Office of the Principal Scientific Adviser to the Government of India

Ministry of External Affairs
Government of India

Technology Dialogue 2026

Charting Technological Convergence

November 30-December 2, 2026

Indian Institute of Science (IISc), Bengaluru

Organized by the Principal Scientific Adviser to the Government of India, Ministry of External Affairs, Observer Research Foundation, Global Innovation Square

The technologies that will define the coming decades are no longer advancing in isolation. Artificial intelligence is accelerating drug discovery and materials science, quantum is reshaping how we think about security, and semiconductors, space and neurotechnology are converging in ways that will redraw economic and strategic maps. How nations, industries and institutions respond, and whether they respond together, is one of the most consequential questions of our time.

To discuss this and a few more issues, the **Technology Dialogue 2026** will be organized from **30 November to 2 December 2026** at the Indian Institute of Science (IISc), Bengaluru. The Dialogue is convened by the Office of the Principal Scientific Adviser to the Government of India, in partnership with the Ministry of External Affairs, Government of India; the Indian Institute of Science Bengaluru (IISC); and the Global Innovation Square: A Raisina-Observer Research Foundation Initiative (GIS).

Now in its third edition, the Technology Dialogue has become India's premier Track 1.5 platform on technology diplomacy. It is a space where senior government officials sit alongside researchers, industry leaders, investors and founders from India and around the world to shape partnerships and policy. The 2023 edition examined the promise and risks of disruptive technologies. The 2025 edition turned to technology diplomacy and India's strategic partnerships in critical and emerging technologies.

This year's theme, **"Charting Technological Convergence,"** takes the conversation further. The programme blends high-level plenaries and expert panels with **closed-door roundtables** designed for candid exchange between policymakers and practitioners. Hosting the Dialogue at IISc, one of India's foremost scientific institutions and at the heart of the country's innovation capital, places these discussions where frontier research is actually happening.

CORE THEMES & PLENARY TRACKS

The 2026 edition shifts from isolated domain discussions to **technological convergence**—where advances at the intersection of critical fields redefine national security, industrial power, and economic sovereignty:

1. **AI & Quantum Computing:** Sovereign compute ecosystems, quantum algorithms, and translating research into strategic dominance.
2. **Semiconductors:** Resilient supply chains, photonics, advanced packaging, and end-to-end semiconductor independence.

3. **Bioeconomy:** Converging AI, engineering, and synthetic biology to lead in therapeutics, biomanufacturing, and global health.
4. **Neurotechnology:** Brain-computer interfaces, cognitive augmentation, and establishing global ethical standards.
5. **Cybersecurity & Post-Quantum Readiness:** Securing critical digital infrastructure, trusted hardware, and post-quantum migration.
6. **Space Capabilities:** Next-generation satellite systems, space exploration technologies, and commercial space utility.
7. **Defence Innovation (Cross-Cutting):** Deploying AI, quantum, and autonomous systems for defence and sovereign resilience.

CLOSED-DOOR DISCUSSIONS

The Dialogue features high-stakes, off-the-record working sessions designed for concrete diplomatic and policy outcomes:

1. **The Road to Geneva (Swiss-India AI Summit):** *Building on discussions at the India AI Impact Summit, this closed-door Track 1.5 roundtable will continue the India–Switzerland policy conversation ahead of the next AI Summit in Geneva. Participants will examine the priorities emerging from India, consider areas of alignment and difference between the two countries, and identify issues that could inform the agenda in Geneva, including AI diffusion, safety, access and international cooperation.*

2. **Accessing AI, AGI, Superintelligence: Policy Imperatives:** *As artificial intelligence rapidly becomes the central engine of economic productivity, scientific discovery, and public service delivery, ensuring its benefits are broadly distributed—rather than concentrated among a few nations or corporations—is a defining challenge. This closed-door session addresses the twin imperatives of technology diffusion and sovereign access: how to accelerate widespread AI adoption so that communities and institutions at large can harness frontier tools, and how to structure government-to-government (G2G) frameworks that facilitate reliable, secure access to highly capable foundation models.*

3. **Deep Tech Ecology:** *India's deep tech ecosystem is expanding, from AI and biotech to space, semiconductors, and advanced materials. But venture capital for deep-tech startups still lags behind VC levels for Indian startups as a whole – chiefly because translational research capabilities in the space are low, and the longer gestation periods needed by deep-tech ventures do not fit the seven-to-ten-year life of standard VC funds. This closed-door discussion brings together researchers, academics, founders, domestic and global investors, and government stakeholders to examine where India's deep tech innovation is actually headed, how translational capacities can be strengthened, what it would take to build genuine patient capital pools at home, how public procurement can be redesigned to unlock demand rather than simply subsidise supply, and what role international capital and government-to-government partnerships can play in closing both gaps where treating access to global growth capital not as a financing question alone, but as a technology-diplomacy one.*

4. **Security Tech & Infrastructure Resilience:** *This session will examine which emerging security technologies are ready to protect critical infrastructure and which require further testing. It will consider post-quantum migration, zero-trust architecture, trusted hardware and AI-enabled threat detection, alongside the shared testbeds, certification mechanisms and institutional partnerships needed for secure deployment across essential systems at scale.*

5. **Frontier AI and the Health Bioeconomy: Pathways for Deployment at Scale in India:** *The convergence of AI with biotechnology, data science, and digital technologies is reshaping healthcare, from how therapeutics are discovered, and disease is diagnosed to how care is delivered, and health systems are run. India is emerging as a significant hub for AI-enabled innovation in biotechnology. In healthcare, initiatives such as the Ayushman Bharat Digital Mission (ABDM), the Strategy for AI in Healthcare for India (SAHI), the Benchmarking Open Data Platform for Health AI (BODH), and the BioE3 Policy have put in place many of the building blocks needed to support this work. Across diagnostics, medical imaging, genomics, biologics design, and drug discovery, new solutions continue to emerge from Indian research institutions, healthcare providers, start-ups, and global companies. The next step is to carry this innovation into routine care at scale. As in health systems around the world, many promising tools are at the stage of pilots and early deployments. Moving further will depend on clear pathways for validation and approval, access to good quality data for evidence generation, and closer working between researchers, clinicians, regulators, healthcare providers, and industry. This closed-door discussion will bring together government, regulators, industry, healthcare institutions, researchers, and international partners, the discussion will focus on the practical policy and partnership measures that can accelerate the deployment of AI-enabled healthcare in India and help Indian innovation reach patients in other markets.*

6. **AI, Cyber & Science Guardrails:** *AI is fast becoming the engine of scientific discovery, designing proteins, screening materials and running laboratories with minimal human involvement. The same capabilities also lower the barrier to harm. Frontier models are being tested for their ability to assist with biological threats, offensive cyber operations and weapons development, and autonomous agents raise a harder question of what happens when systems act beyond their mandate. This closed-door session brings together government officials, scientists, AI developers and security and biosecurity experts for a candid, off-the-record conversation on questions that are difficult to ask in public. Where do the real chokepoints lie, from model safeguards to DNA synthesis oversight, lab automation and compute? How can open science continue without publishing a blueprint for misuse? What testing and incident-reporting standards should apply to autonomous agents in sensitive domains? And what coordination is realistic between countries that are both collaborators and competitors? The aim is a frank exchange on where the risks are real, where they are overstated, and what governments and the scientific community can agree to do now.*

7. **Track 1.5 Dialogue between India and Australia on PACTS:** *The India–Australia Partnership on Cyber, Critical Technologies and Supply Chains (PACTS), with five key pillars, directly*

intersects national security, technological sovereignty, and economic resilience. This Track 1.5 dialogue on this framework will convene senior policymakers, defence tech innovators, research leaders, and industry leaders to stress-test the implementation roadmap across five interconnected core pillars. Participants will move past strategic rhetoric to accelerate actionable cooperation across critical technology supply chains, semiconductor and critical mineral resilience, digital public infrastructure, biotech innovation, and joint defence R&D in advanced materials.

8. **Developing a UN Framework for Responsible Industry Behaviour in Dual-Use & Military AI:** *Co-hosted with UNIDIR, this closed-door consultation will convene select Indian defence-tech founders, AI innovators, cybersecurity experts, industry leaders, and policymakers to inform the UN Framework of Responsible Industry Behaviour for AI in the Military Domain. Focusing on the dual-use nature of emerging technologies, national security imperatives, and lifecycle governance, this discussion seeks to gather real-world perspectives on industry expectations of governments, regulatory gaps, and operational best practices across research, procurement, and deployment. Crucially, this session ensures that India's strategic interests and tech ecosystem insights directly shape global governance standards, while feeding into preparatory efforts led by Switzerland for the 2027 AI Summit on peace and security.*

WALKTHROUGHS

What sets this edition apart is that the conversation will not stay in the room. For a select group of international delegates, we are arranging immersive walkthroughs of three places where India's deep tech is being built:

- **29 November: Space and drone startups:** A walkthrough of Indian space and drone startups, offering a first-hand look at what India's innovation works on and what it looks like on the ground, from satellite manufacturing to uncrewed aircraft.
- **1 December: Deep tech startups at IISc:** A look inside the specialised laboratories of deep tech startups based at IISc, including work on scalable, tech-enabled carbon dioxide removal.
- **2 December: ARTPARK:** A visit to a leading translational hub and incubator at IISc, with a first-hand look at field robotics, AI-driven healthcare platforms and deep-tech incubation in action.

PARTICIPANTS

Reflecting the Dialogue's focus on technological convergence, the 2026 edition will convene four distinct stakeholder groups.

- **Indian Government**: Senior representatives from the Office of Principal Scientific Advisor, Ministry of External Affairs, the Ministry of Science and Technology, the Anusandhan National Research Foundation, NITI Aayog, National Security Council Secretariat and the Ministry of Electronics and Information Technology, among others.

- **International Government and Multilateral Partners**: Government and non-government representatives from strategic partner countries, including Australia, Denmark, Germany, Japan, Korea, the Netherlands, Norway, Singapore, Switzerland, the United Kingdom, and the United States, among others, alongside relevant multilateral and regional institutions.
- **Private Sector and Industry**: Senior leadership from Indian and global companies, alongside founders, VCs and innovators building at the frontier of technological convergence, to showcase their work, surface roadblocks to translational research, and strengthen India's deep-tech ecosystem. A curated group of venture capitalists will offer perspective on the state of India's deep-tech investment landscape and pathways for international expansion.
- **Subject-Matter Experts**: Leading academics, researchers, and independent voices from universities, think tanks, and research institutions in India and around the world, selected specifically for their work at the intersection of two or more of the Dialogue's core themes, to ground the conversations in rigorous, cross-disciplinary expertise rather than single-domain perspectives.