

FDI Policy for
Space 2024

Norms, Guidelines
& Procedures 2024

Draft of Space Act
under finalization

Indian Space Policy 2023

- ✓ Enunciates roles for NGEs, ISRO, IN-SPACe, NSIL.
- ✓ **Policy allows NGEs :**
 - Satellite-based Communication.
 - Satellite-based Remote Sensing.
 - Satellite-based Navigation Services.
 - Establishing Ground Stations & TTCs
 - Assured access to Space with SSA.
 - All domains of Space activities, including futuristic missions such as Space Mining and Extra-Terrestrial Habitat Missions.

Indian Space Policy 2023

Indian Space
Research
Organisation
(ISRO)

Indian National Space
Promotion and
Authorisation Centre
(IN-SPACE)

New Space India
Limited (NSIL)

Defence Space Agency (DSA)

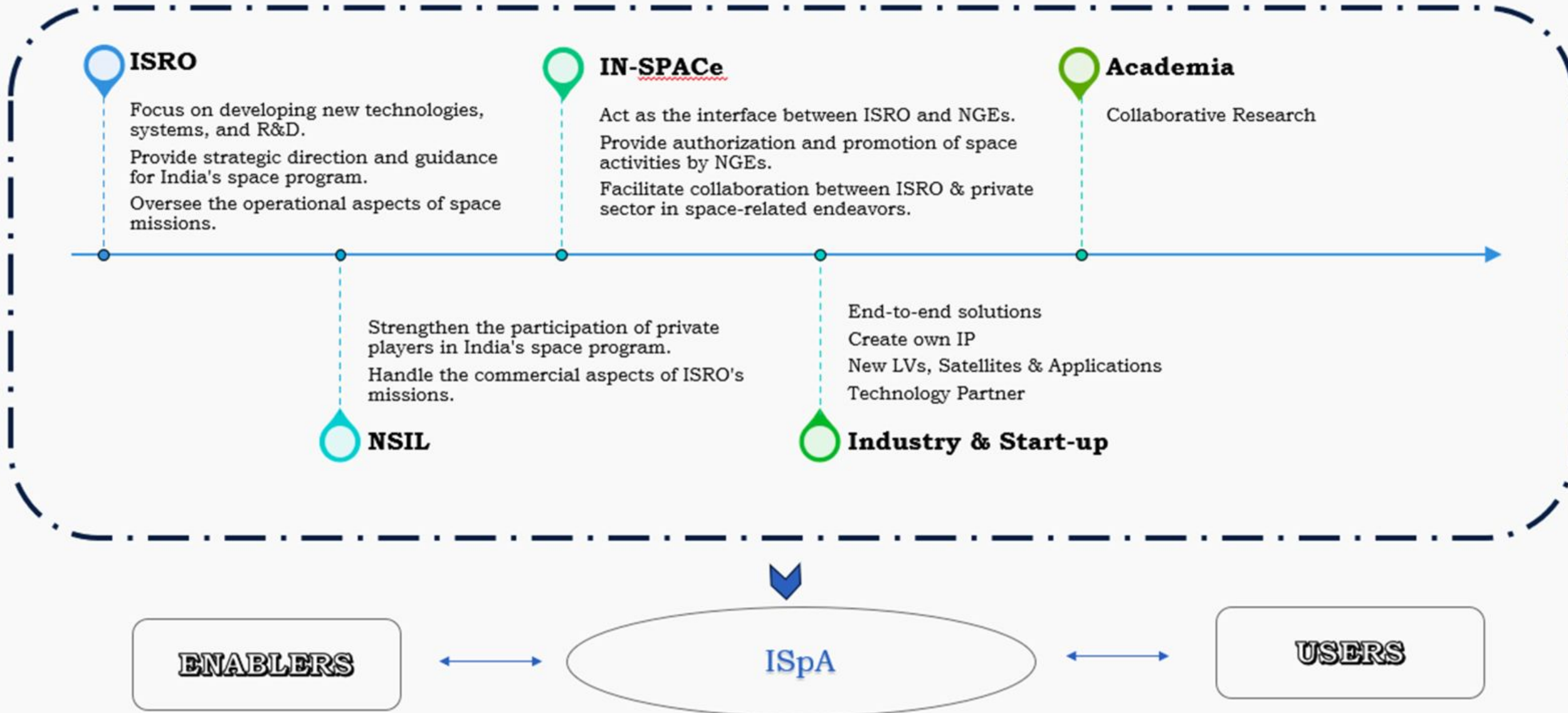
Non Government
Entities (NGEs)

Indian Space Association (ISpA)

Indian Space Policy 2023

- **ISRO** will focus on **research and development of new space technologies**, systems, and scientific missions. It will continue to undertake **national priority programs**, including human spaceflight and planetary exploration, while also supporting the private sector through **technology transfer and infrastructure sharing**.
- **IN-SPACe** acts as the **single-window regulator and facilitator** for all non-government space activities. It is responsible for **authorising, promoting, and supervising** private sector participation, ensuring safety, security, and compliance, while providing access to **ISRO facilities and technical support**.
- **NSIL** is the **commercial arm of the Department of Space**, tasked with **commercializing ISRO's technologies and services**. It owns and operates space assets for business purposes, handles **satellite launches, transponder leasing, and service delivery**, and fosters **public-private partnerships** in India's growing space economy.

NATIONAL SPACE ENTERPRISE



GalaxEye - Mission Dhristi



- **Launch date:** May 3, 2026, from Vandenberg Space Force Base, California
- **Launch vehicle:** SpaceX Falcon 9 (rideshare mission)
- **Payload:** Mission Drishti - GalaxEye's first satellite, a 190-kg Earth observation satellite
- **Result:** Placed into Sun-synchronous Low Earth Orbit at an altitude of approximately 500 km
- **Significance:** World's first commercial satellite combining SAR and EO/multispectral sensors on a single platform, enabling all-weather, day-and-night imaging

Private Space Activities in recent times

Launch Vehicles

- HAL-L&T consortium to build **5 PSLVs for ISRO**
- Skyroot Aerospace successfully launched its first sub-orbital launch vehicle, **Vikram-S**, on November 15, 2021 from the Sriharikota. **Vikram-1**, under Mission Aagaman on July 18, 2026, from the same site, successfully reaching a ~450 km Low Earth Orbit and deploying its payloads.
- **Agnikul Cosmos** successfully launched the world's first rocket with a single-piece 3D-printed engine, **Agnibaan SOrTeD**, on May 30, 2024
- **Hindustan Aeronautics Limited (HAL)** signed a ₹511 crore contract with ISRO, IN-SPACe, and NSIL on September 10, 2025, to transfer and produce the Small Satellite Launch Vehicle (SSLV) technology.



- **72 Satellites** of OneWeb launched **by ISRO, LVM3 M2** mission
- Digantara successfully launched SCOT satl
- Launch of Azista-BST's Satellite on 10th June 2023
- Pixxel's '**Firefly**' **satellite** was successfully launched
- Dhruva Space launched **2 Nano satellites in ISRO PSLV C54 mission**
- **TASL launched satellite**
- **Mission Drishti** satellite launched from California.

Indian Telecommunications Act 2023 - Dec 2023

A NEW ERA FOR SATCOM

Key Policy Advancements:

- Satellite networks now formally part of “*telecommunication network*”
- **Section 4(4):**
Enables administrative spectrum allocation for services listed in First Schedule

MINISTRY OF LAW AND JUSTICE

(Legislative Department)

New Delhi, the 24th December, 2023/Pausha 3, 1945 (Saka)

The following Act of Parliament received the assent of the President on the 24th December, 2023 and is hereby published for general information:—

THE TELECOMMUNICATIONS ACT, 2023

No. 44 OF 2023

[24th December, 2023.]

4. (1) The Central Government, being the owner of the spectrum on behalf of the people, shall assign the spectrum in accordance with this Act, and may notify a National Frequency Allocation Plan from time to time.

(2) Any person intending to use spectrum shall require an assignment from the Central Government.

(3) The Central Government may prescribe such terms and conditions as may be applicable, for such assignment of spectrum, including the frequency range, methodology for pricing, price, fees and charges, payment mechanism, duration and procedure for the same.

(4) The Central Government shall assign spectrum for telecommunication through auction except for entries listed in the First Schedule for which assignment shall be done by administrative process.

Indian Telecommunications Act 2023

- **Entry 16, First Schedule** covers:
 - Global Mobile Personal Communications by Satellite (GMPCS)
 - National/International Long-Distance Satellite Services
 - Mobile Satellite Services in **L and S bands**

THE FIRST SCHEDULE

[See sections 4 (4)]

ASSIGNMENT OF SPECTRUM THROUGH ADMINISTRATIVE PROCESS

16. Certain satellite-based services such as: Teleports, Television channels, Direct To Home, Headend In The Sky, Digital Satellite News Gathering, Very Small Aperture Terminal, Global Mobile Personal Communication by Satellites, National Long Distance, International Long Distance, Mobile Satellite Service in L and S bands.

Why This Matters:

- Empowers **non-auction access** for Satcom-long-standing industry ask
- Lowers entry barriers for **startups and new players**
- Aligns India with **ITU standards** & boosts digital inclusion efforts

India's choice of administrative allocation reflects a bold, future-focused approach – prioritizing national development over short-term revenue.

Indian Telecommunications Act 2023

Current Policy Status – Satcom Spectrum Allocation recommendations sent by TRAI awaiting DOT approval.

India is now policy-ready. Execution with urgency will define our Satcom leadership.

TRAI Recommendations on SatCom (09 May 25)



भारतीय दूरसंचार विनियामक प्राधिकरण
Telecom Regulatory Authority of India



Recommendations on

Terms and Conditions for the Assignment of Spectrum

for Certain Satellite-Based Commercial Communication Services

New Delhi, India
9th May 2025

4% of AGR to be levied as annual spectrum usage charge for:

1. NGSO-based Fixed Satellite Services (FSS)
2. GSO/NGSO-based Mobile Satellite Services (MSS)
3. GSO-based FSS

Minimum Annual Spectrum Charge: ₹3,500 per MHz

1. Charges payable **quarterly in advance**

Additional ₹500/year per urban subscriber

1. Applicable only to **NGSO-based FSS**
2. Rural and remote subscribers are exempt
3. Subsidy Support for Rural Connectivity

Validity Period:

1. Charges and terms valid for **5 years**,
extendable by **2 additional years** based on policy review

THANKYOU

Regulatory / Practical hurdles flagged by Industry

- ❑ **Multiple approvals & agencies:** IN-SPACe authorisations, DoT licensing (UL/GMPCS), WPC frequency clearances, SACFA (site clearances), NOCC testing, and TEC/device approvals -**leading to multiple touchpoints and potential for delays**. The NGP **attempts a single-window approach** but many processes remain with different agencies.
- ❑ **Cumulative levy burden:** licence fees + SUC + per-MHz minimums + entry/guarantee charges can affect unit economics for consumer satellite broadband. TRAI's recommendation seeks a clear formula but industry continues to press for lower effective levies.
- ❑ **Standards & security compliance:** New **TEC IR 42032:2024** obligations for NGSO networks and updated GMPCS security conditions add compliance overhead (lawful interception, data localisation interfaces, etc.).
- ❑ **Spectrum coordination & congestion:** GSO slot scarcity, NGSO coordination complexity, and cross-border coordination at ITU level make prime orbital/spectrum access difficult and competitive.

Brief on India's Satcom Sector – Recent Reforms & Key Changes

Major agenda items & positions

1. Spectrum assignment/allocation method (auction vs administrative)

- **Where it landed:** The policy direction is **administrative assignment** for satellite spectrum under the Telecom Act's First Schedule; the government publicly affirmed this approach in 2024. Detailed rules are being finalised.
- **Why it matters:** Auctions don't fit globally coordinated, non-exclusive Satcom bands and international coordination duties; administrative assignment supports sharing and coordination across GSO/NGSO systems.

2. 28 GHz band (27.5–28.5 GHz) – “retain or reform?”

- **The issue:** 28 GHz is prime **FSS/ESIM gateway** spectrum globally; mobile operators also covet it for 5G mmWave.
- **India's trajectory:** Consultations have argued to **retain 28 GHz for satellite gateways/ESIM** while pushing IMT to 26 GHz (24.25–27.5 GHz). TRAI and multiple filings reflect the Satcom case; debate continues around protection/coordination and equipment ecosystems

Major agenda items & positions

3. Charging framework / fees / SUC

Today's picture (proposed/indicative):

- **Licence fee:** typically **8% of AGR** under UL/GMPCS.
- **SUC:** TRAI proposed **4% of AGR** with **₹3,500/MHz/year** floor; NGSO add-on **₹500/urban subscriber/year** (rural exempt). DoT signals support; industry seeks further relief.
- **Entry fees & bank guarantees:** e.g., GMPCS **₹1 crore entry**, specified **FBG/PBG**; other UL authorisations have their own slabs.
- **Operational clearances/fees:** NOCC/SACFA/WPC processes and testing charges apply per the UL compendium and DoT fee schedules.

Pain points: cumulative levies (licence + SUC + per-MHz + per-subscriber + guarantees) can weigh on unit economics for consumer broadband; industry is lobbying for rationalisation.

Major agenda items & positions

4. ITU filings / orbital resources - difficulty & process

How it works:

- Filing involves advance publication, international coordination, and meeting “bringing-into-use” (BIU) milestones;
- filings are time-sensitive and subject to loss of priority if milestones are not met.
- ISP-2023 and IN-SPACe NGP permit Indian NGEs to request ITU filings via the Administration subject to conditions.
- **Unused filings can be re-allocated** if BIU/BBIU progress isn’t shown. DoT also set out internal WPC processing guidelines

Why it’s tough:

- GSO congestion, complex NGSO coordination, need for compatible spectrum plans with neighbours, and competition for prime longitudes.
- Missing milestones risks loss of priority.