NEWSLETTER INDIAN SPACE ASSOCIATION



EXPLORING THE FINAL FRONTIER:

ISpA Newsletter Unveils Future of Sustainable Space Exploration



Welcome to **ISpA Newsletter**, a trusted conduit for illuminating the latest strategic endeavours, technological innovations, and industry insights shaping the future of sustainable space exploration.

HIGHLIGHTS OF THE MONTH

- Agnikul Cosmos successfully launches world's first 3D-printed rocket enginepowered rocket, Agnibaan - SOrTeD, from Sriharikota.
- NewSpace India to handle all IRS satellite data and products
- Clearing the orbiting dead: How ISRO is pushing the Swachh Space programme
- Only Indian entities can disseminate satellite data, say new IN-SPACe rules
- Integrated drop test for Gaganyaan soon
- Mangalyaan-2 unveiled: India poised to become third nation to land on Mars
- Nasa postpones astronaut Sunita Williams Starliner flight to space
- China is Having a 'Strategic Breakout' in Space Too, USSF Intel Boss Warns
- Pak to send second satellite with China's help for digital transformation
- Russia accuses U.S. of seeking to weaponise outer space
- Japanese researchers build the world's first wooden satellite









MEMBERS BULLETIN

EUTELSAT ONEWEB

- Spacecom and Eutelsat OneWeb conduct trials combining GEO and LEO satellites for emergency communication services.
- Regulatory delays in India hinder Eutelsat OneWeb's goal to reach 90% global coverage with its LEO broadband constellation.
- Eutelsat reports Q3 sales of 300.8 million euros, confirms full-year outlook with OneWeb network rollout on track.
- OneWeb expected to gain first-mover advantage in India's satcom market, pending interim spectrum allocation.
- Viasat partners with OneWeb to offer multi-orbit maritime broadband services, integrating GEO and LEO satellites.
- Liquid Intelligent Technologies partners with Eutelsat to provide enterprisegrade LEO satellite services across Africa.





AGNIKUL

- Agnikul Cosmos announces launch window for its maiden sub-orbital rocket, Agnibaan, between May 28 and June 5.
- Launch of Agnibaan rocket postponed for the fourth time due to technical issues.
- Agnikul Cosmos reschedules test flight of Agnibaan's SubOrbital Technological Demonstrator (SOrTeD) for May 30.
- Agnikul Cosmos successfully launches world's first 3D-printed rocket engine-powered rocket, Agnibaan SOrTeD, from Sriharikota.

GALAXEYE

- GalaxEye signs MoU with IN-SPACe for access to testing facilities, becoming first beneficiary of IN-SPACe's coworking and testing space.
- Successfully tests all-weather, all-time aerial surveillance technology using synthetic aperture radar (SAR) on NAL's pseudo satellite, enhancing India's defence capabilities.



MEMBERS BULLETIN



INTELSAT

- SES to acquire Intelsat for \$3.1 billion, creating a major European satellite player, though concerns about increased debt impacted SES shares negatively.
- Intelsat extends the life of its 10-02 satellite by four years to 2030 using Northrop Grumman's MEV-2 service.
- Intelsat renews long-term content distribution partnership with Sony Pictures Networks India, ensuring delivery of premium entertainment to over 700 million viewers across Asia-Pacific.

KALEIDEO

- SatSure Analytics India develops a high-resolution optical earth observation payload, marking a significant milestone for the private space sector.
- Successfully aerial-tested payload designed from scratch, showcasing advanced capabilities independent of ISRO designs.
- SatSure plans to launch four satellites in 2026, reducing reliance on costly commercial satellite imagery from limited foreign operators.





PIXXEL

- Pixxel plans to launch six satellites in 2024 using rockets from ISRO and SpaceX.
- CEO Awais Ahmed highlights the company's focus on satellite readiness and launch timelines.
- Satellites to provide hyperspectral imagery for agriculture, energy, forestry, and environmental monitoring.

SISIR RADAR

- Indian start-up Sisir Radar uses advanced spy satellite technology to detect mosquito breeding, aiming to prevent mosquito-borne diseases.
- Hyper-spectral imaging technology adapted to identify mosquito larvae in water bodies, aiding targeted insecticide spraying and environmental protection.
- The initiative led by Dr Tapan Misra, founder of Sisir Radar and former ISRO Space Applications Centre director, focuses on reducing malaria and dengue deaths globally.



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MEMBERS BULLETIN



SKYSERVE

- SkyServe achieves Smart Earth Imaging in orbit, heralding a "Smartphone Moment" for Earth observation.
- Collaboration with D-Orbit enables successful testing of edge computing software stack, STORM, on SpaceX-launched satellite.
- STORM demonstrates capabilities including error correction, cloud and water cover removal, and vegetation identification in real-time.



Indian Space Progress

Indian Space Progress is the world's only newsletter dedicated to covering the civil Indian space landscape. Written by <u>Jatan Mehta</u>, a globally published space exploration writer, creator & author of Moon Monday, the newsletter contextualizes the progress of key elements driving India's increasingly relevant space capabilities in the global arena—from space technology, launch & exploration to astrophysics & planetary science to commercial & policy developments and more. You can subscribe to Indian Space Progress for free here: https://jatan.space/subscribe

ISPA ACTIVITIES

MOU WITH IIFCL AT IIFCL OFFICE, MAY 7, 2024:

 Indian Space Association signed a Memorandum of Understanding (MoU) with IIFCL Projects Ltd. The collaboration aims to strengthen the Indian Space Sector.





DG MEETING WITH CHAIRMAN TRAI AT TRAI OFFICE MAY 8, 2024:

- Lt Gen AK Bhatt (Retd), Director General of ISpA, extended congratulations to Shri Anil Kumar Lahoti as the new Chairman of TRAI.
- The chairman was briefed on the existing space ecosystem in India. The emerging space capability of the Indian private sector was discussed.
- The chairman was also apprised of the importance of spectrum for space-based usage.

DG SPEAKING AT GEOSPATIAL WORLD FORUM IN ROTTERDAM, MAY 13 - MAY 16,2024:

- DG ISpA attended the Geospatial World Forum in Rotterdam.
- The summit was organized by Geospatial World at Rotterdam Holland World Trade Centre.
- The session was titled "Enhancing Maritime Domain Awareness with Geo Intelligence." DG ISpA, served as a moderator and panellist.
- The event was part of the Geospatial World India Europe Space & Geospatial Business Summit, Rotterdam, Amsterdam.





ISPA INDUSTRY TOUR, BANGALORE MAY 20 - MAY 23, 2024:

- Team ISpA wrapped up a productive week.
- Met with members to discuss the impact of association programs.
- Heard firsthand accounts of how the programs are making a difference in the Indian Space Sector.
- Discussed new programs and activities that need to be introduced.

ISPA ACTIVITIES

EXTERNAL STAKEHOLDER CONSULTATION MEETING FOR GUJARAT SPACETECH POLICY,

MAY 22, 2024:

- The Government of Gujarat contemplated launching the Gujarat SpaceTech Policy to incentivize investors in the ecosystem, develop R&D, build capacity, and improve overall infrastructure.
- A stakeholder-level discussion was invited to gather inputs for formulating and devising an attractive policy to enable the growth of this sector in Gujarat.
- A consultation meeting was scheduled under the chairmanship of the Principal Secretary of the Department of Science & Technology, Government of Gujarat.



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IAFI'S INDIA SPACE POLICY CONFERENCE, MAY 27 - MAY 28, 2024:

 Director ISpA, was a speaker at the ITU-APT Indian Space Policy Conference and presented ISpA views on the session titled "Role of Satellite Networks for Providing Ubiquitous Connectivity Including Satellite Direct to Device (D2D) Connectivity."



ISPA IN NEWS

Explore the Dynamics of India's DefSpace Sector: Lt Gen Anil Bhatt (Retd), DG, ISpA

3 May 2024 DataQuest Indian space startup Agnikul launches country's second privately built rocket

30 May 2024 Reuters

Agnikul successfully launches SOrTeD, achieves many firsts

30 May 2024 The Times of India IIT-Madras incubated AgniKul launches world's first 3D printed, semicryogenic rocket engine

31 May 2024 The Times of India







RATIONAL NEWS







NATIONAL NEWS

Space companies receive funding under India-Australia programme

1 May 2024 Deccan Herald

SC registrar refuses to accept govt's plea for allowing administrative allocation of spectrum

1 May 2024 The Economic Times

NewSpace India to handle all IRS satellite data and products

1 May 2024 The Economic Times

Govt to go ahead with administrative allocation for satellite broadband

1 May 2024 Mint

Space science roadmap formulation meeting held in Bengaluru

2 May 2024 The Hindu

India's future will be space industry, drones, semiconductors: EAM Jaishankar

2 May 2024 ETGovernment

2G scam case: D Subbarao's new book calls into question CAG's version of 'presumptive loss'

2 May 2024 ET Telecom

Clearing the orbiting dead: How ISRO is pushing the Swachh Space programme

2 May 2024 Firstpost

Access to international orbital slots opens new doors for Indian satcom companies

6 May 2024 The Economic Times

FDI easing in space sector to lure foreign players, boost high-tech jobs 5 May 2024

Business Standard

Only Indian entities can disseminate satellite data, say new IN-SPACe rules

5 May 2024 The Hindu BusinessLine

IN-SPACe releases guidelines for implementation of Indian Space Policy 2023

4 May 2024 The Hindu

Asian Development Bank open to funding space sector in India: VP Bhargav Dasgupta

3 May 2024 ET Telecom

Telcos submit bids to participate in spectrum auctions

7 May 2024 The Financial Express

Integrated drop test for Gaganyaan soon

7 May 2024 The Times of India

Why spectrum allocation, tech policy must not be a matter of courts

7 May 2024 The Indian Express

India to approve private space activity plans in 120 days

6 May 2024 Fortune India

ISRO conducts key ignition test

6 May 2024 The Hindu

Will Elon Musk's Starlink Revolutionize India's Satellite Communication and OTT Industry?

6 May 2024 Deccan Chronicle

Spectrum allocation for satcom delayed, reference to Trai after elections

7 May 2024 Mint Next-gen satellites will paint a clearer picture of a changing Earth

7 May 2024 Space.com

Epochal decade. Sky is the limit for India's space technology story

8 May 20^o24 The Hindu BusinessLine

National Space Council will explore military space and intelligence roles and responsibilities

8 May 2024 Space News

DoT set to seek clarity, security clearance from NSCS on satcom

10 May 2024 The Economic Times

Logo design contest to mark National Space Day

10 May 2024 Deccan Herald

Satcom in India has two puzzles to solve before taking off

9 May 2024 The Economic Times

Indian space industry offers tremendous opportunity for private players, says ISRO Chief

12 May 2024 Hindustan Times

Another feather in ISRO's cap! What is 3-D printed liquid rocket engine that India's space agency successfully tested

11 May 2024 ET Now

NSIL seeks private partners to build its heavy lift rocket LVM3

11 May 2024 The Indian Express

Indian Army all set to get first Hermes-900 Starliner drones to boost surveillance capabilities

11 May 2024 Deccan Herald

NATIONAL NEWS

India's **Growing Space** Sector **Presses for More Tax Incentives**

10 May 2024 Bloomberg Tax

NISAR satellite will be able to monitor tectonic movements accurately, says ISRO chief

15 May 2024 The Hindu

Meet Captain Gopi Thotakura, Indian

15 May 2024 India Ťoday

pilot set to go to space as tourist

20 May 2024 The Economic Times

Space regulator IN-SPACe conferred with global leadership award

15 May 2024 The Print

Indian satellites suffered no outages during recent high-intensity solar storms, says ISRO

15 May 2024 The Indian Express

Space data fuels India's farming innovation drive

17 May 2024 ET Satcom

Mars mission strategy unveiled: Helicopter, robotic car, and crane to navigate red planet

16 May 2024 The Times of India

Amity University Bengaluru hosts joint workshop with ISRO on space science and technology

16 May 2024 The Print

Inside story: How Isro saved Indian satellites from strongest solar storm

16 May 2024 India Today

FDI could be eased further under new govt: **DPIIT** secy

19 May 2024 The Times of India "ISRO aims to explore human space flight activities, build space stations": **Chairman Somnath**

May 19 2024 The Economic Times

Mangalyaan-2 unveiled: India poised to become third nation to land on Mars

17 May 2024 Business Standard

DoT aims to notify rules under **Telecom Act soon**

India's AstroSat makes unusual discovery around black hole in deep space

20 May 2024 India Today

New guidelines could hamper India's promising space industry

24 May 2024 Deccan Herald

Devas-Antrix failed satellite deal: Bengaluru startup investors move US Supreme Court against order favouring ISRO's commercial arm

27 May 2024 The Indian Express

Isro's journey: From discovering water on the moon to fostering India's space tech startups

27 May 2024 Forbes India

EXCLUSIVE: Capt. Gopichand reveals his ambitions for India's space sector and how he hopes to help

29 May 2024 Firstpost

India Accelerator's new vertical to focus on robotics, unmanned systems and space

28 May 2024 The Hindu BusinessLine

India Accelerator's new vertical to focus on robotics, unmanned systems and space

28 May 2024 The Hindu BusinessLine Thapar Institute to submit proposal to Isro to launch its first student satellite 'Thaparsat'

28 May 2024 The Economic Times

12 from Karnataka take part in ISRO's YUVIKA programme

30 may 2024 The Hindu

Astronaut lands at alma mater, shares his space odyssey

30 May 2024 The Times of India

Atmospheric data collection tool Radio-Sonde launched from ISRO centre at Samba

29 May 2024 Siasat.com

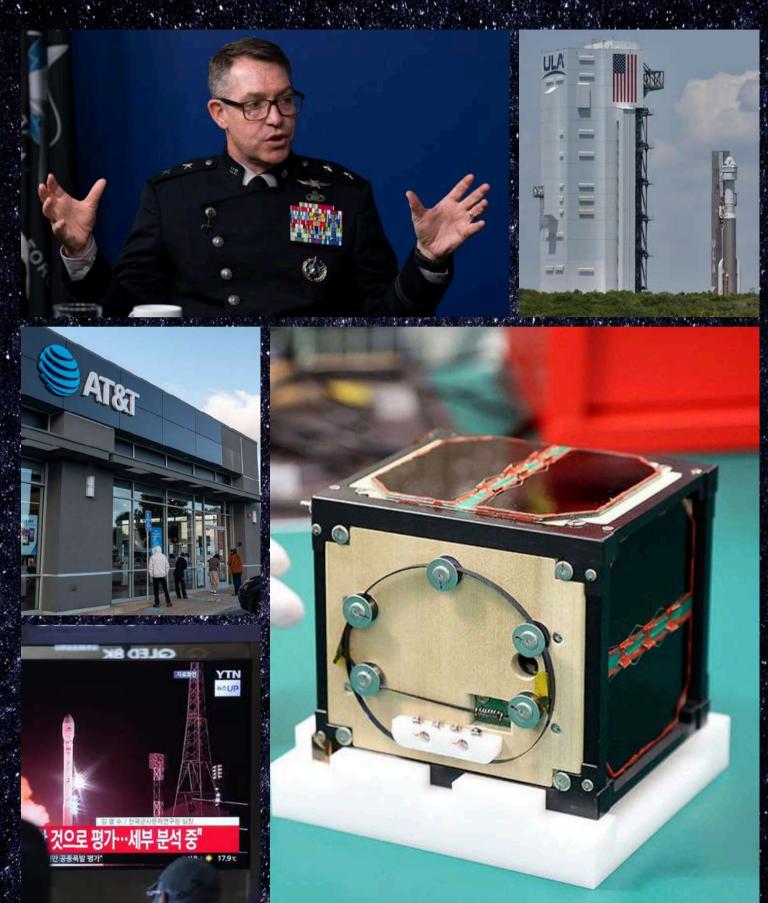
Now India can hope to have its own SpaceX and Blue Origin

30 May 2024 The Economic Times

Space sector globally is drawing interest from private investors, says IN-SPACe's Pawan Goenka

30 May 2024 CNBCTV18

INTERNATIONAL NEWS



INTERNATIONAL NEWS

USA

SpaceX unveils cosmic tourism: Here's how to book your ticket to space

1 May 2024 Business Standard

Boeing set to launch astronauts to International Space Station in historic mission

5 May 2024 The Times of India

Sunita Williams' third space flight aborted hours before liftoff

7 May 2024 India Today

Crewed flight of Boeing Starliner space capsule pushed back at least 10 more days

8 May 2024 Hindustan Times

Space X's Falcon 9 launches 23 Starlink satellites into space; marks 47th orbital mission

9 May 2024 The Times of India

Nasa postpones astronaut Sunita Williams Starliner flight to space

9 May 2024 India Today

Starlink soars: SpaceX's satellite internet surprises analysts with \$6.6 billion revenue projection

9 May 2024 Space News

Musk's Starlink satellites disrupted by major solar storm

12 May 2024 The Indian Express

Viasat Partners With Loft Orbital for NASA Communications Services Project

10 May 2024 Via Satellite

AT&T Strikes Space Broadband Deal in Challenge to Musk's SpaceX

16 May 2024 Bloomberg

Blue Origin to resume tourism flights to space after near two-year pause

15 May 2024 India Today Elon Musk to launch Starlink satellite in Indonesia on Sunday

16 May 2024 WION

'NASA-type' NSA: Why India's next National Security Adviser should be a space scientist

17 May 2024 The Economic Times

Tesla 'silent'; yet to communicate its India plans: Official

17 May 2024 The Economic Times

Boeing Starliner's launch aborted again, Sunita Williams' third space mission deferred to May 25

20 May 2024 The Indian Express

SpaceX launching next-gen US spy satellites early May 22

21 May 2024 Space.com

US To Send Indian Astronaut To International Space Station By Year-End: Envoy

23 May 2024 NDTV

SpaceX launches satellites for new US spy constellation

23 May 2024 The Times of India

NASA to train Indian astronauts for joint mission to International Space Station

27 May 2024 Business Today

America is getting ready for space warfare

27 May 2024 Mint

Elon Musk Dominates Space Launch. Rivals Are Calling Foul.

28 May 2024 The New York Times

SpaceX Launches European-Japanese Climate Research Satellite | ESA & JAXA Collaborative Mission

29 May 2024 Moneycontrol

INTERNATIONAL NEWS

CHINA

Chinese astronauts return to earth after six months in space

1 May 2024 The Economic Times

China is Having a 'Strategic Breakout' in Space Too, USSF Intel Boss Warns

2 May 2024 airandspaceforces

Chinese lunar probe set for take-off with Pakistani miniature satellite on board. Details here

2 May 2024

China launches moon probe as space race with US

3 May 2024 CNN China's satellites are improving rapidly. Its army will benefit

7 May 2024 Mint

China: CAS Space to launch space tourism flights with panoramic windows by 2027 for this ticket price $17~{\rm May}~2024$

Hindustan Times

Pak to send second satellite with China's help for digital transformation

21 May 2024 The Times of India

OTHER NATIONS

New Russian space weapon raises alarm in US

7 May 2024 The Times of India

nnual Meridian Forum for Space Diplomacy celebrates the UAE's achievements in the field of space

8 May 2024 ANI News

Russia accuses U.S. of seeking to weaponise outer space

22 May 2024 The Hindu

North Korea's bid to put 2nd spy satellite in orbit fails as rocket explodes

28 May 2024 India Today Japan to launch first eco-friendly satellite made of wood

29 May 2024 The Telegraph

Japanese researchers build the world's first wooden satellite

30 May 2024 Forbes India

South Korea Launches New Space Agency, Doubles Budget

31 May 2024 Geospatial World

JOB OPENINGS























GOVERNMENT POLICIES/ CONSULTATIONS/ RECCOMENDATIONS/ ANNOUNCEMENTS

- Consultation Paper on Inputs for formulation of National Broadcasting Policy-2024
- https://www.trai.gov.in/release-publication/consultation
- Consultation Paper on Auction of Frequency Spectrum in 37-37.5 GHz, 37.5-40 GHz, and 42.5-43.5 GHz bands Identified for IMT
- https://www.trai.gov.in/release-publication/consultation

UPCOMING EVENTS

Dates	Events	Venue
6th June	IN-SPACe Industry Day 4.0	Ahmedabad
June last week	ISpA Members Meet	New Delhi
23-24th July	ISpA 3rd Annual Gen Meeting	USI, New Delhi
7-10th October	GIFAS Delegation Visit	Delhi-Hyderaba- Banglore
14-18th October	International Astronomical Conference	Milan
15-19th October	IMC 2024	New Delhi
5-7th November	ISpA 3rd Indian Space Conclave	New Delhi

CALL FOR NEW MEMBERSHIP

ISpA is an apex non-profit industry body, set up exclusively for the successful collaborative development of the Private Space Industry in India.

- Participate in policy advocacy
- Networking and publicity opportunities
- Plethora of opportunities to advance your Business in Space Sector
- Multisectoral Partnerships
- Engagement with industry and defence experts via diverse platforms
- Access to industry-related information via reports and newsletters
- Be a part of ISpA Committees to bring expertise & interests and to guarantee the holistic development of the space sector.

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