February 2024

NEWSLETTER Indian Space Association



Bhumandal Se Brahmaand Tak

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

- Budget Of Viksit Bharat Before Polls | Tax Reduction, Freebies For Aam Aadmi?
- 100% FDI In Space Sector | India Space Hub Gamechanger?
- 2024 Interim Budget | Space gets nominal hike, likely boost for spaceflight start-ups
- ISRO set to disrupt the global space business; official decodes gameplan
- Space Frontiers: India Has An Ambitious Blueprint For Its New Security Dimension
- Exploring Mars with a drone! ISRO to send a rotocraft to explore the red planet's atmosphere
- Tamil Nadu Announces New Space Industrial and Propellant Park to Boost Space Technology
- Burden of power: On India's astronauts and the Indian space policy
- Meet 4 astronauts selected for India's space mission 'Gaganyaan'
- More women should pursue careers in space research: Indian-American scientist Swati Mohan
- Japan's Moon lander achieves successful soft landing, resumes operations
- Moon landing: US clinches first touchdown in 50 years

Members Bullein

MEMBERS BULLETIN

- Ananth Technologies Limited (ATL) played a crucial role in the successful launch of GSLV F14 by ISRO, placing INSAT-3DS satellite into Geosynchronous orbit, enhancing India's space exploration efforts.
- ATL's contributions included manufacturing 55 modules for GSLV F14 and supplying essential components for INSAT-3DS, bolstering meteorological observations, weather forecasting, and disaster warning capabilities.
- OneWeb India, affiliated with Bharti Group, plans to offer satellite broadband services in remote areas, with discussions ongoing with key stakeholders like defense forces and ministries.
- Eutelsat faced an anomaly with its aging EUTELSAT 113 West A satellite, prompting cessation of operations.
- OneWeb India received approval for its satellite broadband service in India and is set to showcase its uses.
- Eutelsat OneWeb and Telstra are deploying LEO satellite mobile backhaul at over 300 remote base stations in Australia for improved connectivity.
- Eutelsat expects a slowdown in its Video DTH decline and extended its partnership with Universal Satcom to leverage maritime services in MENA and globally.



DIGAMTARA

 Digantara, a Space Situational Awareness (SSA) startup based in Bengaluru, announces closure of an extended \$2 million financing round, with participation from investors such as Aditya Birla Ventures and the Small Industries Development Bank of India (SIDBI), highlighting their commitment to enabling safe and sustainable space operations and contributing to India's vision of global leadership in space innovation.



- Bengaluru's Pixxel partners with the Indian Institute of Astrophysics to utilize its Laboratory for Space Sciences for testing hyperspectral imagers and leveraging expertise for satellite projects.Pixxel, backed by Google, plans to launch six satellites
 - by June as part of a constellation of 18 satellites, aiming for large-scale satellite projects outside of ISRO's domain.

SKYROOT

• Hyderabad's Skyroot Aerospace launched the Kalpana Fellowship, India's first fellowship for women in the space sector, named after Kalpana Chawla. The year-long program offers monthly stipends ranging from ₹30,000 ₹80,000, based to on educational qualifications, aiming to boost women's participation in space.



INTERIM BUDGET 2024

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INTERIM BUDGET 2024

Bridging the Gap: Unveiling India's Interim Budget 2024

Presented in February 2024, India's Interim Budget serves as a temporary financial roadmap until the formation of the new government. Here's a breakdown of key highlights, with a specific focus on space and deep tech:

Fiscal Continuity and Growth Focus:

- Maintaining Tax Rates: The budget avoids introducing changes to direct and indirect taxes, including import duties. This ensures stability for businesses and individuals during the interim period.
- Prioritizing Capital Expenditure: An 11.1% increase in capital expenditure outlay signifies the government's commitment to infrastructure development and creating long-term growth.
- Economic Growth Projection: The budget projects a real GDP growth of 7.3% for FY 2023-24, aligning with the revised estimate by the Reserve Bank of India (RBI).

Steering Towards Innovation:

- No Changes for Startups: The budget extends existing tax benefits for startups and investments by one year. This provides crucial support for young companies driving innovation.
- Focus on Deep Tech: While specific allocations weren't announced, the budget speech likely emphasized the government's commitment to fostering deep tech (technologies like artificial intelligence, quantum computing, and robotics). This could pave the way for future initiatives in these areas.

Space: Aiming for the Stars

- While detailed allocations for the space program weren't revealed, statements from the Finance Minister suggest continued support for India's ambitious space endeavors. This could include missions like Gaganyaan (India's first human spaceflight program) and Chandrayaan-3 (lunar exploration mission).
- Potential for Public-Private Partnerships (PPP): The budget might encourage private sector participation in the space industry, fostering innovation and cost-effectiveness in future space exploration initiatives.

UPDATES

Foreign Direct Investment (FDI) policy on Space Sector

FOREIGN DIRECT INVESTMENT (FDI) POLICY ON SPACE SECTOR

FDI in India: February 2024 Roundup

February 2024 saw significant developments in India's Foreign Direct Investment (FDI) landscape. Here's a quick breakdown:

Policy Push:

- "FDI-First Develop India": Finance Minister Nirmala Sitharaman, in the Interim Budget speech, emphasized the importance of FDI, rebranding it as "First Develop India." She highlighted the substantial growth in FDI inflows under the current government, nearly doubling from the previous decade.
- Space Sector Opens Up: The Union Cabinet approved a major reform, allowing up to 100% FDI in specific segments of the space sector. This move aims to attract foreign investment, enhance technological capabilities, and boost India's space ambitions.
- EU-India Stakeholder Event: The European Union and India co-hosted an online meeting to discuss recent developments in FDI screening mechanisms. This collaboration signifies efforts towards smoother cross-border investment processes.

Key Takeaways:

- The Indian government is actively promoting FDI as a tool for economic growth.
- The space sector reforms indicate a shift towards greater openness and collaboration in a previously restricted domain.
- The EU-India dialogue reflects a commitment to creating a more transparent and efficient FDI environment.

Looking Ahead:

While specific figures for February's FDI inflows are likely to be released later, the policy changes and discussions point towards a continued focus on attracting foreign investment. Whether these efforts translate into a tangible increase in FDI remains to be seen, but February 2024 certainly set the stage for an exciting future.

UPDATES



ISPA ACTIVITIES

Meeting with MEA

New Delhi, February 06, 2024: Team ISpA met with MEA [chaired by JS (D&ISA)] and Wassenaar Head Ambassador Gyorgy Molnar for constructive exchange on the Wassenaar Agreement at South Block. ISpA emphasized responsible commercial conduct, sharing of compliance best practices & strategic policymaking as vital for the Indian Private Space Industry.

INDUS-X SPACE Workshop

New Delhi, February 19–20, 2024: ISpA co-hosted the INDUS-X Space workshop with Penn State University and Indian Institute of Science, Bengaluru aiming at fostering Indo-US space collaboration requires identifying synergies and priorities, leveraging academia, government, and commercial sectors. Challenges include technology transfer, policy alignment, and cultural differences.

Days 1 & 2 of #INDUSXSpace workshop sessions discussed futuristic and emerging defense space technologies & bilateral cooperation prospects.

National Workshop on WRC 23-27

Bengaluru, February 21, 2024: DG-ISpA Lt Gen AK Bhatt (Retd) attended the National workshop on Learnings from WRC-23 and the way forward Planning for WRC-27 and forthcoming ITU and APT meetings.

Space Startups meeting

New Delhi, February 28, 2024: ISpA Director Wg Cdr Satyam Kushwaha along with member companies attended a meeting on space startups organized by Chairmanship of Secretary-Shri Manoj Ahuja, Agriculture at Krishi Bhawan on the Kirhsi-Decision Support System.

ISPA ACTIVITIES













Budget Of Viksit Bharat Before Polls | Tax Reduction, Freebies For Aam Aadmi? 1 Feb 2024

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ThePrint

Rs 1 lakh corpus to help start-ups in early stages: Jitendra Singh 1 Feb 2024

Indian private space sector: Navigating growth and challenges in era of reform 2 Feb 2024 ET Satcom

Will the increase in fund allocation help the DoS in dealing with funding challenges? 6 Feb 2024 The Week

Govt eases FDI norms in space, allows 100% foreign investment for making sat components 22 Feb 2023 The Times of India

Easing of FDI norms: Space industry says it will pave way for growth, innovation

22 Feb 2024 The Economic Times

FDI liberalisation in satellite-related activities will pave way for galaxy of opportunities, says PM Modi 23 Feb 2024 The Hind BusinessLine

Govt staggers FDI in space sector to align with military requirement: Patil 24 Feb 2024

The Hindu BusinessLine

Will the increase in fund allocation help the DoS in dealing with funding challenges? 6 Feb 2024

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100% FDI In Space Sector | India Space Hub Gamechanger?

23 Feb 2024 NewsX





















ISPA IN NEWS



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DPIIT stand may pave way for Starlink's India satcom entry 8 Feb 2024 ET Telecom

ETSatcom Interviews: NSIL Chairman D Radhakrishnan on India's growth in global space economy, GSAT-20 satellite 1 Feb 2024 ET Satcom

India's space station by 2035: Isro chief 4 Feb 2024 The Times of India

Telecom Diary: Satcom to complement terrestrial mobile networks in big way 3 Feb 2024 ET Satcom

Green propulsion system developed under DRDO Technology Development Fund demonstrates in-orbit functionality 1 Feb 2024 The Hindu

History set to be made: India's first pvt launchpad readies for takeoff 5 Feb 2024 **Business Standard**

India's first high hypersonic test facility at IIT Kanpur to aid space and defence research 5 Feb 2024 Deccan Herald

Govt staggers FDI in space sector to align with military requirement: Patil 24 Feb 2024 The Hindu BusinessLine

KUFOS partners with ISRO for NISAR phase Il research programme 5 Dec 2024 The Hindu BusinessLine

Out of the world: Budding scientists explore Himachal's first space lab 7 Feb 2024 Tribune India

Frontline On Air | Shooting for the stars with feet of clay - Frontline 6 Feb 2024 Frontline Magazine



NATIONAL NEWS





Space courses at more IITs soon, IN-SPACe sets up national panel 8 Feb 2024 The Times of India

AWS launches 1st space tech accelerator programme in India 8 Feb 2024 **ET Satcom** CDS Chief Chauhan asks industry to help boost defence space 8 Feb 2024 The Times of India

CDS calls on industry to work on counterspace capabilities as deterrent for safeguarding country's space assets 7 Feb 2024 The Hindu





Space Paramount Tactical War for **Decision-Making** 7 Feb 2024 Geospatial World

to Antariksh Station Bharatiya be assembled in multiple phases by Isro 7 Feb 2024 India Today

ISRO to launch INSAT-3DS meteorological satellite on February 17 9 Feb 2024 The Hindu BusinessLine

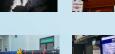
Space regulator IN-SPACe releases plans for 30 launches over next 14 months 8 Feb 2024 The Hindu BusinessLine

Ajit Doval, Greek NSA explore collaboration in cybersecurity, space, and defence 8 Feb 2024 Hindustan Times



ISRO set to disrupt the global space business; official decodes gameplan 11 Feb 2024 The Economic Times



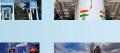




















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XDLINX Labs join forces with Almagest Space Corporation to revolutionize space communication for ultra-speed broadband via E-band technology 15 Feb 2024

India's first spy satellite made by local

Next generation rocket project report ready:

private player set for SpaceX liftoff

Business Standard

The Economic Times

ISRO Chairman

19 Feb 2024

18 Feb 2024

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India's ambitious plans on space station on track, says Chandrayaan-3 project director 11 Feb 2024 The Hindu

Airbus eyes partnerships in Indian defence and space 10 Feb 2024 The Economic Times

How ISRO's InSAT-3DS, to be launched on Saturday, will provide unique weather insights 12 Feb 2024 The Week

Somnath S. on 'Transformative Leadership in ISRO' 12 Feb 2024 The Hindu

DoT working on norms for satcom spectrum allocation 14 Feb 2024 ET Telecom

CWhy India wants to develop high-altitude pseudo-satellite vehicles, powered by the Sun 14 Feb 2024 The Indian Express

Isro conducting final checks ahead of INSAT-3DS launch aboard GSLV-F14 13 Feb 2024 India Today

Isro's black hole mission XPoSat begins active observation, looks at Crab pulsar 13 Feb 2024 India Today

New satellite to shoot better images of eart 15 Feb 2024 The Times of India

Budget session: Launch of space policy in a month of budget approval, says DST secy 16 Feb 2024 The Indian Express

IN-SPACe facilitates the transfer of six ISRO technology companies 15 Feb 2024 DT Next







NASA, Japan to launch world's 1st wooden satellite soon 18 Feb 2024 The Times of India





ISRO successfully launches INSAT-3DS meteorological satellite 17 Feb 2024 The Hindu

Isro will send a UAV to fly on Mars with next Mangalyaan mission 19 Feb 2024 India Today

> 21 Feb 2024 The Financial Express











20 Feb 2024 IndiaTimes From Mangalyaan-2 to Shukrayaan-1, here's what Isro is planning in 2024

20 Feb 2024 **Business Standard**



Exploring Mars with a drone! ISRO to send a rotocraft to explore the red planet's atmosphere 20 Feb 2024 The Financial Express

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Tamil Nadu Announces Space New Industrial and Propellant Park to Boost Space Technology 20 Feb 2024 The Weather Channel



India's first spy satellite made by local private player set for SpaceX liftoff 19 Feb 2024 The Economic Times

Space stocks jump up to 7% after government approves 100% FDI 22 Feb 2024 Mint

Gaganyaan Mission Update: ISRO successfully tests engine, set to take Indian astronauts to space, gives "human rating" 21 Feb 2024 Mint

I-Spy: Elon Musk's SpaceX to launch Indian spy satellite RISAT developed by TATA Group 21 Feb 2024 Firstpost

Next stage 21 Feb 2024 **Business Standard**

Set for a lift-off 23 Feb 2024 The Financial Express

India's weather satellite INSAT-3DS enters orbit, all engine firings complete 22 Feb 2024 India Today



PM Modi to lay foundation for ISRO's second spaceport on February 28 22 Feb 2024 Deccan Herald

Gaganyaan Mission: Isro successfully tests engine that will take Indians to space 21 Feb 2024 India Today

A new success: On collaboration in space programmes 26 Feb 2024 The Hindu

Inquisitive students make the most of Isro's 'Space on Wheels' 26 Feb 2024 The Times of India

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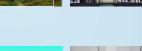








Burden of power: On India's astronauts and the Indian space policy 28 Feb 2024 The Hindu





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How 100% FDI via automatic route will help the space technology sector? 23 Feb 2024 The Economic Times

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Gaganyaan: PM to reveal names of first Indian astronauts selected to go to space 27 Feb 2024 India Today

Nair, Prathap, Krishnan & Chauhan listed for **Gaganyaan space mission** 27 Feb 2024 The Times of India

NIISc-incubated space startup raises \$800k seed fundina 27 Feb 2024 The Times of India

SWon't be a low-cost exercise: ISRO chief

on sending astronaut on moon by 2040

U.S.-India joint satellite will be launched from A.P. soon, says U.S. Consul General 23 Feb 2024 The Hindu

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Al has transformative potential in the field of space: ISRO chairman 25 Feb 2024 The Statesman



Meet 4 astronauts selected for India's space mission 'Gaganyaan' 27 Feb 2024 Mint

2035: PM Modi





To infinity and beyond! How India is creating a space for itself in the Space Industry 28 Feb 2024

Is 2024 the year India's space sector will

India's first spy satellite made by local

private player set for SpaceX liftoff

Watch | PM Modi inaugurates 3 major space projects of ISRO; India to have its own space station by 2035 27 Feb 2024 Mint

Industrial IoT startup Proxgy unveils satellite-based Lockator for wagon and logistics firms 27 Feb 2024 The Hindu

Rohini Sounding Rocket to be launched from **Kulasekarapattinam** 27 Feb 2024 The Hindu

Forging Space Partnerships: Indian Private Sector Engages with LAC Companies for **Mutual Growth** 27 Feb 2024 The Financial Express





Kulasekarapattinam spaceport will launch small satellites within two years: ISRO chairman 28 Feb 2024

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19 Feb 2024

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The Economic Times

More women should pursue careers in space research: Indian-American scientist Swati Mohan 29 Feb 2024 The Indian Express

India will have its own space station by 27 Feb 2024 DD News









Nasa's PACE ocean-monitoring satellite all set to be launched on Tuesday 4 Feb 2024 The Times of India

licensed satellite airwaves to help fill 'black

SpaceX to bring down 100 old Starlink

satellites to keep space 'safe, sustainable'



US Military's "Chicken Neck"! Why Russia's New Space Weapon Poses Big Threat To American Might 19 Feb 2024 EurAsian Times

Luxury space-tourism company shows off its capsule designed to float to the edge of space with a massive ballo 26 Feb 2024 Business Insider India

SpaceX launches 24 Starlink satellites from Florida 26 Feb 2024 Space.com

"Thrilling Step Forward In New Era Of

Space": Biden On US Lunar Landing

Al spurs space sector innovation 8 Feb 2024 SpaceNews

spots': Viasat CEO

7 Feb 2024 ET Satcom

<u>15 Feb 2024</u>

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Satellite operators join forces to chase direct-to-smartphone opportunity 9 Feb 2024 Space News

Viasat, Ligado Networks, Omnispace, others form association to develop directto-device ecosystem 9 Feb 2024 ET Satcom

US and Russian satellites could collide in **space today, Nasa on guard** 28 Feb 2024 India Today

INTERNATIONAL NEWS







Via Satellite Moon landing puts new space race startups in spotlight

26 Feb 2024 The Economic Times

23 Feb 20<u>24</u>



Jio Airfiber watch out! Elon Musk posts from mobile phone directly connected to SpaceX <u>satellite internet</u> 26 Feb 2024 India Today

Augmentation of terrestrial spectrum,









China launches 20 satellites on separate inland and sea rocket launches 4 Feb 2024 SpaceNews

China to launch lunar navigation and communications test satellites 7 Feb 2024 SpaceNews

China's first LEO satellite constellation close to lift-off 13 Feb 2024 Light Reading

How a Chinese rocket failure boosted Elon Musk's SpaceX in Indonesia 20 Feb 2024 Republic World

China Mobile launches world's first Test 6G Satellite : What makes this important 21 Feb 2024 The Times of India

China launches powerful rocket with classified communication satellite 25 Feb 2024 India TV













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Watch this space: Japan's moon sniper nearly dies as lunar surface gets back in focus || 5 Feb 2024 The Indian Express



Japan launches debris removal spacecraft to tackle space junk || 19 Feb 2024 WION

Crash imminent! Europe's ERS-2 satellite

captured tumbling out of orbit || 19 Feb 2024

India Today

European satellite to crash on Earth after falling through space for 13 years || 6 Feb 2024 India Today

Ohsumi, Japan's first successful satellite || 11 Feb 2024 The Hindu



Rakuten Mobile Plans to Provide Satelliteto-Mobile Service in Japan || 22 Feb 2024 Telecom Talk

Starlink satellites approved for use in Israel and Gaza || 15 Feb 2024 The Times of India



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Unlocking the Mysteries of Space: UK Space Agency Funds Global Projects || 14 Feb 2024 The Financial Express



Argentina authorizes Starlink, rival Amazon Kuiper || 27 Feb 2024 ET Satcom

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JOB OPENINGS FROM OUR MEMBERS



GOVERNMENT POLICIES / CONSULTATIONS / **RECOMMENDATIONS /** ANNOUNCEMENTS

 Consultation Paper on Connectivity to Access Service VNOs From More Than one NSO • <u>https://www.trai.gov.in/release_publication/consultation</u>

• Consultation Paper on Assignment of Additional Spectrum to Indian Railways for its Safety and Security Applications

- https://www.trai.gov.in/release-publication/consultation



UPCOMING EVENTS

18-20 April 2024	2nd Indian DefSpace Symposium	New Delhi
27-28 June	SIA ISC 24	New Delhi
13-21 July 2024	45th COSPAR Scientific Assembly - COSPAR 2024	South Korea
06-15 August 2024	XXXII IAU General Assembly	South Africa
25-27 September 2024	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.