

LEVERAGING

SPACE TECHNOLOGY:

REGIONAL TRANSFORMATION
TO GLOBAL REACH

**NORTH-EAST INDIA
SPACE WORKSHOP 2026**



26 – 27 AUGUST 2026



GUWAHATI,
ASSAM



**NATIONAL
SPACE DAY**
CELEBRATION 2026

SPACE FOR THE NORTH-EAST
THE NORTH-EAST FOR SPACE



1. Introduction and Background

Northeast India occupies an indispensable position in India's strategic and development landscape. As the country's land-linked gateway to Association of Southeast Asian Nations (ASEAN), Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) and the wider Indo-Pacific, the region holds immense economic, ecological and human potential. Its strategic location, emerging infrastructure, promising talent, and significant unmet demand for technology-led solutions together create a distinctive opportunity for the region to become a new frontier for India's advanced and disruptive technology industries.

The rise of NewSpace has transformed India's space sector into a growing economy of startups, private industry and downstream applications. For Northeast India, this creates a unique two-way opportunity. The region's connectivity gaps, complex terrain, environmental vulnerability and infrastructure needs create a significant market for space-enabled solutions, while its geography, strategic location and institutional capabilities offer a distinctive environment for developing applications, testing use cases and building innovations with relevance beyond the region.

The Northeast can therefore play multiple roles in India's expanding space economy: **as a market for downstream applications, a testbed for new technologies, a base for innovation and entrepreneurship, and a source of scientific talent and high-value research.** Realising this potential, however, requires stronger linkages between regional needs, local institutions, national space capabilities and private industry.

The timing is particularly significant. The Act East Policy, Prime Minister's Development Initiative for North East Region (PM-DevINE), North East Special Infrastructure Development Scheme (NESIDS), Viksit Bharat 2047, and the Ashtalakshmi vision have placed the Northeast at the centre of India's future growth, while the PM Gati Shakti National Master Plan, Digital India, Digital Bharat Nidhi, and the North Eastern Region Sustainable Development Goals (NER SDG) Vision 2030 provide strong frameworks for connectivity, infrastructure planning, digital inclusion, climate resilience, and sustainable governance. Together, these initiatives create an enabling environment to **harness space technologies to accelerate the Northeast's transformation while leveraging the region's distinctive strengths and demands to expand India's space economy.** Although rarely viewed as a natural frontier of India's space sector, the Northeast has the potential to emerge as one of its most dynamic new markets and innovation ecosystems.

Taking the celebrations of National Space Day as a fitting backdrop, SIA-India seeks to translate this opportunity into action. The successful soft landing of Chandrayaan-3's Vikram lander demonstrated the strength of India's technological capabilities and marked a defining moment in the country's space journey. As India celebrates this achievement, the occasion also provides an opportunity to look ahead- towards widening participation in the space ecosystem and extending the benefits and opportunities created by India's space capabilities across its regions.

Leveraging this momentum, **SIA-India, with the North Eastern Space Applications Centre (NESAC)** as a Partnering Organisation, is extending its industry outreach to Northeast India through a first-of-its-kind regional initiative connecting regional needs and capabilities with industry, government, academia and India's wider space ecosystem.

2. Overview

The “**Leveraging Space Technology: Regional Transformation to Global Reach – Northeast India Space Workshop 2026**” marks SIA-India’s effort to expand the reach of India’s space ecosystem across the country. Scheduled **26-27 August 2026 in Guwahati, Assam**, the workshop is envisioned as an action-oriented, multi-stakeholder platform to foster convergence among Northeast India’s governments and institutions while connecting the region with the wider national and international space ecosystem. Organised as part of the National Space Day celebrations, the workshop carries this national momentum forward by enabling stronger regional participation in India's expanding space ecosystem.

The workshop will bring together policymakers, government departments, space agencies, industry leaders, academia, development institutions, startups and international partners to **move from dialogue to action- generating pathways for technology adoption, industry participation, investment, innovation and institutional collaboration across the region**. The initiative seeks to position Northeast India not merely as a beneficiary of space technology, but as an active participant in India’s NewSpace economy and an emerging hub for downstream applications, innovation and entrepreneurship.

As India’s premier space industry association, SIA-India works to strengthen collaboration across sectors and regions, expand opportunities for industry, and contribute to India’s ambition of becoming a leading global space power. Recognising that the next phase of India’s space growth must draw on capabilities and opportunities across the country, SIA-India is bringing this effort to one of India’s most strategic regions. The aim is to connect Northeast India’s needs and capabilities with national and international expertise, investment, innovation and value chains- building a vibrant regional ecosystem while expanding the frontiers of India’s space economy.

3. Workshop Aims

The workshop aims to:

- **Strengthen the Northeast Space Ecosystem** through collaboration between government, industry, academia, startups, and international partners.
- **Integrate the Northeast into India's NewSpace Value Chain** by promoting manufacturing, downstream applications, and innovation.
- **Accelerate Space Technology Adoption** to enhance governance, connectivity, infrastructure, and public service delivery.
- **Address Northeast India's Unique Challenges** through space-enabled solutions for climate resilience, disaster management, agriculture, and border security.
- **Drive Employment, Entrepreneurship & Investment** by fostering startups, skills, innovation, and private sector participation.
- **Enable Policy Dialogue & Action** by developing recommendations, pilot projects, and implementation of roadmaps for the region.
- **Position the Northeast as India's Gateway to the Indo-Pacific** by advancing the Act East Policy, particularly with Japan and strengthening Indo-Pacific partnerships.

4. Strategic Focus Areas

The workshop will focus on eight thematic pillars:

4.1 Building Regional Space Ecosystems: A Pathway to Growth

India's next phase of space growth will require vibrant regional ecosystems that connect local capabilities, institutions and markets with national and global space networks. Northeast India has the potential to become such an ecosystem, not only as a major market for space-enabled solutions, but as a hub for downstream innovation, entrepreneurship, incubation and research. This pillar will envision a long-term future for the region, identify its distinctive strengths and opportunities, and explore how stronger linkages among governments, industry, academia and startups can create an integrated regional space ecosystem and value chain.

4.2 Bridging the Last Mile: Connectivity & Integrated Infrastructure

Northeast India's rugged terrain and dispersed settlements make connectivity one of its most pressing development challenges. Realising the vision of a digitally connected India, as advanced through Digital India and Digital Bharat Nidhi, requires going beyond terrestrial networks to build integrated satellite-telecom architectures capable of reaching the region's remotest communities. This pillar will explore how satellite connectivity can complement existing networks to enable reliable last-mile access and resilient communications, while space and geospatial technologies strengthen transport, logistics, urban planning and infrastructure development. The aim is to build an integrated technology architecture that connects people, places and infrastructure across the region.

4.3 Building Advanced Technology Ecosystems: Space–Semiconductor Synergies

A regional space ecosystem cannot develop in isolation from the wider advanced-technology landscape. With Northeast India witnessing growing investment in semiconductors and electronics, there is an opportunity to build synergies with the space sector across microelectronics design, specialised electronics assembly, testing and supply chains. This pillar will explore how existing investments and public-private partnerships can create pathways for local MSMEs and startups to participate in national space and semiconductor value chains, generating regional employment and strengthening industrial capacity. The aim is to build a high-tech manufacturing ecosystem capable of supporting national aerospace and semiconductor value chains.

4.4 Securing Strategic Frontiers: Space for Defence & National Security

Northeast India's extensive international borders and strategic location place it at the core of India's sovereignty and national security. Complex terrain, dense forest cover and dynamic riverine frontiers, including the shifting channels and chars of the Brahmaputra, make conventional surveillance and border monitoring particularly challenging. This pillar will examine how Earth Observation, Synthetic Aperture Radar (SAR), Positioning, Navigation and Timing (PNT), Intelligence, Surveillance and Reconnaissance (ISR) capabilities and secure satellite communications can strengthen persistent monitoring, detect cross-border security risks and improve coordination across defence, border and

internal security agencies. The aim is to build stronger space-ground synergies for a more secure, resilient and better-coordinated eastern frontier.

4.5 Environmental Resilience & Sustainable Geospatial Governance

Environmental resilience and sustainable governance are fundamental to Northeast India's development. The region faces recurrent natural hazards and rapidly changing landscapes, while its economic lifelines remain closely tied to agriculture and natural resources. At the same time, its forests, biodiversity and fragile ecosystems constitute assets of immense regional and national value. This pillar will explore how Earth Observation, geospatial intelligence and advanced sensing technologies can strengthen disaster preparedness, safeguard livelihoods and natural ecosystems, and enable more informed resource management. The aim is to move from reactive responses towards predictive, evidence-based and technology-enabled governance across the region.

4.6 Building Human Capital & Research Capacity

Northeast India possesses significant talent, but geographical fragmentation and connectivity gaps continue to limit access to advanced education, specialised training and research opportunities. Building the region into a hub for space innovation and incubation requires sustained investment in skilled human capital and high-value research. This pillar will explore how satellite-enabled education, targeted skilling and stronger industry-academia partnerships can expand access while developing a future-ready workforce capable of supporting the region's emerging space ecosystem and India's wider NewSpace economy. The aim is to ensure that regional talent is not only connected to opportunity, but equipped to actively shape India's future space economy.

4.7 Building an Enterprising Regional Space Ecosystem

Northeast India offers a rich repository of real-world challenges and use-cases that can become the foundation for new space-enabled products, services and enterprises. Its diverse needs across connectivity, agriculture, infrastructure, environmental management and other sectors create significant opportunities for downstream innovation and entrepreneurship. Realising this potential requires stronger pathways that help regional talent translate ideas into viable ventures. This pillar will explore how national institutions such as IN-SPACe and Startup India can work with state missions, academia, industry and new or existing incubation institutions to provide the mentorship, funding, technical support and market access young innovators need. The aim is to create an enabling ecosystem that lowers entry barriers, nurtures home-grown enterprises and allows the Northeast to participate in India's space economy as a creator of solutions and value.

4.8 Expanding International Partnerships: The India-Japan Opportunity

The India-Japan partnership has emerged as one of the most consequential collaborations in the Indo-Pacific, with Northeast India occupying a central place through the India-Japan Act East Forum and growing cooperation in connectivity and infrastructure. Yet space remains relatively unexplored as an instrument of regional and subnational development within the broader strategic narrative. This pillar will examine how Japan's strengths in space technology, precision systems, research and innovation can connect with Northeast India's development priorities and emerging space ecosystem. The aim is to move beyond traditional government-to-government cooperation and create new linkages among

regional institutions, industry, academia and innovators, using the Northeast as a platform to deepen India-Japan space cooperation and expand its impact across the Indo-Pacific.

5. Engagement Opportunities

The workshop is designed to enable focused dialogue, institutional engagement and partnership building through:

- **Panel Discussions** - Bringing together diverse perspectives on priority themes and regional opportunities.
- **Government-Industry Dialogues** - Connecting policy priorities and regional needs with industry capabilities and solutions.
- **Strategic Networking** - Creating a platform for stakeholders to build relationships and identify areas of mutual interest.
- **Policy Roundtables** - Facilitating focused discussions on policy, institutional and implementation pathways.
- **Collaboration Meetings** - Enabling stakeholders to explore partnerships, projects and avenues for sustained engagement.

6. Expected Outcomes

The workshop aims to deliver:

- **Workshop Outcome Report** outlining recommendations for space-enabled regional development.
- **Action Agenda** identifying priority pilot projects with implementation pathways.
- **Framework for a Centre for Northeast Space Entrepreneurship & Innovation** to strengthen skilling, incubation, and downstream industry development.
- **Inter-agency Collaboration Mechanism** connecting government, industry, academia, and international partners for the sustained deployment of space technologies across the Northeast.

7. Why Participate?

The workshop offers a unique opportunity to engage with leading institutions shaping space applications and regional development, including North Eastern Space Applications Centre (NESAC), Border Roads Organisation (BRO), Flood and River Erosion Management Agency of Assam (FREMAA), National Disaster Management Authority (NDMA), Bharat Sanchar Nigam Limited (BSNL), RailTel Corporation of India Limited, and Indian Institute of Technology Guwahati (IIT Guwahati), alongside government agencies, space startups and industry leaders.

- **Engage with Key Institutions** – Connect directly with organisations shaping connectivity, infrastructure, disaster resilience, research and space applications across the Northeast.
- **Map an Emerging Market** – Identify regional use cases and opportunities for deploying space-enabled products, services and solutions.

- **Build Strategic Partnerships** – Develop linkages across government, industry, academia, startups and national and international networks.
- **Shape the Regional Space Agenda** – Contribute to priorities, pilot projects and pathways for building the Northeast’s space ecosystem.
- **Translate Dialogue into Opportunity** – Connect regional needs with industry capabilities to identify actionable collaborations and initiatives.

8. Agenda

Date	Time	Title
DAY 1	9:30- 11:30	Inauguration
	11.30 - 12.00	Tea Break
	12.00 -13.00	Session 1 Reimagining Northeast India as an Emerging Space Innovation Frontier: Vision 2030 This session will explore Northeast India’s unique strengths, identify high-impact opportunities, and define strategic priorities for integrating the region into India's growing space ecosystem and chart a shared Vision 2030 for its integration into India's NewSpace economy.
	13.00 - 14.00	Lunch Break
	14.30 - 15.30	Session 2 Strategic Connectivity, Telecommunications & Infrastructure in North-East This session will explore how space-enabled connectivity can bridge the Northeast’s digital divide by strengthening resilient communications, critical infrastructure, and last-mile connectivity.
	15.30 - 16.00	Tea Break
	16.00 - 17.00	Session 3 Building Northeast India’s Role in the Space & Semiconductor Value Chain This session will identify viable pathways for Northeast India to integrate into national space and semiconductor value chains while enabling local industries, MSMEs, and startups to participate and grow.
	17.00 - 18.00	Session 4 Space Technologies for National Security and Border Resilience Northeast India is central to India’s national security. This session will explore how space technologies can strengthen surveillance, secure porous riverine borders, and enhance situational awareness along the eastern frontier.

DAY 2	9.30 - 11.00	Inauguration
	11.00 - 11.30	Tea Break
	11.30 - 12.30	Session 5 Harnessing Space & Geospatial Technologies for Sustainable Governance This session will identify priority space and geospatial applications to address Northeast India's key development challenges and build a resilient ecosystem for sustainable governance and regional planning.
	12.30 - 13.15	Session 6 Developing Human Capital and Research Capacity for the Space Economy Building Northeast India's space ecosystem requires skilled talent, high-value research, and strong industry-academia collaboration. This session will identify the partnerships and capabilities needed to develop a future-ready workforce.
	13.15 - 14.00	Lunch Break
	14.00 - 15.00	Session 7 Creating Centres of Excellence: Catalyzing Entrepreneurship, Investment and Technology This session will explore how Centres of Excellence, incubators, funding, and industry partnerships can nurture deep-tech startups, accelerate innovation, and build a globally competitive regional space ecosystem in Northeast India.
	15.00 - 15.30	Tea Break
	15.30 - 16.30	Session 8 India–Japan Partnership: Advancing Space Cooperation in the Indo-Pacific (Roundtable) Building on the India–Japan Act East Forum, this session will explore how space technologies can strengthen connectivity, innovation, and regional development, positioning Northeast India as a strategic hub for Indo-Pacific cooperation.
	16.30 -18.00	Closing and Recommendations