ORF OBSERVER RESEARCH FOUNDATION

RAISINA DIALOGUE

Ministry of External Affairs
Government of India

Office of the Principal Scientific Adviser to the Government of India

BRIDGING SCIENCE AND STATECRAFT: THE RAISINA SCIENCE AND DIPLOMACY INITIATIVE 2026

SPECIAL REPORT

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Foreword

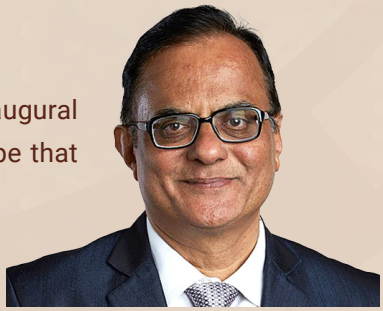
Science and technology today are central to economic competitiveness, national security, strategic autonomy, and geopolitical influence. At the same time, emerging and frontier technologies are advancing faster than the governance systems designed to manage them. This widening gap between innovation and governance presents one of the defining global challenges of our time.

It is therefore essential to address contemporary issues of Science and Technology (S&T) Diplomacy in the larger context of foreign policy deliberations. With this mandate, the Raisina Science and Diplomacy Initiative (SDI) was established as a flagship track under the Raisina Dialogue 2026 by the Observer Research Foundation and the Office of the Principal Scientific Adviser to the Government of India. The initiative seeks to advance a forward-looking and pragmatic agenda on science and technology diplomacy in an increasingly fragmented and competitive global landscape.

The discussions at the inaugural SDI, held on 5 March 2026, underscored the reality that science diplomacy is no longer merely a tool of soft power but is fast becoming a core governance imperative. As technologies increasingly shape economic resilience, strategic influence, and societal transformation, science diplomacy frameworks must evolve to address the governance challenges associated with dual-use and disruptive technologies.

At the same time, the evolving technology landscape requires science diplomacy frameworks that balance strategic autonomy with scientific openness and international collaboration. The growing influence of non-state actors, including large-scale technology firms, is also reshaping global governance and standards-setting. This calls for a more inclusive, adaptive, and accountable science diplomacy architecture supported by a revitalised and more representative multilateral system of governance.

This report captures the key strategic insights emerging from the inaugural edition of the Raisina Science and Diplomacy Initiative. It is our hope that these insights contribute to building a more pragmatic, inclusive, and future-ready science diplomacy framework for the world.



Prof. Ajay Kumar Sood
Principal Scientific Adviser to the Government of India

About the Initiative

The inaugural edition of the Raisina Science and Diplomacy Initiative (SDI) was convened on 5 March 2026 at Bharat Mandapam, New Delhi, as a flagship track under the Raisina Dialogue. Jointly launched by the Office of the Principal Scientific Adviser to the Government of India and the Observer Research Foundation (ORF), the initiative aims to advance a forward-looking agenda on science and technology diplomacy in an increasingly multipolar world order.

Today, breakthroughs in fields like artificial intelligence (AI), biotechnology, and quantum computing are happening at speeds significantly outpacing the traditional, slower-moving institutions designed for global governance. Due to the globally interconnected supply chains of these emerging technologies and the resultant data flows, they are incredibly difficult to regulate using outdated, geographically bound frameworks. This fundamental tension, in which technology moves far faster than diplomacy can keep pace with, is the driving force behind the Science and Diplomacy Initiative.

What the inaugural edition of the SDI at the Raisina gathering made clear is that no single stakeholder can handle this challenge on their own. Scientists, diplomats, and governments must collaborate closely, drawing inspiration from past successes like the Antarctic Treaty and the Montreal Protocol.[a] These are not just footnotes in history; they show us what is possible. Yet the current geopolitical landscape presents challenges, primary of which is that access to advanced technologies is increasingly concentrated in a handful of countries and corporations. To limit the risk of deepening inequalities, the imperative is a platform that bridges the scientific, diplomatic, and industry ecosystems. This is the role the SDI has set out for itself.

India's role in this conversation is particularly significant. During the COVID-19 pandemic, India supplied vaccines to the world. It has also built Aadhaar and UPI—digital systems used by hundreds of millions of people—faster than almost any other country. Through the International Solar Alliance (ISA), India has helped bring together over 110 countries to accelerate global solar energy adoption. More recently, in February 2026, India hosted the AI Impact Summit, convening global leaders to

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a The Antarctic Treaty and related agreements, collectively known as the Antarctic Treaty System (ATS), regulate international relations with respect to Antarctica, Earth's only continent without a native human population. It was the first arms control agreement established during the Cold War, designating the continent as a scientific preserve, establishing freedom of scientific investigation, and banning military activity.
The Montreal Protocol on Substances that Deplete the Ozone Layer is the landmark multilateral environmental agreement that regulates the production and consumption of nearly 100 man-made chemicals referred to as ozone depleting substances (ODS).

establish a shared vision for responsible and inclusive AI governance. Through all these efforts, India has shown that when science and policy work together, the global community can achieve milestones. The challenge is to replicate this coordination at a global level to ensure equitable access to frontier technologies.

The SDI is envisioned as a platform for diverse global perspectives, positioning it as a 'hub of hubs'. It serves as an essential connector between science and diplomacy, annually convening a vital trifecta of scientists, diplomats, and industry leaders. The initiative aims to provide clear direction to eliminate roadblocks to collaboration.

Bringing together over 80 global thought leaders, policymakers, diplomats, scientists, and institutional stakeholders, the inaugural edition of the SDI facilitated focused deliberations on the evolving intersections between science, technology, geopolitics, and governance. Central themes included the pursuit of strategic autonomy, the governance of disruptive technologies, the changing structures of science and technology governance, and technology foresight. One message was clear: a gap exists between science and diplomacy, and SDI is positioned to serve as the bridge between the two.

Key Insights

1

Science diplomacy is no longer merely a tool of soft power and has evolved into a core governance imperative.

Science and technology are increasingly central to national security, economic resilience, geopolitical influence, and strategic competitiveness. As technological capabilities become critical instruments of statecraft, science diplomacy is moving beyond the soft-power realm of international cooperation and becoming a requisite policy tool.

Technology policy measures, supply chain controls, export regulations, and standards-setting mechanisms are now directly linked to strategic influence and economic sovereignty. A country's technological position depends not only on domestic innovation capacity, but also on its integration into global supply chains and access to critical technologies.

At the same time, scientific cooperation remains one of the few relatively neutral and evidence-based channels for international engagement amid growing geopolitical fragmentation. This creates an important role for science diplomacy in enabling dialogue, reducing mistrust, and supporting collective responses to shared global challenges.

Future science diplomacy frameworks must therefore become more pragmatic, operational, strategic, and governance-oriented. They must support both national interests and international cooperation in an increasingly contested technological landscape.

2 Science diplomacy frameworks should be operationally aligned with strategic technology imperatives to address the governance challenges associated with dual-use technologies.

Frontier technologies, including advancements in AI, biotechnology, semiconductors, quantum technologies, cyber-physical systems, and space technologies, are reshaping global governance and strategic competition. Many of these technologies, and their convergent potential, possess dual-use characteristics, where civilian applications can also generate military, surveillance, or security implications, and vice-a-versa. As a result, the distinction between civilian and security technology governance is becoming increasingly blurred.

Existing governance mechanisms are not adequately equipped to address the speed, scale, and cross-sectoral nature of these technological disruptions. Governance challenges now include misuse risks, strategic dependencies, ethical concerns, and civil-military diffusion.

Addressing these challenges requires science diplomacy frameworks that are interoperable with strategic technology priorities and capable of functioning across both civilian and security domains. Governance systems must become more anticipatory, adaptive, and internationally coordinated. Ethical safeguards, risk assessment methodologies, and responsible-use principles should be integrated from the earliest stages of research and development. The governance of dual-use technologies will increasingly depend on stronger international coordination and institutional preparedness.

3 It is essential to balance the pursuit of strategic autonomy with the values of scientific openness.

Governments across the world are increasingly prioritising strategic autonomy through resilient supply chains, domestic innovation ecosystems, and secure access to critical technologies. At the same time, scientific progress fundamentally depends on openness, international partnerships, talent mobility, and cross-border knowledge exchange.

Balancing technological sovereignty with scientific openness is therefore emerging as a defining challenge for global science diplomacy efforts. Excessive technological securitisation risks fragmenting international scientific cooperation, while unrestricted openness may create vulnerabilities related to research security, intellectual property, and strategic dependency.

This tension is leading to new approaches based on “selective openness,” trusted partnerships, and values-based collaboration. However, significant gaps remain

between coordination on global challenges and deeper forms of equitable scientific cooperation involving shared resources and mutual accountability.

Future cooperation models must prioritise reciprocity, co-development, and trust-based partnerships while preserving the principles of open science. It is equally important to strengthen research security frameworks without undermining scientific collaboration and innovation. The sustainability of global scientific cooperation will depend on maintaining a balance between openness and strategic competitiveness.

4 Science diplomacy frameworks should be recalibrated to reflect the rising participation of non-state actors, including the big tech firms.

Science diplomacy is no longer driven exclusively by governments and multilateral institutions. Private technology firms, startups, philanthropic foundations, academic institutions, and transnational research networks now play an important role in shaping scientific priorities, technology standards, and resultant impact on governance outcomes.

The influence of large technology corporations is particularly significant due to their control over digital infrastructure, data ecosystems, AI platforms, and emerging technology standards. Their growing partnership with governments can accelerate innovation and technology deployment, but may also reshape global norms, deepen market concentration, and marginalise countries outside dominant technological blocs.

This evolving landscape requires science diplomacy frameworks to move beyond state-centric approaches towards more inclusive multi-stakeholder governance systems. Institutional mechanisms must integrate non-state actors while ensuring transparency, accountability, equitable participation, and safeguards for the public interest.

A revitalised science diplomacy architecture must recognise that governance authority is increasingly distributed across governments, industry, academia, and civil society. The challenge ahead lies in integrating these actors into global governance processes in a responsible manner.

5

As disruptive technologies redefine geopolitical and governance landscapes, a revitalised multilateral science diplomacy system becomes increasingly essential.

Existing multilateral institutions and governance mechanisms are struggling to keep pace with the rapid evolution of disruptive technologies and their cross-sectoral implications. Current systems are often too fragmented, slow, and state-centric to effectively address emerging challenges related to technology governance, standards-setting, and equitable participation.

There is an urgent need for a revitalised multilateral science diplomacy system that is more agile, inclusive, and evidence-based. Effective governance will require stronger international coordination on risk assessment, responsible use, technology standards, and access to scientific and technological resources.

Science diplomacy must also strengthen the interface between science and policymaking. Scientists, diplomats, and policymakers operate under different institutional and political constraints, making more effective communication and coordination mechanisms essential for translating scientific evidence into actionable governance frameworks.

Future multilateral systems must be more inclusive of emerging economies and broader stakeholder communities, including the private sector, academia, startups, and civil society. Governance frameworks grounded in shared risk assessments, ethical principles, and equitable participation will be critical to ensuring that technological transformation contributes to global stability and sustainable development rather than fragmentation and inequality.

BRIDGING SCIENCE AND STATECRAFT: THE RAISINA SCIENCE AND DIPLOMACY INITIATIVE

Session Reports

I. Vision for SDI

The Science and Diplomacy Initiative is envisioned as a space where scientific research and diplomatic practice can inform each other and generate thought leadership that neither domain can produce in isolation. It aims to produce directions for pursuing science diplomacy and international collaboration by welcoming diverse perspectives—by becoming a hub of different hubs around the world.

Science has historically enabled international collaboration and ensured that the global commons of space (through the Outer Space Treaty) and Antarctica (through the Antarctic Treaty) remain a domain for research and collaboration rather than territorial contestations. While rooted in historical precedence, international scientific collaboration faces challenges in the contemporary landscape. The current environment is marked by geopolitical fragmentation, eroding trust, and frontier technologies advancing faster than the diplomatic and governance frameworks designed to manage them. The world that will exist a decade hence will likely look different again, and the frameworks being built today must be flexible enough to meet it.

What makes the timing of this initiative urgent is the nature of the governance challenges these technologies present. Unlike many challenges of the past, which became visible once they had entered commercial or military markets, the risks and opportunities of frontier technologies are unfolding in real time. The absence of anticipatory governance does not produce a neutral outcome; it produces reactionary measures, written under pressure, after harm has already occurred.

Inaugural Session of Science Diplomacy Initiative 2026 at the Raisina Dialogue
Speakers (Top Left to Bottom Left): Vijay Chauthaiwale, Ajay Kumar Sood, Samir Saran, Rudra Chaudhuri. Marilyne Andersen, Peter Gluckman

Historically, science and diplomacy have developed in parallel, but there is now a need for them to converge. The significance of science advisory mechanisms cannot be overstated, as they perform a vital role in connecting research with the implementation of science-informed policy. Indeed, this critical need for science advisory systems served as the primary catalyst for establishing the Chief Science Adviser's Roundtable (CSAR). Launched by India as part of its 2023 G20 presidency, the CSAR highlighted the essential function that science advice serves in closing systemic gaps between discovery and governance. The SDI is envisioned to carry that spirit forward and bridge the gap between science and diplomacy.

India's position within this initiative is neither incidental nor peripheral. It reflects India's scientific capacity and diplomatic positioning. India brings to this conversation a scientific ecosystem of rare scale and diversity: some 40 hubs working across the domains of health, space, and biotechnology, and one of the largest pools of scientific talent in the world. Its leadership in vaccine development during COVID-19 was not simply a public health achievement; it was a demonstration of what a knowledge-centric economy, properly mobilised, can contribute to the world. India's active engagement across plurilateral forums like BRICS and the India-Pacific region signals that it is increasingly approaching science diplomacy not as a recipient of norms set elsewhere but as their co-author.

II. Changing Structures of Science and Technology Governance

The traditional state-led model of governance is shifting towards a more complex landscape. As Science is increasingly influenced by private capital and markets, critical decisions regarding technological deployment now frequently occur in boardrooms rather than through multilateral forums. Apart from scientists, engineers, market experts, and platform owners are also influencing technological governance. This has brought about new perspectives as well as the need for a renewed governance model.

What this transition demands are more than new institutions or updated regulatory frameworks. It demands a public culture of anticipation, where governance is conducted with citizens at the centre rather than at the periphery. People who are the users of these frontier technologies and are affected by them—in their jobs, healthcare and security—need to be involved in the governance and direction these technologies take. The mechanisms through which the governance of technologies is shaped must be made more inclusive.

Speedtalk: "Changing Structures of Science and Technology Governance" | Jahnavi Phalkey

Building the spaces for public participation, whether physical, institutional or cultural, is necessary. These spaces would provide a platform where citizens can engage seriously with the questions that frontier technologies raise before decisions on their governance and deployment are made. The skill of anticipatory thinking needs to be instilled as a civic capacity. This kind of inclusive and anticipatory engagement should not be an afterthought but should be at the very foundation of technology governance. The generation that will govern the technologies of the 2040s is already here, and the world needs to nurture the spaces and the environment to prepare them for that responsibility.

III. Science Diplomacy in an Era of Strategic Autonomy

Cooperation and trust in scientific systems remain a vital bridge even amidst deepening geopolitical shifts. In an era of fragmented alliances, scientific cooperation continues to function as a stabilising, evidence-based channel for collaboration. However, in contemporary times, diverging national interests mean countries are prioritising autonomy in individual areas of strategic interest. Thus, to build synergies between nations that are pursuing autonomy, the world needs trusted networks, transparent research ecosystems, and resilient multilateral frameworks that can hold even when diplomatic relations are strained. However, trust and transparency are under pressure, with increasing concerns around research integrity, data security, and the politicisation of science.

Building the spaces for public participation, whether physical, institutional or cultural, is necessary. These spaces would provide a platform where citizens can engage seriously with the questions that frontier technologies raise before decisions on their governance and deployment are made. The skill of anticipatory thinking needs to be instilled as a civic capacity. This kind of inclusive and anticipatory engagement should not be an afterthought but should be at the very foundation of technology governance. The generation that will govern the technologies of the 2040s is already here, and the world needs to nurture the spaces and the environment to prepare them for that responsibility.

At the same time, science and technology have taken a critical role in policy processes. National strategies on economic resilience, national security, and geopolitical influence are now built keeping science and technology as one of the main levers. Due to this criticality, technology's consequential positioning in determining strategic autonomy cannot be understated. Today, divergent regulatory regimes spanning export controls, data governance, intellectual property, and mobility frameworks are making visible just how deeply science has become entangled with strategic autonomy. This

Roundtable: "Science Diplomacy in the Era of Strategic Autonomy"
Panelists (Left to Right): Jan Marco Mueller, Vaughan Turekian, Maria Jarquin, Zakri Hamid, Balakrishna Pisupati, Abhay Karandikar, Peter Gluckman, Parvinder Maini

regulatory fragmentation has the potential to disproportionately affect emerging economies that are seeking to integrate into global innovation systems.

Institutions like the European Organisation for Nuclear Research (CERN) and the International Atomic Energy Agency (IAEA) were deliberate acts of science diplomacy, built on the recognition that knowledge sharing and the diffusion of scientific understanding across borders require sustained diplomatic investment. While these institutions, alongside examples like the Antarctic Treaty and Montreal Protocol, have demonstrated the potential of scientific consensus to shape global governance, the contemporary context of accelerated technological competition limits the direct replication of such models. This necessitates reinterpreting past approaches to suit present-day realities, including more flexible and plurilateral forms of cooperation.

In the pursuit of sovereignty, self-reliance is often seen as an opposite reaction to international collaboration; it need not be. In current times, the central tension lies in balancing national objectives of technological sovereignty with the inherently collaborative nature of scientific progress. India's approach illustrates this. Initiatives like Vaccine Maitri[2] during the COVID-19 pandemic demonstrated that India could lead vaccine development and supply to the world simultaneously. Similarly, India's push for human-centric AI through the M.A.N.A.V.[3] approach and bringing together global

2 'Vaccine Maitri' refers to 'Vaccine Friendship' in Hindi
https://www.pib.gov.in/PressReleasePage.aspx?PRID=2124745&reg=3&lang=2

3 M.A.N.A.V - Moral, Accountable, National Sovereignty, Accessible and Inclusive, and Valid and Legitimate Systems.

stakeholders for governance conversations at the AI Impact Summit in India[4] signifies the country's consequential position in balancing sovereignty and collaboration. India is moving towards building the kind of ecosystem in which it is a genuine co-developer in global science and technology, rather than a dependent participant.

However, the pursuit of balancing between autonomy and collaboration is limited by contemporary challenges. As states increasingly coordinate positions on global challenges, a persistent gap remains between coordination and deeper forms of cooperation, which require shared commitments and resource pooling. This gap is perpetuated by diverging national interests and capability asymmetries. Models of "selective openness" and "trusted partnerships" may prove to be pathways to balance the two pursuits, without undermining global research ecosystems.

The changing structure of research ecosystems is also widening this gap between autonomy and collaboration. Innovation ecosystems are increasingly decentralised and being driven by applied research communities and private sector actors. This transformation redefines epistemic authority, requiring science diplomacy to engage beyond traditional academic institutions. The rising influence of non-state actors, particularly private sector entities, philanthropic organisations, and multinational corporations, necessitates new governance frameworks that integrate them while ensuring accountability and equity. For emerging economies without significant technological sovereignty, this rising influence of non-state actors poses a risk of increased technological dependency. Countries at varying levels of technological capabilities and economic realities will have differing priorities and sovereignty concerns, and science diplomacy can act as a bridge between them. In this pursuit, traditional open science models must give way to reconfigured approaches that emphasise reciprocity, co-development, and resilience, moving away from models that perpetuate dependency. An equitable future would involve the emerging economies being brought in not merely as a recipient of science diplomacy, but as architects of it.

Current international agreements—the Paris Agreement, the Sustainable Development Goals (SDGs), and those others that preceded them—are achievements to be proud of. They are not the finishing line, however—the work is unfinished, and the pace of technological change means the cost of standing still is rising.

4 AI Impact Summit – Held between 16 February – 20 February 2026 https://impact.indiaai.gov.in/

IV. Anticipatory Science Diplomacy through Technology Foresight

The pace of technological change demands that countries adapt to new realities before they materialise. The practice of technology foresight is crucial in this regard to foresee and prepare for challenges that might arise in the future. In this regard, four forces (as also identified in the NATO technology foresight report 2025–2045) that will shape the global environment and diplomatic engagements through 2045 are:

1. The strain on the rules-based international order
2. The accelerating consequences of climate change
3. The shifting landscape of global partnerships
4. The growing, unprecedented power of the private sector

The rules-based international order is being severely tested by the uneven distribution of emerging, power-conferring technologies that currently lack multilateral governance frameworks. The race for AI and quantum supremacy is a geopolitical reality with substantial implications for intelligence and decision-making. However, the specialised talent required to advance and govern these systems is scarce. Therefore, pooling expertise and collaborating on development is no longer an idealistic goal, but a contemporary necessity. Hoarding capabilities independently will only result in technology advancing faster than our collective ability to manage it.

The area of climate change is uniquely positioned as both a consequence of industrial technology and a crisis that only technology, deployed at unprecedented speed and scale, can mitigate. Alongside such developments, the concept of security itself is shifting away from physical, territorial domains towards hybrid and cyber environments. Defence planners and diplomats must now prepare for challenges, such as AI-powered disinformation and cyberattacks on critical infrastructure, demanding entirely new frameworks of technological resilience.

Speedtalk: "Technology Foresight" | Steen Søndergaard

This has led to global alliances being fundamentally reshaped by who controls data, critical infrastructure, and innovation pipelines, with the complexity being amplified by the rapid advancements in frontier technologies. Because these technologies are becoming highly accessible and distributed, regulatory frameworks are struggling to keep pace. Hence, within global partnerships, consistent, cross-border application of principles is required rather than simply agreeing to them.

Science diplomacy must evolve to actively account for these dynamics—of rapid advancements, private sector participation and changing world order. The private sector now drives much of the world's most consequential research and development, operating with a reach and velocity that governments and state-led alliances are struggling to match. Building resilient structures for the next two decades will require bringing private actors into the diplomatic fold, ensuring that the development of critical technologies aligns with broader security and global public good objectives.

VI. Science Diplomacy and the Governance of Disruptive Technologies

The fast-paced development of disruptive technologies has brought with it evolving challenges in governing them. These technologies are advancing at a pace far exceeding the development of standards and regulatory frameworks, creating a widening acceleration gap. Policymakers are attempting to respond to developments they did not anticipate, making decisions under conditions of uncertainty and using tools that were not designed for the cross-sectoral implications now in front of them. The question is not whether existing multilateral frameworks need to evolve, but whether they can adapt fast enough to avoid simply entrenching the advantages of those who are already ahead.

This acceleration gap is further complicated by the changing nature of innovation itself. Technology no longer originates exclusively in universities or state-centric institutions, but operates within a multi-stakeholder ecosystem that includes startups, corporate R&D labs, and civil society. Its development is transboundary and fast-paced, making it difficult to track or regulate, and raising questions of accountability due to the deepening involvement of technology firms in governance. This nexus can further perpetuate the marginalisation of countries outside the dominant technological blocs. This dispersal of innovation also creates a fundamental science-policy interface problem: those responsible for making policy decisions are often working without the scientific and technical literacy required. Making this interface stronger within both national governance and multilateral processes is essential to solving this challenge.

To effectively deploy this risk assessment, there is a need to focus on the critical window between discovery and deployment, which is where governance has the most leverage, yet is most consistently absent. The governance challenges often become visible only after technologies are widely deployed. Preparedness takes time, and by the time a technology reaches commercial markets or military application, the most critical decisions have already been made. This window must be used more deliberately. The moment between a scientific breakthrough and its

Roundtable: "Science Diplomacy and Governance of Disruptive Technologies"
Panelists (Left to Right): William Marks, Doyin Odubanjo, Hema Sridhar, Macharia Kamau, Geetha Vani Rayasam, Sudip Parikh, Vijay Chauthaiwale, Tateo Arimoto, Marilyne Andersen

widespread deployment is precisely when anticipatory frameworks, foresight, and inclusive standard-setting processes need to be activated. This is particularly critical as we navigate intensifying competition in AI and quantum technologies, the governance of synthetic biology, widening resource divides, fragmented trust in science systems, and growing civil-military technological convergence.

These challenges reveal that the governance of frontier technologies has evolved beyond pure regulation into a fundamentally geopolitical challenge. In contemporary times, technological capabilities are increasingly viewed as instruments of strategic leverage, shaped by global supply chains and export control regimes. This is further perpetuated by the concentration of these critical technologies and their constituents, like compute, capital, and intellectual property, in a small number of geographies. That concentration determines whose values get embedded in technical standards and risks reinforcing global inequities. Thus, governing it through reactive multilateral regimes risks deepening the inequalities it was supposed to correct. What we need is adaptive frameworks that are grounded in ethical and developmental considerations, and that ensure broader participation, especially from emerging economies.

To further prevent deepening the inequalities, multilateralism remains essential, but it must be fundamentally reimagined to move beyond reactive and state-centric approaches towards more proactive and pragmatic models. The multilateralism the moment requires is inclusive, open to the private sector, and anticipatory in nature. Part of this reimagining involves identifying pre-competitive spaces for collaboration, such as those demonstrated by large-scale initiatives like the Human Genome Project. Such pre-competitive areas can provide pathways for cooperation even amidst strategic competition.

VI. The Pursuit of Science and Technology Diplomacy in a Multipolar World

The ideal notion of “borderless science”, where knowledge belongs to everyone, is increasingly strained by the realities of geopolitical competition. While global collaboration remains essential for shared challenges, advancements in disruptive and dual-use technologies, such as AI, quantum computing, and synthetic biology, have made cooperation highly sensitive and strategically contentious. As the same research and infrastructure that advances medicine or climate modelling can also enhance military capabilities, science is no longer insulated from geopolitics, but it is now a strategic asset tied to national security. Science diplomacy must see the aspects of competition and cooperation simultaneously to ensure that scientific progress serves the global public good even as nations compete over century-defining technologies.

As countries prioritise technology security, a tangible erosion of trust is creating a chilling effect on open research and co-development. Collaborative research projects are facing rigorous legal reviews, tighter data-sharing regulations, and restrictive visa regimes, causing researchers to withdraw from partnerships due to the shifting political climate rather than changing science. The absence of neutral platforms risks undermining our collective capacity to address global shocks. To bridge this divide, science diplomacy must shift towards “anticipatory diplomacy”—a proactive approach to governance that does not wait for crises to prompt a response, as the pace of change in fields like synthetic biology makes reactive regulations unaffordable. The creation of ‘scientific corridors’ is another pathway that can provide structured, politically insulated channels for collaboration, keeping the essential connective tissue of the global scientific community intact even when state-level diplomacy is strained.

The expanding and largely ungoverned influence of non-state actors is profoundly reshaping technological trajectories and global governance. Large corporations now control critical data sets, computing infrastructure, and innovation pipelines that often rival or exceed the capacities of

Plenary Session: "Pursuing Science and Technology Diplomacy in a Multipolar World"
Panellists (Left to Right): Ajay Sood, Peter Gluckman, Marilyne Andersen, Macharia Kamau, Kiana Aran, Magdalena Skipper

many smaller and emerging nations. Consequently, they shape research agendas, set standards, and operate across borders in ways that traditional, bilateral state-centric frameworks were never designed to manage. To effectively manage this, science diplomacy must evolve into a more inclusive architecture—a 'triple helix' that brings together academia, industry, and government to integrate these technology corporates into formal governance structures without stifling the innovation that makes them valuable.

Emerging economies, in particular, face the risk of long-term dependency due to asymmetries in technological capabilities. Emerging economies find themselves excluded not only from access to cutting-edge research but also from the critical processes that establish the standards and norms for upcoming technologies. This effectively forces them to live under rules they had no hand in writing. To counter this exclusion and strengthen equitable participation in global technology governance, science diplomacy must enable the shift towards partnerships that build local institutional capacity and integrate diverse knowledge systems into the global scientific conversation.

VII. Special Session on Science Diplomacy (by the International Science Council)

The distinct domains of diplomacy and science and technology are experiencing rapid change, and the interface between them, often called science diplomacy, is entering a new complex and difficult era. Science, technology, economic development, security and geostrategic interests have become tightly intertwined: the rise in nationalism, fractured commitments to longer-term thinking in favour of short-term transactional decision-making, the rising role of dominant non-State actors especially in the technology arena, the emergence of distinct technopoles, and more overt power-based conflicts in the face of global economic issues are contributing to embed science in geostrategic competition.

The field of science diplomacy which grew in the period after 2010 is therefore having to undergo significant reorientation. In this context, the International Science Council (ISC) convened a meeting of scientists and practitioners of science diplomacy from most of the relevant groupings with diplomats in Delhi, as part of the 2026 Raisina Dialogue, on the day after the Science Diplomacy Initiative of the Dialogue, to consider the future of science and technology diplomacy and the potential role of the ISC.

Participants remarked at the outset that the commitment to advancing the global commons has markedly diminished to a more self-interested focus. And the range of issues where science and diplomacy interact have greatly expanded beyond those considered in the SDGs to include issues of technology control in areas such as space, geoengineering and the issues of transnational regulation of AI, synthetic biology—all areas where non-State actors have dominant roles.

The primary observations from the meeting focused on the need for science diplomacy to be more pragmatic, noting: that diplomacy will always focus primarily on national interests; that there is a need to support efforts to get a diplomatic focus on the expanded global commons (especially in light of the upcoming discussions on the post 2030 Sustainable Development Agenda); and to assist diplomacy to understand the impacts of technologies that need transnational consideration. The potential role of technology in driving greater national inequalities and creating a form of technological colonialism was also discussed.

ISC Special Session on Science Diplomacy

Science has and will continue to have a crucial role in international discussions as it brings credibility and a common foundation to build on. The scientific community must link more strongly to the wider ecosystems of foreign policy of which diplomats are only one part. It was also noted that there are disparities among countries in scientific capabilities and international organisations have a key responsibility in addressing power imbalances and ensuring a level playing field. Additionally, leveraging science diplomacy for the global public good also requires strengthening the underlying (and less visible) systems that allow knowledge sharing and trust building such as data repositories and shared infrastructures.

There was concern noted about confusion in the overuse of the term 'science diplomacy' and a need for key stakeholders to work more closely together to align their understandings while recognising their distinct roles. The consensus was that stronger coordination and exchange across the key stakeholders in science diplomacy was needed, including to examine whether a more formal network of science diplomacy actors, extending beyond the science community, was desirable. It was also agreed that collaboration across those active in capacity building in science diplomacy could strengthen individual and institutional development across regions, for instance by pooling available training resources and mapping commonalities and differences across organisations and regions in teaching materials and approaches to capacity building.

Such collaborative efforts in coordinating across networks and capacity building would complement and support the work that the ISC does through its growing interactions with the multilateral system, the EU supported ISC project on the multilateral dialogue on principles and values in international science cooperation and the ISC's work on Freedom and Responsibility in science, and the ISC's long-standing role in coordinating international science collaboration as the global voice for science.

Annexe

Expert Contributors:

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