PROMOTING U.S.-INDIAN DEFENSE COOPERATION: OPPORTUNITIES AND OBSTACLES

Richard Weitz
The United States Army War College

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Richard Weitz

June 2017

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This manuscript was funded by the U.S. Army War College External Research Associates Program. Information on this program is available on our website, ssi.armywarcollege.edu, at the Opportunities tab.

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The author would like to thank the research and editing contributions to this monograph from Alexander Derhacobian, Ben Zimmer, Benjamin S. Pershall, Benjamin Rimland, Cassandra Pena, Christopher Weihs, Damen Cook, Daniel Nathan, Dima Vitanova, Garth McLennan, Geneva Decker, Grace Gonzales, Hagop Karabetian, Jacob Littman, Janko Scepanovic, Joe Conlon, Junaid Siddiqui, Karin Thomas, Kathleen O’Rourke, Lance Alfred, Lindsey Hardin, Madina Rubly, Maja Cavlovic, Michael Brown, Michael DiCianna, Michael Kameras, Michael McCue, Michelle Peters, Monika Fallon, Mycal Ford, Ngo Quynh Vy Thai, Nick Berdjis, Rina Katzovitz, Ryan Payne, Samantha Baker, Samantha Wolk, Scott Karo, Sean McGuffin, Srijit Ghosh, Taja Towne, Vinjeet Sidhu, and Wei Luo. Janani Krishnaswamy and Rathna Muralidharan provided invaluable help in coordinating these contributions as well as making their own.
FOREWORD

This monograph analyzes one of the most crucial U.S. security relationships. India is the most populous democracy, while the United States is the oldest. India’s growing global influence generates new partnership opportunities regarding counterterrorism, regional security, foreign arms sales, and international defense interoperability.

The U.S.-Indian relationship has greatly improved under recent U.S. Presidential administrations, with bipartisan support in the U.S. national security community. The previous Obama administration continued the process of building U.S.-Indian military ties that began after the Cold War. Recent progress has included deepening defense-industrial collaboration, increasing intelligence sharing, expanding cooperation into East Asia, and normalizing U.S.-Indian nuclear ties.

With the advent of a new U.S. Presidential administration, the value of strong U.S.-Indian security ties persists. In the words of former Secretary of Defense Ashton Carter, “the U.S.-India relationship is destined to be one of the defining partnerships of the 21st century.”

DOUGLAS C. LOVELACE, JR.
Director
Strategic Studies Institute and
U.S. Army War College Press
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Nations: A Comparative Analysis (SSI, USAWC, 2007). Dr. Weitz holds a B.A. with Highest Honors in government from Harvard College, a M.Sc. in international relations from the London School of Economics, an M.Phil. in politics from the Oxford University, and a Ph.D. in political science from Harvard University.
SUMMARY

Since the Cold War, the United States and India have overcome earlier impediments and substantially strengthened their military, economic, and diplomatic ties—advancing their mutual interests in defense industrial collaboration, combating terrorism, promoting democracy, preventing weapons of mass destruction (WMD) proliferation, and managing regional security issues. U.S. Secretaries of Defense have seen India as a potential partner on a range of security issues. Former Secretary of Defense Leon Panetta called India a “linchpin” of U.S. policy in Asia, former Secretary of Defense Chuck Hagel termed India a security provider “from the Indian Ocean to the greater Pacific,” and former Secretary of Defense Ashton Carter marked India as a natural partner of a “principled security network” in Asia.

The New Framework Agreement (NFA) for the U.S.-Indian Defense Relationship, renewed in 2015, has facilitated a growth in U.S.-Indian arms sales, joint exercises, and military interactions. India has become one of the largest importers of U.S. arms. The U.S.-Indian Defense Technology and Trade Initiative (DTTI), launched in 2012, has expanded military technology transfer as well as defense co-production and co-development. Several pilot projects have since been launched under the Initiative’s auspices.

The United States has become the primary foreign exercise partner of the Indian Armed Forces (IAF). Bilateral relations have intensified across all military services and some civilian defense agencies. U.S.-Indian naval exercises have increased military interoperability, maritime domain awareness, and mutual understanding of maritime procedures. The
U.S. and Indian armies have practiced counterinsurgency, peacekeeping, and humanitarian assistance. Furthermore, the two air forces have engaged in some exercises. The U.S.-Indian counterterrorism partnership has expanded. U.S. and Indian officials now routinely share intelligence and best practices to counter terrorist financing, enhance transportation security, and respond to regional terrorist threats.

Yet, U.S.-Indian security collaboration must evolve to address new challenges. In particular, the new U.S. President Donald Trump’s administration should take several steps to strengthen ties. In addition to completing the implementation of negotiated agreements and furthering the reform of U.S. arms exports, the Trump administration should take further steps to develop the U.S.-Indian security agenda. For example, Washington and New Delhi should impart more strategic rationale to joint exercises, discuss potential future missions and scenarios, engage more extensively with other foreign partners, and increase the number of army drills. More senior-level military and civilian defense engagement can also profitably include homeland security, counterterrorism, nuclear security, biological threats, and cyber-defense cooperation.
## LIST OF ACRONYMS

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<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACC</td>
<td>Air Combat Command</td>
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<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
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<td>ATA</td>
<td>Anti-Terrorism Assistance</td>
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<td>BECA</td>
<td>Basic Exchange and Cooperation Agreement</td>
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<td>BJP</td>
<td>Bharatiya Janata Party</td>
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<td>BMD</td>
<td>ballistic missile defense</td>
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<td>BRICS</td>
<td>Brazil-Russia-India-China-South Africa</td>
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<tr>
<td>C4I</td>
<td>command, control, communications, computers, and intelligence</td>
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<td>CCI</td>
<td>Counterterrorism Cooperation Initiative</td>
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<td>CISMOA</td>
<td>Communications and Information Security Memorandum of Agreement</td>
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<td>COMCASA</td>
<td>Communications Compatibility and Security Agreement</td>
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<tr>
<td>CYBERCOM</td>
<td>Cyber Command</td>
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<td>DARPA</td>
<td>Defense Advanced Research Projects Agency</td>
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<td>DHS</td>
<td>Department of Homeland Security</td>
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<td>DPG</td>
<td>Defense Policy Group</td>
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<td>DPP</td>
<td>Defense Procurement Policy</td>
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<td>DPPG</td>
<td>Defense Procurement and Production Group</td>
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<td>DRDO</td>
<td>Defence Research and Development Organisation</td>
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<tr>
<td>DTTI</td>
<td>Defense Technology and Trade Initiative</td>
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<tr>
<td>ESG</td>
<td>Executive Steering Groups</td>
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<tr>
<td>FBI</td>
<td>Federal Bureau of Investigation</td>
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<td>FDI</td>
<td>foreign direct investment</td>
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<td>HTCG</td>
<td>High Technology Cooperation Group</td>
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<td>IAEA</td>
<td>International Atomic Energy Agency</td>
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<td>IAF</td>
<td>Indian Armed Forces</td>
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IEA  International Energy Agency
IMET  International Military Education and Training
IRIGC-MTC  India-Russia Inter-Governmental Commission on Military Technical Cooperation
ISI  Inter-Services Intelligence
ISIL  Islamic State of Iraq and the Levant
ISIS  Islamic State of Iraq and Syria
ISR  Intelligence, Surveillance, and Reconnaissance
JMSDF  Japanese Maritime Self Defense Force
JTG  Joint Technical Group
LEMOA  Logistics Exchange Memorandum of Agreement
MCG  Military Cooperation Group
MMRCA  Medium Multi-Role Combat Aircraft
MTCR  Missile Technology Control Regime
NATO  North Atlantic Treaty Organization
NFA  New Framework Agreement
NPT  Non-Proliferation Treaty
NSG  Nuclear Suppliers Group
PAD  Prithvi Air Defense
PLA  People’s Liberation Army
PRC  People’s Republic of China
PTI  Press Trust of India
RIMPAC  Rim of the Pacific
S&CD  Strategic and Commercial Dialogue
SCO  Shanghai Cooperation Organization
SLOC  Sea Lines of Communication
SSI  Strategic Studies Institute
<table>
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>STSG</td>
<td>Senior Technology Security Group</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>UNSC</td>
<td>UN Security Council</td>
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<td>USAWC</td>
<td>U.S. Army War College</td>
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<tr>
<td>VBSS</td>
<td>visit, board, search, and seizure</td>
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<tr>
<td>VIP</td>
<td>very important person</td>
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<tr>
<td>WMD</td>
<td>weapons of mass destruction</td>
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PROMOTING U.S.-INDIAN DEFENSE COOPERATION: OPPORTUNITIES AND OBSTACLES

This monograph analyzes the relationship between the United States and India to confirm progress, identify persistent obstacles, and suggest future opportunities for defense and security cooperation in the coming years. Bilateral security relations have improved substantially since the Cold War. Since then, the two countries’ national security establishments have partnered on arms sales, defense industrial projects, military exchanges, intelligence sharing, crisis management, humanitarian responses, regional security issues, and countering nuclear proliferation and terrorism. In the past decade, the two militaries have participated in dozens of bilateral exercises and multinational drills, while senior defense officials from both states have held regular consultations. Although India has declined to become a formal member of the U.S.-led international anti-terrorism coalition, Indian Governments have supported many U.S. counterterrorism initiatives.

The Barack Obama administration had pursued stronger U.S.-Indian security relations as a pillar of its rebalancing to Asia policy, also known as the Asia Pivot. The administration sought to increase the U.S. military, diplomatic, and economic presence in Asia in part by developing better relations with emerging Asian powers such as India. Former U.S. Secretary of Defense Ashton Carter viewed India as a natural partner of the “principled security network” in the Asia-Pacific region that the United States was building. In August 2016, Carter said:
the U.S.-India relationship is destined to be one of the defining partnerships of the 21st century. We share so much, so many interests and values, as well as a common vision for peace, for stability and prosperity in the India—Indo-Asia-Pacific region.2

According to Carter, the United States has pursued both a “strategic handshake” with India, “with the United States reaching west in its rebalance, and India reaching east in Prime Minister Modi’s Act East policy,” and a “technological handshake,” in which both countries are driving toward “deeper and more diverse defense co-development and co-production.”3 Nonetheless, India will likely remain a constrained security partner of the United States in the coming years due to historical and geographical differences. For ideological and other reasons, Indian strategists favor a multipolar world order. Yet, like U.S. leaders, Indians generally understand that strengthening the U.S.-Indian security partnership would bring benefits for both countries. The bilateral national security relationship is mutually advantageous and capable of helping both countries realize their core defense objectives, provided that U.S. and Indian policymakers focus on pursuing their shared long-term goals in regional stability and geopolitical pluralism.

TROUBLED HISTORY

The U.S.-Indian security and defense relationship has seen marked improvements since the Cold War, when Washington and New Delhi often found themselves on opposite sides of important issues. While U.S. leaders sympathized with New Delhi’s drive for independence from the British Empire, relations
between the United States and India became strained in the 1950s as Indian leaders strove for non-alignment between east and west. The United States supported New Delhi in the 1962 Sino-Indian War by providing intelligence and other assistance. But in the 1970s, then-President Richard Nixon and National Security Advisor Henry Kissinger pursued better relations with China and Pakistan, culminating in U.S. support for Pakistan during its 1971 war with India—a decision that strained U.S.-Indian relations for years. The conflict drove India and Pakistan to seek nuclear weapons, which, due to U.S. nonproliferation policies, impeded U.S. security cooperation with both parties and complicated Washington’s efforts to promote stability in South Asia. New Delhi’s tilt toward Moscow, despite India’s commitment to non-alignment, also posed a challenge for U.S.-Indian relations. During the 1980s, the Reagan administration gave Pakistan billions of dollars in economic and military aid to deter a Soviet attack on Pakistan, which was assisting the armed resistance against the Soviet occupation of Afghanistan. The United States continued to provide Pakistan with substantial additional military and economic assistance after the Cold War despite Washington’s limited influence over Islamabad’s foreign and defense policies.

Since the Soviet Union’s demise, Indian foreign policy has become more autonomous and active in the international security realm. Indian elites have downplayed their commitment to non-alignment and have come to see the United States as a useful partner in their strategic diversification strategy. Under the previous administrations of William Clinton, George W. Bush, and Barack Obama, the United States and India have achieved considerably stronger bilateral
economic, political, and especially military ties. The signing of the 10-year 2005 New Framework Agreement (NFA) for the U.S.-Indian Defense Relationship imparted significant momentum to that security partnership. The agreement provides an overarching structure through which the United States and India have pursued more specific arrangements—including arms sales, military exercises, and other military interactions. In 2006, the two governments signed the Indo-U.S. Framework for Maritime Security Cooperation. In 2010, they launched a bilateral Counterterrorism Cooperation Initiative (CCI). Additional bilateral cooperation mechanisms include the Defense Policy Group (DPG) and its subgroups, the Defense Procurement and Production Group (DPPG), the Senior Technology Security Group (STSG), the Joint Technical Group (JTG), and the Military Cooperation Group (MCG) and its Executive Steering Groups (ESGs) in an annual meeting of senior officers of the two countries’ armies, navies, and air forces. In their September 2013 U.S.-India Joint Declaration on Defense Cooperation, both governments affirmed their mutual support for fundamental principles of enhanced military collaboration. Under the Obama administration, Washington rebalanced its strategic orientation to devote more resources to Asia. Obama became the first U.S. president to visit India twice while in office; following his first trip in November 2010, he was the “chief guest” at India’s Republic Day ceremony on January 26, 2015. The two governments renewed the NFA the same year, modifying its terms to reflect changes in the security environment since 2005. The new agreement, which continues until 2025, provides more support for military-to-military engagement, maritime cooperation, and defense-academic partnerships.
DEFENSE INDUSTRIAL COOPERATION

India spends more on foreign weapons than any other country (see Figures I-1 through I-4 in Appendix I). The enormous volume of India’s purchases and the country’s vast unmet defense needs guarantee that India will remain an important arms buyer for years to come. India is projected to surpass the United Kingdom in a few years to become the world’s third biggest defense spender, after the United States and China. Despite India’s major arms purchases from the United States, Europe, and Israel, Russia remains India’s leading foreign weapons supplier. Russia supplied 68 percent of India’s major arms purchases from 2012 to 2016. The United States lagged considerably behind, providing only 14 percent of India’s imported weapons, with Israel occupying third place at 7 percent. India is also the largest foreign purchaser of Russian weapons, buying some 38 percent of Russian defense exports. Furthermore, India is the lead foreign buyer of Israeli weapons and the second-largest purchaser of British exports.

Indian officials have tried, with limited success, to increase the amount of weapons the Indian Armed Forces (IAF) purchases from indigenous defense companies. India’s national arms industry has improved over time and manufactures a wider range of indigenous weapons systems than in previous decades. To benefit the national defense industry, India’s national Defense Procurement Policy (DPP) obliges foreign defense companies to transfer substantial technology to domestic producers; give Indian firms a large role in producing (under license), maintaining, and repairing imported weapons systems; and reinvest
sales revenue into the country’s state-owned or private defense companies. Indian officials have required foreign firms to provide fewer turn-key systems (completed systems that clients can operate immediately). Instead, they want foreign and Indian companies to engage in more joint research, development, and manufacturing of new defense technologies and systems. Indian negotiators often require that new contracts stipulate a significant transfer of defense technologies to Indian firms. Indian Governments have long sought to protect domestic defense producers such as the Tata Group, Larsen & Toubro Limited, Bharat Forge, Mahindra and Mahindra Limited, and Punj Lloyd. They have also demanded large offsets—the industrial compensation international firms are contractually obligated to pay foreign governments as a condition of purchase, allowing governments to offset the cost to the local economy of buying from a foreign seller rather than a domestic firm. These payments can include contracts that obligate the selling party to invest a certain percentage of its revenue in the purchasing country’s economy, to purchase certain goods produced by the buying country, or to transfer the capability to produce certain technologies to the purchasing state.

Despite these measures, India still purchases most advanced military systems from foreign suppliers, especially Russian companies. Indian defense firms have found it difficult to transition from the development of successful prototypes to the serial production of major indigenous weapons systems such as submarines, tanks, or combat aircraft. These companies have struggled to produce high-quality weapons systems and have suffered recurring performance issues and production delays. India’s offset requirements
aim to raise national defense industrial capabilities, but they can counterproductively deter foreign defense partnerships and investment. Indian companies have yet to become leading weapons exporters, while the government at times has had to set aside its defense modernization goals and simply buy foreign weapons to meet high-priority requirements. For example, although India for years demanded technology transfer and domestic production in its tenders for a Medium Multi-Role Combat Aircraft (MMRCA), the Indian Government eventually bought three-dozen Rafale fighters in turn-key condition from the French aerospace corporation Dassault to fill an urgent acquisition need. National security imperatives have also mandated New Delhi’s continued reliance on foreign arms. Indian military leaders have insisted that they could not risk waiting until India develops some advanced indigenous weapons systems, such as critically needed fighter planes. India accordingly remains heavily reliant on arms imports and has become one of the world’s most competitive national arms markets.

The IAF have purchased over $10 billion worth of U.S. weapons. In 2014, India was the second largest importer of U.S. arms, accounting for more than 11 percent of all U.S. arms sales worldwide, trailing only Saudi Arabia. The largest deals have included India’s acquisition of U.S.-made Apache (attack helicopters), Chinook (heavy-lift helicopters), C-130 Hercules (transport aircraft), and Boeing P-8I (long-range maritime surveillance and anti-submarine aircraft), as well as several other weapons systems. This surge in U.S. arms sales helped boost bilateral trade in 2015 to more than $100 billion and U.S. investment in India that year to $35 billion. Although the U.S. and Indian Governments have sought to increase defense indus-
trial cooperation, the Indian bureaucracy’s resistance to allowing substantial foreign direct investment (FDI) in the country’s defense sector and other factors initially limited progress. Prime Minister Narendra Modi, who took office in May 2014, and the Bharatiya Janata Party (BJP) have launched a “Make in India” program to increase Indian industries’ international competitiveness. The new government views foreign defense-related FDI more favorably for its potential to strengthen domestic producers by better integrating them into global supply chains, expanding their access to high technology, and creating a more competitive procurement environment that would encourage national companies to become more efficient. In July 2014, the government raised the ceiling for FDI in India’s defense sector from 26 to 49 percent, with higher limits for those foreign firms that transferred the most valuable technology. The increase in FDI in the defense sector has allowed U.S. producers to increase their arms sales to India. The result has been record levels of FDI. Indian officials have said that they might accept 100 percent foreign ownership of defense projects in some cases, but have not specified these conditions. Indeed, the Modi administration has established ambitious targets for decreasing the country’s dependence on weapons imports by developing the indigenous defense industry, with the goal of eventually transforming India into a major arms exporter. In February 2015, the Modi administration set the target of having 70 percent of all weapons used by the IAF manufactured in India by 2020. The government revised the DPP to encourage strategic partnerships between domestic and foreign weapons producers with the objective of promoting greater foreign investment and technology transfer to Indian arms manufacturers. Indian officials also offered tax incen-
tives and other enticements to induce more Indian small businesses to enter the defense market.

India’s defense industrial and procurement practices still create problems for foreign partners. India’s weak national currency, uneven economic growth, and high inflation in the defense sector create recurring gaps between the IAF’s requirements and budget.\textsuperscript{33} In addition, the Defence Research and Development Organisation (DRDO) constantly changes program requirements, arbitrarily cancels and re-issues tenders, delays decisions, and favors public rather than private sector firms.\textsuperscript{34} U.S. analysts have routinely considered Indian demands for technology transfers and offsets (whose typical rate for large defense contracts is 30 percent) excessive, risky for foreign companies without stronger protection for imported intellectual property, and misguided given the Indian defense industry’s limited capabilities.\textsuperscript{35} Foreign companies worry about Indian firms’ inability to serve as system integrators, lengthy production delays, and the other performance problems that have historically characterized India’s defense industry.\textsuperscript{36} Additional challenges to greater U.S.-Indian arms sales cooperation have included India’s continuing commitment to buying weapons from diverse foreign suppliers to avoid dependency on any one of them; the established presence of strong foreign competitors such as Russia and Israel that pledge to offer greater technology transfer; the deterioration of U.S.-Russian relations (which has made U.S. officials more concerned about Russian access to any U.S. technologies provided to India); and U.S. weapons sales to Pakistan.

The United States has been striving to meet Indian requirements for offsets, technology transfers, and other support. In 2012, the United States and India
launched a Defense Technology and Trade Initiative (DTTI) to facilitate military technology transfer as well as expand defense co-production and co-development, with the aim of making their buyer-seller relationship more balanced by ending the previous U.S. “presumption of denial” for Indian defense technology transfer requests.\(^37\) Former Defense Secretary Chuck Hagel said the goal was:

\begin{quote}
\textit{to support the development of a strong and self-sufficient Indian defense industrial base—one that develops mutually beneficial, long-term partnerships with top American defense companies and helps create jobs in both our nations.} \(^38\)
\end{quote}

The endeavor was originally known as the Carter Initiative, as the then-Deputy Secretary was a driving force behind the initiative.\(^39\) The DTTI, the first agreement of this kind for the Pentagon, has the following aims:

- Transform the bilateral defense relationship into one that is limited only by independent strategic decisions, rather than bureaucratic obstacles or inefficient procedures
- Strengthen India’s defense industrial base by moving away from the traditional ‘buyer-seller’ dynamic toward a more collaborative approach
- Explore new areas of technological collaboration from science and technology cooperation through co-development and co-production
- Expand U.S.-Indian business ties\(^40\)

The Undersecretary of Defense for Acquisition, Technology, and Logistics leads the DTTI in Washington, while at the bilateral level a joint U.S.-India DTTI Interagency Task Force (DIATF) is the lead oversight
body. In January 2015, the Pentagon created the India Rapid Reaction Cell to advance the DTTI, while that month President Obama and Prime Minister Modi decided to focus current DTTI efforts on several co-development/co-production pathfinder projects.41

Later that year, the United States and India renewed the NFA for another decade.42 The new accord includes a specific DTTI-related commitment to co-develop and co-produce defense technologies—such as jet engines, personnel protective gear against biological and chemical weapons, and mobile electric hybrid power sources (solar generators for soldiers in remote locations such as India’s border mountains).43 This initiative had a slow start, as India rejected the first dozen projects proposed by the United States for not providing sufficient technology transfer.44 To solve this problem, the two parties agreed to pursue four pathfinder pilot projects involving subsystems of widely available U.S. military systems that could expand into a wider and deeper defense industrial partnership.45 These included co-production of the unarmed handheld RQ-11 Raven surveillance drone made by AeroVironment and the manufacture of roll-on, roll-off modules for Indian-owned C-130J Super Hercules military transport aircraft that provided targeted capabilities for disaster relief, surveillance, very important person (VIP) transport, and additional missions.46 During Carter’s April 2016 visit to India, he and Indian Defense Minister Manohar Parrikar agreed to new pathfinder projects for the development of digital helmet-mounted displays and a lightweight personal protective system (the Uniform Integrated Protection Ensemble—Increment 2) against biological and chemical agents.47 These could have a shorter-term delivery date than the joint systems
integration projects (connecting new weapons systems with existing platforms) being reviewed under a Jet Engine Technology Joint Working Group and a Joint Working Group on Aircraft Carrier Technology Cooperation. The latter body includes discussions on aircraft launch and recovery equipment as well as the technology India wants for its next-generation aircraft carriers, such as a flat deck with catapults for launching planes. Following Parrikar’s June 2016 visit to the United States, the United States and India signed an information exchange annex to cover confidential information sharing on unspecified aspects of carrier designs. Meanwhile, in November 2016, India agreed to buy 145 Lightweight M777 Howitzers, optimal for the Indian Army operation in the country’s mountainous borders with China and Pakistan, in a deal structured to promote large-scale co-production. The Indian Army will acquire 25 U.S.-made turn-key weapons, while Indian corporations will build the remaining 120 under license.

Other future projects might cover ballistic missile defense (BMD) cooperation, which was emphasized during the George W. Bush administration, both bilaterally and trilaterally, with Israel as a third partner. The Obama administration downplayed BMD partnership fearing the technologies might disrupt regional stability in South Asia. The 2015 agreement contained only a passing reference to BMD, but India has been pursuing the technology with domestic and other foreign technology. The government has been building a two-tiered BMD system, with a Prithvi system for high-altitude intercepts at a maximum altitude of 80 km and an Advanced Air Defense system for intercepts at altitudes under 30 km. After considering Israel’s Iron Dome system, India decided to
buy the Russian S-400 Triumf Air Defense System to supplement its national systems. India has become the fourth country — after the United States, Israel, and the Soviet Union/Russia — to construct a multilayer missile defense system.

MILITARY-TO-MILITARY TIES

U.S.-Indian defense exchanges have been expanding substantially in number and type — in recent years, the United States has become the primary foreign exercise partner of the IAF. Bilateral military relations steadily grew after the two countries pooled their resources in response to a devastating tsunami that struck India following the massive Indian Ocean earthquake in December 2004. The following year, they launched a U.S.-Indian Disaster Relief Initiative. Building on an already strong civilian relationship, this initiative aimed to increase coordination of their military humanitarian relief operations. Since then, the United States and India have augmented their engagement across all military services and with their civilian defense managers. These include regular meetings between civilian and military national security leaders, formal military exercises, defense dialogues, and additional interactions. For example, the DPG, which meets annually, consists of senior civilian national security leaders as well as some high-ranking officers, while the Defense Joint Working Group conducts mid-year reviews of the DPG’s progress. The MCG, meanwhile, is chaired by general officers from both countries. Its three ESGs — for the air forces, armies, and navies, respectively — meet annually to discuss military-to-military engagements and to plan
joint exercises, which have become more complex and frequent in recent years.\textsuperscript{60}

Moreover, soldiers from each country often socialize with one another at scheduled activities such as sporting events and meals. A U.S. Army officer praised these engagements and wrote of the Indians: “They are teaching us their culture and values. . . . It was a delight to work with the Indian Army because they are professional, competent soldiers who are able to teach us a lot and learn from us while doing so.”\textsuperscript{61} The International Military Education and Training (IMET) program provides funding to train Indian officers and officials through Defense and State Department educational projects.\textsuperscript{62} These institutional ties between militaries provide ballast to political relationships, whose sustainment can be difficult due to frequent changes in office. Still, senior-level political intervention may be needed to achieve lasting results, especially given that both the United States and India have a steadfast tradition of civilian control of the military.

The U.S.-Indian naval exercises that began in 1992, code-named “Malabar,” have focused on increasing interoperability and developing a common understanding of maritime security procedures. The Clinton administration canceled these exercises in 1998, following India’s nuclear weapons tests. Bilateral military partnership revived when the Indian Navy escorted U.S. vessels through the Strait of Malacca after the September 2001 terrorist attacks.\textsuperscript{63} The Malabar exercises, led by the U.S. Navy’s 7th Fleet based in Japan, resumed in 2007 and have occurred annually since then, taking place alternatively in the Western Pacific and off India’s coast.\textsuperscript{64} The July 2015 exercise off Chennai rehearsed carrier strike operations; surface and anti-submarine warfare; and visit, board, search,
and seizure (VBSS) operations. The week-long June 2016 “Malabar-16” exercise marked the largest iteration of its kind, with 8,000 naval personnel in total. They engaged in diverse surface, subsurface, anti-air, and harbor defense drills with the participation of a U.S. carrier strike group and Indian and U.S. submarines. India also sent a naval commander to the U.S.-led Rim of the Pacific (RIMPAC) multilateral exercise in 2012, but did not send any vessels. In 2014, the Indian Navy fully participated in RIMPAC, the largest multinational naval exercise in the Asia-Pacific region, by sending the INS Sahyadri; the Navy also participated in the 2016 RIMPAC exercise.

The United States and India share similar maritime security principles regarding the Indian Ocean and Asia Pacific. Under the 2010 CCI, both countries agreed to exchange maritime intelligence. The 2015 U.S.-Indian Joint Strategic Vision Statement highlights their shared maritime security principles and interest in protecting surrounding seas from piracy and other threats. Carter’s June 2015 visit to the city of Visakhapatnam, where the Indian Navy’s Eastern Command is located, was the first such trip by a U.S. Defense Secretary, thereby emphasizing the growing maritime cooperation between the two countries. In December 2015, Parrikar became the first Indian Defense Minister to tour U.S. Pacific Command headquarters. In February 2016, the United States participated in the International Fleet Review of the Indian Navy at Visakhapatnam. In May 2016, Carter and Parrikar attended the inaugural Maritime Security Dialogue in New Delhi, where they exchanged perspectives on maritime security developments in the region and approved a “white shipping” agreement to share commercial shipping data. The Maritime
Security Dialogue, which has since met at the assistant secretary-level, has involved the U.S. Defense and State Departments as well as the Indian Defense and External Affairs Ministries.\textsuperscript{73} For India, these joint maritime exercises and dialogues with the United States are valuable for enhancing military interoperability, increasing maritime domain awareness, and learning from the more experienced U.S. Navy.\textsuperscript{74}

Although the two navies are the main military services participating in U.S.-Indian exercises, the Indian and U.S. ground and air forces also regularly engage in joint drills.\textsuperscript{75} The U.S. and Indian armies have held annual \textit{Yudh Abhyas} (training for war) exercises since 2004.\textsuperscript{76} Over time, these drills have grown from squad- and platoon-level to company- and battalion-level exercises.\textsuperscript{77} The 2016 Yudh Abhyas exercise was held in Uttarakhand, the closest the joint U.S.-Indian Army drill has ever been to China.\textsuperscript{78} The Indian Army and U.S. Marine Corps have also participated in amphibious exercises.\textsuperscript{79} U.S. and Indian Special Forces, meanwhile, have held a Balanced Iroquois training exercise.\textsuperscript{80} These ground-force drills have focused on building capacity for counterinsurgency, counterterrorism, humanitarian assistance, and peacekeeping.\textsuperscript{81} (India is one of the leading providers of United Nations [UN] peacekeeping personnel, while the United States is the main funder of UN peace operations.) The U.S. Army seeks to use bilateral exercises with the Indian Army to become a more effective counterinsurgency force and to make their coordinated disaster relief efforts more efficient and effective. The U.S. Army rotates the units that participate in the Yudh Abhyas exercises to maximize cultural exchanges and interoperability between Indian and U.S. ground forces. The Indian and U.S. participants have emphasized the value of the personal relationships that they develop.\textsuperscript{82}
The U.S. and Indian Air Forces coordinate exercises and other contacts through their bilateral ESG. The two air fleets held their first of several “Cope India” bilateral exercises in 2004. The Indian Air Force has also participated in the U.S.-led multilateral Red Flag exercises in 2008 and 2016. These drills have mainly focused on humanitarian assistance, disaster relief, and air-to-air combat. Cooperation with India also provides the U.S. Air Force with an opportunity to test U.S. fighters against India’s Russian and European-made warplanes, such as India’s Russian-built MiG 29s and Su-30MKIs. Meanwhile, India’s Air Force can enhance its ability to address regional security challenges and support UN, humanitarian, or noncombatant evacuation missions, like the one India conducted recently in Yemen, by practicing these operations with U.S. forces. However, cooperation between the air forces is less developed than the collaboration between other Indian and U.S. military branches. The Indian Government has not approved some of the exercises and engagements proposed by the ESG, possibly due to cost considerations. The Indian Air Force’s heavy reliance on Russian military technology also presents an obstacle to deeper cooperation with the United States, since some Indian commanders may be reluctant to showcase their best Russian-provided fighters, radar, and avionics to the United States for fear of losing access to Russian suppliers. The U.S. Congress has taken steps to strengthen bilateral defense ties. For example, the National Defense Authorization Act of 2017 funds a special office in the Pentagon focused on the DTTI, authorizes a senior position focused exclusively on the U.S.-Indian defense relationship, and supports future joint military planning, specifically in humanitarian assistance, counter-
piracy, maritime security, and co-production/development. After Modi’s 2016 visit to the United States, Congressmen Eliot Engel and Joseph Crowley introduced legislation in the House of Representatives defining India as a Special Global Partner of the United States and amending the Arms Export Control Act to benefit India. The United States in 2016 designated India a “Major Defense Partner,” a newly created category to make India a de facto major non-North Atlantic Treaty Organization (NATO) ally, without using that term. According to Carter, the decision “will facilitate defense, trade and technology sharing with India on a level we reserve only for our closest friends and allies.” Specifically, the new designation helps the White House expedite Indian defense licenses and adds India to an approved category of the Arms Control List, helping India obtain U.S. defense technology more rapidly. The new designation also simplifies defense investment and gives India license-free access to dual-use technologies in exchange for strong Indian export controls. Despite India’s new classification, U.S. law will still regulate intelligence, patents, and the export of “sensitive technology.”

COUNTERTERRORISM, CYBER, AND INTELLIGENCE COOPERATION

Counterterrorism cooperation between the United States and India has also expanded in recent years. In 2000, the two countries created a U.S.-India Joint Working Group on Counterterrorism. This body has facilitated the exchange of intelligence on terrorist financial operations and supported joint training in border management, surveillance techniques, aviation security, and terrorist incident response involving
weapons of mass destruction (WMD). Through the Anti-Terrorism Assistance (ATA) Program, U.S. agencies like the Federal Bureau of Investigation (FBI) and the Department of Homeland Security (DHS) subsequently trained Indian security personnel in counterrorism activities such as advanced crisis response, hostage negotiation, incident management, explosive incident countermeasures, and terrorist interdiction. The 2008 Mumbai attacks—in which 6 U.S. citizens were among the almost 200 dead—spurred greater U.S.-Indian counterterrorism cooperation, including a U.S. commitment to pressure Pakistan further on this issue. During the inaugural 2009 U.S.-India Strategic Dialogue, President Obama and Prime Minister Manmohan Singh explicitly called for eliminating terrorist safe havens in Afghanistan and Pakistan. The CCI, launched the following year, has included short- and long-term projects for enhancing joint counterterrorism capabilities through the sharing of advanced techniques, best practices, and investigative skills as well as cooperation between forensic laboratories, reciprocal investigative assistance, and mutual training and liaison. The CCI has addressed money laundering, terrorist financing, mass transit and rail security, maritime transportation, and port and border security. However, their “Homeland Security Dialogue,” established in 2011, has yielded few results. In 2014, the United States created a Homeland Security working group under the bilateral High Technology Cooperation Group (HTCG) with the intent to facilitate joint access to counterterrorism-related technology. The Indian and U.S. intelligence services have collaborated on many regional terrorism threats, such as the new South Asian branches of al-Qaeda, the Lashkar-e-Tayyiba (LeT), Jaish-e-Mohammad, the Haqqani
Network, and the Islamic State—also known as the Islamic State of Iraq and Syria (ISIS), the Islamic State of Iraq and the Levant (ISIL), and its Arabic acronym, Daesh. The Indian and U.S. defense ministries also discussed these regional terrorist threats at the highest levels. In February 2015, India formally banned ISIS and its associated organizations under the Unlawful Activities (Prevention) Act. On September 22, 2015, then-U.S. Secretary of State John Kerry and Indian Minister of External Affairs Sushma Swaraj issued “The U.S.-India Joint Declaration on Combatting Terrorism” as part of their Strategic and Commercial Dialogue (S&CD). The text highlighted shared concerns about regional terrorist movements, the two countries’ common long-term counterterrorism goals, and their commitment to complete “a bilateral agreement to expand intelligence sharing and terrorist watch-list information.” In 2016, their annual Yudh Abhyas exercise focused on counterinsurgency and counterterrorism operations in mountainous regions. Leaders of both governments recognized that their counterterrorism relationship must evolve to address changes in threats and technology. In his June 2016 speech to the U.S. Congress, Modi said that the “traditional tools” used to fight terrorism are insufficient and that both countries must “deepen their security cooperation” through new and diverse methods to combat terrorism. Obama also stressed the importance of finding more creative opportunities for collaboration in counterterrorism. During Modi’s visit, he and Obama signed an agreement providing for enhanced data exchanges between India’s Multi Agency Centre and Intelligence Bureau and the FBI’s Terrorist Screening Center.
The Indian and U.S. Governments have recently increased cooperation against cyberterrorism. The U.S.-India Cyber Security Forum, established in 2001, created a framework for dialogue between U.S. and Indian cyber agencies. The United States and India later launched a Joint Initiative on Cyberterrorism. A decade later, the two governments signed a memorandum of understanding that facilitated a more substantial exchange of cyber information and expertise. In 2013, they launched a Strategic Cyber Policy Dialogue. The Framework for the U.S.-India Cyber Relationship, the first such document the United States has signed with any foreign government, committed both countries to various principles such as promoting international law, public-private partnerships, and appropriate norms of state cyber conduct. The parties also agreed to deepen cybersecurity collaboration on critical infrastructure protection, malicious and criminal activity, and to eventually adopt a bilateral cybersecurity cooperation agreement. The two governments have used the U.S.-India Cyber Dialogue to implement the Framework as well as pursue additional joint cyber projects. More recent cooperation has expanded to further command, control, communications, computers, and intelligence (C4I) elements. In late August 2016, Parrikar visited the U.S. Cyber Command (CYBERCOM), the Defense Advanced Research Projects Agency (DARPA), the Air Combat Command (ACC), and the 480th Intelligence, Surveillance, and Reconnaissance (ISR) Wing, presumably to develop partnership opportunities with all these organizations.

U.S.-Pakistani ties have complicated U.S.-Indian counterterrorism cooperation. The Indian Government has repeatedly accused Pakistan, particularly
the semiautonomous Inter-Services Intelligence (ISI), of sponsoring terrorism against Indian targets. U.S. officials, while generally agreeing with these assessments, have felt compelled to cooperate with the ISI, as they have considered its help critical for defeating terrorist threats against the United States, especially against U.S. forces in Afghanistan. The 2008 Mumbai attack deepened Indian apprehensions about a perceived U.S. reluctance to share information detrimental to Pakistan with India. Not only did U.S. authorities deny Indian law enforcement personnel access to David Headley, a Pakistani-American who participated in the attack, but U.S. media reported that the U.S. authorities had acquired intelligence about the attack before it occurred, but had refused to act on it or share the information with the Indian authorities. More recently, Indians have skeptically viewed Pakistani Government pledges to U.S. authorities to adopt a harder line toward terrorism following the December 2014 terrorist attack in Peshawar, which killed more than 100 Pakistani children. In his speech to Congress, Modi pointedly observed that, “while it was a global problem, terrorism was ‘incubated’ in India’s neighborhood.” However, Indian Governments have strongly resisted U.S. mediation of its conflict with Pakistan over Kashmir and other issues that New Delhi treats as its internal affairs. The restricted geographic nature of these threats, issues of feasibility, and legislative constraints will likely exclude future U.S.-Indian collaboration on these issues.

REGIONAL SECURITY

Despite their limited cooperation regarding Pakistan, U.S. defense leaders have come to see India as a potential partner on a range of regional security issues.
of concern to Washington. In 2012, then-U.S. Defense Secretary Leon Panetta called India a “linchpin” in the U.S. pivot to Asia. In August 2014, then-Secretary Hagel observed that, “the United States strongly supports India’s growing global influence and military capability – including its potential as a security provider from the Indian Ocean to the greater Pacific.” India’s regional partnerships extend to several important U.S. allies. For instance, India regularly buys weapons and collaborates on counterterrorism and other security issues with France and other European countries. India and Israel have also developed close security ties, which include joint exercises, counterterrorism collaboration, and Israeli arms sales to India. During the past decade, moreover, Japanese-Indian security ties have grown to include military exercises, defense industrial cooperation, and energy security (including a November 2016 civil nuclear cooperation agreement). Tokyo supports New Delhi’s “Look East” policy and was instrumental in ensuring India’s participation in the East Asian Summit. The Japanese Maritime Self Defense Force (JMSDF) had participated in several of the annual Malabar maritime exercises and became a permanent participant in the drills in 2015. Japan has also joined in some multinational regional security initiatives with the United States and India. Some recent activities have extended to include Australia on a quadrilateral basis.

Concerns about how the People’s Republic of China (PRC) would employ its rising economic and military power have been a key driver of post-Cold War U.S.-Indian cooperation. Sino-Indian relations reflect a mixture of collaboration and conflict. Bilateral economic exchanges are increasing, while Beijing and New Delhi have aligned their policies on important
global issues such as climate change. India has joined several Beijing-led development institutions, such as the Asian Infrastructure Investment Bank; and China has removed its veto of India becoming a full member of the Shanghai Cooperation Organization (SCO), a bloc of Eurasian states that also includes China and most Central Asian countries. The two countries also engage in modest bilateral defense dialogues and exchanges. Yet, Sino-American tensions encompass territorial conflicts, cyber suspicions, mutual fears of geopolitical encirclement, competitive diplomacy to secure third-country support against the other country, and Beijing’s efforts to limit India’s membership in various international organizations, such as the UN Security Council (UNSC) and the Nuclear Suppliers Group (NSG), that can enhance India’s great power status. India fought a short border war with China in 1962. Despite years of official negotiations since then, they have failed to resolve their conflicting territorial claims. During the Cold War, India was in de facto alignment with the Soviet Union against the PRC; now Indians worry about the leverage Beijing gains over Moscow due to Russia’s growing dependence on China’s economy, which could allow Beijing to challenge Russian-Indian ties. New Delhi and Beijing still compete for regional influence in South Asia, especially Bangladesh. Indians and Chinese perceive each other as maneuvering globally to contain the other country’s rise. Indians are concerned with the PRC’s close defense relations with Pakistan and expanding military presence in the Indian Ocean region, while India’s growing security ties with the United States, Japan, and other potential Chinese adversaries make Chinese analysts uneasy. India has conducted multilateral military exercises with Nepal, Indonesia,
Thailand, Vietnam, the Philippines, Myanmar, and other members of the Association of Southeast Asian Nations (ASEAN). Some of these countries hope for India to act as a modest counterweight to China in the region.\textsuperscript{135} For decades, PRC policy has been to fortify Pakistan, India’s main South Asian rival, with economic and military help to keep New Delhi preoccupied with Islamabad, allowing Beijing to focus on managing its more important relationships elsewhere.\textsuperscript{136} Indian policymakers have long perceived a trilateral dynamic at work in their relations with China and Pakistan. When India tested nuclear weapons in May 1998, its government justified this controversial action by citing the threat presented by China’s military ties with Pakistan and the PRC’s nuclear weapons capabilities rather than a direct threat from Islamabad.\textsuperscript{137} For their part, Pakistani policymakers see security ties with China, along with their country’s nuclear capabilities and terrorist ties, as helping negate New Delhi’s superior conventional military capability. The PRC has sought to deter India and assure Pakistan through military and additional assistance, including probable past assistance to Pakistan’s nuclear weapons program, but has pushed Islamabad to become more capable of self-defense rather than defending it directly through extended nuclear deterrence or other means. China has greater economic and military resources than India, but PRC policymakers must often manage more economic and strategic relationships due to China’s global presence and larger number of regional neighbors. As a result, Indian policymakers typically appear more concerned with China than PRC policymakers do with India. PRC strategists have regularly dismissed India as a second-ranked power compared
to Japan, Russia, and the United States. Yet, India’s growing economic and military superiority relative to Pakistan has changed this dynamic; PRC policymakers increasingly recognize New Delhi as a more important global player, especially in Asia. The United States has found improving security ties with India while sustaining good bilateral relations with Pakistan difficult to manage. Indians have resented the billions of dollars in economic and security assistance Washington has provided Islamabad, while Pakistani elites traditionally consider Beijing as a more reliable partner than Washington, which has imposed various sanctions on Islamabad.

Though both the United States and India have eschewed an explicit strategy of containing the PRC, they recognize that a stronger U.S.-Indian partnership would better position them both to manage their China challenges. Washington and New Delhi have overlapping, though not identical, security concerns regarding Beijing’s growing military power. The United States and India also differ from China in having democratic political systems. Even so, only under Modi has the Indian Government more visibly joined U.S. criticism of China, such as expressing shared support for freedom of navigation in the South China Sea. The 2015 U.S.-India Framework agreement pledges to:

> enhance cooperation toward maritime security and to increase each other’s capability to secure the free movement of lawful commerce and freedom of navigation across sea lines of communication [SLOC], in accordance with the principles of international law.

While visiting India in April 2016, Carter and Parrikar released a joint statement of intent to ensure “freedom of navigation and over-flight throughout the region,
including in the South China Sea.” They also expressed support for a “rules-based order and regional security architecture conducive to peace and prosperity” in the Indo-Asia Pacific region and their commitment to work with other countries to uphold “security and stability” in the area. Modi used similar language during his June 2016 visit to Washington. The Indian Government has ruled out conducting joint military patrols with the United States or other partners in the South China Sea. The Indian approach may reflect a reluctance to challenge Beijing in its backyard or to avoid giving the People’s Liberation Army (PLA) Navy another reason to strengthen its presence in the Indian Ocean in retaliation. However, Obama observed that:

> Whether India decides to operate with us or not, we are committed to helping India develop that capacity to protect its own interest and to ensure that the Indian Ocean region is free from the kind of threats to maritime transport, shipping, the way it is being in the South China Sea.

During the 2015 summit of Indian Prime Minister Modi and Japanese Prime Minister Shinzo Abe, the two leaders underscored their shared commitment to securing SLOC, as both countries depend heavily on SLOC for energy and trade. Japan-India defense industrial cooperation has also gained momentum as India is purchasing the ShinMaywa US-2 amphibious aircraft from Japan to upgrade India’s maritime domain awareness and search-and-rescue capabilities. Other recent bilateral military initiatives have included joint air force staff talks, agreements on defense technology transfer, and joint intelligence unit training. India and Japan have also partnered in creating
strategic rare earth element refinement and processing centers in Odisha and Andhra Pradesh to dilute China’s near monopoly on these mineral exports.¹⁵⁰ Meanwhile, the United States and India have managed their differences regarding Russia, Iran, and other regions. India has deep and longstanding defense ties with Moscow and has refrained from sanctioning Russia for the Soviet military occupation of Afghanistan in the 1980s or its annexation of Crimea in March 2014.¹⁵¹ Many Russian and Indian elites see their countries as important elements in the multipolar world order that they favor over one led by the United States. At the multilateral level, both are full members of the Brazil-Russia-India-China-South Africa (BRICS) bloc of emerging economic powers, while Russia has successfully pushed for India to become a full member of the SCO.¹⁵²

Russian-Indian cooperation is strongest in the defense sector. During the Cold War, India bought more arms from the Soviet Union than from any other foreign supplier.¹⁵³ Russian-Indian defense cooperation has remained strong since then due to overlapping geopolitical interests, shared security concerns, and mutual economic benefits. Arms sales and other avenues of defense cooperation have been institutionalized in annual meetings of the India-Russia Inter-Governmental Commission on Military Technical Cooperation (IRIGC-MTC).¹⁵⁴ Russia has sought to meet Indian demands that Russia transfer more defense technologies and engage in more joint research, development, and production of military systems. Both countries oppose radical Islamic terrorism and regional instability in Central Asia and conduct regular joint military exercises in both bilateral and multilateral formats.¹⁵⁵ Nevertheless, problems in past Rus-
sian arms sales, India’s growing arms purchases from the United States, and other factors have constrained recent Indian purchases of Russian weapons. Meanwhile, the BRICS countries have only achieved modest economic cooperation through joint declarations and summits, demonstrating little if any strategic coordination.\textsuperscript{156} India’s involvement in the SCO has also remained minimal, though this might change when India becomes a full member in 2017. Yet, Indian leaders have avoided aligning with the United States against Russia. In addition, Moscow’s strong post-Cold War security ties with Beijing have remained a serious barrier to Russian-Indian regional security cooperation.\textsuperscript{157} Moscow’s developing security partnership with Pakistan, promoted by China, could also present a challenge to Russian-Indian collaboration in Afghanistan, especially since Moscow has begun selling weapons to Pakistan and conducting joint Russian-Pakistani military exercises.\textsuperscript{158}

U.S. officials have long confronted the difficult balancing act of improving security ties with India while simultaneously sustaining good bilateral relations with Pakistan.\textsuperscript{159} For example, U.S.-Indian collaboration regarding Afghanistan has been constrained by U.S. concerns about Pakistani sensitivities.\textsuperscript{160} India has made major economic, political, and strategic investments in Afghanistan since the Taliban lost power in 2001, including programs to bolster Afghanistan’s security capabilities and integrate the country into regional diplomatic and economic structures. In their 2011 Strategic Partnership Agreement, India agreed to train Afghan military officers and provide light weapons useful for counterinsurgency operations.\textsuperscript{161} Pakistani national security managers have seen India’s presence in Afghanistan as a threat.\textsuperscript{162} With U.S.
encouragement, India initially collaborated mostly on diplomatic and economic initiatives with foreign partners in Afghanistan. More recently, NATO’s declining military presence in Afghanistan has led India to expand its training and other assistance of the Afghan National Security Forces.\textsuperscript{163}

Indian-Iranian ties have also troubled U.S. policymakers. Although the Indian Government supported the International Atomic Energy Agency (IAEA) and UN sanctions against Iran and decreased oil imports from Iran, Indians have at times seemed less concerned than the United States about Iran’s nuclear weapons activities and have invested in Iran’s Chabahar Port to gain access to the Persian Gulf.\textsuperscript{164} Indians share U.S. fears of nuclear terrorism, but perceive this danger as emanating more from Pakistan’s militants rather than Iran’s Revolutionary Guards. The 2015 Iranian nuclear deal reduced U.S.-Indian tensions regarding Iran.\textsuperscript{165} U.S. President Donald Trump and members of his administration have criticized the deal; however, for now, Iran is fulfilling its terms. India’s dependence on Persian Gulf energy and employment opportunities for millions of workers has also limited Indian cooperation with U.S. military operations in the Middle East.\textsuperscript{166}

**NUCLEAR ISSUES**

Nuclear security cooperation between the United States and India has historically been limited and sensitive. During the 1950s, under the Eisenhower administration’s Atoms for Peace program, the United States helped India develop its nuclear energy sector by building a nuclear reactor, providing India with nuclear fuel, and permitting Indian scientists to study
in the United States. However, India resisted U.S. pressure to sign the 1968 Nuclear Non-Proliferation Treaty (NPT) on the grounds that the treaty privileged the existing nuclear weapons states. As U.S. policymakers feared, India’s 1974 nuclear test encouraged Pakistan and other countries to acquire their own nuclear weapons. The United States imposed sanctions on India and pressed other states to refrain from any nuclear cooperation with India, even for non-military purposes. India continued developing its nuclear weapons program at great financial cost and with its own state-operated regulation and safeguard regimes.

India’s perseverance in pursuing nuclear technologies despite U.S. sanctions, development of effective national nuclear safeguards, increased cooperation regarding terrorism and other regional security threats, and other considerations led the former George W. Bush administration to pursue a more conciliatory approach. In July 2005, the administration decided to end the decades-long embargo on nuclear trade with India. In 2006, with White House backing, the U.S. Congress passed the Hyde Act to exempt nuclear cooperation with India from the U.S. Atomic Energy Act. This legislation allowed Congress to adopt a so-called 123 Agreement regarding India the following year, allowing civil nuclear cooperation between both states provided India permitted the IAEA to establish safeguards on a select number of its civilian nuclear facilities and did not transfer U.S. nuclear material, related equipment, and technology to third countries or use them for military purposes. A comprehensive Indo-U.S. civilian nuclear agreement, which the IAEA approved, was finalized in October 2008. The United States also persuaded the NSG to make an exemption for India, allowing its member states to engage in civil
nuclear trade with India despite New Delhi’s refusal to join the NPT as long as India continued its unilateral moratorium on further nuclear weapons testing. In 2010, Washington and New Delhi signed an agreement that allowed India to reprocess spent nuclear reactor fuel that originated in the United States. Reprocessing is controversial because the plutonium extracted from the spent fuel can be used to build nuclear weapons as well as recycled to manufacture more reactor fuel. Aside from India, the United States has authorized only Japan and the European Atomic Energy Community (Euratom) to reprocess U.S.-origin uranium.171

India suffers from a perennial energy shortage and hopes that the nuclear power will provide a quarter of the country’s energy requirements by 2050.172 Despite this need and the commitment of the United States and India to pursue nuclear cooperation, U.S. and other foreign investment in India’s nuclear sector has remained low, mostly due to the Indian parliament’s adoption of an extremely demanding nuclear accident liability law, in which nuclear suppliers rather than local plant operators are held primarily accountable for nuclear accidents.173 Only Russia has managed to sell India foreign nuclear reactors. An agreement reached during Obama’s January 2015 visit to New Delhi created a state-backed insurance scheme to overcome Western companies’ concerns about India’s unlimited liability law. The agreement also included provisions for IAEA oversight of U.S.-provided nuclear materials to India. During Modi’s June 2016 visit to Washington, the two leaders said India’s ratification of the Convention on Supplementary Compensation for Nuclear Damage provides the framework necessary for a long-term partnership between U.S. and Indian companies to construct nuclear power plants in India.
The leaders supported the plans by Westinghouse and the Nuclear Power Corporation of India Ltd. to build six reactors with the financial support of the Indian Government and the U.S. Export-Import Bank. The new U.S. approach has encouraged other countries to also pursue civil nuclear cooperation with India. Japan and India, for instance, signed a Nuclear Cooperation Agreement permitting Japan to transfer civilian nuclear technology to India, which will include components for the Westinghouse AP1000 reactors the United States is building in South India.

Ironically, whereas a decade ago, the United States and India considered resolving their nuclear-related differences essential for making mutual progress on other issues, U.S.-Indian security cooperation has since progressed sufficiently that regularizing their nuclear ties is no longer critical. The removal of the U.S. nuclear sanctions on India appears to have proved sufficient given both countries’ growing collaboration regarding terrorism, regional security, defense industrial ties, and other issues. Meanwhile, the United States endorsed India’s membership in the Missile Technology Control Regime (MTCR), finalized in June 2016, and supports New Delhi’s bid to become a member of the NSG, which Beijing is blocking.

LOOKING AHEAD

Despite growing security cooperation, the United States and India are not natural defense partners. The leaders of both countries, including national security ministers and, when necessary, presidents, must actively manage a bilateral relationship that has been historically troubled, is not a traditional military alliance, and remains focused on compartmentalized
deals rather than comprehensive programs. Notwithstanding their common strategic interests and shared democratic values, the United States and India will remain unequal in military strength and other power resources. They also have diverging strategic priorities in some areas, such as regarding Pakistan. Indians will generally provide more concrete support for U.S. goals than their public rhetoric would suggest. Conversely, U.S. officials should become more vocal in supporting India’s aspirations to become a permanent UNSC member, demonstrating U.S. conviction that India deserves greater recognition in the international arena, even if UNSC membership remains out of reach due to the Chinese veto. President Obama appropriately went out of his way to describe India as a potential strategic partner on many security issues, ranging from counterterrorism to climate change. Even so, many Indians still question whether U.S. policymakers appreciate that India’s enhanced economic-military power and elevated international stature will benefit U.S. interests despite New Delhi’s firmly independent foreign policy. They also insist that Washington remove remaining bilateral and multinational restrictions on Indian access to advanced U.S. civilian, dual-use, and military technologies. Additionally, they want U.S. policy to treat Pakistan more strictly while avoiding explicitly linking U.S. policy toward Pakistan and India.

Recent U.S. and Indian administrations have laid the basis for further security progress in coming years despite these differences, provided that both governments continue their comprehensive and sustained efforts to achieve it. In the last year of the Obama administration, the two governments signed a Logistics Exchange Memorandum of Agreement (LEMOA)
during Secretary Carter’s visit to India in April 2016. The LEMOA is a variant of the Logistics Support Agreements that the United States has signed with many foreign military partners, though the LEMOA was altered to meet the specific nature of the U.S.-Indian defense relationship.\textsuperscript{178} The agreement allows the two militaries’ land, air, and naval forces to access the other country’s defense supplies such as fuel, spare parts, and services such as maintenance and repair facilities at air and seaports. Parrikar and Carter stated that the LEMOA “increased strategic and regional cooperation, deepened military-to-military exchanges, and expanded collaboration on technology and innovation.”\textsuperscript{179} The LEMOA provides the U.S. Navy and Air Force with easier access to the South Asian region, which is useful for U.S. presence, counterterrorism, and related operations in Asia, while also expanding India’s military reach, potentially globally. Though the LEMOA does not oblige either party to pursue joint activity or provide for formal basing arrangements, it could enhance the effectiveness and efficiency of any joint operations, thus serving both countries’ objectives of increasing their presence in areas where China’s naval presence is growing.

Indian and U.S. officials see the LEMOA as the first of several “foundational” bilateral defense cooperation agreements designed to broaden and deepen the U.S.-Indian security partnership.\textsuperscript{180} Many Indian experts have welcomed the LEMOA for enhancing India’s military capabilities within and beyond South Asia—making India a better global “net security provider” in general and helping India manage its long-term relationship with China in particular.\textsuperscript{181} However, some Indian commentators worry that it makes their country strategically bound to the United States and
could entangle New Delhi in Washington’s disputes with Moscow and Beijing.\(^\text{182}\) They also oppose U.S.-Indian defense agreements as being too intrusive.\(^\text{183}\) Similar Indian concerns have delayed Indian approval of the U.S.-proposed Communications and Information Security Memorandum of Agreement (CISMOA), which would provide India with technologies for encrypted communications, and the Basic Exchange and Cooperation Agreement (BECA), which encourages geospatial intelligence collection and sharing. Negotiations over CISMOA have been sporadically underway since 2005; the proposed accord has recently been renamed the Communications Compatibility and Security Agreement (COMCASA) at India’s request. Though the Indian Government has approved these two agreements, there has been no announcement regarding when they will be formally signed or put into effect.\(^\text{184}\) When asked about the issue during his last Pentagon news conference, Parrikar recalled that the two countries had spent at least a dozen years negotiating the LEMOA and said his government first needed to secure its adoption before trying to achieve public support for the other deals.\(^\text{185}\)

In addition to completing implementation of these agreements, the Trump administration could take other steps to develop the U.S.-Indian security agenda. For instance, the two sides should impart more strategic rationale to the bilateral military exercises beyond developing tactical proficiencies and interoperability as ends in themselves.\(^\text{186}\) Engaging in more substantive bilateral discussions about the desired operational focus of their exercises would provide a means to enhance the strategic dialogue and joint planning between the two defense establishments regarding possible future missions and scenarios. Furthermore,
the multilateral Malabar maritime exercises should also fully embrace other foreign partners and rehearse large multi-service combined exercises and other high-end missions.\textsuperscript{187} Opportunities exist for expanding U.S. and Indian naval drills and other collaboration.\textsuperscript{188} Still, the number of ground exercises should increase, since the Indian Army receives more than half of the country’s defense budget while the Navy, which has been the Pentagon’s most active exercise partner, receives a considerably smaller percentage.\textsuperscript{189} Washington and New Delhi also need to make further progress toward realizing the goal, enunciated in their September 2014 joint statement, “for the United States to cooperate with India’s planned National Defense University” and to “expand military-to-military partnerships including expert exchanges, dialogues, and joint training and exercises.”\textsuperscript{190} Congress has adopted legislation permitting substantial senior-level officer exchanges, so now the U.S. and Indian defense communities need to implement such programs, which can form ties that last decades.\textsuperscript{191} In addition to placing personnel at major military command headquarters, they could also exchange civilian managers, military planners, defense scientists, and technicians.\textsuperscript{192} In this regard, the United States should ensure that training, exchange, and other opportunities engage India’s civilian defense managers. Unlike in Pakistan, where the lack of civilian control over the security agencies has created problems for achieving U.S. counterterrorism goals, India’s military is fully subordinate to civilian control; but Indian political leaders could benefit from more defense education and training. The United States and India should also develop more joint student and teacher exchange programs for their respective defense educational institutions. Whereas mili-
Military exercises improve their physical interoperability, these activities strengthen the cultural and intellectual readiness of the two national security communities to cooperate on joint missions.

The U.S.-Indian counterterrorism relationship can be strengthened and made more effective in meeting both countries’ security goals by increasing and diversifying cooperation, such as by streamlining intelligence sharing, reviving their lackluster homeland security dialogue (perhaps to include more immigration issues), and encouraging a freer exchange of creative ideas on how to combat radicalization. The recent hate crimes against Indian nationals residing in the United States underscore how both countries need to address this issue, which, along with the imperative of managing immigration and outsourcing, challenge U.S.-Indian societal, commercial, and other ties. India sent a high-level delegation to the Nuclear Security Summits held during the Obama administration. U.S.-Indian cooperation should now extend to constructing the new global nuclear security architecture needed, following the end of the summits. India can also increase its funding for IAEA nuclear security programs. The United States, for its part, should facilitate India’s joining the International Energy Agency (IEA), a group of 29 energy-importing countries. In addition to countering WMD trafficking, the United States and India could also collaborate more on international trafficking issues (of narcotics, weapons, and people) and biological security, such as averting threats to agriculture or public health in Asia. Some of these collaborative projects could extend to Africa, since both countries already train many African agricultural experts independently. At their August 2016 Strategic and Commercial Dialogue in New Delhi, the two governments
reaffirmed their commitment to sign a cybersecurity framework agreement, which now falls to the Trump administration to execute.\textsuperscript{196}

U.S.-Indian defense cooperation has become better institutionalized within the two countries’ national security establishments, but would still benefit from high-level political intervention to surmount bureaucratic barriers. In this regard, the departure of Secretary Carter could present a challenge to the relationship since he was very committed to improving U.S.-Indian ties and the U.S. arms export program—and spent more time with Parrikar than with any other foreign defense minister.\textsuperscript{197} For this reason, the policies toward India of the new Trump administration, and his top national security appointments, will be especially important in shaping the future U.S.-Indian relationship. In dealing with India, Trump’s team may be deliberating between two choices. The first approach would be to continue the previous administration’s policies of developing a strategic partnership based on shared values (based on a partnership between the world’s oldest democracy and the most populous democracy) and long-term interests. The second would be pursuing a more short-term transactional economic focus that emphasizes attaining concrete U.S. economic benefits. From a U.S. perspective, the former approach will be more difficult to achieve but should be the objective of the new administration; an expanded defense industrial partnership could maximize economic efficiency (combining U.S. high technology with Indians’ lower costs of labor) and thereby further mutual security interests. The Trump administration seems well positioned to help increase U.S. arms exports while meeting India’s defense autonomy goals. A good indication of the administrat-
tion’s approach may be how it responds to proposals by Lockheed-Martin and Boeing to shift production of the F-16 Fighting Falcon and F/A-18 Super Hornet to India while concentrating production of the more modern F-35 within the United States.\textsuperscript{198}

A transactional strategy might work better with Pakistan. Indians and others have called for conditioning more U.S. aid on stronger Pakistani measures to combat terrorism.\textsuperscript{199} Washington should also urge China to render more economic support to Pakistan. The Trump administration should publicly continue to de-hyphenate Pakistan and India by addressing both countries on issues beyond their mutual antagonism. At the same time, U.S. officials should recognize that strengthening India’s counterterrorism capabilities helps deter Pakistani-backed terrorism against India, with its inherent escalatory potential.\textsuperscript{200} In addition to addressing Islamist terrorism, China’s rise, and other mutual security issues, stronger U.S.-Indian ties will also help overcome possible U.S.-Indian divergences under Trump over immigration (due to a portion of India’s population being Muslim), climate change (India had expected to receive foreign financing and technology to curtail their carbon emissions), and alarming cases of hate crimes against Indian nationals in the United States.\textsuperscript{201} Based on his pre-election statements, Trump might also take a harder line against U.S.-Iranian ties and U.S.-Indian economic exchanges. Conversely, India’s non-membership in any formal U.S.-led defense alliance may present less of a challenge than in the past, since Trump has de-emphasized such arrangements. Indian leaders share Trump’s preference for strategic autonomy and reluctance to let alliance ties impinge on their foreign policy decision-making. If the Trump administration
manages to improve relations with Moscow, opportunities for tripartite Russian-U.S.-Indian security cooperation could grow in areas of mutual concern such as Afghanistan and in countering Islamist extremism. Even if U.S.-Russian ties remain strained, the United States should see India’s impending full membership in the SCO as an opportunity to moderate anti-U.S. tendencies within that organization. The United States should incentivize Beijing to discourage Pakistan’s support for anti-Indian terrorism by playing on Chinese anxieties regarding Islamist terrorism at home and in neighboring countries.

Several factors could make Afghanistan a more important area for joint U.S.-Indian counterterrorism cooperation. The United States and India have an interest in ensuring that Afghanistan does not serve as a launching pad for terrorist attacks against either country. In line with its declared policy of rebalancing U.S. defense cooperation, the United States should encourage India to provide more extensive and direct assistance for the development of the Afghan National Security Forces as well as cooperate with the United States and other countries to reduce Central Asian countries’ vulnerability to terrorism. In addition, India can undertake projects to improve the capacity and efficiency of Afghan governance institutions. Such cost sharing and pooling of resources would deepen and reinforce U.S.-Indian ties. Although Pakistan would object to this cooperation, the U.S.-Pakistani relationship has become both more stable and less important over time. In addition, the Pakistani leadership will be cautious about antagonizing the new U.S. administration, given its firm stance against Islamist terrorism and unpredictable regional security policies. Trump would do well to stress in public that U.S. policy
de-hyphenates the India-Pakistan relationship—meeting Indian demands to be treated as a great power in its own right. Spending much diplomatic capital to solve the Kashmir crisis is unwise since Indian-Pakistani tensions would persist even if their disputes were resolved. Still, it is clearly important that the United States use whatever tools available to avert a major conflict between India and Pakistan that could result in a nuclear war in South Asia involving more than a billion people. The proximity of the Indian and Pakistani nuclear forces, their deep mutual antagonisms, suspicions, and the vulnerability of both forces to preemptive attack already raise the risk of nuclear escalation. U.S.-Indian and U.S.-Pakistani defense ties could prove critical for early warning of impending conflict, crisis management, escalation control, and then dispute resolution. The Trump administration will likely press New Delhi to participate in the U.S.-led international coalition against the Islamic State, which now includes some 68 countries. Indian policymakers should consider doing so, especially as the terrorist group is striving to gain a foothold in South Asia. Building on their new presidential hot line, the United States and India should co-develop a crisis management strategy for handling major terrorist incidents and other regional threats. Improved information sharing in crises will enhance mutual risk mitigation and promote a more rapid and effective joint response. Increasing cooperation with Australia, Japan, NATO, and other third partners would also expand the impact of the U.S.-Indian security partnership.
To meet the Trump administration’s expected focus on expanding U.S. exports and achieving more balanced foreign economic partnerships, the two countries should execute their plans to facilitate U.S. civil nuclear energy sales to India. Furthermore, the two governments should continue to build on the ties presented by the Indian diaspora in the United States. A new initiative might secure a U.S.-India bilateral trade and investment treaty. In the security domain, India should raise its defense FDI ceiling to international standards and relax some of its offset requirements. For example, Indian officials need to specify when 100 percent FDI is permissible in the country’s defense sector. Indian and U.S. officials should also consider how to strengthen barriers against the unauthorized transfer of U.S. military technology to third parties. Defense exports to any country raise some risk that other rival countries will gain access to U.S. military secrets. Another potential risk is that, at some point, Indian defense exporters could emerge as low-cost competitors of U.S. defense companies in the same way South Korea and other recipients of U.S. defense technology transfers have. On the whole, however, the United States benefits from reinforcing Indian capabilities to fight terrorism and deter great power threats in Asia, while low-cost Indian components could, with appropriate quality control, help reduce the costs to U.S. companies of relying on the international defense supply chain. The United States should continue to modernize its defense export controls, which still restrict items Indians can purchase from other suppliers.
ENDNOTES


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203. Trivedi.


Figure I-1. Yearly Military Expenditure of India in Constant (2014) USD, 1988 to 2015.

**Figure I-2. Total Yearly Trend Indicator Values of Arms Imports of India, 1950 to 2015.**
Figure I-3. Russian and U.S. Share of Indian Arms Imports Trend Indicator Values, 1950-2015.
Figure I-4. Russian and U.S. Share of Indian Arms Imports Trend Indicator Values, 1985-2015.
