Newsletter

INDIAN SPACE ASSOCIATION
ISpA
Bhumandal Se Brahmaand Tak

BLOCK YOUR CALENDAR

INDIAN SPACE CONCLAVE

2023

INDIAN SPACE CONCLAVE 2023
10-12TH OCTOBER 2023
NEW DELHI

CALL FOR MEDIA AND SUPPORTING PARTNER

May 2023 Edition

ISpA Newsletter catalogues all endeavours undertaken by ISpA in the direction of propelling India's Space Sector forward.

HIGHLIGHTS OF THE MONTH

- ISpA Media Interaction on 'Assignment of Spectrum for Space-based Communication Services'
- iDEX signed 250th Contract and 1st Under Mission DefSpace
- Pixxel Space has secured $36M in Series B funding to Advance Hyperspectral Satellite Constellation and Data Platform.
- GSLV-F12/NVS-01 mission accomplished successfully, deployed NVS-01 navigation satellite, first of the second-generation satellites envisaged for the NavIC services.
- Elena Geo Systems has launched the India's first NavIC-based hand-held navigation device.
- OneWeb has commenced building ground stations.
- GalaxEye Space selected as member of Seraphim Space's accelerator program.
- Advent International, alongside minority investor BCI, have completed their acquisition of Maxar.
- Viasat completes acquisition of Inmarsat.
- Suhora Technologies won Geospatial World Startup Catalyst Initiative.

OneWeb has commenced the building of a hyperscale satellite ground station installation at the Arctic Space Technologies' Space Center in Piteå, Sweden

OneWeb and NOW Corporation sign MoU for Combined connectivity to provide clean, secure, high-speed, low-latency broadband connectivity to the Philippines.
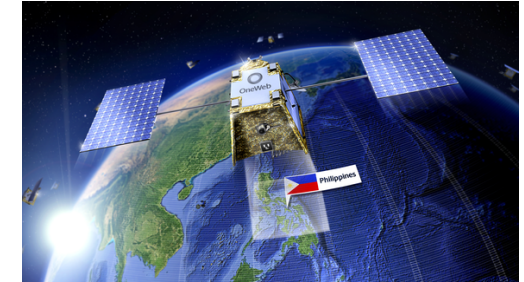
OneWeb, with strategic partner GRC, initiates LEO programme for Iceland government, using Dual Parabolic User Terminals in Reykjavik, to demonstrate secure and resilient connectivity across the country

OneWeb announces finalists in its Innovation Challenge 2022 "Connectivity and beyond!". Seven innovators have been successful in the Industrial Partners award category and will now enter a co-engineering phase together with OneWeb to further develop their ideas.
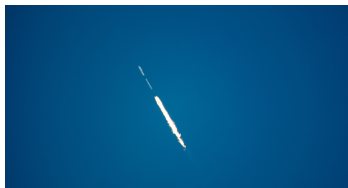

OneWeb confirms successful deployment of 16 satellites including next-generation JoeySat.

Distribution Partnership Agreement (DPA) with iSAT Africa to bring high-speed, low-latency broadband connectivity across Africa.

Viasat completes acquisition of Inmarsat. The closing of the Inmarsat acquisition enables the companies to bring together spectrum, satellite, and terrestrial assets, including 19 satellites in space spanning Ka-, L- and S- bands.

Members Bulletin

Pixxel has raised $36 Million in Series B funding!
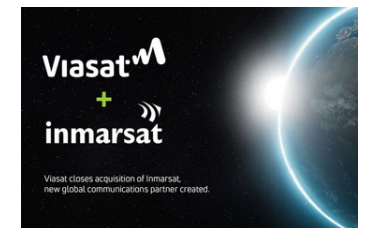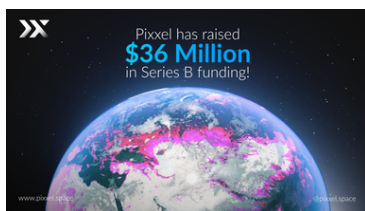
Pixxel Space has secured $36M in Series B funding from new investors such as Google, along with existing investors Radical Ventures, Lightspeed, Blume Ventures, growX, Sparta and Athera to Advance Hyperspectral Satellite Constellation and Data Platform.

Introducing aurora
A geospatial analysis platform
Intuitive no-code workflow
Simplified insights from satellite imagery
Access to Pixxel's dynamic repository of data models
Join our alpha tester community today to unlock your incentives.

Pixxel's geospatial analysis platform Aurora is live to test. Designed as a full-service toolkit, this easy-to-use analytics dashboard will help businesses simplify insights from satellite imagery. To know more fill in the form: https://bit.ly/423QPSK
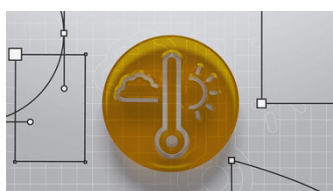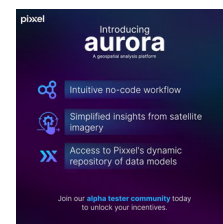
Pixxel was featured in the list of organisations actively working to address the climate crisis as part of FastCompany's World Changing Ideas Awards

Elena Geo Systems
Elena's NavIC based Atomic Clock
The clock comes in different sizes and configurations to cater to different applications. Some of them are listed below:-
• Use in Railway Platforms, Railway Control Centers and synchronization of signals in railways.
• Use in Airports for time coordination.
• Synchronisation of Telephone networks.
• In Mobile Telephony, especially in 4G and 5G networks.
• Electricity networks.
• Coordinating movement in ports and of the ships

The Elena NavIC Clock is an indigenously developed product of Elena Geo Systems to give high precision and stable time reference to the users. This is built around Elena's ELNMC1A module. The time reference is given out in IST format.
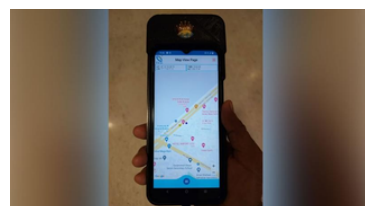
Elena Geo Systems has launched the India's first NavIC-based hand-held navigation device. The navigation device, which can provide precise directions in tasks related to infrastructure projects involving railway, land survey, telecoms and hydrocarbon exploration.

GalaxEye Space selected as member of British investment firm Seraphim Space's eleventh bi-annual accelerator program.

GALAXEYE

STARTUP CATALYST

Suhora Technologies is one of the winners of Geospatial World Startup Catalyst Initiative.

Skyroot Aerospace have been awarded as the YOUNG TURK START-UP OF THE YEAR at the CNBCTV18News India Business Leader Awards

INDIA BUSINESS LEADER AWARDS

Intelsat 40e and its NASA payload TEMPO successfully reached its final geostationary orbit above North America.

Members Bulletin

MAXAR's methane emission measurement technology was named to FastCompany's 2023 World Changing Ideas list as honorable mention in the climate category, recognizing sustainable designs, innovative products and bold social initiatives.

U.S. private equity firm Advent International, alongside minority investor BCI, have completed their acquisition of Maxar.
Maxar will remain a U.S.-controlled, owned and operated company.

MAXAR Open Data Response to the Cyclone Mocha
Access Satellite Imagery: https://blog.maxar.com/for-a-better-world/2023/open-data-response-to-cyclone-mocha

MAXAR Open Data Response to the Flooding in DRC
Access Satellite Imagery: https://blog.maxar.com/for-a-better-world/2023/open-data-response-to-the-flooding-in-drc

MAXAR Open Data Response to the Flooding in Italy
Access Satellite Imagery: https://blog.maxar.com/for-a-better-world/2023/open-data-response-to-the-flooding-in-italy

Updates

ISpA position on Spectrum Allocation of Space based Communication Services

ISpA and all our members strongly believe that for the growth of the nascent space industry, spectrum needs to be allocated by Administrative method and frequency such as the 28 GHz band which is globally allocated for space, should continue to be there for SatCom usage.

Administrative allocation provides a level of certainty and predictability that can be beneficial for the satellite communication industry. With auctions, there is always a risk that spectrum will be allocated to entities that are not best suited to provide the required services. This uncertainty can make it difficult for operators to plan and invest in their networks effectively.

Read Complete ISpA Comments: https://www.trai.gov.in/sites/default/files/ISpA_02062023.pdf

ISRO NVS-01 Mission

GSLV-F12/NVS-01 mission is accomplished successfully on Monday, May 29, 2023. This GSLV mission deployed NVS-01 navigation satellite, weighing about 2232 kg, into a Geosynchronous Transfer Orbit.

NVS-01 is the first of the second-generation satellites envisaged for the Navigation with Indian Constellation (NavIC) services. NVS series of satellites will sustain and augment the NavIC with enhanced features. This series incorporates L1 band signals additionally to widen the services. For the first time, an indigenous atomic clock flown in NVS-01.

Upcoming Launch of Chandrayaan-3

Chandrayaan-3 is a follow-on mission to Chandrayaan-2 to demonstrate end-to-end capability in safe landing and roving on the lunar surface. It consists of Lander and Rover configuration. It will be launched by LVM3 from SDSC SHAR, Sriharikota. The propulsion module will carry the lander and rover configuration till 100 km lunar orbit. The propulsion module has Spectro-polarimetry of Habitable Planet Earth (SHAPE) payload to study the spectral and Polari metric measurements of Earth from the lunar orbit.
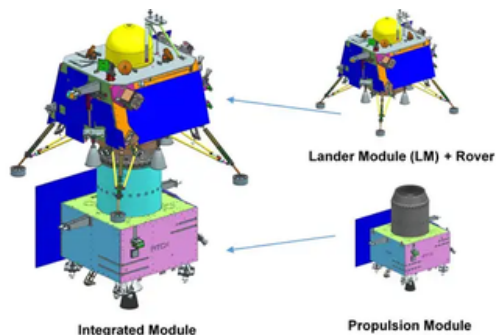
Upcoming Launch of Aditya-L1

Aditya L1 shall be the first space based Indian mission to study the Sun. The spacecraft shall be placed in a halo orbit around the Lagrange point 1 (L1) of the Sun-Earth system, which is about 1.5 million km from the Earth.

The suits of Aditya L1 payloads are expected to provide most crucial informations to understand the problem of coronal heating, coronal mass ejection, pre-flare and flare activities and their characteristics, dynamics of space weather, propagation of particle and fields etc.

ISpA Activities

Media Interaction on 'Assignment of Spectrum for Space-based Communication Services'

ISpA on 24th May conducted a media briefing on the topic of "Assignment of Spectrum for Space-based Communication Services." The briefing aimed to shed light on the crucial aspects and implications of spectrum assignment for satellite-based communication services. The event provided an opportunity to discuss the need for a comprehensive framework that ensures fair competition, promotes innovation, and optimizes spectrum utilization.

To mark National Space Day

U.S. Consulate General Chennai
and
Indian Space Association (ISpA)
in association with
the Indo-Pacific Circle (IPC)

invites you to a webinar on

SPACE UNITES US:
#USINDIATOGETHER ADDRESS GLOBAL CHALLENGES

Friday, May 5, 2023; 3:00 p.m. - 4:30 p.m.

Space Unites Us: #USIndiaTogether Address Global Challenges

On the occasion of National Space Day US Consulate General Chennai and Indian Space Association (ISpA) in association with the Indo-Pacific Circle (IPC) organized a webinar on "SPACE UNITES US: USINDIATOGETHER ADDRESS GLOBAL CHALLENGES".
Director-ISpA talked about the bilateral relations of Indo-US on Space Technology matters and the importance of collaboration between the two countries for the growth of Global Space Economy.

ISpA Members Meet

ISpA organized this year's first Members Meet on 19th May 2023 in online mode. New Members in Startup, Associate and Core categories were welcomed by the whole ISpA Team and Members. All members were briefed about the ISpA activities in the past months-MoUs, Events, Reports, Policy Consultations. Members deliberated upon the New Space Policy and provided their recommendations for the guidelines.

INDIAN SPACE ASSOCIATION
ISpA
Bhumandal Se Brahmaand Tak

ISpA Members Meet

19th May 2023

...or, United Service Institution (USI) Building, Rao Tula Ram Marg (Opp. Signals Enclave), Shankar Vihar, Delhi Cantt, ...

ISpA Activities

RIISE 2023 (Research Innovation & Incubation Showcase of IIIT Delhi)

RIISE 2023 featured panel discussions and research poster presentations on themes such as EV, Communication, Research Monetization etc. The event provided a platform for discussing cutting-edge technologies and research opportunities. The discussion aimed to provide insights into these technologies and their potential impact on society. The poster presentations showcased the latest research findings, technological advancements, and future opportunities.

IIID INDRAPRASTHA INSTITUTE *of* INFORMATION TECHNOLOGY DELHI — RIISE
RESEARCH INNOVATION & INCUBATION SHOWCASE
11th & 12th May, 2023
Government — Academia — Industry

Lecture at Indian Military Academy

DG ISpA was invited to give a talk on "Leadership Challenges in Modern Conflict" at IMA. DG-ISpA talked to 800 Gentleman Cadets as to how Modern Conflict with dimensions of Cyber and Space will bring in a new set of Challenges for future leaders.

National Technology Week 2023

The National Technology Week 2023 opened doors for innovators across India to display their projects, connect with industry experts. It was organized by NITI Aayog from 11-14th May. Many of ISpA Member Startups showcased their company at the exhibition, such as - MapmyIndia, Galaxeye Space, Dhruva Space, Bellatrix Aerospace, Digantara, Pixxel, Skyroot Aerospace, Canopus Space, Manastu Space, Elena Geo Systems and so on.

INDIAN SPACE ASSOCIATION
Bhumandal Se Brahmaand Tak
CELEBRATING
NATIONAL TECHNOLOGY WEEK 2023
11-14TH MAY 2023
FROM SCHOOL TO STARTUP: IGNITING YOUNG MINDS TO INNOVATE

ISpA Activities

Industry Consultation Workshop on 'Integrating GIS Capabilities with UPYOG under the National Urban Digital Mission'

Under NUDM, an open-source platform named Urban Platform for DeliverY of Online Governance (UPYOG) has been developed as a key offering to be utilized by the States and UTs for accessible and citizen-centric urban governance.

NIUA organized the workshop to deliberate on some of the key questions around current industry practices, challenges, and opportunities in this context before defining the approach for integrating GIS capabilities with UPYOG for further strengthening the platform.

Bicentenary Celebrations of Mussoorie

DG ISpA was invited to be the Chief Guest at the Bicentenary Celebrations of Mussoorie. "Honoured to share the stage with the family members of the Founders of Mussoorie Capt Late Frederick Young.", said Gen Bhatt.

Gen Bhatt focussed on the importance of saving Mussoorie from an Ecological Disaster which will require participation of the local populace to ensure that Mussoorie does not go the Joshimath Way'. He also highlighted conservation efforts like 'Jabarkhet Trek' and the 'Benog Sanctuary'."

Space Insurance Update 2023

The event organised by Global Insurance Brokers with its Partners, WTW and Price Forbes, was aimed to bring best insurance and risk management solutions to the Indian Space economy.

Director-ISpA talked and presented the Industry Perspective on the Space Insurance and growth potential of satellite launches and space exploration missions along with the present challenges such as lack of historical data for space missions, space debris risks

Space Insurance Update 2023

presented by

GLOBAL Insurance Brokers Pvt. Ltd.

23rd May 2023 | The Oberoi Bengaluru, India

In Association With

wtw | PRICE FORBES

ISpA Activities

India Defence Conclave - ET Government

India Defence Conclave 2023 focussed on key discussion points as follows:

- Roadmap for R&D in Aerospace and Defence Sector
- State Defence Industrial Corridors for Catalysing India's self-reliance capabilities
- New and Emerging Technologies in Defence Sector
- Indian Startups for Driving innovation that responds to a rapidly changing global scenario

CAPS 2nd Annual Space Security Dialogue

Centre for Air Power Studies organised the 2nd Annual Space Security Dialogue on the theme "Leveraging Space for National Security" on 12 May 2023 at Conference Hall, Air Force Auditorium, Subroto Park, New Delhi. This seminar was started as an annual event in 2022 to bring the key players together on a common platform to deliberate on the issues concerning space security for India.

National News

Satcom spectrum not auctioned anywhere: IN-SPACe chairman Pawan Goenka

5 May 2023
ET Telecom

India's low-cost star tracker is up and running in space

1 May 2023
India Today

South-South Cooperation: India and Dominican Republic to deepen ties in Space, Defence, AI and Trade

1 May 2023
The Financial Express

Indian Space Policy needs more clarity in key aspects, experts say

3 May 2023
Moneycontrol

Major global powers have merged air and space domains, time for India to follow suit

5 May 2023
FirstPost

6 GHz not used for 5G globally, should be delicensed: BIF to DoT

5 May 2023
ET Telecom

ISRO to start online training programme for PG and and final-year UG students

8 May 2023
The Hindu
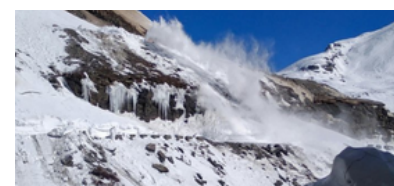
Students to be trained on glaciers, remote sensing at IISc Bengaluru

10 May 2023
Deccan Herald

INDIAN SPACE ASSOCIATION
ISpA
Bhumandal Se Brahmaand Tak

Nothing is off limits for the private sector: IN-SPACe chief Pawan Goenka

14 May 2023
The Economic Times

Defence Ministry's iDEX achieves another milestone with signing of its 250th contract and 1st under Mission DefSpace

15 May 2023
The Economic Times

India's Space achievements wall museum unveiled

17 May 2023
The Hindu

Gaganyaan: Will send a female robot in space in 2023 as test before sending human, says union minister Jitendra Singh

19 May 2023
Mint

Antarctica to Shadnagar: ISRO's Mega Rs 110-cr Project to 'Defrost' India's Satellite Network

20 May 2023
News18

Crowded July-Aug for Isro with Chandrayaan-3, PSLV & Gaganyaan abort missions; Aditya-L1 aimed for Aug-Sept

23 May 2023
The Times of India

The Possibilities for Quad Cooperation in Space

23 May 2023
The Diplomat
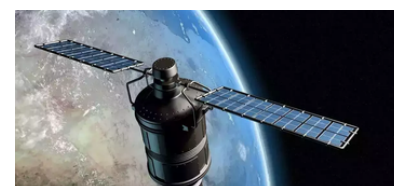
Space broadband group opposes mandatory equipment testing, says facilities ill-equipped

24 May 2023
ET Telecom

National News

More collaboration, less competition among nations way forward for future space explorations: Rakesh Sharma

24 May 2023
The Print

India eyes US$6-12B pan-country non-mobile connectivity network

25 May 2023
The Ken

New FDI policy for space likely to be out in three months: IN-SPACe chairman Pawan Goenka

25 May 2023
The Economic Times

Expand user scientific community to justify expensive space-missions: ISRO chief

26 May 2023
The Indian Express

Isro, Navy release Gaganyaan recovery training plan

26 May 2023
The Times of India

From NavIC 1.0 to 2.0, ISRO needs to learn from mistakes

29 May 2023
The Financial Express

How IAF is driving military startups?

30 May 2023
The Financial Express
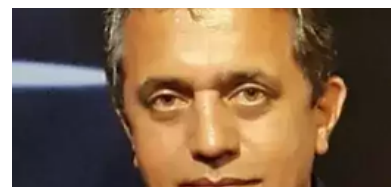
Satcom market to become more competitive & affordable post new policy: Hughes India

31 May 2023
ET Telecom

USA

Space startups need to start preparing for a post-Starship world

7 May 2023
TechCrunch

Haven-1: The First Commercial Space Station

12 May 2023
The Financial Express

Weather intelligence company aims to revolutionize forecasting with a constellation of radar satellites

16 May 2023
CNBC

Axiom Space Ax-2 crew readies for trip to space station
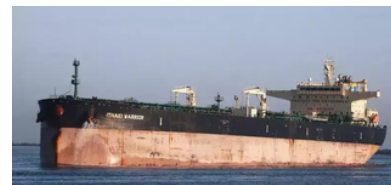
17 May 2023
The Economic Times

Billionaire Space Race: Jeff Bezos' Blue Origin Wins NASA Contract — Will Compete Against Musk's SpaceX

19 May 2023
Forbes

Elon Musk's SpaceX and Italy's Unipol join forces to help Italians hit by flooding

21 May 2023
ET Telecom

Marlink to deploy Starlink for ship management firm Polembros Shipping

23 May 2023
ET Telecom

From Your Car To Space: Starlink Launches In-Motion High-Speed Global Internet Connectivity

23 May 2023 || Forbes

SpaceX launches 52 Starlink satellites, lands rocket on ship at sea

31 May 2023 || Space.com

NASA beamed a record 200 Gbps link from 530km in the sky using a space laser; here's how
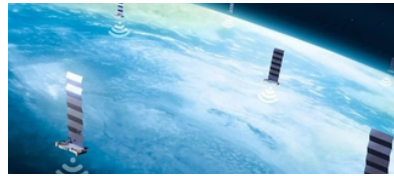
31 May 2023
Business Today

CHINA

China's hypersonic research to get boost from satellite startup

2 May 2023
Space.com

China's 'Satellite Killer' Spacecraft Threatens To Puncture US Military In Space By Crippling Its Recon, Navigation & EW Satellites

13 May 2023
EurAsian Times

Tron Future Tech to test LEO satellite communication under Foxconn-initiated EV project

18 May 2023
DigiTimes

Confronting threat posed by China's space programme

18 May 2023
The Tribune

China's satellite navigation service industry exceeds $71 billion in output value
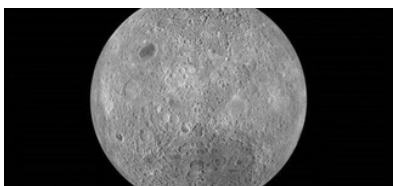
18 May 2023
Global Times

Space war: India must improve its military space programme to beat China

22 May 2023
The Financial Express

China To Send First Civilian To Space in June: Space Agency

29 May 2023
NDTV

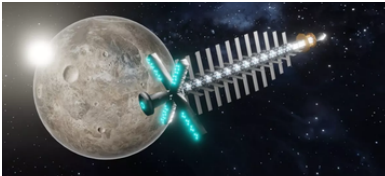**China to send astronauts to Moon by 2030 as space race intensifies**

29 May 2023
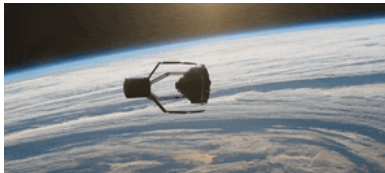The New Indian Express

EUROPE

Space rivals join up to bid for European Union's $6.6 bn satellite plan

2 May 2023
Business Standard

Europe wants to build a nuclear rocket for deep space exploration

4 May 2023
Space.com

Space junk cleanup mission to launch in 2026 aboard Arianespace rocket

10 May 2023
Space.com

UK's Space Forge develops satellite reentry technologies

16 May 2023
The Statesman

Nearly 350 licences issued to UK space companies

16 May 2023
The Independent

Cyberattack On European Spacecraft! How 'Hackers' Took Control Of Satellite's Imaging Sensors & Jeopardized Its Data

21 May 2023
EurAsian Times

No tears, only launches now: Virgin Galactic heads back to space as Virgin Orbit goes under
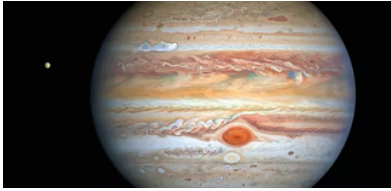
25 May 2023
TechCrunch

Virgin Galactic completes final test flight ahead of paid brief trips to space

26 May 2023
Hindustan Times

International News

Regulating space: Who is keeping track of private companies trying to reach the stars?

11 May 2023
Euro News

Saudi Arabia to benefit from new satellite IoT services

15 May 2023
Geospatial World

Space station welcomes 2 Saudi visitors, including kingdom's 1st female astronaut

25 May 2023
The Indian Express

Arabsat launches BADR-8 satellite into orbit

27 May 2023
The Print

North Korea building satellite launch pad with 'new urgency'

25 May 2023
Deccan Herald

North Korea says its attempt to launch 1st spy satellite ends in failure

31 May 2023
The Indian Express

South Korea says homegrown space rocket put satellite into orbit

25 May 2023
ET Telecom

Japan startup raises $30 million to build space robot workforce

29 May 2023
The Times of India

Job Openings from our Members

DHRUVA SPACE https://www.dhruvaspace.com/careers

DIGANTARA https://www.linkedin.com/company/digantara/jobs/

GALAXEYE https://galaxeye.zohorecruit.in/careers

Kawa Space — Space Powered SIGINT & ELINT http://lnkiy.in/kawa-space
Send CV at: support@kawa.space

MAXAR https://maxar.wd1.myworkdayjobs.com/MAXAR

pixxel https://www.pixxel.space/careers

SkyServe https://www.linkedin.com/company/skyserve-ai/jobs/

Space Kidz India — Savouring Space Sciences https://www.spacekidzindia.in/careers/

TSC https://tsctech.in/#/careers

XOVIAN — || आसाद्य भवाग्र || https://xovian.zohorecruit.com/jobs/Careers

For General Queries: info@ispa.space, +91 9667303304
For Membership: Ms Aditi (aditi@ispa.space, +91 8437985777); coord@ispa.space

Department of Space releases Indian Space Policy 2023

https://www.isro.gov.in/IndiaSpacePolicy.html

TRAI Consultation Paper on Assignment of Spectrum for Space-based Communication Services

https://www.trai.gov.in/consultation-paper-assignment-spectrum-space-based-communication-services

Last Date for Comments: 01 June 2023
Last Date for Counter Comments: 22 June 2023

Recommendations & Policy Directives of Startup Policy Communique` by Startup20 Engagement Group of G20

https://www.startup20india2023.org/

Think Tank Recommendations on Corporate Governance for Indian Start-ups by Startup20 Engagement Group of G20

https://www.startup20india2023.org/

TRAI Recommendations on ''Ease of Doing Business in Telecom and Broadcasting Sector''

https://www.trai.gov.in/notifications/press-release/trai-releases-recommendations-ease-doing-business-telecom-and

TRAI responds to DoT's back reference on TRAI's Recommendations on 'Methodology of Applying Spectrum Usage Charges (SUC) under the Weighted Average Method of SUC assessment, in cases of Spectrum Sharing'

https://www.trai.gov.in/notifications/press-release/trai-responds-dots-back-reference-trais-recommendations-methodology

TRAI Consultation Paper on Issues related to Low Power Small Range FM Radio Broadcasting

https://www.trai.gov.in/notifications/press-release/trai-releases-consultation-paper-issues-related-low-power-small-range-fm

Department of Science & Technology releases National Geospatial Policy 2022

https://www.meity.gov.in/content/digital-personal-data-protection-bill-2022

TRAI Recommendations on Licensing Framework for Establishing and Operating Satellite Earth Station Gateway (SESG)

https://www.trai.gov.in/notifications/press-release/trai-releases-recommendations-licensing-framework-establishing-and

Upcoming Events

29-30 June 2023	ICT Spring 2023: Global Tech Conference	Luxembourg
06-07 July 2023	Space 20: Leaders Meeting of G20 Nations	Bangalore
22-23 August 2023	GeoSmart Infrastructure 2023	New Delhi
10-12 October 2023	**Indian Space Conclave 2023**	**New Delhi**
16-18 October 2023	GeoSmart India 2023	Hyderabad

CALL FOR NEW MEMBERSHIP

ISpA is an apex, non-profit industry body exclusively working towards the successful exploration, collaboration, and development of the private and public Space Industry in India.

JOIN US

- 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.