US-India Defense Technology Cooperation

Vital, Not Inevitable

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For almost twenty years, defense cooperation between India and the United States has been on a steady upward trajectory. This is true across a range of measures, including military exercises: India does more with the United States than with any other country; defense trade has topped $20 billion today; and critical enabling agreements have facilitated increased military cooperation on everything from communications to intelligence-sharing to logistics. Former Indian Defense Minister Nirmala Sitharaman accurately described US-Indian defense cooperation "as the most significant dimension of our strategic partnership and as a key driver of our overall bilateral relationship."[1] Defense cooperation—and defense technology cooperation in particular—continues to be a positive driver in the US-India bilateral relationship today.

In 2023, the US-India defense partnership—built by leaders from across the political spectrum in both countries over twenty years—seems natural. Defense cooperation continues to be a driving force in strengthening the overall bilateral relationship, and leaders recognize that this robust partnership is vital to their own national security as well as to the security of the Indo-Pacific region. But US-India defense relations remain complicated, bespoke, and precarious. The success of this relationship never was, and still is not, inevitable.

In the timescale of global geopolitics, defense ties between the US and India transformed in the blink of an eye. The US sanctioned India for nuclear tests in 1998. Just a decade later, in 2008, the US Congress approved a nuclear deal with India that not only required changes to US law but also reshaped the entire global nuclear nonproliferation regime.[2] On the way to this acknowledgment of India as a nuclear weapons state outside the global Non-Proliferation Treaty, US President George W. Bush and Indian Prime Minister Manmohan Singh launched a ten-year defense cooperation

framework and a "global strategic partnership" in 2005. In 2016, President Obama and Prime Minister Modi launched a new framework uniquely tailored for India that designated India as a "Major Defense Partner," making it eligible for technology sharing on par with US treaty allies. In 2018, the US Commerce Department under President Trump moved India to Strategic Trade Authorization Tier 1, granting broader exceptions for licensing of sensitive technology for India.[3]

The deepening of defense ties in the early 2000s foreshadowed the reconceptualization of the Asia-Pacific into the Indo-Pacific, an idea that grew from discussions of maritime security and was brought to the fore when Japanese Prime Minister Shinzo Abe delivered his pivotal "Confluence of the Two Seas" speech before the Parliament of India in 2007. Though he did not use the words "free and open Indo-Pacific," Abe set the predicate for the contest now unfolding in the region with this vision of Indo-Japanese cooperation:

> By Japan and India coming together in this way, this "broader Asia" will evolve into an immense network spanning the entirety of the Pacific Ocean, incorporating the United States of America and Australia. *Open and transparent, this network will allow people, goods, capital, and knowledge to flow freely* [emphasis added].[4]

Abe never mentioned China in the speech. The Quadrilateral Security Dialogue—the Quad—of Australia, India, Japan, and the United States, which has evolved into the most active head-of-state-level multilateral structure among democracies in the region, also frames a positive vision without much mention of China in official statements. But it is clear these nations believe the risk to the free flow of people, goods, capital, and knowledge—to the "free and open Indo-Pacific"—stems from choices that might be made by an assertive and revisionist China.

INDO-US DEFENSE TIES CENTRAL TO QUAD AND MULTILATERAL REGIONAL SECURITY COOPERATION

The Quad sets out to offer a positive agenda and alternatives to Chinese investment and technology in the region. It does not explicitly include security measures other than a Maritime Domain Awareness program focused on illegal and unregulated fishing. But for each of the four member countries, this is the positive side of the coin of deterrence. To be credible and viewed by states across the region as more than a discussion forum, it must be undergirded by sufficient military capacity and capability to ensure Chinese leaders calculate that it will be too costly to remake the region to China's liking by military means. For each partner, the greatest concerns center on long-standing territorial and sovereignty disputes and growing Chinese technological and power projection capabilities on air, land, and sea, and in space and cyberspace that might prompt a Chinese misadventure and spark a war.

The Quad countries share this strategic view but find the challenge most acute where it impacts each of them most directly. For India, the central dispute is over the Line of Actual Control (LAC) with China and China's claims to the Indian state of Arunachal Pradesh. Clashes here in recent years have pushed Sino-Indian ties to historic lows. For Australia, the closest concerns are over Chinese assertiveness in the Pacific Islands and the maritime domain in the Indian Ocean. For Japan, the Senkaku Islands are the most acute issue with China. And for the United States, Taiwan takes center stage. Quad partners and countries across the region are concerned about China imposing its will on all the claimants to portions of the South China Sea. Can China be deterred from using force or economic coercion in all of these areas of friction?

When it comes to deterring China's worst possible courses of action, India's role is vital and a bit of a paradox. With a strong India on its western front, China faces far more complicated calculations about any military adventures elsewhere. India can hold at risk Chinese assets—land, air, and sea—and potentially take advantage of Chinese distraction to tip the balance along the LAC in its favor. India can constrain the flow of critical materiel through the Strait of Malacca. In order to play this deterrent role for its own national security interests, India requires rapid and robust growth in its economic, military, and diplomatic power. The United States and other Quad partners need this strong India to complicate Chinese planning against their own top areas of concern.

Yet India is unique in this partnership by virtue of being neither a US ally nor a developed economy. With a GDP of roughly $2,000 per capita and persistent poverty, India can achieve what it needs—and what the US and its Quad partners seek—only with rapid economic growth and partnership. One critical variable that will have far-reaching impact on India's expanding role and position of prominence in the coming decades is the depth, breadth, and durability of its relationship with the United States, particularly a trusting partnership in the area of defense cooperation.

India's ability to deter and, if necessary, defeat threats from China (and Pakistan) and its role as a regional power and net security provider will be fundamentally impacted by the character and quality of its defense relationship with the United States. Strong and constant US-India defense cooperation, including increased sharing of advanced military technologies, will also bolster regional security, help India manage territorial threats from China, and force China to develop greater capacity or assume greater risk in attacks anywhere along its periphery. India's strength can constrain China's freedom of action. The future looks far more ominous if US-India defense cooperation deteriorates and is not leveraged to its fullest potential.

Encouragingly, since the Major Defense Partner designation, the US and India have concluded four key defense enabling agreements that facilitate secure communications across multiple platforms, allow for greater technology transfer, increase industry cooperation on sensitive technology, and allow real-time geospatial intelligence sharing. Interoperability has also been improved between India, the US, and US allies such as

Australia, Japan, and South Korea. The US has cleared the way to share more sophisticated technologies, including armed UAVs. This level of technology sharing is unprecedented to date outside of America's community of allies and closest partners.

The trajectory of India-US defense cooperation going forward is indeed promising, but obstacles remain in technology sharing, the cost of US systems, and challenges for the US in effectively partnering with India as it seeks to build an indigenous defense industrial base. More broadly, actions that would undermine trust or raise concerns over either country's reliability as a partner could strain or even derail the trajectory of US-India cooperation. Take, for example, the expected fallout should the US impose the Countering America's Adversaries through Sanctions Act or other sanctions on India or if India makes choices in the substance and nature of its close relationship with Russia that lead the United States to limit cooperation.

Strong India-US relations will create conditions for the US to continue to provide greater and more technologically advanced defense platforms, increase our intelligence and information sharing, and step up the scope and complexity of military-to-military exercises with both the US and other regional partners. This is no time to rest on our laurels or assume the strength and trajectory of this relationship will endure without significant attention and investment.

STRENGTHENING DEFENSE COOPERATION

Officials in both countries recognize that the momentum of US-India defense cooperation is arguably stalling in key areas like codevelopment and coproduction of critical new technologies even as it deepens in areas like intelligence sharing. Significant opportunities to advance the relationship remain unexploited. From large-end defense platforms to emerging technologies with dual-use applications, the United States and India are leaving significant opportunities on the table. We recommend the following opportunities to strengthen the technology piece of US-India defense cooperation.

PUTTING THE "MAJOR" IN THE MAJOR DEFENSE PARTNERSHIP: SHARE ADVANCED DEFENSE TECHNOLOGIES WITH INDIA AT THE LEVEL OF OUR CLOSEST ALLIES

With the designation of India as a Major Defense Partner—a relationship portrayed as akin to those the US maintains with its treaty allies—there is an expectation that the US will share its advanced technologies at the same level. For India, there is also an expectation that defense trade be viewed as an investment in the relationships that are in India's long-term strategic interests to maintain and strengthen.

It is exceedingly difficult for the United States to implement this vision for two reasons: First, export control regimes, while well intended, hamper technology transfers even

with America's closest allies. The United Kingdom and Australia, for example, have formal Defense Trade Cooperation Treaties with the United States. Despite this, all three governments are struggling to implement both the nuclear submarine and the critical technology pillars of the Australia-United Kingdom-United States security agreement. Second, while the US government might block US companies from sharing technology, it will not direct them to share technology for strategic purposes. Other states supplying India with defense technologies, including Russia and also allies like France, Israel, and the UK, have formal defense industrial policies facilitating these transfers and are more able to offer technology through official government channels. The UK, for example, has offered India maritime propulsion and jet-engine technology; France is offering India both nuclear submarine cooperation and fighter-jet engine technology; and Israel offers full transfers of technology on drones and missiles. Russia remains for the foreseeable future the critical source of the majority of India's strategic systems, including its intercontinental ballistic missiles and nuclear submarines. In this context, the advantages afforded to India by its designation as a Major Defense Partner are underwhelming.

Thus, despite having unilaterally pushed the permanent nuclear powers to accept India as a nuclear weapons state, the United States remains overly constrained in sharing sensitive technology with India. To address this, Congress should add India to the list of NATO allies, Australia, Japan, New Zealand, Israel, and South Korea given preferred treatment under the Arms Export Control Act, as proposed for several years by US Senators Mark Warner and John Cornyn. The same technologically advanced and capable US fighters, including the F-35, should be made available to India should it wish to procure them. India in turn should factor the long-term strategic impact when making decisions on major defense purchases like fighters. The Department of Defense and US industry should work closely together to identify technology that can be shared and systems that could be manufactured in India to support its efforts to build a defense-industrial base. And we should encourage and facilitate defense trade and technology transfer between India and our closest allies, creating more and better opportunities to build India's technology capabilities through defense trade and expanding the Defense Technology and Trade Initiative (DTTI) umbrella to include additional countries—for example, establishing a "Quad DTTI." The more recent India Initiative on Critical Emerging Technologies (iCET), officially launched in January 2023 when US National Security Advisor Jake Sullivan and his Indian counterpart Ajit Doval met in Washington, DC, should aim to build on the defense technology sharing objectives of DTTI. Opportunities to harness cooperation across US and Indian governments, research laboratories, universities, and the private sector can and should be more effectively exploited.[5]

On the Indian side, major reforms like raising foreign direct investment caps to 74 percent for defense production–linked investment schemes and dedicated defense corridors have not yet seen the level of uptake the Indian government would like. This is often because issues around taxation, IP protection, duties on imports, or the availability of key inputs subject to local content requirements make major investments too complicated or too costly. A fast-track empowered group led out of the National Security

Council staff could potentially investigate and resolve such obstacles through waivers or reforms to facilitate deals that will help with self-sufficiency in defense.

Additionally, legacy US concerns about creating a relative imbalance between Pakistan's capabilities and India must be shelved for the good of our vital and important interests in this era of strategic competition with China. Pakistan does not have the strategic priority it once maintained during the Cold War and during the early years of the Global War on Terrorism. United States policies toward sharing military technologies with India must not be limited by these historic and no longer relevant constraints imposed by concerns for relations with Pakistan.

CREATE REAL INCENTIVES AND VIABLE MECHANISMS TO DECREASE DEPENDENCY ON RUSSIAN DEFENSE PLATFORMS AND EQUIPMENT

Russia's war against Ukraine over the last year underscores the political and strategic liabilities of maintaining close relations with this aggressor nation as well as the risks of depending on defense equipment of Russian origin. India is both diversifying and indigenizing its defense production to address such vulnerabilities; despite past success with technology from Russia, Indian leaders recognize that the cutting-edge future they want will not be made in Moscow. The US could be a bigger part of the solution. But many US-made options remain too expensive or are unavailable.

India is not interested in traditional security assistance like Foreign Military Financing, but other steps could be taken to make acquiring US defense equipment more feasible. For example, the US government could consider providing India what amounts to "Foreign Military Sales Credits" and create provisions that allow for Department of Defense Title 10 grant assistance to be used as credits toward the purchase of strategically important capabilities that India currently seeks. The US Development Finance Corporation (DFC) currently provides structured finance, investment, and loan guarantees in areas including infrastructure, energy, and health care in India, but it is prohibited from work on defense articles and services. This policy could be reevaluated, or short of this, the administration could direct DFC to support critical technologies that are dual use, including in space, microelectronics, and networking, for example. The US should have a de facto "fast track" approval process to provide India major defense systems more rapidly and with fewer restrictions to better compete with other suppliers, including allies and partners. This can be achieved informally by requiring that decisions to deny any technology to India be reviewed by a senior official or panel such as the deputy secretary of state and deputy secretary of defense.

INCREASE THE SUBSTANCE AND SCOPE OF PUBLIC-PRIVATE DEFENSE INNOVATION COOPERATION WITH INDIA

India, like the United States, recognizes that technologies with military relevance such as AI, machine learning, and quantum computing are increasingly being developed in the

commercial technology base, not just in universities and government labs. Progressive initiatives from within the Indian Ministry of Defense, such as Innovations in Defense Excellence (IDEX), are keen to learn from the US experience and to partner with organizations like the Defense Innovation Unit. An India better able to identify, adopt, and deploy technology needed for its defense and security will be a stronger, more capable, and interoperable US partner. Establishing and leveraging greater public-private partnerships between the US and India provides opportunities to harness the potential of both states' vibrant technology sectors and focus them on defense.

OPERATIONALIZE THE DEFENSE ENABLING AGREEMENTS

Both authors served in the same role—deputy assistant secretary of defense for South and Southeast Asia—during different administrations. The now-concluded enabling agreements—Logistics Exchange Memorandum of Agreement; Communications Compatibility and Security Agreement; Industrial Security Agreement; and Basic Exchange and Cooperation Agreement—provide the foundation for in-depth defense cooperation and interoperability. To date, this foundation has not led to enough innovation. Communications and servicing have been streamlined, and intelligence sharing has become more robust and routine, but industrial cooperation remains bogged down. India will avoid any appearance of formally allying militarily with the United States against China and will not participate in certain types of military-to-military cooperation, but the implementation of these agreements provides a path to far more robust military collaboration.

The defense enabling agreements can be operationalized by increasing cooperation in more benign scenarios, such as humanitarian assistance and disaster relief, and other activities that encourage military-to-military relationships, intelligence and information sharing, interoperability, and cooperation potential. Priority areas for cooperation facilitated by the conclusion of these enabling agreements include positioning US-India defense ties within the broader bilateral and multilateral security architecture; identifying gaps in military capabilities and sourcing them to the Indian military services; institutionalizing opportunities for greater intelligence sharing; establishing deeper and more substantive consultations aimed at addressing and mitigating risks in the nuclear, space, and cyber domains; prioritizing activities that enable joint combined operations and cooperation with countries across the region subject to nefarious Chinese influence; and significantly leveraging these agreements to drive increased transfers of advanced technologies and empowering more substantive codevelopment efforts.[6]

CONCLUSION

India is on track to assume what its leaders and citizens view as its natural role as a major global power. India has the world's fifth-largest economy, which experts predict will grow to $10 trillion by 2025. By 2030 India may be the third-largest economy, after the United States and China. India's military is the third largest in the world and is making

significant investments in modernizing its forces and increasing their readiness. More people will live in India than any other country in the world within the next five years and, unlike many of the largest economies in the region, India's young population ensures a large workforce that must support a comparatively small population of seniors.

India is well equipped to realize the ascendant vision articulated by its leaders and will continue to make positive gains toward these ends. The character, pace, and extent of India's rise, however, is not preordained. For the United States and India, both facing an assertive and revisionist China, the rationale for strategic defense cooperation is clear. But many external and internal factors will influence India's regional and global position in the decades going forward.

Though they are not allies, the US and India have deep ties and shared interests that make them natural partners. A strong, capable, and independent India assuming its natural place as a regional power with global influence is not just in the interest of India but of every country sharing a similar vision for the future of the Indo-Pacific region and beyond. Increasing the depth and breadth of US-India defense cooperation, especially in the realm of expanding the sharing of advanced military technologies, has been and can continue to be a driving force in advancing the broader bilateral relationship as well as relationships with those of US allies and partners across the region.

NOTES

1. Minister Sitharaman made these remarks at the inaugural 2+2 dialogue meeting in Delhi on September 6, 2018. See Jim Garamone, "US-India Defense Cooperation a 'Key Driver' of Overall Relationship," UIS Department of Defense, September 6, 2018, https://www.defense.gov/News/News-Stories/Article/Article/1622396/us-india-defense-cooperation-a-key-driver-of-overall-relationship.

2. For an excellent primer, see Jayshree Bajoria and Esther Pan, "The US-India Nuclear Deal," Council on Foreign Relations, updated November 5, 2010, https://www.cfr.org/backgrounder/us-india-nuclear-deal.

3. For a summary of key developments in US-India defense relations, see US Department of State, Bureau of Political-Military Affairs Fact Sheet, "US Security Cooperation with India," https://www.state.gov/u-s-security-cooperation-with-india.

4. "Confluence of the Two Seas," speech by Shinzo Abe, prime minister of Japan, Ministry of Foreign Affairs of Japan, August 22, 2007.

5. For an excellent backgrounder on iCET, see Rudrah Chaudhuri, "What Is the United States–India Initiative on Critical and Emerging Technologies (iCET)?" Carnegie India, February 27, 2023, https://www.google.com/search?client=safari&rls=en&q=icet+india+critical+emerging+technologies&ie=UTF-8&oe=UTF-8.

6. See Joshua White, "After the Foundational Agreements: An Agenda for US-India Defense and Security Cooperation," Brookings, January 2021. https://www.google.com/search?client=safari&rls=en&q=operationalizing+the+defense+enabling+agreements+with+India&ie=UTF-8&oe=UTF-8.

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