

The U.S. and India take the next step: Unpacking U.S.-India technology cooperation and Modi summit

Sean Randolph – September 6, 2023

June's meeting between U.S. President Biden and India's Prime Minister Modi advanced the U.S.-India connection to a new level. While the relationship falls short of an actual alliance and India and the U.S. may often differ, the alignment of national interests continues to deepen. This was evident in the scope and breadth of cooperative agreements that the meeting either announced or confirmed. Much of the focus was on technology, which plays an increasingly central role in the relationship. These were the high points:

The United States and India:

- Affirmed the key role that technology will play in their relationship, particularly through iCET, the Initiative on Critical and Emerging Technology launched in January;
- Expanded their cooperation in space, including an agreement by NASA and ISRO, India's space agency, to cooperate on human spaceflight. NASA will provide advanced training for Indian astronauts and the two countries will cooperate on satellites and satellite launches;
- Agreed to create a Semiconductor Supply Chain and Innovation Partnership to coordinate their semiconductor industry incentive programs;
- Launched two Joint Task Forces on advanced telecommunications to support the mutual goal of "trusted and secure telecommunications and resilient supply chains";
- Launched a joint Indo-US Quantum Coordination Mechanism, a first step toward a comprehensive Quantum Information Science and Technology Agreement;
- Confirmed a program to jointly develop and commercialize AI and quantum technologies;

- Flagged a contribution by India to the U.S. Department of Energy's Fermi National Laboratory to support the collaborative development of the Long Baseline Neutrino Facility, the first and largest international research facility on US soil. Plans call for similar collaboration in advanced biotechnology and biomanufacturing.

The announcement also included the launch of the U.S.-India Defense Acceleration Ecosystem (INDUS-X), a network of universities, startups, industry and think tanks to facilitate joint defense technology innovation and the co-production of advanced defense technology. Clean energy was also a focus, with the launch of the U.S.-India New and Emerging Renewable Energy Technologies Action Platform (RETAP), an initiative to accelerate cooperation on green hydrogen, offshore and onshore wind, and other emerging energy technologies.

These announcements build on both countries' technology strengths, strategically accelerating cooperation. The potential is significant given India's technology workforce, its capacity in Ai and semiconductor design, its entrepreneurial ecosystem, and recent achievements such as the successful landing of a lunar rover on the moon's challenging south pole (the first by any nation).

Though unstated, the challenge from China looms in the background. As if to confirm that differences over trade won't be allowed to impede the larger strategic relationship, the United States and India have notified the World Trade Organization that they have jointly decided to close two major trade disputes related to duties imposed by the Trump administration on Indian steel and aluminum products, and reciprocal duties imposed by India on selected U.S. products.

Silicon Valley will play an important role as the India-US relationship advances, seen in investment in internet infrastructure by companies like Meta and Google, Apple's growing production of iPhones, and massive investment by firms such as Applied Materials and Intel in India's semiconductor sector.

The fast-growing U.S.-India relationship is built on a shared values and interests, propelled by external challenges. Much needs to be done to realize the ambitious goals that both countries have set for technology cooperation, but as the summit confirms a strong start has been made.

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