

Toward a Mature Defense Partnership

Insights from a U.S.-India Strategic Dialogue

By Sameer Lalwani, Elizabeth Threlkeld, Christopher Clary, and Zoe Jordan

November 2021

Geopolitics of the
Indo-Pacific

South Asia Program

Executive Summary

The Stimson Center's U.S.-India Strategic Dialogue convened Indian and American national security experts and practitioners in 2020-2021. The dialogue—held virtually over 20 hours of group discussion and 40 hours of individual follow-ups—offered insight on competition in the Indo-Pacific, strategic cooperation, and future political and economic challenges. While the US-India partnership comprises multiple nodes, including trade, technology, climate, global health, immigration, and institutional norms, the dialogue and analysis herein focused on the deepening defense partnership.

Key Findings and Recommendations

U.S. Government

Joint Leadership Statement on Defense Tech. The U.S.-India relationship requires clear leadership signals and cabinet-level oversight/advocacy to overcome bureaucratic inertia and advance defense technology cooperation. A leader-level announcement of a joint flagship initiative with downstream impacts on defense technology cooperation, public-private partnerships, supply-chain integration, and talent formation—e.g., a joint program to build the world's most powerful supercomputer—would provide top-cover to advance defense, intelligence, R&D, and economic cooperation.

Disarm CAATSA Landmine. CAATSA sanctions will trigger significant Indian political blowback, setting relations back a decade. The United States should either issue India an enduring waiver or apply very light, symbolic sanctions once, with sufficient forewarning and dialogue with Indian leadership to mitigate political repercussions.

Rhetorical Adjustments. India remains cautious about conspicuous confrontation with China, expects asymmetric U.S. support, and guards its autonomy and sphere of influence. U.S. official rhetoric on the partnership should emphasize discreet, less conspicuous cooperation on China—such as intelligence, maritime security, and cybersecurity; bolstering Indian sovereignty and development; frequent consultation and coordination on India's neighborhood; and long-term American pursuit of greater strategic reciprocity.

Department of Defense

Joint Intelligence Assessment. India does not share the same U.S. urgency over the maritime threat posed by China's navy, has not made a major grand strategic shift to prioritizing that threat, and remains ambivalent over a deep U.S.-India defense partnership. Because U.S. and Indian perceptions of regional trends and threats appear misaligned, the United States and

India should engage in more frequent joint assessment processes at working-level meetings and inter-sessional engagements involving a cross-section of military, civilian defense professionals, diplomats, intelligence, and political leaders. A standing Joint U.S.-India Intelligence Assessment Center at INDOPACOM could serve as a mechanism for bilateral analytic exchanges, table-top exercises, and joint intelligence estimates.

Revitalize a Human-Centric Defense Technology Partnership. India measures the success of the U.S.-India strategic partnership through the lens of technology cooperation and transfers in defense and civilian spheres. By those measures, India assesses the partnership falls short relative to those with Russia, France, and Israel. The Pentagon can revitalize the India-U.S. Defense Technology and Trade Initiative by delivering on a high-visibility cooperation success (beyond an unmanned system prototype). Hybrid entities like DIU could “go global” to Indian cities via roadshows, overseas offices, and eventually co-investment to solve joint challenges. U.S. agencies should expand R&D institutional partnerships and talent exchange flows that could fill U.S. demands for STEM talent and boost India’s skilled economy. The Pentagon should partner with State and Commerce to establish the U.S.-India Strategic Tech Alliance focused on emerging technology recommended by the National Security Commission on Artificial Intelligence.

Excess Defense Articles (EDA) & Infrastructure Investments. Indian defense modernization will encounter significant obstacles in the next five to ten years due to budgetary constraints and intensifying inter-service rivalries. As the U.S. divests from numerous platforms not considered survivable in a near-peer fight, it should use the EDA program to help India acquire or lease the RQ-4 Global Hawk for border security, the E-8 JSTARS for battle management, A-10 Warthogs for close-air support, and minesweeper ships and helicopters. The U.S. Development Finance Corporation (partnering with Japan) should explore initiatives for investing in infrastructure development in the Andaman and Nicobar Islands, such as port and telecommunications infrastructure.

U.S. Navy

Increase Frequency and Complexity of Naval Exercises. The U.S. and Indian defense communities exhibit mutual interest in advancing naval cooperation, particularly maritime domain awareness (MDA) and anti-submarine warfare (ASW). The U.S. Navy should propose to advance the tempo and complexity of joint exercises, as well as accompanying subject-matter expert engagements. These should include joint P-8 exercises out of Indian and U.S. bases, a Ship Anti-Submarine Warfare Readiness and Evaluation Measurement exercise, and joint deployment of Surveillance Towed Array Sensor Systems in the Bay of Bengal.

Maritime Security as Public Goods. India wants to build dual-use naval capability and institutions that bolster its defense, as well as garner regional support by delivering public goods. The United States should help India acquire sensors, signal processing, and data fusion capabilities for MDA to generate information that can be distributed to the Indian Ocean Region (IOR). U.S. discussion of MDA should be framed positively to promote maritime security, economies, and ecologies. The Quad navies should add a counter-narcotics or humanitarian assistance exercise following the next Malabar exercise as a visible public good and invite all regional countries as observers.

Integration Over Interoperability. India seeks U.S. support in developing advanced naval capabilities, but it remains hesitant about any forms of dependence and defensive of its autonomy. The United States could gain more Indian buy-in for exercises and trainings using the language of “integration” of India’s own forces rather than “interoperability,” though both work toward the same end.

Medium-Term Dialogue. Existing U.S.-India naval dialogues are too near-term and exercise/training focused. Forums for medium-term challenges and cooperation (chaired at O-6, -7, or -8 levels) may facilitate high-level discussions about best practices and doctrine, including C2, advanced undersea warfare, water space management, and submarine safety. A dialogue on inadvertent escalation arising from more states sending nuclear weapons to sea would also be timely given emerging risks.

Acknowledgements

The authors would like to thank Grace Easterly, Dylan Junkin, and Uzair Sattar for their assistance in producing this report. This report is made possible with support from the Strategic Trends and Effects Department within U.S. Department of Defense’s Defense Threat Reduction Agency (DTRA).

Dialogue Background

The 2018 National Defense Strategy emphasizes the importance of robust defense partnerships that afford the United States an asymmetric advantage in a long-term strategic competition with China.¹ Alliances and partnerships allow the United States to share the burdens of competition. By pooling capabilities; complementing and interoperating with U.S. forces; and enabling U.S. reach via access, regional relationships, and enhanced information, they contribute to a favorable balance of power. Recent 2021 Interim National Security Strategic Guidance reaffirms that U.S. partnerships and alliances “pool our collective strength to advance shared interests and deter common threats.”²

Across the last four U.S. administrations, American officials have consistently identified a strong partnership with India as essential to this effort. The Pentagon’s 2019 Indo-Pacific Security Report specifically envisions securing U.S. interests through a strong relationship with a rising India given our “common outlook” on global commerce and a rules-based international order.³ The State Department’s complementary report describes India as “vital” and “critical” to this vision.⁴ This was most recently echoed by Secretary of State Blinken, who described India as the “preeminent U.S. partner in the Indo-Pacific.”⁵

Despite the strategic consensus, the realities of the partnership have at times fallen short of expectations.⁶ The United States designated India as a “Major Defense Partner” in 2016. Multiple defense agreements and arms sales have been concluded, but U.S. officials are sometimes perplexed by divergent Indian threat perceptions, priorities, strategy, and pacing, as well as the country’s relationship with U.S. adversaries such as Russia and Iran. Since India and the U.S. both see the other as a cornerstone in their Indo-Pacific strategies, it is in both their interests to surmount these divergences for a more mature, reliable defense partnership.

In this effort, the Stimson Center has convened a multi-year U.S.-India Strategic Dialogue, sponsored by DTRA’s Strategic Trends and Effects Department within the U.S. Department of Defense. Held virtually in December 2020 and July 2021, the first year of the dialogue sought to identify strategies to better align U.S.-India threat assessments, strategies, planning, and platforms. The dialogue sessions produced fresh insights on great power competition with China; opportunities for deeper defense, intelligence, and technological cooperation political and economic challenges; and approaches to the heavily nuclearized regional security environment, with implications for U.S. strategists, operators, diplomats, and globally focused senior leaders. Through mutual exchange with leaders from India’s strategic community, the dialogue focused on opportunities and obstacles in U.S.-India defense cooperation. Participants included retired military general officers; diplomats; practitioners from the national security and intelligence bureaucracies; leaders from politics and industry; as well as scholars from think tanks, academia, and research laboratories.

The virtual dialogue involved over 20 hours of discussions, distributed across multiple plenary sessions. Additionally, numerous preliminary meetings, sidebar consultations, after-action discussions, and one-on-one follow-up conversations resulted in over 40 hours of more restricted conversations that inform this report.

Dialogue Insights

India's Shift in Strategy

After the 2020 Ladakh crisis with China, analysts and practitioners often proclaim that Indian defense strategy has reached a major inflection point in recent years.⁷ Discussions with Indian interlocutors before and after the February 2021 disengagement process suggest this shift in strategy may be less transformative and more qualified and constrained than headlines indicate.⁸

- **Bolder Signals.** Although its fears have not disappeared entirely, India appears less concerned with “provoking” China than it was pre-2020. For example, India is more comfortable with deeper military engagement with the United States and with a more public military dimension to the Quad, as recent Malabar exercises suggest. It has taken serious steps towards economic diversification and technology decoupling (e.g., 5G mobile broadband network trials), and is also willing to publicly indicate that the broader political-economic relationship with China rests on People’s Liberation Army (PLA) behavior on the border.
- **Continued Entrapment Fears.** Despite bolder public signals and increased resolve to balance China, India has not been consistently willing to deepen U.S.-India defense cooperation in all the ways Washington would prefer, or to the extent many U.S. and Indian observers view as proportionate to the challenge. Some Indians characterize this as the product of deep residues of suspicion and nonalignment; others characterize the behavior as a consequence of intentional diversification strategies and multi-alignment. Across the range of defense relations—from signed agreements to types of military exercises, analytic exchanges, and communications software and protocols—Indian insiders still express concerns of entrapment or limits on autonomy that would constrain India’s future foreign policy choices or result in an unnecessary provocation of China. Counterintuitively, concerns remain about abandonment by the United States should Washington adopt a more cooperative approach with Beijing. Worries about a U.S.-China G-2 that date back to the first term of the Obama administration, while stale, are still in circulation in New Delhi, even as U.S. policy has shifted markedly in the last decade.

- **Different Sense of Urgency.** Relatedly, U.S. observers assess that India does not yet share the same sense of urgency as Washington about the threat environment (especially the maritime domain). While Indian leaders worry about Chinese economic coercion and technological dominance, it is unclear if they are ready to lead bold interventions to redress this concern or will wait to follow others. India's approach might be growing more aligned with Washington's, shedding hopes for a pre-April 2020 *modus vivendi* and Wuhan dialogue process. However, some U.S. participants concluded that the pace and scope of India's national security policy shift are not "appropriate for the challenge."
- **Questions of Grand Strategy and Risk.** Indian interlocutors seem less concerned than U.S. participants that the country's grand strategy has a problem. India is honest about a two-front dilemma amidst a significant resourcing problem that stems from years of economic slowdown, the COVID-19 crisis, and an unwillingness to significantly raise or restructure defense budgets. While U.S. strategists talk more about meeting rising challenges with scarcer resources by taking risks in certain regions to compete with China effectively, India still appears uncomfortable with similar prioritization. The consensus from Indian interlocutors is that New Delhi is driving in the right direction and does not require a fundamental change in course, even as it might need to accelerate in some areas and need support in others. This may be because Indian observers perceive the threat from Pakistan and instability from Afghanistan as nodes of Chinese aggression and encirclement rather than independent, lesser threats to Indian security that could potentially be decoupled.

India's Threat Environment & Continental Dilemmas

Events in 2020 have reaffirmed India's focus on continental encirclement threats, which it acknowledges will divert attention and resources from the maritime domain.

- **Pakistan.** The current ceasefire on the Line of Control in Kashmir is considered fragile and unlikely to hold long-term. Indian interlocutors viewed the ceasefire as a symbolic Pakistani gesture meant to relieve pressure on Islamabad ahead of expected fall-out from the Afghan conflict. Since India views the ceasefire as a tactical decision rather than an indicator of a Pakistani strategic shift, it may not have freed significant Indian resources or assets.⁹ Furthermore, Pakistan is seen as too beholden to China to ever be decoupled. India increasingly sees Pakistan as a proxy arm of China, limiting the extent to which India perceives rapprochement with Pakistan as a realistic strategy to shift its attention toward balancing China. Indian interlocutors do not expect the modicum of stability in Kashmir to hold, which may renew tensions with Pakistan.

- **China.** The U.S. focus has, unsurprisingly, concentrated on China's growing power projection capabilities in the East and South China Seas. However, People's Liberation Army (PLA) incursions to generate military advantage on the disputed Sino-Indian border have created an enduring dilemma for India over the next five to ten years. China's positions in the Depsang Plains could effectively preempt India's ability to create dilemmas for China on its shared frontier. These positions can also leverage China's offensive routes to threaten India's positions on the Siachen Glacier and Saltoro Ridge sectors, and its hold over Ladakh. Some Indians believe the PLA is equally tied down by the prospect of a more active border.

Consequently, this is a theater where India feels it cannot economize but must show visible signs of resolve. In New Delhi's calculus, the domestic political costs of loss of access to territory—even if not operationally or strategically meaningful—outweigh the expenses of troop deployments. Indian strategists see their approach as costly but sustainable, limiting interest in a new model of deterrence, even while some doubt India's offensive options. Simultaneously, Indian interlocutors see less risk than their U.S. counterparts of vertical or horizontal escalation to erode what India perceives as relative Sino-Indian military parity along the frontier. While there was some acknowledgment of Chinese cyber intrusions into Indian civilian infrastructure and potential economic coercion, there appeared to be little consideration of how cross-domain challenges might complicate crisis bargaining. India also sees political instability on its continental borders—from Myanmar to Nepal to Afghanistan—as intensifying, threatening, inter-related, and fueled or exploited by China.

- **Afghanistan.** The U.S. government contends withdrawal from Afghanistan frees the United States to focus on the Indo-Pacific, while Indian participants warned that spillovers from Afghanistan pose a greater, more direct threat to India's national security than China's behavior in East Asia or the South China Sea. Some Indian observers see China's involvement and cooperation with Pakistan in the Afghan conflict as a threat to India because it will be a "backstage operator," even while some U.S. strategists see it as a liability for China. U.S. participants forecasted that withdrawal from Afghanistan would allow the United States to work more closely with India. Nevertheless, some Indian participants feared Afghanistan would continue to remain a source of friction in the relationship, so long as the United States continues to cooperate with Pakistan and the Quad demurs from involvement. Despite criticisms of Washington's "lack of coordination" on Afghanistan, calls for greater consultation, and hopes this might somehow become a quagmire for Pakistan, there were few realistic proposals for U.S.-India cooperation to shape Afghan political dynamics.
- **Indian Ocean Region (IOR).** Indian interlocutors expressed some concern for deteriorating or fragile relationships in their immediate neighborhood with Bangladesh, Sri Lanka, and the Maldives, while U.S. participants paid more attention to the

deteriorating military and naval balance in the Bay of Bengal. India seems skeptical of the People's Liberation Army Navy's (PLAN) ability to pose a challenge or sustain operations in the IOR over the next five to seven years and continues to evaluate the continental theater as more deserving of its limited resources. Indian analysts were forthright about how the country's naval capability development will slow with the likely cancellation of a third aircraft carrier and delays in submarine acquisitions over the next five to ten years.

There are some areas of India's neighborhood where both partners perceive the other to be working at cross-purposes. While the United States often defers to India's regional policy vision, some American officials worry that India's assertive foreign policy behaviors and majoritarian politics might rankle neighboring states, and U.S. moderating influence can help prevent a backlash. India, for its part, worries that U.S. policy choices cede too much influence to China. Additionally, Indian interlocutors stressed that New Delhi expects to be treated as the preeminent military power on the subcontinent as a first principle for greater cooperation. While there was some optimism that Japan, India, and the United States might compensate for each other's weaknesses through collaborative efforts in India's near abroad—specifically India's presence backed by Japanese investment and American diplomatic heft—there remains ample room for more concrete thinking.

India's Tension Between Self-Help and External Help

- **India's U.S. Goldilocks Dilemma.** Despite the deteriorating security environment and the Ladakh crisis of 2020, U.S. participants sensed India still retains some ambivalence about what kind of relationship it desires with the U.S. military. In this assessment, India faces a “goldilocks dilemma” of wanting just the right amount of support on-call from the United States without undermining India's regional primacy. This could stem from a desire to manage the added costs of a partnership or to avert entrapment. At the same time, India still maintains some lingering—albeit diminishing—doubt about the durability of the United States' competitive approach to China, which feeds into its concern over potential abandonment in a potential Sino-Indian contingency.
- **Feeling “Alone” in 2020.** U.S. participants were surprised to hear consistent Indian expressions of feeling “alone” during its militarized border crisis with China on the Line of Actual Control (LAC) in 2020, despite public reporting of substantial U.S. support.¹⁰ To remedy this in the future, American analysts raised the prospect of joint contingency planning, but Indian strategists seemed skeptical. Instead, Indian strategists seem to prefer a much more gradualist approach to defense cooperation, starting with joint assessment processes. While, on the one hand, Indian participants

contend India will be hesitant about concrete military collaboration in a conflict scenario, they also assume that it would be easy to scale up collaboration as needed in a crisis. They perceive U.S. channels of support for India as something that can be turned on seamlessly, rather than a process that needs to be planned, exercised, and built. U.S. interlocutors stressed that should India require direct military support, robust, secure command and control networks cannot be established on short notice.

- **Continental Dilemmas.** Both sides praised the progress of the Quad as a valuable forum for cooperative security and public goods. Some Indian participants lamented the lack of Quad attention to India's continental dilemmas, including Afghanistan. At the same time, proposals for more visible signals of military interoperability on the continent, such as a joint air defense exercise, were regarded as too provocative towards China. Worries were expressed about infringements on Indian sovereignty and autonomy even in the domain of growing naval interoperability that both sides embrace.

“India First” Model of Cooperation

- **Mutual High Expectations.** Both sides have expressed higher expectations of each other. Indian strategists detailed expectations for active U.S. assistance to India's self-defense capabilities combined with economic support and political deference to India as an inclusive regional leader. Some U.S. participants noted that, for a robust partnership, India would have to reciprocate with greater military cooperation, economic openness, and political support for critical U.S. interests in the region, such as on the status of Diego Garcia. Rather than seeking direct U.S. military support, Indian interlocutors preferred bolstering India as a self-reliant power that can independently operate in and contribute to the region.¹¹ This model would involve greater foreign direct investment in defense and telecoms, changes in export controls, and intellectual property regulation, technology sharing, more generous visa regimes, and proactive supply-chain redirection to source more from Indian manufacturing.

Regarding military support, Indian participants prefer more indirect, inconspicuous support via joint assessment, intelligence, and joint training on anti-submarine warfare (ASW), cyber, and electronic warfare. There is a general satisfaction with, and desire for, more U.S.-India cyber cooperation and a recognition that the United States is India's best partner for cooperation in this realm.

- **Support for Joint Assessment.** While skeptical of joint contingency planning, Indian interlocutors expressed a greater openness to joint assessment, which they acknowledge could pave the way for future contingency planning. However, participants did not identify specific contingencies in which India might consider supporting the United States. While some acknowledged that in the event of a

contingency in East Asia within the next decade, it would be in India's interest for Taiwan to prevail in a cross-Straits conflict, they noted that India is hesitant even to discuss any preemptive steps it might consider taking to assist in deterring an initial conflict outbreak. India would also have to overcome political hesitations, exposure to risk on its land border with China, and inability to sustain deployments over long distances.

Challenges to Indian Defense Modernization

Several factors will continue to constrain Indian defense modernization over the next five to ten years, including its approach to indigenization, defense budgets, theater commands, and integration.

- **Indigenization.** India is committed to indigenization—such as its investment in the Tejas fighter—which means it is willing to accept some compromises in military effectiveness in the medium-term in exchange for long-term sustainable, self-reliant defense production capacity. It is also committed to boosting its medium-sized enterprise suppliers, though it is unclear how foreign defense companies can and will interface with them.
- **Defense Budgets.** India's economic recovery is likely to be slow and impose resultant limits on defense budgets, capital expenditures, and acquisitions over the next five years. If New Delhi seemed hesitant to spend a higher percentage of GDP on defense when the economic outlook was bright—and before the shock of the COVID-19 pandemic—it is even less likely to do so now that India will increase this percentage over the next five years. Defense budget constraints will also limit India's ability to provide credible development alternatives to China in its own neighborhood.
- **Theater Commands.** India is creating joint theater commands, likely leading to a more efficient and integrated Indian military. However, concomitant inter-service rivalry issues will intensify over the next five years, exacerbating the problem of suboptimal or delayed defense acquisition processes.
- **Systems/Network Integration.** Despite a move to theater commands that emphasizes jointness, Indian strategists still only display a modest desire to see all current and future shooters, sensors, and command and control nodes fused on interconnected networks to share information in real-time. India faces difficult challenges linking together platforms from a wide array of supplying states, including most notably both U.S.- and Russian-origin systems that are likely restricted in their abilities to interface with one another. Indian planners either downplay the need for advanced, secure networking or exhibit confidence in their capacity for jugaad (improvised

workarounds).¹² The navy may be most inclined towards greater integration, particularly given its aspiration for enhanced capacity for MDA and ASW operations. New Delhi will be more interested in platform and architecture systems integration of its own forces than in allied interoperability with Quad navies (but advancing the former could still benefit the latter). In short, India seems comfortable, for the time being, forgoing deep systems interoperability even at the risk of diminished military effectiveness.

Regional Policies

Several perspectives were shared on the state and strategy of India's regional relations.

- **Concerns of America in the Neighborhood.** While India is losing ground to China in its neighborhood, there is still debate on whether India's soft power tools can compete with China's increasing economic and political influence, or if it needs more significant U.S. or Quad backstopping. Even when it seeks U.S. involvement, India remains defensive of its historic sphere of influence.

New Delhi desires prior consultation and coordination on any direct, bilateral security or political relationships between the United States and countries in the neighborhood (e.g., Maldives, Bangladesh, and Sri Lanka). India appears to be less bothered by Japan's bilateral engagements in the region, perhaps because Tokyo coordinates more effectively with New Delhi or because these engagements are principally economic or infrastructure-focused rather than defense-oriented.

India prefers that the United States deals with the region by, with, and through New Delhi. Indian strategists contend this approach bolsters India's ability to withstand China's influence and enables more regular engagements and localized regional management than the United States can maintain. However, U.S. strategists warn that, despite India's presence, it still does not have the foreign policy institutional infrastructure—such as a large foreign service, a development aid bureaucracy, or a large defense attaché corps—to permit difficult, sustained lines of effort over time or in response to a regional political or humanitarian crisis.¹³

- **Association of Southeast Asian Nations (ASEAN) centrality.** India's emphasis on "ASEAN centrality" seems to be more of an "and" than an "either/or" proposition. This emphasis is primarily about revitalizing diplomacy and the East Asia Summit as a key forum for diplomatic engagement in addition to the Quad. Additionally, it is also an expression of pushing the Quad to provide public goods for the region—not just club security goods for the Quad alone. This language is also believed to give India political cover to defend

the Indo-Pacific framework to its neighborhood and ASEAN partners.

- **Pakistan.** Some U.S. policymakers forecast continued, even if diminished, U.S.-Pakistan cooperation on counterterrorism and Afghanistan's stability.¹⁴ New Delhi remains suspicious of U.S.-Pakistan cooperation, whether on Afghanistan or other issues, and some Indian discussants cast U.S.-India and U.S.-Pakistan relations in zero-sum terms. India's account of the failures of Afghanistan assigns blame to U.S. ignorance and its rewarding of Pakistan's bad behavior. Reductions in any financial pressures on Pakistan or resumption of military aid would be met with deep suspicion in New Delhi, as would U.S. pressure for Indian restraint in a future India-Pakistan crisis. However, some Indian participants indicated that closer consultation and advanced notification could help mitigate these concerns.

Technology

- **Seeking Flagship Defense Technology.** India perceives inadequate U.S. interest in one of India's highest priorities – advanced technology cooperation. The United States is seen as a second-tier technology partner behind Russia, Israel, and France in terms of ease of working with U.S. companies, technology-sharing, and costs. The United States appears to lack a flagship project that transfers technology or know-how to India, while Russia (Brahmos missiles), Israel (Barak 8 missile; Hermes UAVs), and France (Scorpene submarines) each can identify a high-visibility program. Indian and U.S. participants acknowledged that the mandates of the “permissions community” that oversees technology restrictions and export controls may not be fully aligned with the broader political goal of enhanced cooperation. No Indian participant thought the U.S.-India Defense Technology and Trade Initiative (DTTI)—the flagship mechanism launched in 2012 to spur co-development and coproduction of defense articles—was working.¹⁵ India wants the United States to steer investment to India that can create tangible benefits for Indian economic growth while incorporating Indian strengths into the United States' long-term defense technology competition with China. Furthermore, Indians fear the perpetual threat of U.S. sanctions under CAATSA could have a chilling effect on defense technology cooperation.
- **Focus on Small/Medium-Sized Enterprises.** While India has made significant strides in creating space for the Indian private sector and pushed back on the defense public sector undertakings (DPSUs), it has not secured the results it had hoped by championing major conglomerates. Some Indian interlocutors suggested New Delhi is now focused on bolstering small/medium-sized enterprises to help build a broader indigenous ecosystem, but this seems incongruent with how some U.S. defense primes portray the dynamic. The problem with such an approach is that smaller firms are even more challenged than major conglomerates to navigate the U.S. defense procurement

bureaucracy and integrate with the United States' sprawling defense industrial supply chain.

- **Civilian Technology.** India wants policy mechanisms to help steer partnerships to develop a host of commercial technologies with U.S. companies, including pharmaceuticals, telecommunications, cyber-security, and green/clean technology with U.S. firms. Both sides lament that there are no high-level policy structures or sufficient capital incentives to spur the relationship, as with other bilateral partnerships like Japan. It is unclear if the Multilateral Telecommunications Security Fund or the Multilateral Microelectronics Security Fund in the National Defense Authorization Act will create new mechanisms for increased technology cooperation.
- **Human capital investment.** Where defense trade has faltered as a mechanism for technology transfer, participants on both sides agreed that talent pooling and human capital development might offer the most potential for immediate technology cooperation. This is largely due to the compatibility of demand from the United States and latent human capital in India. U.S.-India joint research and development in the public and private sector are still relatively anemic compared to their potential, especially given the size of Indian emigration to the United States to work in many advanced technology sectors. While Indian regulation poses an obvious hurdle, the commercial technology sector was thought to be a comparatively less regulated space, though there are some worrying signs. Nevertheless, some Indian analysts pointed out while human capital development may be most feasible, it may not satisfy the desire for a high-profile technology collaboration initiative that can elicit greater political buy-in from the top down.

Defense and Naval Cooperation

- **Missions.** U.S. participants made a case for more advanced naval cooperation, particularly in the conduct of peacetime ASW to track all subsurface vessels and handoff tracking between Quad partners. Indian discussants expressed some interest in expanding the scope and pace of naval exercises, especially at the lower end of the spectrum (e.g., humanitarian assistance and disaster relief (HADR), but also openness to greater MDA and ASW. Indian discussants expressed greater support for these activities when framed as joint trainings rather than joint missions.¹⁶ Additionally, India may prefer these under a Quad framework rather than a bilateral framework. Indian participants emphasized that these capabilities should be showcased to its IOR neighborhood as capacity building and a method of public goods to support regional maritime economies and ecologies.

- **Interoperability.** U.S. participants continued to promote the value of greater interoperability between forces. India remains hesitant to fully commit to unified, secure communications networking with U.S. systems or relying heavily on U.S.-origin tactical data links like Link 16. It interprets such enhanced interoperability as “the thin-edge of the wedge,” pushing arms sales, risking entrapment, and potentially compromising autonomy. Even the already signed U.S.-India enabling agreements, while seen as useful, are also viewed with some apprehension as potentially “disenabling” agreements, which could create lock-in constraints or pressure points that work against the broader Indian strategic objective of self-reliance (Atmanirbhar Bharat). Disappointment expressed over ongoing negotiations over the appendices of the Basic Exchange and Cooperation Agreement (which facilitates geospatial intelligence sharing) implies that if India does not start experiencing significant tangible benefits of the enabling agreements soon, the accumulated frustration might overwhelm any sense of forward progress.
- **Jury-Rigged “Good Enough.”** Some Indian strategists expressed that a patchwork of indigenous communications and data links jury-rigged with U.S. systems (like CENTRIXS systems employed in exercises) can be “good enough” for Indian military effectiveness and peacetime interoperability with partners. These participants did not anticipate tactical scenarios that would require the speed of targeting that Link 16 enables of a real-time common operating picture.¹⁷ They remained extremely skeptical that there will be sufficient U.S.-India political alignment in a crisis or hot conflict that would warrant the kind of partner military interoperability for joint warfighting. As one discussant put it, “Link 16 is less a technical issue than a political issue.” U.S. participants suggested how custom filters on Link 16 could mitigate these concerns, but misalignment of ends remains the fundamental obstacle to greater communications interoperability.
- **Doctrine.** India’s gradual shift to theater commands does not appear to presage a major overhaul of doctrine or significant shifts in the balance of service budgets. The process of theaterization will take some time and is already intensifying inter-service rivalries, which will affect the debate over deterrence options vis-à-vis China. Given obstacles to networking and interoperability, there was no Indian demand signal for broad input on their force structure, force design, or warfighting concepts.
- **Basing.** India seems lukewarm to U.S. strategists’ discussion of reciprocal basing access. Yet, there may be some potential for the United States to support logistics and maritime infrastructure on the Andaman and Nicobar Islands.

Russia

India continues to see value in its relationship with Russia in the following respects:

- **Affordable Arms Technology.** Russian-supplied military equipment is priced lower on the front end, is widely perceived to be more durable and easier to maintain in austere conditions, and includes meaningful technology transfers. Indian participants pointed out that only the Russians have offered “the crown jewels” of nuclear-powered submarines and helped India codevelop what they assess as a world-class advanced military system like the BrahMos missile. Additionally, decades of cooperation have bred a certain level of trust. When comparing U.S. and Russian systems, Indian leaders assert that U.S. equipment costs “double” the price of Russian systems, which India can ill afford.
- **Reliability.** Some Indian strategists viewed Russia as a more reliable arms supplier than the United States. Though some considered the possibility that China could pressure Russia into cutting off spares and maintenance to India in a future crisis, this risk was largely discounted. Of particular concern is the United States’ end-user restrictions and monitoring, as well as a history of sanctions. CAATSA sanctions would further reinforce this perception and may cause India to strengthen its partnership with Russia.
- **Geopolitical Broker and Partner.** Many Indian discussants viewed Russia as a positive geopolitical player in South Asia able to provide support for India’s continental dilemmas. Arms purchases are instrumental transactions that prop up the India-Russia relationship in the absence of significant bilateral trade. Russia is seen as a helpful crisis mediator and “bridge builder” with China on the disputed border, a backer of India’s Kashmir policies, a facilitator of India’s role in Central Asia, and a potential collaborator in future counterterrorism and violence management strategies in Afghanistan.¹⁸ Indian participants also framed Russia relations as a means to preclude deeper Russia-China geopolitical alignment (including on Pakistan) and high-end defense technology cooperation.
- **Strategic Autonomy.** India’s relationship with Russia also serves as a point of pride and validation of its autonomous, multi-aligned geopolitical identity. India refuses to be treated as a “junior” partner. Indian strategists insist that India, like the U.S., can have relationships with multiple competing great powers. Even Pakistan, they note, has maintained robust defense relationships with the United States and China and operates both F-16s and JF-17s.

Recommendations

U.S. Government

- **Top-down Leadership Signal Needed.** India has a hierarchical political system that requires clear leadership from the top to overcome bureaucratic inertia. This system also requires continuous shepherding by senior leaders to advance key policy issues at the working level. As a still-developing and non-industrialized economy, it is especially driven by the prospect of technology transfers and acquisitions. The United States' arms transfer and technology release process is designed to minimize disclosure of classified information and works best with traditional treaty allies.¹⁹ If both countries are serious about seeking "cooperation in advanced military technologies," and to "expand their partnership in new domains and many areas of critical and emerging technology," this likely requires Cabinet-level oversight and advocacy from both sides.²⁰

A presidential/prime ministerial-level meeting and statement specifically on the defense technology partnership would helpfully set the relationship agenda. A directive from the senior-most level would ensure continued attention at the cabinet- and senior bureaucratic-level. An announcement of a flagship initiative involving defense technology and public-private partnerships would provide top-cover to bureaucrats to advance defense, intelligence, R&D, and technology cooperation.²¹ The most recent agreement on co-development of an air-launched unmanned aerial vehicle (ALUAV) prototype in three to four years, while a significant milestone, does not provide sufficient accelerant.²²

The flagship need not be defense technology alone, but could also be in a dual-use area, such as if the United States and India jointly build the world's most powerful supercomputer. Since India has world-class space capabilities, another project could be a commitment to build a joint or Quad space station. This could generate positive movement for other areas of the relationship like trade or visa changes to allow the flow of more STEM talent. A U.S.-India point person could be formally or informally designated to act as a sherpa for the relationship. While the relationship is sufficiently strong that U.S. and Indian officials routinely coordinate on international issues and cooperate during crises, inertial tendencies still prevent sustained momentum on difficult problems such as technology transfer or co-development.

- **Disarm CAATSA Sanctions Landmine.** CAATSA sanctions will not be taken lightly and will set back U.S.-India relations by one to two decades. The recurring annual threat of the Countering America's Adversaries Through Sanctions Act (CAATSA) is the worst of both worlds—not significant and credible enough to compel Indian policy changes but threatening enough to harm and impose a drag on the relationship.²³ Indian interlocutors

repeatedly warned that, should sanctions be implemented, political blowback would be significant and jeopardize twenty-years'-worth of relationship building. Thus, the United States needs to either issue India a waiver—not just for the S-400 system but also for several systems India is acquiring over the next five years (e.g., destroyers, submarines, helicopters, missiles)—or apply very light, symbolic sanctions once, with enough forewarning and dialogue with Indian leadership to mitigate political blowback.

- **Advantageous Approaches.** India is still hesitant about conspicuous forms of confrontation with China, seeks U.S. support and deference based on its regional role, and maintains asymmetric expectations of Washington's contribution to the U.S.-India partnership. Certain approaches and rhetorical frameworks will be useful for the United States to employ in its defense relations with India, despite some tradeoffs.
 - **Quieter, Discreet Forms of Military Cooperation.** Discreet, less conspicuous cooperation and coordination on China—like intelligence sharing, joint assessment, and cybersecurity cooperation—will appeal to Indian leaders more than highly visible military exercises or sternly worded joint public statements. Naval cooperation is inherently more discreet because it occurs away from land and often involves information-sharing rather than physical presence on Indian soil.
 - **Development and Sovereignty over Competition.** The United States should publicly frame language on cooperation with India around a positive agenda of enhancing its development and sovereignty, not on competition explicitly with China. Even though some Indian analysts may privately agree with a competitive framework, such a construction remains publicly problematic due to some concerns—though diminishing—over antagonizing China. Instead, an approach that emphasizes support for India's rise and its defense against coercion will gain more traction.
 - **Partnership “Garden-Tending.”** To manage the inevitable frictions over Indian domestic politics, Pakistan, and China, traditional diplomatic “garden-tending” with Indian counterparts—including advanced notification, explanation of strategy and motives, and routine consultation—can help mitigate Indian concerns and prevent surprises or unforced errors. This includes consultation, if not coordination, on U.S. bilateral security initiatives in India's neighborhood. Expectations management and realism about each side's limitations are also essential for partnership upkeep.²⁴

Department of Defense

- **Joint Intelligence Assessment.** Because perceptions of regional trends and threats at times appear misaligned, the United States and India should engage in more frequent joint assessment processes at defense working-level meetings and inter-sessional engagements (e.g., prior to the 2+2 dialogue). These engagements should include a cross-section of military, civilian security/defense professions, and civilian political leaders.²⁵

Additionally, the United States and India could stand up a Joint Intelligence Assessment Center at INDOPACOM to complement ongoing strategic dialogues, produce intelligence estimates, and serve as the standing mechanism for bilateral analytic exchanges and tabletop exercises. This joint process would reinforce defense cooperation efforts while offering a less visible and costly forum to foster interpersonal and interagency bonds, disseminate best practices, and produce mutually recognized threat and scenario assessments. Because constrained defense budgets will limit the number of military exercises, more frequent tabletop exercises might be a viable substitute to increase U.S.-Indian strategic familiarity as well as operational and tactical compatibility.²⁶

Dialogue participants welcomed the prospect for greater intelligence cooperation beyond merely sharing discrete intelligence inputs. One proposal involved an early joint review of factors leading to China's fait accompli operation in Eastern Ladakh in early 2020 (akin to the Kargil Review Commission) as well as an assessment of any missed indicators and warnings of Chinese intent. Future topics for joint assessment proposed within the dialogue included: 1) expected balance of power shifts in the Bay of Bengal over the next decade (and what this might mean for India's SSBN bastion and second-strike capability); 2) the impact of electronic and cyber warfare, unmanned systems, sensor data fusion, stand-off weapons, and space on future conflicts with highly advanced militaries; and 3) the consequence and durability of the Russia-China strategic relationship (including their cooperation on space, cyber, and nuclear submarines). Such assessments might sharpen and converge threat assessments and accelerate balancing behavior. This may begin more effectively as a bilateral venture before growing into a Quad activity.

- **Revitalize Defense Technology Partnership.** Indian strategists measure the health and success of the U.S.-strategic partnership through the lens of technology cooperation and transfers in defense and civilian spheres. By those measures, they assess that the partnership is currently inadequate. The India-U.S. Defense Technology and Trade Initiative (DTTI) provided a structure and "bumper sticker" for bilateral technology cooperation nearly a decade since its launch in 2012. It has succeeded in sensitizing both countries' officials to obstacles and impediments to greater technology sharing, but DTTI has not yet transcended existing barriers to produce even one high-visibility example of technology cooperation, the ALUAV notwithstanding. A new or rebranded initiative might

showcase U.S. sensitivity to Indian concerns, but ultimately a change in acronyms can only buy time. Indian officials and non-governmental observers will be watching for concrete signs that the U.S. relationship can deliver on technology cooperation that materially advances deterrence to the extent that, in their eyes, Russia, France, and Israel have already done.

Another proposal raised during the dialogue was for Defense Innovation Unit (DIU) and Defense Advanced Research Projects Agency (DARPA) to “go global” to Indian cities such as Bangalore or Hyderabad by doing roadshows, setting up overseas offices, and embarking on co-investment of funds with Indian counterparts to solve joint challenges.²⁷ Through these means, India could successfully integrate into the U.S. “alliance innovation base.”²⁸ Indian partner firms could help develop and manufacture new technologies, potentially at lower costs,²⁹ while enhancing economic and R&D ties, potentially facilitated through a new category of “national security innovation visas.”³⁰ In tandem, a broader focus on civilian technology cooperation could helpfully complement these efforts. One potential mechanism might be scaling and broadening the PACEsetter Fund under the Indo-US Science and Technology Forum.³¹

- **Human-centric Defense Tech Partnership.** Rather than exclusively focusing on DTTI’s platform-centric defense technology collaboration, U.S. agencies should also focus on the software dimension that could fill U.S. demands for STEM talent and simultaneously enhance Indian human capital development and economic needs. U.S. agencies should lead an expansion of R&D institutional partnerships and human talent exchange and flows. The Pentagon should partner with State and Commerce to establish the U.S.-India Strategic Tech Alliance focused on emerging technology as recommended by the National Security Commission on Artificial Intelligence.

One proposal that could link the two would be a collaboration on an ambitious “moonshot” project—for example, setting up a joint space station or building the most powerful U.S.-India supercomputer—that could provide the requisite umbrella to advance a host of objectives underneath, including basic science collaboration, public-private cooperation, supply-chain integration, and human capital development. USG agencies like DTRA, defense and energy research laboratories, Federally Funded Research and Development Centers, war colleges, and hybrid strategic investment entities (DIU, In-Q-Tel) could launch many more exchanges and collaborative research efforts with Indian institutional counterparts or bring in more Indian talent on fellowships.

Several participants proposed linking U.S. capital, visa regimes, and R&D infrastructure to India’s currently latent talent pool through joint research programs on basic and applied science. Some areas of core technologies identified for research cooperation included energy, artificial intelligence, neuroscience, robotics, quantum computing, signal

processing, and synthetic biology. These core technologies for civilian application undoubtedly spill over into the strategic and defense domains. Another proposal would harness existing government-funded training like International Military Education & Training funds to enable Indian officers to enroll in defense technology training courses at U.S. war colleges, and potentially other appropriate institutions where the United States hosts military exchanges.

- **Mechanisms for Lower Cost Arms Transfers.** Indian defense modernization will encounter significant obstacles in the next five to ten years due to budgetary constraints and intensifying inter-service rivalries that stem from standing up theater commands. Given U.S. desires to see enhanced Indian defense capabilities and U.S.-friendly battle networks despite challenging budget constraints, the Office of the Undersecretary of Defense for Policy, the Joint Staff, and the Defense Security and Cooperation Agency can expand dialogue with Indian counterparts over foreign military finance, leasing, and excess defense articles. As the United States divests from numerous platforms that are not considered survivable in a near-peer fight, it should consider how India might be able to acquire or lease these platforms, including the RQ-4 Global Hawk (enabling deterrence by detection)³², the E-8 Joint Surveillance Target Attack Radar System (for battle management), A-10 Warthogs (for close air support), minesweeper ships, and helicopters. Other creative mechanisms could include helping broker the lease of Japanese submarines that are required to be put out of service after 22 years but are still very mission-capable. Finally, another possibility is for India to cost-efficiently develop a third carrier by acquiring a retiring U.S. amphibious assault ship and adding a ski-jump.
- **Infrastructure Investment.** The U.S. Development Finance Corporation could explore initiatives for investing in infrastructure development in the Andaman and Nicobar Islands and Port Blair, such as construction, port infrastructure, and undersea telecommunications cables. The United States should coordinate with Japan to identify areas where U.S. investment may be viewed as too provocative (for its public perception of future access), but where India might view Japanese investment as politically acceptable.
- **Non-Naval Exercises.** While joint exercises for maritime domain awareness, ASW, and cybersecurity are of the highest mutual interest, bandwidth permitting, there may be other opportunities for military cooperation and exercises in high-altitude mountain warfare, ground force-unmanned systems coordination, or air defense.³³ More military activity focused on India's leading service of the Army in its priority continental theater could extend more cover for deeper naval cooperation. If Indian political leaders remain hesitant over conspicuously provocative joint Army exercises, tabletop exercises could offer an alternative. In the event of an acute Indian border crisis with China, one outlier idea endorsed by a few participants was to prepare a joint air-defense exercise (possibly with

the Quad) to be conducted close to the LAC. With India nervous about the fallout from Afghanistan, there may be greater interest in special operations forces collaboration and joint training.

U.S. Navy

- **Increase Frequency, Complexity of Naval Exercises.** The greatest mutual interest between U.S. and Indian defense communities remains in advancing naval capabilities and cooperation. This is particularly true in terms of maritime domain awareness, ASW exercises, and ASW missions. The United States should propose to advance the tempo and complexity of joint exercises and operations, as well as the frequency of subject-matter-expert engagements that accompany them. The U.S. can propose more frequent P-8 exercises out of Indian or U.S. bases that involve co-mission planning, mission conduct, and post-mission debriefs. The U.S. should present to the Indian Navy and defense planners the complexity and scale featured in a Ship Anti-Submarine Warfare Readiness and Evaluation Measurement (SHAREM) exercise that the U.S. currently conducts with NATO allies, Australia, and Japan, and develop a plan to conduct a similar exercise bilaterally or with the Quad in the coming years. The U.S. should also develop a plan to be able to conduct joint exercises and patrols in the Bay of Bengal within the next five years involving mobile surveillance systems like the Surveillance Towed Array Sensor System.
- **Indian Naval Public Goods.** India wants to be able to build a “dual-use” naval capability, accommodating potential kinetic contingencies while also contributing to regional HADR efforts. Institutions such as the Quad are particularly helpful as they can assist in defense and deterrence missions while being seen as less alarming within the region, given their role in delivering public goods. The United States should help India acquire platforms and develop capabilities (e.g., ISR sensors, signal processing, edge computing, and AI/ML) that can be used to build greater maritime domain awareness for India’s neighborhood. This would require a wider array of sensor networks for maritime data collection, integration into a multi-domain fusion center, and then distribution of this information to IOR states as a “neighborhood watch” function to protect their own maritime security and economy.³⁴ Another demonstration of public goods for the region could be a maritime interdiction/ counter-narcotics exercise conducted at the end of the next Malabar exercises where IOR countries are invited as observers to see how Quad maritime security benefits them. For a similar objective, conducting a HADR exercises with other IOR states navies and coast guards could build climate resilience given anticipated flooding and displacement in IOR littoral states due to climate change. Relatedly, India believes U.S. Coast Guard engagement, capacity building, and training in the region would also build U.S. and Quad influence.³⁵ In general, all U.S. proposals to India for MDA exercises or missions—and all statements publicizing and promoting these missions—should be

framed in terms of delivering maritime security to protect maritime economies and ecologies.

- **Prioritize Integration Over Interoperability.** Even as India seeks U.S. support in developing advanced naval capabilities, it remains suspicious of any forms of dependence and is defensive of its autonomy. The United States could gain more buy-in from Indian counterparts for exercises, trainings, and tabletop exercises using the language of “integration” of India’s own joint forces rather than “interoperability” with Quad partners, though both may work towards the same end.
- **New, Medium-Term Dialogues.** The existing structure of navy-to-navy dialogue, under the U.S. Navy-Indian Navy Executive Steering Group, is too exercise- and training-focused. As a consequence, it is near-term- (next year-long planning cycle) focused. A forum or fora to identify medium-term challenges and opportunities for cooperation may be beneficial to the U.S.-India relationship. These forums could be chaired at O-6, O-7, or O-8-level depending on the issues to be discussed and report into either the Executive Steering Group or joint Military Cooperation Group, or serve as standalone bodies. Such groups could consider a host of issues, including communications and command and control challenges, including the flexibility of Link 16 datalinks, the ability to switch on/off and between datalink systems, as well as the flexibility of filters to safeguard Indian autonomy. They could also consider advanced undersea warfare, water space management, submarine safety, and ASW inadvertent escalation risks. The latter is especially urgent, as Pakistan conventional submarines laden with nuclear cruise missiles for a second-strike mission could be easily misidentified as Chinese conventional attack submarines. In particular, DTRA could take the lead or work with the Navy on convening such dialogues, perhaps in coordination with the Department of Energy’s National Nuclear Security Administration. Increased Indian leasing or acquisition of U.S. remotely piloted MQ-9 or RQ/MQ-4 uncrewed systems might naturally lead to both traditional subject-matter-expert exchanges but also more high-level discussions about best practices and doctrine.

About the Research Team

Dr. Sameer Lalwani is a Senior Fellow for Asia Strategy at the Stimson Center where he researches nuclear deterrence, interstate rivalry, and crisis behavior. He is also a term member with the Council on Foreign Relations and has held teaching or research affiliations at George Washington University, the RAND Corporation, and MIT's Security Studies Program.

Elizabeth Threlkeld is a Senior Fellow and Director of the South Asia Program at the Stimson Center. She previously served as a U.S. diplomat in Monterrey, Mexico and Islamabad and Peshawar, Pakistan, and has research and work experience spanning East Asia and the Middle East. A Mandarin, Pashto, and Spanish speaker, she studies South Asian geopolitics, crisis decision-making, and ethno-nationalist conflict and is currently a member of the CSIS Project on Nuclear Issues Mid-Career Cadre.

Dr. Christopher Clary is an Assistant Professor of Political Science at the University at Albany, State University of New York, and a non-resident fellow with the South Asia program at the Stimson Center. He has previously worked or held fellowships at the Watson Institute at Brown University, the Belfer Center at Harvard University, the RAND Corporation, the Council on Foreign Relations, the Office of the Secretary of Defense, and the Naval Postgraduate School.

Zoe Jordan is a Research Associate with the South Asia Program at the Stimson Center where she leads the Track II and Simulations project. Previously, Zoe received her MA in International Relations at the Yenching Academy of Peking University and BA in China Studies from NYU Shanghai. Zoe speaks Mandarin and is interested in China-South Asia relations, South Asian security, and nuclear issues.

About the South Asia Program

The Stimson Center's South Asia program studies competition, deterrence, and strategic dynamics on the Subcontinent through objective research inquiry and critical exchange in order to bolster stability and advance a more secure, prosperous region. It produces policy analysis and academic research on regional strategic trends and geopolitical dynamics in order to inform both policy debates and scholarly work. Through a range of policy roundtables, fellowships, online engagements, track II dialogues, and simulation exercises it seeks to advance U.S. foreign policy interests while partnering with South Asian analysts and policymakers to enhance regional and global stability.

Endnotes

¹ Department of Defense, Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge (Arlington, VA: Department of Defense, 2018)

² The White House, Interim National Security Strategic Guidance, March 2021.

³ U.S. Department of Defense, *Indo-Pacific Strategy Report: Preparedness, Partnerships, and Promoting a Networked Region*, June 1, 2019, 33.

⁴ U.S. Department of State, *A Free and Open Indo-Pacific: Advancing a Shared Vision*, November 4, 2019, 9.

⁵ "Secretary Blinken's Call with Indian External Affairs Minister Jaishankar," U.S. State Department, January 29, 2021, <https://www.state.gov/secretary-blinkens-call-with-indian-external-affairs-minister-jaishankar/>.

⁶ Robert D. Blackwill and Ashley J. Tellis, "The India Dividend: New Delhi Remains Washington's Best Hope in Asia," *Foreign Affairs* 98, no. 5 (September/October 2019): 173-183; Sameer Lalwani and Heather Byrne, "Great Expectations: Asking Too Much of the US-India Strategic Partnership," *The Washington Quarterly*, 42, no. 3, (Fall 2019): 41-64.

⁷ See, for instance, Gideon Rachman, "India Picks a Side in the New Cold War," *Financial Times*, June 22, 2020, <https://www.ft.com/content/d74d9bda-6822-4f85-9d48-a285a9effe07>; Hal Brands, "China's Border Invasion Will Push India Toward the US," *Bloomberg*, June 1, 2020, <https://www.bloomberg.com/opinion/articles/2020-06-02/china-s-himalayan-border-invasion-will-push-india-toward-u-s>; Sushant Sareen, "It's Not Just the Indian Soldiers that Fell Off the Cliff at the Border," *Economic Times*, June 18, 2020, <https://economictimes.indiatimes.com/news/defence/view-falling-off-a-cliff/articleshow/76438466.cms>.

⁸ This point is supported by another piece of analysis, Ashley J. Tellis, "Non-Allied Forever: India's Grand Strategy According to Subrahmanyam Jaishankar," Carnegie Endowment for International Peace, March 2021.

⁹ Recent reporting suggests a significant shift of two divisions to the North, but Indian interlocutors seemed to downplay the scope or significance of this. See Ajai Shukla, "Army's Pivot to the North," *Business Standard*, January 7, 2021; Mujib Mashal and Hari Kumar, "For India's Military, a Juggling Act on Two Hostile Fronts," *New York Times*, September 24, 2021, <https://www.nytimes.com/2021/09/24/world/asia/india-military-china-pakistan.html>.

¹⁰ See interview with Lisa Curtis in Suhasini Haidar, "Top Trump administration official's advice to India on China, Quad," *The Hindu*, February 19, 2021, <https://www.thehindu.com/podcast/top-trump-administration-officials-advice-to-india-on-china-quad-the-hindu-in-focus-podcast/article33882457.ece>

¹¹ India's expectations of the militaries functioning in parallel rather than working together have also been observed by Pentagon officials. See Cara Abercrombie, "Realizing the Potential: Mature Defense Cooperation and the U.S.- India Strategic Partnership," *Asia Policy* 14, no. 1 (January 2019), 137, <https://www.nbr.org/publication/realizing-the-potential-mature-defense-cooperation-and-the-u-s-india-strategic-partnership/>.

¹² Rina Arya, "Jugaad: A study in Indian ingenuity and improvisation," *South Asia @LSE*, March 9, 2020, <https://blogs.lse.ac.uk/southasia/2020/03/09/jugaad-a-study-in-indian-ingenuity-and-improvisation/>

¹³ Daniel Markey, "Developing India's Foreign Policy 'Software,'" *Asia Policy* no. 8 (2009): 73-96; Kanti Bajpai & Byron Chong, "India's Foreign Policy Capacity," *Policy Design and Practice* 2, no. 2 (2019): 137-162.

¹⁴ These forecasts preceded the Taliban's capture of Kabul and may evolve.

¹⁵ The dialogue took place before the signing and announcement of a project agreement on the Air Launched Unmanned Aerial Vehicle under DTTI. That said, public reporting indicates that a prototype would be developed in 4-7 years, which will not satiate the demand for a robust technology partnership.

¹⁶ This appears the case even with naval missions. See Nilanthi Samaranayake, Michael Connell, and Satu Limaye, "The Future of U.S.-India Naval Relations" CNA, February 2017 pp. 16-17, https://www.cna.org/cna_files/pdf/DRM-2016-U-013938-Final2.pdf.

¹⁷ For background, "Link 16 provides real-time data communications, situational awareness and navigation, and in some cases digital voice, all in a jam-resistant, crypto-secured, information security package. Link 16 is a military

tactical data link network for U.S. and NATO military forces. With Link 16, military aircraft, as well as ships and ground forces may exchange their tactical picture in near-real time. Link 16 also supports the exchange of text messages, imagery data and provides two channels of digital voice at 2.4 kilobits per second and/or 16 kilobits per second in any combination.” See John Keller, “Navy asks ViaSat for secure data capability, Link 16, and cryptography for MIDS-LVT communications terminals,” *Military & Aerospace Electronics*, July 20, 2021, <https://www.militaryaerospace.com/trusted-computing/article/14207046/secure-data-cryptography-link-16>.

¹⁸ This was the sentiment before the Taliban takeover of Afghanistan in August 2021. There is reason to think this sentiment will persist in response to a Taliban-ruled government.

¹⁹ See Chapter 7, “Technology Transfer, Disclosure, Export Controls, and International Programs Security,” *Security Cooperation Management*, Defense Security Cooperation University, Edition 41, May 2021, <https://www.dscu.mil/pages/resources/greenbook.aspx>.

²⁰ U.S.-India Joint Leaders’ Statement: A Partnership for Global Good, The White House, September 24, 2021. It’s worth noting this four-page joint statement employed the word “technology” 13 times.

²¹ The AUKUS nuclear submarine agreement, while much more advanced than what is possible with the US-India partnership, is instructive in that it provides an umbrella for joint technology developments in sensors, data processing systems, hypersonic missiles, quantum computing, artificial intelligence, and electronic and cyber warfare. See Arzan Tarapore, “AUKUS is Deeper than Just Submarines,” *East Asia Forum*, September 29, 2021, <https://www.eastasiaforum.org/2021/09/29/aukus-is-deeper-than-just-submarines/>.

²² Rajat Pandit, “India, US ink pact to develop air-launched unmanned aerial vehicles,” *Times of India*, September 3, 2021, <https://timesofindia.indiatimes.com/india/india-us-ink-pact-to-develop-air-launched-unmanned-aerial-vehicles/articleshow/85905620.cms>.

²³ The most recent U.S. Ambassador to India has also made this point. See Kenneth I. Juster, “Remove a Sanctions Cloud from U.S.-Indian Relations,” *War on the Rocks*, April 27, 2021, <https://warontherocks.com/2021/04/remove-a-sanctions-cloud-from-u-s-indian-relations/>.

²⁴ These points have also been advanced by former Deputy Assistant Secretary Alyssa Ayres, who argues for the importance of frequent consultations that build “thick connectivity” (233) expectations management by conceiving of India as a “joint venture” partner rather than ally-in waiting (216). See Alyssa Ayres, *Our Time Has Come: How India is Making its Place in the World*, New York: Oxford University Press, 2018.

²⁵ Though this has been done before, we recommend it be regularized.

²⁶ Other scholars have also proposed more wargames and tabletop exercises that include civilian, diplomatic, and defense officials as observers to bridge civil-military disconnects. See Joshua White, “After the Foundational Agreements: An Agenda for US-India Defense and Security Cooperation,” Washington DC: Brookings, January 2021, especially pages 9 and 12 and footnotes 22 and 25.

²⁷ Daniel Kliman and Brendan Thomas-Noone, “Now is the Time to Take DIUx Global,” *Defense News*, May 24, 2018, <https://www.defensenews.com/opinion/commentary/2018/05/23/now-is-the-time-to-take-diux-global/>.

²⁸ Daniel Kliman, Ben FitzGerald, Kristine Lee, and Joshua Fitt, “Forging an Alliance Innovation Base,” Washington, DC: Center for New American Security, March 2020, <https://www.cnas.org/publications/reports/forging-an-alliance-innovation-base>.

²⁹ Current DIU head Michael Brown discusses working with allies’ and partners’ science/technology bases includes India’s low-cost manufacturing as well as harmonizing defense technology investments with trade and immigration policies. See “DIU’s Michael Brown on US-China Tech Competition,” *China Talk*, January 2, 2021 (~17:00-23:00).

³⁰ See testimony of Mr. Raj M. Shah at “Supercharging the Innovation Base,” Future of Defense Task Force, House Armed Services Committee U.S. House of Representatives, February 5, 2020, <https://armedservices.house.gov/2020/2/future-of-defense-task-force-hearing-supercharging-the-innovation-base>.

³¹ Kanika Chawla, Alan Yu, and Rita Clifton, “Renewed U.S.-India Climate Cooperation Mobilizing Foreign Capital for a Green Transition in India,” Center for American Progress, February 18, 2021,

<https://www.americanprogress.org/issues/green/reports/2021/02/18/495999/renewed-u-s-india-climate-cooperation/#Ca=10>.

³² Thomas G. Mahnken, Travis Sharp, Grace B. Kim, "Deterrence by Detection: A Key Role for Unmanned Aircraft Systems in Great Power Competition," Washington, DC: Center for Strategic and Budgetary Assessments, April 2020.

³³ Another scholar has discussed with Indian officials the prospect for exercises featuring U.S. AWACS and other ISR assets. See Stephen F. Burgess, "A Pathway toward Enhancing the U.S. Air Force–Indian Air Force Partnership and Deterrence in the Indo-Pacific Region" *Journal of Indo-Pacific Affairs*, Spring 2019, p. 29.

³⁴ Thomas G. Mahnken, Travis Sharp, Chris Bassler, Bryan W. Durkee, "Implementing Deterrence by Detection: Innovative Capabilities, Processes, and Organizations for Situational Awareness in the Indo-Pacific Region," Washington, DC: Center for Strategic and Budgetary Assessments, July 2021.

³⁵ On leveraging the Quad to benefit third countries in the region, see Dhruva Jaishankar and Tanvi Madan, "How the Quad Can Match the Hype," *Foreign Affairs*, April 15, 2021, <https://www.foreignaffairs.com/articles/united-states/2021-04-15/how-quad-can-match-hype>.