

Emerging Technologies

India is a central actor in several emerging-technology coalitions. The United States and Europe have named it as an important and like-minded partner, and for India its partnerships with both are crucial for aspect of its Digital India policies. Trisha Ray explores how the three actors operationalize their cooperation on emerging technologies in 2021, going beyond a shared vision.

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Beyond an India-EU-U.S. Shared Vision on Emerging Technologies

Trisha Ray

India is an increasingly pivotal actor in the deluge of technology-centered coalitions and partnerships. It is part of minilateral groupings like the India-Australia-Japan Supply Chain Resilience Initiative, “values-driven” groupings like the proposed D10 club of democracies on technology, and norms-shaping groupings like the Global Partnership on Artificial Intelligence. Its inclusion would appear to be natural: It remains a democracy that supports a rules-based international order. India has [rapidly emerged](#) as a major electronics manufacturer, and it is an attractive market for digital products, with between 800 million to 1 billion [projected](#) internet users by 2025. It has also built a reputation for bold digital projects, like the bid to enroll its billion-plus population under the national biometric ID [Aadhaar](#) and the [IndiaStack](#) project that is working on full-stack application programming interfaces for India’s digital infrastructure.

Partnerships with the United States and the EU are an important component of [Digital India](#)—the program aiming to bring the population online, to create a digital growth proposition that benefits all, to generate value sustainably, and ultimately to transform the country into a global digital hub. India’s growing digital footprint and geopolitical value as a hub of the Indo-Pacific have made it an invaluable economic and strategic partner on emerging technologies. As a result, decades of lowest-common-denominator-style cooperation in science and technology is slowly giving way to seeing India as an equal partner on hot-button issues of technology norms and rules.

One key to Digital India is the tenet “Indian solutions to Indian problems,” premised on building human capital and research and development capacity. Here, existing education and research initiatives with the United States and the EU—especially in science, technology, engineering, and mathematics—are an important building block. The Indo-U.S. Science and Technology Forum, for instance, was established in 2000, as part of the general warming of relations between the two countries in the early 2000s. Since its inception, it has served as a launchpad for research collaborations and talent development in biotechnology, smart grids, gene editing, and other frontier technologies. The EU and India’s Department of Science and Technology have [similarly collaborated under the European Commission’s Horizon 2020](#) program (2014–2020), co-funding [projects](#) on health, biotechnologies, and clean energy. The EU-India [Agreement on Science and Technology Cooperation](#) was recently renewed for the next five years.

The Windfalls of Techno-nationalism?

Relations between India and the United States and the EU respectively have and will be heavily influenced by the trend toward techno-nationalism—the imprinting of national identity, prosperity, and security onto technologies.

The United States often takes India as an important regional partner in balancing China’s brand of digital authoritarianism. In the U.S. [Clean Network](#) program for 5G, which “addresses the long-term threat to data privacy, security, human rights, and principled collaboration posed to the free world from authoritarian malign actors,” India’s Jio is cited as a “clean telco.” The United States is also [reportedly](#) collaborating with India and Israel on research and development in 5G, again with an emphasis on a “transparent, open and reliable” network.

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The EU’s emphasis on a “[European way](#)” of digital transformation and on “digital sovereignty” almost mirrors India’s narratives, including “data sovereignty” and Digital India. Both sides’ narratives are centered around breaking out of the U.S.-China dichotomy, using local data in support of local enterprises and prosperity, and challenging the dominance of a handful of tech giants with compelling alternatives. India and the EU have been engaged in a series of Cyber Dialogues, with the [sixth edition](#) concluding last December. As part of these and other dialogues, the two have also discussed how to cooperate at multilateral and multi-stakeholder technology rulemaking bodies, an area where the two can leverage their shared values—which resonate with much of the developing world—as well as their respective vast networks of bilateral and minilateral dialogues.

Yet, even though India and its partners in the United and Europe broadly speak the same language on emerging technologies, there remain barriers to overcome. In the United States’ case, for instance, the securitization of technology flows limits how deeply India can engage. Whether it be its notable absence from the Department of Defense’s [AI Dialogue for Defense](#) or the lackluster track record of the nearly decade-old U.S.-India Defense Technology and Trade Initiative, India has not been able to cross the invisible fence around the United States’ group of trusted technology partners. The expectation that India should fall in line with the United States’ worldview and cut ties with long-term technology partners like Russia overnight is also a source of friction.

In keeping with its digital ambitions, India is keen to leave behind its role as a technology taker, and its engagement with EU and the United States is part of this broader ambition. It seeks to build its digital futures on its own terms, a fact that may sometimes put it at odds with its partners. Nevertheless, more than ten years of slow-burn research cooperation is giving way to deeper strategic cooperation on technology, as both the EU and the United States turn to India because of its massive and growing digital market as well as of shared visions of a rules-based technology order.

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