# UNITED AS SENTINELS OF SOVEREIGNTY AND GUARDIANS OF LIBERTY

A Compendium of U.S.-India Defense Partnership



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### **Abbreviations**

ACIR Alliance for Commercialisation and Innovation Research

ACM Air Chief Marshal

AH-64A Advanced Multi-Role Combat Helicopter

AH-64E Apache Variant

AIU Airborne Instrumentation Unit

AJT Advanced Jet Trainers AK-203 AK-203 Kalashnikov

ALUAV Air-Launched Unmanned Aerial Vehicle

AMRAAM Advanced Medium-Range Air-to-Air Missile

ANI Asian News International AN/MPQ-64Fl64F Sentinel Radar Systems

ASEAN Association of Southeast Asian Nations ATAGS Advanced Towed Artillery Gun System

AUKUS Australia, the United Kingdom, and the United States

BECA Basic Exchange and Cooperation Agreement

BH Tactical Airborne Platform for Aerial Surveillance-Beyond Horizon-

201

BRICS Brazil, Russia, India, and China

C4ISR Command, Control, Communications, Computers

CAATSA Countering America's Adversaries Through Sanctions Act

CENERS-K The Research Centre for East and North East Regional Studies,

Kolkata

CEO Chief Executive Officer

iCET, Initiative on Critical and Emerging Technology

CISMOA Communication and Information Security Memorandum of

Agreement

C-130J Super Hercules Transport Planes

COMCASA Communications Compatibility and Security Agreement

COVID Coronavirus Disease

CSIS Centre for Strategic and International Studies

CURAM Counter-UAS, Rocket, Artillery & Mortar System

CUTLASS Cutlass Express is a U.S. Naval Exercise Conducted in East African

Coastal Regions and The West Indian Ocean

CUTS Consumer Unity & Trust Society

DAC Defense Acquisition Council

DAP Defense Acquisition Procedure

DCA Defense Cooperation in Armaments

DCS Direct Commercial Sales

iDEX Innovations for Defense Excellence

DFARS Defense Federal Acquisition Regulation Supplement

DICF DTTI Industry Collaboration Forum

DIME Diplomacy, Information, Military, and Economic Elements

DIU Defense Innovation Unit
DOD Department of Defense
DPG Defense Policy Group

DPPG Defense Production and Procurement Group

DRDO Defense Research and Development Cooperation

DSCA Defense Security Cooperation Agency
DST Department of Science and Technology
DTII Defense Technology and Trade Initiative

EO Electrical Optical

ESG Executive Steering Group

ET Economic Times

F404 GE Aerospace's F404 Engine

F414 American Afterburning Turbofan Engine

FDC Fire Distribution Centre
FDI Foreign Direct Investment

F-15EX Eagle Fighter Aircraft

FICCI Federation of Indian Chambers of Commerce and Industry

FIM-92 Stinger Short-Range Man-Portable Air Defense System

FIM-92L Stinger Missiles

FMS Foreign Military Sales

FSMTC Federal Service for Military-Technical Cooperation

FSS Fleet Support Ships

5G 5<sup>th</sup> Generation Mobile Network

6G 6th Generation G20 Group of 20

G2G Government-to-Government

G7 Group of 7

GE414 Advanced Afterburning Turbofan Engine
GSOMIA General Security of Military Agreements

HADR Humanitarian Assistance and Disaster Relief

HAL Hindustan Aeronautics Limited
HALE High Altitude Long Endurance

HF-24 Marut Fighter Bomber
HIAE Hindustan Aeronautics
HML High Mobility Launchers

HPC High Performance Computing
HSL Hindustan Shipyard Limited

I2U2 Grouping of India, Israel, the United Arab Emirates, and the United

States

IADWS Integrated Air Defense Weapon System

IAF Indian Air Force

IDDM Indigenously Designed, Developed and Manufactured

IDSA Institute of Defense Studies and Analysis

IFC-IOR Information Fusion Centre for the Indian Ocean Region

IIT Indian Institute of Technology

IMEEC India Middle East Europe Economic Corridor

IMET International Military Education and Training programme

INDUS-X India-US Defense Acceleration Ecosystem

INS Indian Naval Ship

INSAS Infantry Soldier As A System

IOP Indian Offset Partners
IOR Indian Ocean Region

IORA Indian Ocean Rim Association

IP Intellectual Property

IPEF Indo-Pacific Economic Framework for Prosperity

IPOI Indo-Pacific Ocean's Initiative

IR International Relations
ISA Industrial Security Annexe

ISR Intelligence, Surveillance, Reconnaissance

ISRO Indian Space Research Organisation

ISTAR Intelligence-Surveillance-Targeting or Reconnaissance

IT Information Technology

ITAR International Traffic in Arms Regulation

JIMEX Japan-India Maritime Exercise

IMSDF Japan Maritime Self Defense Force

JTG Joint Technical Group
JWG Joint Working Group

LAC Line of Actual Control LCA Light Combat Aircraft

LEMOA Logistics Exchange Memorandum of Agreement

LOA Letter of Offer and Acceptance

LOCUST Low-Cost UAV Swarming Technology
LRMR P8I Long Range Maritime Reconnaissance
M4A1 Lightweight Selective-Fire Assault Carbine

M777 Howitzer Towed 155mm Howitzer Artillery

M855 A Small-Calibre Rifle Cartridge Used in Military Firearms

MCG Military Cooperation Group
MDA Maritime Domain Awareness
MDP Major Defense Partnership
MEA Ministry of External Affairs

MEHPS Mobile Electric Hybrid Power Systems

MH-60R Seahawk Helicopters

MPQ Advanced 3D Air Defense Radar System

MQ9-B Armed Reconnaissance Unmanned Aerial Vehicle

MRO Maintenance, Repair and Overhaul

MSC Marine Sealift Command

MSD India-US Maritime Security Dialogue
MSME Micro, Small, and Medium Enterprises

MSP Mineral Security Partnership

MSRA Master Shipyard Repair Agreement
MTS Multi-spectral Targeting System

NASA National Aeronautics and Space Administration

NATO North Atlantic Treaty Organisation NDAA National Defense Authorisation Act

NFDC New Framework for Defense Cooperation

NSA National Security Advisor NSF National Science Foundation

NSSP Next Steps in Strategic Partnership
OEM Overseas Equipment Manufacturer

ORF Observer Research Foundation

OSD Officer on Special Duty

OUSD Office of the Under Secretary of Defense for Policy

P8I Boeing P8I Long Range Maritime Reconnaissance Aircraft

PRC People's Republic of China

PSU Public Sector Undertaking

QUAD The Quadrilateral Security Dialogue RDP Reciprocal Defense Procurement

RIMPAC Rim of the Pacific Exercise

SASC Senate Armed Services Committee
SCO Shanghai Cooperation Organisation

SFG Special Forces Group

SFTS Special Forces Training School

SIDM Society of Indian Defense Manufacturers

SIPRI Stockholm International Peace Research Institute

SOP Standard Operating Procedure STA Strategic Trade Authorisation

iSTAR Intelligence, Surveillance, Targeting and Reconnaissance

STEM Science Technology Engineering Mathematics

STSG Senior Technology Security Group

SWiFT Stealth Wing Flying Testbed

T1 A Technical Criterion for Defense Procurement

RE-TAP The Renewable Energy Technologies Action Platform

TASL Tata Advanced Systems Limited

Bayraktar TB2 Armed, Long-Endurance Unmanned Combat Aircraft

TBAL Tata Boeing Aerospace Limited
TPF US-India Trade Policy Forum

C-UAS Counter-Unmanned Aircraft Systems

UAV Unmanned Aerial Vehicle

UCAV Unmanned Combat Aerial Vehicle

UDA Undersea Domain Awareness
ULH Ultra Lightweight Howitzer

UN United Nations

UNCLOS United Nations Convention on the Law of the Sea

US United States
USG US Government

USIAI US-India Artificial Intelligence Initiative

USIBC US-India Business Council

USIP US Institute of Peace

USISPF US-India Strategic Partnership Forum

USML US Munitions List

USSR Union of Soviet Socialist Republic

VAMRAM Virtual Augmented Mixed Reality for Aircraft Maintenance

VETO Power of Permanent UNSC Members

WION World is One News

WIPO World Intellectual Property Organisation

WMD Weapons of Mass Destruction

WTO World Trade Organisation

### **Contributors**



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## **Prologue**

#### Introduction

Global security is experiencing uncertainty and volatility due to significant geopolitical and geoeconomic events. While the dust of the COVID-19 pandemic has not yet settled, it has exposed the cracks in multilateral institutions. The Ukraine-Russia war has embroiled Europe and its adverse consequences are being felt all over the world. The heightened tensions in the Taiwan Strait are a result of history being rewritten by an expansionist regime in Beijing that is fixated on redrawing the map of Asia to suit its interests.

As S. Jaishankar puts it, "A multipolar world with frenemies, the balance of power and a clash of values may today present a challenge for global politics."

As India seeks to achieve transformative national growth and development internally, it seeks to pursue a robust defense strategy and policies which aim to address the wide spectrum of conventional and non-conventional security challenges. Guided by the principle of building strength through strategic autonomy and self-reliance, India seeks to enhance her capabilities and pursue constructive engagement with neighbours and partner countries in the regional and global community to promote peace and stability.

India has signed agreements on defense cooperation with over 53 nations (Ministry of Electronics and Information Technology, n.d.). It also actively contributes to achieving worldwide peace and security via its military forces while fostering the conditions that would hasten the country's continuing transition. India has undergone a great transition from being a hesitant military spender in the Cold War days to gradually emerging as the fourth biggest military spender in the world in 2022 (Stockholm International Peace and Research Institute, 2024).

According to this SIPRI report, India with a military spending of US\$81.4bn trailed behind the United States, China, and Russia to claim the fourth spot (Stockholm International Peace and Research Institute, 2024).

India was the largest arms importer for the five years between 2018-2022 (The Hindu, 2023). This was despite the country's arms imports dropping by 11 per cent between 2013-17 and 2018-22 (The Hindu, 2023). Russia was the largest supplier of arms to India during the 2013-17 and 2018-22 period, while France emerged as New Delhi's second-largest supplier between 2018 and 2022 (The Hindu, 2023). Russia accounted for 45 per cent is India's imports followed by France (29 per cent) and the US (11 per cent) (The Hindu, 2023).

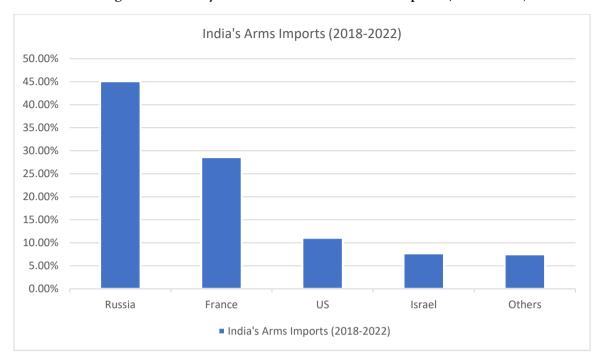


Figure 1: Country-wise Share of India's Arms Imports (2018-2022)

**Source**: https://armstrade.sipri.org/armstrade/page/values.php

Besides being one of the largest importers in the world, India has also been listed as the 23rd largest defense exporter in the world. India's defense exports have witnessed a whopping 334 per cent rise in the past five years and 75 countries across the globe are recipients of New Delhi's arsenal. India was the third largest arms supplier to Myanmar after Russia and China accounting for 14 per cent of its imports. This has been only possible with India's policy shift to greater self-reliance in defense manufacturing and exports as it allowed a great degree of technology transfer to private manufacturing firms. India seeks to build indigenous technological and production capacity in collaboration with reputed manufacturers from friendly nations.

It is against this backdrop that the present work studies the contemporary India-US Defense Partnership through the prism of the media. It tries to portray how the media outlets (local, national, transnational) are reporting India's defense relations with the US and other countries. It seeks to highlight the mutual benefits that would accrue from the India-US partnership for global security. It will also drive home the point that if India's security is jeopardised then it will have ramifications for Indo-Pacific. It will capture defense cooperation from the perspective of India's Foreign Policy.

#### India-U.S. Major Defense Partnership

India-U.S. Defense Partnership has been a defining one for the present century and is a crucial pillar of the India-U.S. bilateral agenda. It is since India's independence in 1947 that India-U.S. ties have played a significant role in New Delhi's foreign policy calculations. However, India's freedom coincided with the beginning of the Cold War between the US and the USSR.

India adopted a non-aligned policy rejecting disproportionate military or political ties with either superpower, the US or the Soviet Union. In a bid to contain the USSR, the US sought defense links with both India and Pakistan due to their strategic locations. India rejected the US's offer due to its non-alignment policy.

The most significant upswing in Indo-US ties came towards the end of the Cold War in June 1985 when during former Prime Minister, Rajiv Gandhi's visit to the US, India became the first non-aligned developing country to receive high-technology for supercomputers and GE F404 engine technology for India's Light Combat Aircraft (LCA) project.

The significance of the GE F404 engines to India was that the GE F404 had an advanced technology that was to be fitted then on future US fighter aircraft and was not yet found even on the advanced Soviet Union MiG-29 aircraft prototype MiG-31s. Bilateral visits from officials continue for the facilitation of technology transfer to India.

#### Post-Cold-war Defense Relations

An important step that paved the way for defense cooperation was the signing of the 'Agreed Minute on Defense Relations between the US and India' in January 1995 during US Defense Secretary William J. Perry's visit to India. The Agreed Minutes provisioned for bilateral cooperation to be expanded between the different structures under the defense departments of the two countries. The minutes asked for period consultations among civilian and military officials of India and the US from their respective defense ministries.

Despite the chance provided by the end of the Cold War, the nuclear issue continued to obstruct India and US negotiations. The discrepancies reached a boiling point in 1998 when India conducted a series of nuclear tests because there was little understanding of each other's assessments of threat. In retaliation, the U.S. imposed economic sanctions and led an international condemnation campaign. However, despite the friction on the nuclear issue, the strategic congruence became evident after the Jaswant Singh-Strobe Talbott dialogue in the late 1990s, followed by President Clinton's visit to India in 2000.

The General Security of Military Information Agreement (GSOMIA) was the first of the foundational agreements to be signed in 2002. This agreement essentially a military information agreement guaranteed that the two countries would protect any classified information or technology that they shared and was aimed at promoting interoperability and laid the foundation for future US arms sales to the country (Firstpost, 2022).

The U.S. and India in January 2004 announced major progress in the Next Steps in Strategic Partnership (NSSP) (Embassy of India, 2016). They agreed to expand cooperation in three

specific areas: civilian nuclear activities, civilian space programmes, and high-technology trade. In addition, the two countries agreed to expand our dialogue on missile defense. These areas of cooperation are designed to progress through a series of reciprocal steps that build on each other.

Summing up the scenario, S. Jaishankar observes, "In the period when India was balancing a dynamic situation, a development that merits special mention is the 2005 Indo-US nuclear deal. It does so because this agreement removed key impediments to the development of those ties and enabled them to reach the stage, they have today...From the American side, there was little doubt that the growing relevance of Asia was a key factor in driving a stronger relationship with a democratic and market-oriented India" (Jaishankar, 2020).

#### **Signing Framework Agreements**

A 10-year Framework for the Defense Relationship between India and the US was established. The Framework laid out an institutional mechanism for areas of cooperation including joint exercises, intelligence exchanges, joint training for multinational operations including disaster relief and humanitarian assistance, technology transfer, and a sharing of non-proliferation best practices.

The 2005 framework was followed in 2006 by an agreement on cooperation in scientific exchange and development to foster the co-production of defense technology. The initial movement was slow; it gathered momentum once the nuclear hurdle was overcome in 2008 with the India-US civil nuclear deal.

The US Defense Technology and Trade Initiative (DTTI) set up in 2012 was a step forward in moving away from the buyer-seller dynamic and that the technology transfers and co-production and co-development arrangements should be fast-tracked. As rightly pointed out in a paper on the dynamics of India-US Defense Relations, DTTI has been a "silent enabler", helping the defense establishments of the two countries resolve many functional impediments, and remains a vital forum to promote future technology cooperation (Delhi Policy Group, 2022).

In 2013, the Joint Principles for Defense Cooperation stated that India and the U.S. share common security interests and place each other at the same level as their closest partners-confirming that this would also apply to defense technology transfers, licensing, trade, research, co-development, and co-production involving defense articles and services, including advanced and sophisticated technology.

In 2015 the two nations signed the Framework for the India-US Defense Relationship, built upon the previous framework and successes to guide the bilateral defense and strategic partnership for the next ten years (The Economic Times, 2015).

The framework agreement, which was decided during the visit of US President Barack Obama to India in January 2015 focused on issues ranging from maritime security and joint training. The new Framework agreement provided avenues for high-level strategic discussions, continued exchanges between the armed forces of both countries and strengthening of defense capabilities.

The Framework also recognised the transformative nature of the DTTI (The Economic Times, 2015).

#### High-end Defense Trade

A salient feature of the revamped and upgraded Indo-US defense ties in the 21<sup>st</sup> century was the sale of high-end defense equipment and weapons systems to India by successive US administrations. Amongst, the big-ticket defense sales by the US to India include 10 C-17 heavy-lift aircraft worth US\$4.1bn, the sale of eight Boeing P-8I to the Indian Navy in March 2009, the sale of six Lockheed Martin C-130 J Super Hercules transport planes worth US\$1bn in January 2008 and the sale of the USS Trenton, a naval vessel worth US\$48mn in 2007.

India has spent some US\$20bn in defense acquisitions from the US since 2008, including systems like the Apache attack helicopters, Chinook heavy-lift helicopters, and M 777 ultra-lightweight artillery (U.S. Department of State, n.d.). Some of the individual deals involve the sale to India of MH-60R Seahawk helicopters for US\$2.8bn, the Apache helicopters for US\$796mn, and the Large Aircraft Infrared Countermeasure for US\$189mn (U.S. Department of State, n.d.).

Since 2015, the US also authorised India over US\$3bn in defense articles via the Direct Commercial Sales (DCS) process, which licenses the export of defense equipment, services, and related manufacturing technologies controlled under the 21 categories of the US Munitions List (USML) (U.S. Department of State, n.d.).

The top DCS categories to India by the US during this period were military electronics; fire control, laser, imaging, and guidance equipment; and aircraft and related articles.

#### **Bilateral Military Exercises**

Military-to-military cooperation has been one of the highlights of the India-US defense partnership. The 1991 Kicklighter proposals (Lt. Gen. Claude Kicklighter was the Army commander at the US Pacific Command) suggested establishing contacts between the three Services to promote exchanges and explore areas of cooperation.

Since 1991 the two countries had been conducting joint military exercises on an annual basis. They also began naval exercises and for the first time, the US fielded nuclear-powered submarines in naval exercises in 1995. The two countries have expanded and upgraded a range of military exercises — from Yudh Abhas (army) since 2002 to Malabar (navy) since 1992, Red Flag since 2008 and Cope India (air force) from 2004, Tarkash and Vajra Prahar (special forces) since 2010, and the more recent Tiger Triumph exercise (tri-service) from 2019. During the weeklong exercise, US Marines and sailors partnered with forces from all three of India's armed services to rehearse disaster response and humanitarian aid delivery.

India also participates in the US-led Rim of the Pacific (RIMPAC) exercise and trilateral Malabar exercise with the US and Japan. Such military exercises enhance U.S.-India relations and help create a more stable and secure Indo-Pacific region (U.S. Department of State, 2015).

Besides, India has also participated in the International Military Education and Training (IMET) programme and received at least US\$1mn of IMET funding annually since 2003 (U.S. Department of State, 2015). IMET provides professional military education and training to military students and is key to establishing lasting relationships with future leaders.

#### **Defense Groups and Dialogues**

To guide the India-US strategic defense partnership, the Defense Policy Group (DPG) will serve as the primary mechanism (U.S. Department of Defense, 2015). The sub-groups of the DPG are to continue to meet regularly and report to the DPG.

Table 1: Sub-groups of Defense Policy Groups

Group's Name	Function	
Defense Procurement and Production Group (DPPG) cochaired by the Director General Acquisition & Director Defense Security Cooperation Agency	Review government-to-government defense acquisitions (including hybrid programmes) and other defense trade issues	
Senior Technology Security Group (STSG)	Develop an understanding of export licensing and technology security processes and practices to establish a technology security dialogue for adequate protection of advanced defense technologies	
Joint Technical Group (JTG)	Forum for discussion and coordination of defense research and production matters	
Military Cooperation Group (MCG)	Primary forum to guide cooperation between the armed forces of both sides	
Executive Steering Group (ESG)	In conjunction with MCG, ESGs function as primary mechanisms to develop military service-related function	

Source: Bilateral Defense Groups and their Functions

High-level defense and security-related dialogues have also proliferated, including a Maritime Security Dialogue, Space Dialogue, Homeland Security Dialogue, Cyber Security Dialogue, Strategic Security Dialogue, Joint Working Group on Counterterrorism, and Inter-Agency Task Force to foster defense trade.

In May 2022, both countries launched an India-U.S. Initiative on Critical and Emerging Technologies (iCET) during Prime Minister Narendra Modi's meeting with US President Joe Biden in Japan. The initiative seeks to facilitate outcome-oriented cooperation and identifies areas of mutual interest in technological cooperation.

Co-led by the National Security Council Secretariat in India and the U.S. National Security Council, iCET would forge closer linkages between the government, academia and industry of the two countries in areas such as AI. It also seeks to overcome bureaucratic barriers and excessive regulations that frequently impede technological collaboration. Agreements like iCET can help India wean itself from dependence on defense manufacturing and services on specific countries, such as Russia, and enable more strategic autonomy in times of crisis.

#### Signing of Two Key Foundational Agreements

Prime Minister Narendra Modi's visit to the US in 2014 led India to declare their bilateral relations as the 'closest partners'. In 2016, the U.S. designated India as a Major Defense Partner. In the same year, the two countries signed LEMOA (logistics exchange agreement) in August 2016 during the then US Defense Secretary Ashton Carter's visit.

The second agreement came after a hiatus of 14 years as a lot of negotiations went into it and the agreement had implications beyond the Indo-US plane. LEMOA provides the framework for sharing military logistics, for example for refuelling and replenishment of stores for ships or aircraft transiting through an Indian/US facility.

The "2+2" Ministerial Dialogue was inaugurated in September 2018 and for the first time brought together the American secretaries of state and defense with the Indian external affairs and defense ministers and has been upheld as valuable for addressing a longstanding asymmetry between the two governments (Brookings, 2021).

Establishing the 2+2 as the leading bilateral dialogue had the further effect of somewhat insulating defense and security issues from contentious disagreements on trade (Brookings, 2021). The third agreement, COMCASA (communications security agreement) was signed during the inaugural '2+2' meeting in September 2018. This is an India-specific version of the Communication and Information Security Memorandum of Agreement (CISMOA). The Communications Compatibility and Security Agreement is one of the four foundational agreements that the U.S. signs with allies and close partners to facilitate interoperability between militaries and the sale of high-end technology.

COMCASA, for the first time, allowed India to procure and transfer specialised equipment for encrypted communications for US-origin military platforms like the C-17, C-130 and P-8Is (The Hindu, 2018). In 2018, India was subsequently elevated to Strategic Trade Authorisation tier 1 status, which allows India to receive licence-free access to a wide range of military and dual-use technologies regulated by the Department of Commerce.

During the "2+2" Ministerial Dialogue held in New Delhi in October 2020, India and US singed the U.S.-India defense trade cooperation continues to expand with the Logistics Exchange Memorandum of Agreement (LEMOA), Communications, Compatibility and Security Agreement (COMCASA), the Basic Exchange and Cooperation Agreement for Geospatial Intelligence (BECA) and the Industrial Security Agreement (ISA) now in place. This marks a strategic shift in India's operational capacities in the Indo-Pacific region and could prove critical

in information sharing and spurring industrial collaboration (Observer Research Foundation, 2022).

#### Cooperation in the Indo-Pacific Region

The Indo-Pacific region is where the India-US defense alliance has its most significant strategic consequences. A strong defense partnership with the US will bolster India's regional strategic capacity to meet threats in the Indo-Pacific. Strong bilateral defense connections between the two nations are the foundation for the strategic arguments in favour of an Indo-Pacific region that is "free, open, and secure."

In this context, S. Jaishankar points out, "The Quad nations are all democratic politics, market economies and pluralistic societies. Apart from their natural understanding, similarity in the structural aspects of their relationships has helped to foster the platform...An important outcome from the Tokyo Summit in 2022 was the Humanitarian Assistance and Disaster Relief (HADR) partnership for the Indo-Pacific" (Jaishankar, 2024).

The bilateral framework outlines four areas of defense cooperation in the Indo-Pacific: upholding stability and security; combating terrorism and violent extremism; halting the spread of WMD and their related materials, data, and technology; and promoting a rules-based system that safeguards free trade in the region.

With its rising desire and capacity to shift the regional balance of power in its favour, US-India strategic collaboration in the Indo-Pacific has emerged as a counterbalance to China. With plans to control the Indian Ocean and the Indo-Pacific, Beijing has surpassed the US as the world's largest fleet. As a result, a strategic move to establish incremental pockets of influence — often referred to as "grey-zone activities"— to ensure a favourable balance of power has been made in the area. India's defensive alliance with the US makes up for its lack of strength and capabilities in comparison to China (Jaishankar, 2024).

With its strategic partnership with the US, India seeks to modernise its military by acquiring sensitive and advanced technologies necessary for its own national ambitions and regional interests. New Delhi also hopes to bridge its capacity-capability deficit by developing homegrown know-how and skill sets in both the armed forces and the defense industry through specific programmes of co-production and co-development.

Beyond the obvious growth in numbers, the fundamental foundations of India-US relations have continuously changed in response to new challenges and demands for regional response.

#### Conclusion

The discussion so far serves as a backgrounder for the India-US Defense compendium. It traces the defense cooperation between the two nations since 1947, specifically since the end of the Cold War. It foregrounds India's role in defense and security in the Indo-Pacific and its implications on international defense trade and industry.

## **Executive Summary**

#### Introduction

Since India's economic liberalisation in the 1990s, the country has pursued a foreign policy aimed at greater openness and integration with the global economy. This shift paved the way for improved relations with the U.S. Over the past few decades, defense and security ties between the two countries have expanded significantly.

Milestones highlighting the closer U.S.-India defense partnership include India's designation as a Major Defense Partner, the signing of foundational military agreements, and the large number of joint exercises conducted between their armed forces. The growing attention on the Indo-Pacific in geopolitics has also brought the two countries closer amid shared strategic interests in the region. Initiatives like the Quad and the Indo-Pacific Economic Framework underline this convergence.

As S. Jaishankar puts it, "corrosion is now the new competition. In a world of constraints and risks, nations now penetrate and influence rather than directly confront each other. So, if the threats are different, our defenses must be too. And that starts with greater awareness of our times. There was an era when we thought of security essentially as policing, law and order, intelligence and investigation...Our world has changed profoundly and so, too, must our sense of security. The 'knowledge economy' that we are now getting accustomed to can generate new metrics of power" (Jaishankar, 2024).

The future trajectory of the U.S.-India defense relationship will have a major influence in shaping the Indo-Pacific's security landscape. A recent leaders' joint statement in 2023 affirmed their vision for a "free, open, inclusive and prosperous" Indo-Pacific, reflecting a commitment to translate the partnership's deliverables into tangible outcomes.

Going forward, securing a rules-based order in the Indo-Pacific should be a key deliverable of the defense partnership. Effectively communicating this message can help ensure progress from cooperation frameworks to concrete results.

The proposed compilation of media reporting on India-U.S. defense ties from 2020-2023 can illustrate the partnerships' mutual benefits for regional and global security. Highlighting what's at stake if India's security is undermined can underscore why Indo-Pacific stability hinges so much on India-U.S. defense relations. Tracking the defense cooperation against the backdrop of India's foreign policy evolution allows a better appreciation of its strategic calculus and future trajectory.

By compiling the latest news and analysis on India's defense partnerships, the study can serve as a valuable reference guide for understanding the country's international defense and strategic relations in the 21st century.

#### **Review of Compilation of Articles**

Given this backdrop, Chapter 1 of the compendium comprises news and opinion articles reflecting the development of India-US relations and evaluates the bilateral partnership. It covers the period between January 01, 2020-December 31, 2023, i.e. a momentous period of four years. This chapter also seeks to shed light on the U.S.-India Defense Partnership and its ramifications on the Indo-Pacific region. It also takes stock of India's defense relations and what the future portends for this bilateral partnership. It, therefore, attempts to serve as a guide on India's international defense and strategic relations.

A review of the compilation of articles suggests that in the year 2020 India and the U.S. concluded the last of the four foundational agreements, the Basic Exchange and Cooperation Agreement for Geo-Spatial Cooperation (BECA). With the signing of this agreement, most building blocks for transacting formal defense cooperation with the US were in place.

Also, in 2020, India's weapons procurement from the U.S. jumped from a meagre US\$6.2mn to a whopping US\$3.4bn in the final year (2020) of the Trump administration. The year 2020 was also a geo-political inflection point in the Indo-Pacific as the Sino-Indian military standoff at Galwan and global concerns over China's handling of the COVID-19 pandemic, further aligned the strategic interests of India and the US.

The examination of the news articles and opinion pieces reckons that India and the US enjoy a comprehensive global strategic partnership, motivated by shared democratic values and converging mutual interests, ranging from connectivity to security, economy, and people-to-people ties.

In this regard, one of the most relevant progresses has been witnessed in the sphere of defense collaboration, with the U.S. becoming India's largest military exercise partner, incorporating measures to improve interoperability and coordination, in addition to reaching and concluding technical agreements to further enhance and expand India's access to high-end defense technology.

Further, the present India-US Defense Cooperation is based on the 'New Framework for India-US Defense Cooperation' which was renewed for ten years in 2015. In 2016, the U.S. acknowledged India as a 'Major Defense Partner' and has committed to offering the latter defense technologies at par with America's closest partners and allies.

Equivalent to this designation, in 2017, the Trump Administration modified the Export Administration Regulations to facilitate defense trade With India and also provided a substantial offer of Missile Technology Control Regime Category I Unmanned Aerial Vehicles to the Indian Navy.

Taking up the thread further, in 2018, India was also elevated to Strategic Trade Authorisation tier 1 status, which allows India to receive licence-free access to a wide range of military and dual-use technologies, regulated by the Department of Commerce. In fact, since 2015 the US has also authorised India over US\$3bn in defense articles via the Direct Commercial Sales (DCS)

process, which licences the export of defense equipment, services and related manufacturing technologies controlled under the 21 categories of the U.S Munitions List (USML). The top DCS categories for India during this period included military electronic (USML Category XI); fire control, laser, imaging and guidance equipment (Category XII) and aircraft-related articles.

According to the compilation of articles, an important aspect has been India's participation in the International Military Education and Training (IMET) Programme, since 2003, with professional military training and education, laying the foundation and lying at the core of these defense-related bilateral developments that have happened in the recent past.

Since 2014, all these developments have been substantiated by the intensification of the 'Make in India' campaign – a major tent of the Narendra Modi government, thereby encouraging and intending a boost in the production of defense hardware. This lies in the Defense Technology and Trade Initiative of 2012, leveraging the industrial and technological convergences, and codeveloping projects.

The multifaceted defense cooperation between the two countries witnessed regular institutionalised bilateral dialogue, military exercises, and defense procurement. Right at the apex of the dialogue mechanism is the 2+2 Ministerial Dialogue, co-chaired by the Minister of External Affairs, Government of India, and Minister of Defense, along with the U.S. Secretary of State and Secretary of Defense, U.S.

The Basic Exchange and Cooperation Agreement (2020) made a major mark during this phase, with eminent precursors like the Logistics Exchange Logistics Exchange Memorandum of Agreement (2016); Communications Compatibility and Security Agreement (2018); Industrial Security Agreement (2019); and Memorandum of Intent for Defense Innovation Cooperation (2018).

The review of the compilation of articles suggests, that post-2020, a major milestone was the India-US Defense Industrial Cooperation Roadmap which concluded in May 2023, seeking to bring technology cooperation and co-production on a fast-track mode. Of similar importance was the India-US Defense Acceleration Ecosystem (INDUS X) – a network of universities, incubators, corporates, think tanks, and private investment stakeholders, launched in June 2023. With this, military-to-military exchanges have taken place through high-level visits, exercises, training courses, and regular service-specific bilateral mechanisms.

In the review of the compilation of articles, it was found that India has the largest number of military exercises with the U.S., which are growing in scale and complexity. Important bilateral exercises include Yudh Abhyas (Army), Vajra Prahar (Special Forces), Malabar (Navy), Cope India (Air Force), and Tiger Triumph (tri-services).

Red Flag, RIMPAC, CUTLASS Express, Sea Dragon, and Milan are some multilateral exercises in which the two countries participate. INS Satpura was the first Indian naval ship to visit the US mainland when it came to San Diego in August 2022 as a part of Azadi Ka Amrit Mahotsav. India joined the multilateral Combined Maritime Force (CMF) based in Bahrain, as an Associate Partner in April 2022.

The bilateral relationship's amicability has gone a notch higher since 2021, as Joe Biden assumed the Presidency in the U.S. As multilateral engagements became more relevant, the significance of the Quad (Quadrilateral Security Dialogue) increased as summit-level meetings were introduced, to make it more worthwhile.

The release of the National Defense Strategy 2022, under the Biden administration, in October 2022 also highlighted the priorities of Washington and its defense posture, marking a special impact for India. With this strategy in place, talks of further strengthening the Indo-Pacific region started doing the rounds, with a renewed focus on a free and open regional order, deterring issues like Chinese aggression in the region.

As Biden and Modi emphasised the importance of economic cooperation and technology collaboration in their conversations on April 11, 2022,<sup>48</sup> and February 14, 2023, the historic agreement between Air India and Boeing, involving the purchase of more than 200 American-made aircraft, was discussed in the February 2023 call, comes out as a major instance of successful bilateralism.

This agreement is expected to support over 1 million American jobs across 44 states. Furthermore, both leaders acknowledged the significance of the strategic technology partnership, stressing January 31, 2023, the inaugural launch of the iCET.

Another example comes in the form of an agreement signed between General Electric and Hindustan Aeronautics Limited, to co-produce the F-414 engine for India's domestic "Tejas" light fighter. This agreement highlights the evolving U.S. trust in India, based on shared security concerns. Helping India improve defense production will also reduce India's continued reliance on Russian-made defense equipment. This agreement also shows that ideas which may have failed a decade ago can be successfully revisited.

#### Stakeholder Survey

This section highlights a survey that was undertaken by CUTS International to assess perceptions of the U.S.-India Defense and Security Partnership of about 200 respondents representing the media, academia, and think tanks across India's length and breadth. This survey was carried out in the metropolises of Kolkata, Jaipur, Mumbai, Hyderabad, and Chennai for six months from August 04, 2023-February 06, 2024.

All the respondents participated in the five Workshops on "Deliverables to Deliveries" under the ongoing Defense News Conclave Project (Stories of U.S.-India Defense and Security Partnership), supported by the U.S. Department of State through the Consulate General Kolkata.

#### Key Findings of the Stakeholder Survey

#### The Indo-Pacific as India's Priority Neighbourhood

A clear majority of respondents affirmed the 'Indo-Pacific' as the optimal characterisation of India's neighbourhood given overlapping economic, political and security interests across the Indian Ocean region and broader Pacific. As India navigates through great power competition in the Indo-Pacific, safeguarding national security interests and preserving strategic autonomy remain paramount. This imperative underpins both the conceptualisation of India's extended neighbourhood and the cultivation of defense partnerships across regions.

With over half its maritime trade traversing the South China Sea, upholding freedom of navigation in critical commercial sea lanes drives India's advocacy for a rules-based regional order.

Beyond security considerations, the 'Indo-Pacific' acknowledges deepening economic ties between India's Act East Policy and Southeast Asian countries, forming a bridge expanding India's strategic footprint eastwards.

In contrast, labels like 'Asia-Pacific' underrepresent India's stakes and centrality across the Indian Ocean zone. Therefore, while 'Asia-Pacific' may indeed describe a significant portion of the world, it might not fully capture India's immediate neighbourhood or its primary strategic focus.

Yet despite widening engagement, 'South Asia' remains vital as proximate stability directly impacts India. India shares historical, cultural, economic, and geopolitical ties with the neighbouring countries of Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, and the Maldives, making South Asia a critical region for India's foreign policy and strategic interests. Issues such as trade, security, cross-border terrorism, and regional stability are significant priorities for India within the South Asian context.

While 'Eurasia' may play a role in India's broader regional engagement, it is not the best description of India's neighbourhood. Overall, the Indo-Pacific framing demonstrates India's vision to shape regional dynamics while securing national interests.

#### Multipolarity Best Serves India's Interests

The survey results indicate that the majority of respondents believed a multipolar world order, with several major powers balancing each other, best serves India's interests. This aligns with India's traditional policy of non-alignment and strategic autonomy, as a rising power that benefits from the flexibility afforded by a multipolar structure without a single dominant state.

A multipolar order provides India with room for manoeuvrability in its complex relations with China and Pakistan, where both cooperation and competition coexist. It dilutes China's influence in the Indo-Pacific region and constrains Pakistan's tendency to escalate tensions. Additionally, it allows India to shape global governance norms across issues like climate change and nuclear proliferation, where it has vested interests.

Another view argues that India's interests are evolving, and different world orders offer varying opportunities and challenges. A bipolar order led by the US and China could provide economic opportunities if equilibrium persists, while a unipolar structure risks limiting India's policy options and strategic autonomy.

#### Partnership Choices Reflecting Strategic Priorities

The survey results indicate that the highest share of respondents believe the Quad, comprising India, the United States, Japan, and Australia, is the most critical security grouping for advancing India's geopolitical interests in the 21st century.

The Quad provides a platform for India to coordinate security policies with powerful partners, enhance its capabilities through joint military drills, intelligence sharing, and advanced technology transfers, and gain support for defending its borders and maritime interests. The Quad signals the resolve of its members to counter aggressions against any one of them, acting as a deterrent against China's assertiveness in the region. It aligns with India's objective of ensuring a free, open, and inclusive Indo-Pacific.

The I2U2 grouping of India, Israel, the United Arab Emirates, and the US emerged as the second most vital grouping, facilitating India's capabilities build-up in areas like drones, robotics, cybersecurity, and border surveillance. It provides a platform to harmonise security perspectives with technologically advanced militaries and partners committed to India's security interests.

The third-highest share of respondents chose "Other," indicating either a different grouping or the belief that no specific grouping could serve India's security needs. Some respondents favoured strategic autonomy and partnerships with like-minded countries over formal groupings, while others suggested groups like the Shanghai Cooperation Organisation (SCO), BRICS, and the Indian Ocean Rim Association (IORA).

The Australia-France-India trilateral had the least share as a grouping advancing India's Indo-Pacific security interests. With shared threat perceptions of China's rise, the trilateral initiates joint measures across maritime security, defense technology cooperation, protecting supply chains, and upholding freedom of navigation.

#### Centrality of the India-US Strategic Partnership

The U.S.-India defense partnership has transcended partisanship and trade differences, showcasing high-level commitment through the unique Major Defense Partner status and the 2+2 Ministerial Dialogue. Key agreements have enabled interoperability via secure communication, geospatial data sharing, and logistical cooperation between the armed forces. Over the past decade, more than US\$20bn in defense trade and initiatives like the DTTI have fostered jointly produced technologies, setting the stage for more complex projects.

At the political level, bipartisan support in Washington and New Delhi reflects a growing convergence: two vibrant democracies with overlapping interests in securing a free, open and inclusive Indo-Pacific where China is constrained from undermining rules-based order. Shared values in democracy, human rights and transparency form the ethical basis for deepening cooperation. These aspects differentiate the qualitatively unique India-US partnership from India's traditional defense relationships with Russia, France or Israel.

Russia emerged as the second most preferred defense and security partner for India, owing to their historically robust and enduring relationship rooted in mutual strategic interests and shared cooperation. Russia's consistent support for India's defense modernisation efforts, technology transfers, and indigenous production aligns with India's self-reliance aspirations. Bilateral exercises and joint ventures enhance interoperability and strategic coordination.

Israel and France ranked third and fourth, respectively, as India's most trusted defense and security partners. Israel's provision of cutting-edge military technology, intelligence cooperation, and counter-terrorism expertise, coupled with strategic alignment on common threats, has bolstered India's defense capabilities. France's commitment to supporting India's defense modernisation, strategic convergence on issues like terrorism and maritime security, and willingness to transfer technology and facilitate co-development align with India's objectives.

The "Other" choice received the least responses, with some suggesting that classifying a "most" trusted partner may not be in India's best interests, while others advocated for balancing the U.S. and Russia to avoid overdependence on a single partner.

#### Alignment of Interests and Values in Strategic Partnership

The survey questionnaire also aimed to gauge participants' views on the alignment of values and interests between the US and India in their strategic partnership. The highest share of respondents believed that the two countries share both values and interests.

The respondents noted that India and the U.S. share democratic values and are cooperating on issues like health, climate change, and security. Building trust and partnerships during peacetime is seen as important, with the U.S. standing to gain strategically and commercially by sharing more with India, including defense technologies.

India is slowly working to counter China's threats across domains, and while valuing strategic autonomy, its interests are aligning more with the U.S. Shared interests in countering China's regional dominance and upholding a rules-based order drive greater convergence.

However, the relationship is not without challenges. Under President Biden, ties may become more multifaceted, with more avenues for cooperation but also more complex policy contours. India will have to balance and promote its interests adeptly.

While there is political convergence on issues like counterterrorism and managing China's rise, differences persist on issues like Russia and economic openness, which need bridging. Militarily, India and the U.S. are doing more exercises together, accelerating interoperability, and defense trade has grown, but ties seem excessively hardware-centric currently.

Trust-building through personnel exchanges can cement long-term cooperation, and uneven reciprocity in the sharing of defense capabilities needs redressal. India's neutral stance on the Ukraine crisis amid dependence on Russian weapons does not augur well for the strategic partnership with the U.S., though its identity as a democracy aligned with a rules-based order needs upholding.

#### Key Drivers and Components of India-US Defense Cooperation

The survey results indicate that the highest share of respondents mutually perceived security threats in the Indo-Pacific as the key driver of the U.S.-India Defense and Security Partnership. The relationship between the two countries is evolving into a robust partnership driven by shared democratic values, strategic interests, and mutual concerns, particularly regarding China's rising assertiveness in the region.

India's gradual efforts to counter China's threats align with U.S. interests, positioning India as a closer security partner, even though it is not a formal ally due to its non-alignment policy. The defense partnership, highlighted by Modi's recent visit, has become exceptionally close, driven by shared interests in countering China's regional dominance and upholding a rules-based order in the Indo-Pacific.

The diversification of defense supplies emerged as the second-highest key driver. This has not only reduced India's dependence on Russia but has also strengthened the strategic partnership, enabling the two countries to collaborate more closely in addressing regional and global security challenges. The U.S. has become a major defense supplier to India, with defense trade increasing significantly in recent years.

Countering terrorism in the Indo-Pacific was the third-highest driver, with both countries recognising Pakistan-based outfits as persistent threats to Indian security. This has led to closer cooperation in areas such as intelligence sharing, capacity building, and joint military exercises to counter terrorism.

The lowest percentage share of respondents chose the other option excluding the above three options. They may have reasoned that there is no definitive "key driver" of the India-U.S. defense and security partnership. It is shaped by a range of shared interests and objectives.

#### Criticality of U.S. Defense Technology Transfer to India

The survey results indicate that defense procurement and technology transfer emerged as the most critical area of cooperation between the US and India in strengthening their strategic partnership. As the two largest democracies with common interests in defending the security and upholding a rules-based international order in the Indo-Pacific region and beyond, both countries stand to gain significantly from greater integration between their defense industrial bases.

The U.S. and India have already made substantial progress in defense trade and technology sharing, with defense procurement playing a crucial role in transforming their relationship into a strategic partnership. As India seeks to modernise its military and indigenise its defense manufacturing capabilities, American technology transfer can help bridge critical capability gaps while also creating high-tech jobs through partnerships with U.S. defense companies. Simultaneously, deeper defense cooperation serves Washington's interest in boosting India's capacity to balance and deter threats in the region.

Counter-terrorism cooperation emerged as the second most crucial component, though arguably not as critical as defense procurement and technology transfer. Joint efforts, including intelligence sharing and capacity building, help India manage threats from Pakistan-based groups like Lashkar-e-Taiba and Jaish-e-Mohammed. However, counter-terrorism cooperation alone cannot define the breadth and depth of the strategic partnership, as defense trade, technology transfer, and strengthening India's military capabilities *vis-à-vis* China factor more significant.

Conducting regular joint military exercises was the third most critical component, improving interoperability between the U.S. and Indian armed forces and allowing them to demonstrate strategic messaging in the Indo-Pacific region. Nevertheless, while valuable for trust-building, exercises have limited operational impact compared to defense technology transfer and weapons sales, which boost India's hard power capabilities.

Implementing bilateral defense agreements was adjudged by the survey the least critical component, as the degree of cooperation still falls short of U.S. alliances due to India's history of non-alignment. Agreements like LEMOA, COMCASA, and ISA have operationalised key aspects of defense cooperation, but their successful implementation is essential to building mutual trust and strengthening India's capability as a deterrent against regional threats.

#### Most Significant Outcomes of PM Modi's US Visit in June 2023

The launch of the U.S.-India Defense Acceleration Ecosystem (Indus-X) was the most significant outcome of Indian Prime Minister Narendra Modi's Official State Visit to the U.S. in June 2023. Indus-X aims to accelerate defense technology collaboration between American and Indian industries, startups, and academia by facilitating interactions and providing funding avenues. This initiative signals intent to boost innovation and expand the strategic technology partnership and defense industrial cooperation between the two countries.

The second most significant outcome was the MoU on Semiconductor Supply Chain and Innovation Partnership. This MoU holds strategic significance as it demonstrates an intent to strengthen innovation linkages and resilient supply chains in advanced chip technologies. For India, it enables cost-effective access to semiconductor technologies and chip design capabilities, while for the U.S., it provides opportunities to diversify its supply chains and ensure reliable long-term access to cost-competitive high-tech microchips.

The third most significant outcome was the MoU between General Electric and Hindustan Aeronautics Limited for the manufacture of GE-414 jet engines in India. This deal carries noteworthy potential as it provides a boost to indigenous jet engine manufacturing capabilities for Indian combat aircraft, a critical technology India has lagged in. However, proper implementation remains key as similar agreements have faced execution difficulties in the past.

A fourth significant outcome was India joining the U.S.-led Mineral Security Partnership (MSP) as its 14<sup>th</sup> member. The MSP works to strengthen vital mineral supply networks, promote climatic goals and economic growth, and ensure the production, processing, and recycling of essential minerals by stimulating investments from the public and private sectors along the entire value chain.

Overall, these outcomes highlight the increasing strategic convergence between the U.S. and India, and such initiatives aim to boost innovation, strengthen bilateral cooperation, and address shared challenges in various strategic domains.

#### Bolstering India's Defense Industrial Base with US Support

The survey results indicate that the highest percentage of respondents believe the U.S. can help India diversify its defense supply production and export by facilitating technology transfer and joint ventures. The iCET provides a comprehensive framework for enabling such collaboration between the two countries in critical defense technologies.

Through iCET, the U.S. and India can coordinate joint research and development efforts, establish mechanisms for technology transfer, support capacity-building initiatives in India's defense industry, and explore opportunities to collaborate on affordable defense technologies for export to third countries in Latin America, Africa, and Asia.

The second highest percentage of respondents held that the U.S. can help India diversify the latter's defense supply production and export through a military-aid package. While there wasn't a formal 'U.S. military aid package' announced for India, the two countries have engaged in various forms of defense cooperation and assistance, which have included military aid elements.

Reports in May 2022 suggested the U.S. was preparing a US\$500mn military aid package for India to deepen security ties and reduce India's dependence on Russian weapons, although details were unclear.

Offering weapons at concessional rates was not considered a good idea as the number of respondents chose this option India is the world's largest weapons importer and is expected to spend about US\$220bn in the coming decade to modernise its armed forces. The U.S.

government is actively encouraging India to reduce its dependence on Russian-origin defense articles, which currently account for 62 per cent of India's defense imports by value.

The Roadmap for U.S.-India Defense Industrial Cooperation, jointly adopted in June 2023, states that the two countries will work together to identify opportunities for cooperative production of systems required to meet India's military modernisation objectives. Such efforts can lead to greater opportunities for the cooperative development of new technologies and cooperative production of existing systems, strengthening supply chains and bolstering India's domestic defense industry.

#### Bureaucracy Challenge Foreign Original Equipment Manufacturers

The survey results indicate that the strongest challenge for foreign original equipment manufacturers (OEMs) in India's defense industry is the country's stringent offset policy and complex procurement procedures. India's defense procurement process involves major bureaucratic hurdles, including extensive documentation requirements, long approval timelines, and uncertainty surrounding contracts.

Additionally, the offset policy mandates that foreign OEMs invest a portion of the contract value back into India's defense sector, often in the form of technology transfer or local manufacturing.

To address these challenges, a balanced approach is needed, enhancing transparency, accountability, and collaboration between foreign OEMs and IOPs. This can mitigate risks and create a more conducive environment for foreign investment and participation in India's defense industry.

#### India's Objective: Managing Partnerships to Serve Strategic Autonomy

Preserving "strategic autonomy" and advancing the vision of a multipolar world are seen as significant drivers for India's diverse defense partnerships. India has long been committed to non-alignment and strategic independence, seeking to maintain autonomy in decision-making and avoid alignment with any single power bloc.

At its core, India aims to equitably further cooperation with major powers to address security challenges within its neighbourhood, but without over-alignment with any camp that impinges its independent foreign policy doctrine and handcuffs policy choices.

If strategic autonomy is paramount, India will selectively engage with partners based on contextual bilateral sensitivity rather than alienate friendly countries as rigid bloc politics intensifies. India envisions a cooperative, multipolar order where responsibly led powers uphold global commons and deter expansionist regimes undermining universal ideals India espouses.

Moreover, these partnerships enable India to diversify its sources of military technology and equipment, reducing reliance on a single country and enhancing its defense preparedness. Collaborating with a diverse set of partners provides access to a wide range of military capabilities, contributing to the modernisation of India's armed forces and overall security objectives.

However, some respondents disagreed with this view, arguing that India's defense partnerships with certain countries may be perceived as aligning too closely with particular geopolitical interests, undermining its image as a neutral player and limiting its diplomatic flexibility. Managing these diverse partnerships while maintaining coherence in its defense strategy can be challenging and may lead to strategic ambiguity. Additionally, compatibility issues and logistical challenges may arise due to different systems and standards from various suppliers.

While preserving strategic autonomy is important, India must carefully manage the potential drawbacks and challenges associated with its diverse defense partnerships. Striking a balance between maintaining its non-aligned stance and addressing security challenges in the Indo-Pacific is crucial for India's foreign policy and defense strategy.

Surveys of India's strategic circle validate that securing national interests within a stable, rules-based Indo-Pacific drives India's defense outreach. Concurrently, preserving maximum strategic autonomy and foreign policy independence remains vital. Cooperating with partners like the US and its allies is rising, albeit cautiously, guided by pragmatic objectives of managing China's power, modernising India's military, sharing best practices on technology innovation, and codeveloping affordable solutions.

This balanced, issue-based reasoning typifies India's realist worldview, shunning dogmatic ideological lenses while cooperating across divides to responsibly shape its extended neighbourhood.

#### Workshop Reports

This section comprises the reports of the various workshops both virtual and hybrid held under the Project Defense News Conclave- Stories of U.S.-India Defense and Security Partnership. The workshops were held from June 2022 to February 2024. The workshops had several objectives including: acting as a capacity-building initiative for media professionals and other relevant stakeholders; facilitating meaningful dialogues between experts and participants for a better understanding of the relevance and nuances of U.S.-India Defense and Security Partnership for the 'good' of the world in general and the Indo-Pacific region in particular.

Lastly, the workshops also sought to develop a better understanding of good practices in the joint development of advanced defense-related technologies for promoting a positive narrative on the U.S.-India Defense and Security Partnership, especially in the context of evolving geopolitical, including geo-strategic and geo-economic, developments in the Indo-Pacific region.

The workshops provided a sustained platform for free-flowing interaction on issues related to the U.S.-India Defense and Security Partnership. They helped build more and better information about good practices on the U.S.-India Defense and Security Partnership- joint production possibilities of equipment and materials, opportunities and challenges for various sectors involved, and overall enhanced capacity to report and write on related issues.

Excepting issue-specific webinars (3 in total) held virtually, all five workshops held through the hybrid mode in five metropolises of Kolkata, Jaipur, Mumbai, Hyderabad and Chennai had two sessions focusing on good practices of U.S.-India Defense and Security Partnership in general and relevance for U.S.-India Strategic Partnership in the Indo-Pacific region in particular. Among others, they looked at milestones set and achieved, and policies and gaps to be filled in to secure a free, open, inclusive, and prosperous Indo-Pacific region.

#### Key Takeaways from the Workshops

The evolving defense and security partnership between the U.S. and India holds immense strategic significance amid the complex geopolitical dynamics shaping the Indo-Pacific region. Underpinned by shared democratic values and converging strategic interests, this partnership aims to promote stability, prosperity, and rules-based order in one of the world's most pivotal regions. Realising the full potential of this collaboration requires translating deliverables into tangible outcomes through commitment, trust-building, and pragmatic policymaking.

The very fundamentals shaping this defense partnership highlight the deliverables expected from both sides. America's bet on India as a stabilising power and 'first responder' in the Indian Ocean Region (IOR) necessitates the building of credible deterrence capabilities. Simultaneously, India stands to gain from U.S. capital, technology, and manufacturing expertise to reduce asymmetry *vis-à-vis* China's military modernisation. Transforming such complementary goals into actual deliveries involves overcoming limitations in defense acquisition, production, R&D, human capital, and interoperability.

Success stories like the P-8I maritime surveillance aircraft showcase the fruits of technology transfer and co-production. Such cooperative models align with the iCET initiative's focus on fostering product, skill, and programme strategies for defense innovation. However, the lack of indigenous capabilities, red tape, bureaucratic inertia, and procedural delays continue to impede defense acquisitions and development. Streamlining processes, expanding avenues for collaboration, incentivising private sector involvement, and nurturing STEM talent can transform deliverables into deliveries.

Besides acquisition, actualising deliverables in operational domains is vital. The deepening interoperability reflected in advanced air exercises like Cope India and expanding naval exercises like Malabar directly enhance preparedness and deterrence. Such activities build familiarity, expertise, and trust indispensable during contingencies like border crises. Joint patrolling, real-time intelligence sharing, threat monitoring, and communication encryption expand the partnership's operational deliverables.

However, differences in strategic outlook, priorities, and compulsions sometimes constrain policy alignment on regional security issues. India's reluctance to publicly condemn Russian actions and hesitance over formal alliances limits naval collaboration in contested areas like the South China Sea. Nonetheless, insulating shared maritime interests from wider divergences through constructive dialogue and alignment of counter-terrorism objectives can sustain cooperation.

Furthermore, deliverables related to defense innovation and capability building rely extensively on technology cooperation and transfer. India's partnerships with Israel, France, and Russia have enabled the acquisition of key technologies earlier denied by the U.S. However, cold chains, maintenance, interoperability concerns and costs of platform multiplicity continue to foster demand for American technologies. Streamlining cumbersome export control processes can enhance technology sharing, as ongoing jet engine development programmes exhibit.

Collaboration in cutting-edge domains like AI, quantum, space, cybersecurity, and VIE systems can accelerate R&D deliverables into operational capabilities. Meanwhile, India's LOCUST naval missile demonstrates the country's innovative potential for joint ventures. Identifying such niches and incentivising co-development through funding and ecosystem support is crucial for long-term dividends.

Apart from hardware, deliverables related to doctrines, planning, and policies directly bolster institutional capacity. Intelligence partnerships manifest in deeper threat awareness, joint assessments on geopolitical futures, and data-driven planning. India's reticence regarding intelligence sharing has eroded considerably, albeit asymmetry and some reluctance persist. Augmenting exchanges among thinkers, planners, and personnel can foster systemic trust and coherence.

However, paradoxically, deeper interoperability may hamper India's bargaining leverage with other suppliers. Therefore, consultations should cover potential consequences alongside deliverables. Regular high-level summits like the 2+2 Ministerial Dialogue play a vital role here by enabling continuous goal-setting, troubleshooting and accountability.

In many ways, the evolving innovation and industrial landscape being shaped by this defense partnership remains its cornerstone.

Success stories like India's Mars Orbiter Mission showcase indigenous capabilities primed for international collaborations addressing global challenges. The renewal of the 10-year 2015 Defense Framework Agreement centred on the DTTI highlights priorities like UAVs, aircraft carriers, jet engines, and helmet-mounted displays for joint production. Developing reliable supply chains and leveraging each other's manufacturing strengths can transform such deliverables into usable defense platforms.

Resolving contractual ambiguities regarding repairs, maintenance, and life-cycle product support is vital in this context. Moreover, India offers a sizable market and abundant STEM talent pool attractive for American firms aiming to bolster global competitiveness through partnerships. However, bureaucratic inertia, procedural delays, and lack of indigenous capabilities continue to pose structural challenges.

Nurturing private sector involvement, reforming acquisition processes, expanding technology incentives and building enterprise ecosystems through iDEX and INDUS-X-type platforms can help overcome these hurdles. Overall, the deliverables surrounding innovation and codevelopment contain immense yet under-realised potential.

In totality, the U.S.-India defense partnership has achieved substantial deliverables across technology, operations, innovation, intelligence and interoperability domains. However, structural challenges rooted in differing strategic outlooks and limitations in indigenous capabilities pose barriers to actualising tangible outcomes. Resolving tensions between overdependence and inadequate self-sufficiency will determine the sustainability of this partnership.

A realistic appraisal of indigenous capabilities, streamlining of bureaucracy, private sector participation, leveraging comparative advantages and insulating cooperation from strategic divergences can optimise the translation of deliverables into actual deliveries. By pragmatically aligning the partnership to their respective Make in India and Export Control priorities, both nations have an opportunity to fulfil joint objectives, nurture mutual trust and strengthen the rules-based order against shared threats.

The evolving U.S.-India defense and strategic partnership has become a defining feature shaping the geopolitical landscape of the Indo-Pacific region and beyond. As evident from the text, defense cooperation between the two nations has strengthened significantly since the 1990s, transcending from tentative beginnings marked by India's non-alignment policy to a comprehensive strategic partnership today.

Several key factors have catalysed this transformation over the past three decades. The recognition of shared democratic values and mutual interests in combating terrorism after 9/11 provided early momentum. Subsequent agreements like the New Framework for Defense Cooperation in 2005 and Major Defense Partner designation in 2016 lent structure and direction. Meanwhile, concerns over China's military modernisation and its assertive actions have aligned strategic priorities. As major Indo-Pacific stakeholders, both nations share an interest in upholding a stable, rules-based regional order.

Consequently, defense trade has expanded exponentially from less than US\$1mn to over US\$20bn. Bilateral initiatives like the DTTI identify avenues for co-development of advanced technologies to reduce India's capability gaps *vis-à-vis* China. Major Indian acquisitions of U.S. military platforms worth billions demonstrate tangible outcomes. Joint working groups and dialogues foster regular communication between stakeholders across governments, militaries and industries.

The scope of military-to-military cooperation too has grown remarkably as evidenced by the scale and complexity of joint exercises across domains. Key agreements like LEMOA and COMCASA now enable critical information sharing, geospatial data transfer as well as logistical coordination between the armed forces. The Indo-Pacific focus aligns with converging political, economic and security goals for the regional order.

However, some divergence persists in threat perceptions and policy priorities concerning issues like Russia, Iran, and global trade. For the partnership to stabilise, political consensus-building through consistent engagement alongside deeper military-to-military trust is necessary. Indians need to reconcile non-alignment traditions and multilateralism with the imperative of defending sovereignty against authoritarian regimes.

For an even closer convergence, both nations also need to reorient overly hardware-centric ties towards knowledge transfer and technology co-development, leveraging their respective innovation strengths. Promising initiatives like iDEX, INDUS-X and the Critical and Emerging Technologies MoU signify a move in that direction. Moreover, increased private sector participation can boost defense innovation.

#### Conclusion

The U.S.-India Defense and Security Partnership Compendium provides a comprehensive overview of the evolution and current status of the bilateral defense relationship over the past few years. Spanning news reports, surveys, and workshop discussions, the texts analyse the partnership's growth, achievements, future priorities, and challenges across the strategic, technological, and operational domains of defense and security cooperation.

By integrating perspectives from media, academia, and policy experts, it draws crucial insights into the factors propelling closer ties, the deliverables set and met, and structural limitations inhibiting the actualisation of tangible defense outcomes.

A common thread underscoring analyses of the compilation of media articles, surveys and takeaways from workshops is the recognition that China's military rise and aggressive actions pose an acute threat, aligning India-US strategic interests in preserving stability and deterring coercion across the Indo-Pacific region.

Consequently, the signing of defense agreements, measures to improve interoperability among armed forces, and expanding cooperation frameworks like the Quad and IPEF to promote a "free, open, and prosperous" regional order. Meanwhile, the survey also identifies managing China's power as the prime driver for unprecedented U.S.-India defense ties over the past decade as a total of 63 per cent of respondents surveyed regarded Chinese assertiveness as the biggest disruptive factor in Asia over the next 10-15 years.

Tangible outcomes of this strategic convergence include surging bilateral defense trade crossing US\$20bn after years of lagging below US\$1mn. The planned acquisition of over 200 American-made aircraft by Air India and the GE-HAL agreement to jointly produce jet engines domestically demonstrate both nations turning strategic interests into economic cooperation.

Moreover, the compendium highlights how India's elevation to Strategic Trade Authorisation tier-1 status enables access to advanced US technologies in critical domains like maritime surveillance. These transfers fructify into indigenous platforms like the P-8I patrol aircraft with high export potential.

Besides hardware acquisitions, the compendium also rightly states expanding operational cooperation to deter shared threats. It notes deepening naval interoperability through advanced exercises like Malabar, in addition to increased maritime domain awareness via joint patrolling, real-time intelligence sharing, and communication encryptions.

These improve preparedness and trust for coordinated responses during contingencies like border crises with China. However, differences over engaging with Russia, and Iran, and broader policy alignment issues sometimes constrain collaboration in sensitive areas like the South China Sea, requiring insulation of shared maritime objectives from wider strategic divergences.

Furthermore, the compendium unanimously identifies technology cooperation and transfer as vital for transforming deliverables like plans, dialogues, and agreements into concrete defense capabilities. It documents India's partnerships with Israel, France and Russia enabling the acquisition of crucial technologies earlier denied by the US over the years. However, high costs and interoperability limitations with these alternate suppliers turn attention to American precision technology as evidenced by ongoing projects on jet engines, UAVs, and helmetmounted displays under the DTTI.

It also highlights India's innovative capabilities representing attractive niches for joint ventures in domains like AI, space and cybersecurity. The iCET and INDUS-X initiatives aim to incentivise such programmes, albeit structural problems with red tape, procedural delays and lack of indigenous expertise continue posing barriers.

The culmination of such factors and limitations underscoring the partnership forms the crux of the analysis and policy recommendations provided in the documents. Stakeholder surveys identify defense technology transfer, arms sales, and counterterror partnerships as the bedrock of ties contributing 7 per cent, 6 per cent, and 3 per cent respectively to overall solidarity, while also signalling their yet unfulfilled potential.

It also concludes that while substantial deliverables exist across operations, innovation and planning domains, transforming these into tangible capabilities remains encumbered by structural challenges around strategic outlook divergences and defense industrial limitations which need pragmatic redressal.

By integrating these perspectives, one finds one of the most significant factors propelling the partnership is the expansionist threat posed by China's authoritarian resurgence which disrupts the balance of power in the Indo-Pacific. Bolstering deterrence capabilities by overcoming limitations in defense technology absorption and indigenous production thus becomes imperative for both New Delhi and Washington to secure a favourable equilibrium.

This requires prudent policy reforms easing technology transfer barriers alongside ecosystem support strengthening indigenous innovation. Insulating shared maritime security goals from periodic political divergences and fostering deeper military-to-military trust through advanced exercises and planning dialogues can also help actualise the partnership's potential to uphold the rules-based regional order.

## Chapter 1. Media Articles

#### 1.1 News

## Extraordinary Growth Potential in U.S.-India Defense Trade: Boeing official

The Economic Times, January 28, 2020

India offers growth and productivity opportunities for the global aerospace industry and there is potential for defense trade and partnerships to grow between India and the U.S. Dennis D Swanson, Vice President, global marketing Boeing Defense, Space and Security said the bilateral defense cooperation has evolved considerably, driven by the growing convergence of American and Indian defense interests. He said at the international geo-strategic level that this convergence was occurring primarily because of the shifting balance of power in Asia.

All the US companies that are part of this USIBC mission to India recognised that aerospace was a global industry and that they must continue to tap into the talent, innovation and technology in the US, India, and around the world to deliver high performance and affordability their customers expect.

"The investments made by US companies in India in defense partnerships or investing in the manufacturing, skill development and engineering footprint in India is critical to our industry's long-term ability to sustain and grow jobs here in India and the US," he said.

Secretary of State Mike Pompeo along with President Donald Trump and Vice President Mike Pence had reaffirmed the US recognition of India as a "Major Defense Partner" and a commitment to offer India defense technologies on par with America's closest partners and allies. In 2017, the Trump administration modified the Export Administration Regulations to facilitate defense trade with India and provided an unprecedented offer of Missile Technology Control Regime Category I Unmanned Aerial Vehicles to the Indian Navy, he said.

In 2018, further progress was made through the granting of India as a "Strategic Trade Authorisation 1" country and by the joint signing of the Communications, Compatibility and Security Agreement (COMCASA), which was over a decade in the making. More recently, the Industrial Security Agreement (ISA) was signed during the 2+2 Dialogue which facilitates close technology transfer with the Indian private industry.

India's aerospace and defense market has tremendous growth potential to be globally competitive and develop into a leading hub and net exporter for design, manufacturing, engineering, technology development and services, he said. Indian companies - both in the public and private sectors - are adopting global standards when it relates to quality, efficiency and cost competitive benchmarks required for the aerospace and defense industry.

https://economictimes.indiatimes.com/news/defense/extraordinary-growth-potential-in-us-india-defense-trade-boeing-official/articleshow/73685669.cms?from=mdr

### U.S. Approves Sale of Integrated Air Defense Weapon System to India

Lalit K Jha, Mint, February 11, 2020

The U.S. has approved the sale of an Integrated Air Defense Weapon System to India for an estimated cost of US\$1.9bn to modernise its armed forces and to expand its existing air defense architecture to counter threats posed by air attacks.

The Trump Administration has notified to the US Congress of its determination to sell India the IDD (IADWS), the Defense Security Cooperation Agency said. "India intends to use these defense articles and services to modernise its armed forces, and to expand its existing air defense architecture to counter threats posed by air attack," the State Department said.

The proposed sale comes amidst the massive military modernisation by China which is also flexing its military muscles in the strategic Indo-Pacific region. It also comes ahead of a possible visit by President Donald Trump to India later this month. Trump is set to visit India on a two-day trip between February 23 and 26 and both sides are in the process of fine-tuning his schedule.

India had requested to the US to buy an IADWS. The request was for five AN/MPQ-64Fl Sentinel radar systems; one hundred eighteen AMRAAM AIM-120C-7/C-8 missiles; three AMRAAM Guidance Sections; four AMRAAM Control Sections; and one hundred thirty-four Stinger FIM-92L missiles. Also included are 32 M4A1 rifles; 40,32) M855 5.56mm cartridges; Fire Distribution Centers (FDC); Handheld Remote Terminals; Electrical Optical/Infrared (EO/IR) Sensor Systems; AMRAAM Non-Developmental Item-Airborne Instrumentation Units (NDI-AIU); Multi-spectral Targeting System-Model A (MTS-A); and Canister Launchers (CN); High Mobility Launchers (HML).

https://www.livemint.com/news/india/us-approves-sale-of-integrated-air-defense-weapon-system-to-india-11581361614686.html

### India, U.S. Sign Defense Deals Worth over US\$3bn

Dinakar Peri, The Hindu, February 25, 2020

India and the U.S. concluded defense deals worth over US\$3bn for 24 MH-60R Seahawk Multi-Role Helicopters for the Navy and six AH-64E attack helicopters for the Army on the sidelines of the discussions between Prime Minister Narendra Modi and U.S. President Donald Trump.

"Earlier today we expanded our defense cooperation with agreements for India to purchase more than US\$3bn of advanced U.S. defense equipment including Apache and MH-60R helicopters, the finest in the world," Trump said in his press statement.

The MH-60R helicopters are a critical requirement for the Navy which has an acute shortage on its frontline warships. The Seahawk deal is worth around US\$2.2bn and the six Apaches cost around US\$800mn. To meet the urgent requirement, six Seahawks are expected to be delivered within a year and the rest as per the agreed schedule. Observing that defense has a major role in the relationship.

Modi said manufacturers of the two countries are becoming part of each other's supply chains. "In the last few years, there has been unprecedented growth in the inter-operability between our militaries," he said.

Addressing the media later, Foreign Secretary Harsh Shringla said President Trump has given the highest consideration to India in the procurement, technology and joint development in defense. He said from 2014 onwards there had been about US\$9bn in defense acquisitions from the U.S.

https://www.thehindu.com/news/national/india-us-sign-defense-deals-worth-over-3-billion/article30915848.ece

## India-U.S. to Hold 2+2 Talks, Defense Cooperation Pact Likely on Agenda

Nayanima Basu, The Print, August 23, 2020

Amid the ongoing standoff between India and China in the Ladakh sector of the Line of Actual Control (LAC), New Delhi and Washington will be holding their first virtual 2+2 format dialogue between foreign and defense ministries in September. This round of the 2+2 talks will be led by External Affairs Minister S. Jaishankar and Defense Minister Rajnath Singh from the Indian side, while the US will be represented by Secretary of State Mike Pompeo and Defense Secretary Mark Esper.

During this round, the two sides might finally sign the last of the US' defense foundational pacts — Basic Exchange and Cooperation Agreement (BECA). "The 2+2 this time will be taking place under very different circumstances. The world then when the last 2+2 meeting took place and the world now are very different places. We expect the Indo-Pacific construct and the Quad framework to strengthen further after this round of 2+2 talks, BECA is also on the agenda.

#### The other agreements

India and the US have already signed some of the key US foundational pacts — Logistics Exchange Memorandum of Agreement (LEMOA) and Communications Compatibility and Security Agreement (COMCASA) — to deepen defense and strategic ties.

#### 'LAC tensions to feature prominently'

The upcoming round of 2+2 meeting will be also taking place at a critical juncture, months after India witnessed a violent face-off with China for the first time in the last 45 years. While India lost 20 soldiers in the clash, the Xi Jinping administration did not reveal the Chinese casualties. The Trump administration has called out China several times for the LAC incident in support of India. The Joe Biden camp recently said it will work with India for a rule-based Indo-Pacific and won't allow China to threaten its neighbours.

"The China-India spat has accentuated the opportunities for, and the necessities of, deepening US-India security cooperation. The 2+2 offers a useful forum to discuss how to seize these new opportunities and how to move the needle forward on bilateral relations," Kugelman said.

India has so far procured Apache, Chinook and MH-60 Romeo Seahawk helicopters, M777 Howitzer guns, and Super Hercules C-130J military transport planes from the US, among other items. Several other procurements are also in the pipeline, with India now keen to purchase the medium-altitude long-endurance (male) armed Predator-B drone and other high-tech weapons.

https://theprint.in/diplomacy/india-us-set-to-hold-22-talks-defense-cooperation-pact-likely-on-agenda-amid-lac-standoff/487706/

### India, U.S. Sign Major Defense Pact BECA, Days Before Presidential Polls

Vishnu Som, www.ndtv.com, October 27, 2020

The long-awaited Basic Exchange and Cooperation Agreement or BECA, which gives India access to classified geo-spatial data as well as critical information having significant military applications from the US, was signed as External Affairs Minister S Jaishankar and Defense Minister Rajnath Singh held the third edition of the 2+2 talks with US Secretary of State Mike Pompeo and Defense Secretary Mark Esper, in New Delhi.

The signing of BECA with the US is a "significant" move, Defense Minister Rajnath Singh said as he briefed the media after the high-level talks held at Hyderabad House in the national capital. "We held comprehensive discussion on range of key issues. Our military-to-military cooperation with US moving forward very well. We identified projects for joint development of defense equipment. We reaffirmed our commitment to peace and security in Indo-Pacific region," he said.

BECA, which is the fourth and final "foundational" understanding the US has with India, will allow India to gain access to precision data and topographical images - on a real time basis - from U.S. military satellites. External Affairs Minister S Jaishankar said that the situation in the Indo-Pacific was also discussed during the talks. "Our national security convergences have grown; Indo-Pacific was a focus of our discussion," he said.

US Secretary of Defense Mark Esper said that the growing defense and security partnership between India and the US will keep a check on the situation in the Indo-Pacific at a time when China is attempting to expand its economic and military clout in the region. The sensitive satellite and sensor data provided by the US under the agreement will allow India to keep a close watch on the movements of Chinese warships in the Indian Ocean.

https://www.ndtv.com/india-news/india-us-sign-landmark-defense-pact-basic-exchange-nd-cooperation-agreement-during-2-2-dialogue-2316370

### India-U.S. Defense and Security Ties Stronger Than Ever Before

The Hindu, February 11, 2021

India's ambassador to the U.S. Taranjit Singh Sandhu said that India's designation as a 'Major Defense Partner' and accordance of Strategic Trade Authorisation-1 Status by the U.S. and the signing of the four foundational agreements with Washington will enhance military-to-military cooperation between the two countries. India has signed the Logistics Exchange Memorandum of Agreement (LEMOA), Communications Compatibility and Security Agreement (COMCASA), Industrial Security Annex and the Basic Exchange and Cooperation Agreement (BECA) to facilitate military-to-military cooperation.

Defense procurements from the U.S. have been an area of remarkable growth in the last decade. India has procured around US\$18bn worth of defense items from the U.S. since 2008. India already has several U.S. military platforms and equipment and many such proposals for new acquisitions are in the pipeline. The defense procurement activities are monitored through the Defense Production and Procurement Group (DPPG), the last meeting of which took place in Washington DC on June 07-09, 2018.

According to a recent report by the Brookings Institute think-tank, the U.S. defense and security relationship with India is a modest but important piece of the Biden administration's wider Indo-Pacific agenda and one that will require steady investment and recalibration rather than major redesign.

https://www.thehindu.com/news/international/india-us-defense-and-security-ties-stronger-thaever-before-ambassador-sandhu/article33808151.ece

## India, U.S. to Expand Military Engagement, Defense Ties

Sheikh Saaliq, Associated Press, March 20, 2021

Top defense officials from India and the U.S. pledged to expand their military engagement, underscoring the strengthening defense ties between two countries concerned over China's growing influence in the Indo-Pacific region. U.S. Secretary of Defense Lloyd Austin and Indian Defense Minister Rajnath Singh met in New Delhi and agreed to deepen defense cooperation, intelligence sharing and logistics.

Austin is making the first visit to India as a top member of President Joe Biden's administration. His visit follows a meeting last week between leaders of Australia, India, Japan and the U.S., which together make up the four Indo-Pacific nations known as the Quad.

The Quad is seen as a counterweight to China, who critics say is flexing its military muscle in the South China Sea, East China Sea, Taiwan Strait and along its northern border with India. China has called the Quad an attempt to contain its ambitions. Austin's Indian counterpart, Singh, said the talks were focused on "expanding military-to-military engagement." "We are determined to realise the full potential of comprehensive global strategic partnership," Singh said.

The U.S. and India have steadily ramped up their military relationship in recent years and signed a string of defense deals and deepened military cooperation. In 2019, the two sides concluded defense deals worth over US\$3bn. Bilateral defense trade increased from near zero in 2008 to US\$15bn in 2019. The U.S.-India security partnership enjoys strong bipartisan support in Washington, and it has grown significantly since the early 2000s even though trade agreements have been a sticking point.

More recently, India drew closer to the U.S. following its months-long military standoff with China along their disputed border in eastern Ladakh, where deadly clashes erupted last year. Tensions between the nuclear-armed Asian giants have eased after the two countries pulled back troops from one area of contention.

https://apnews.com/article/joe-biden-lloyd-austin-india-china-new-delhi-6a9c7db72c4242d12a0a8efc7c644e52

## India, U.S. Signed Co-Development Agreement for Air-Launched Unmanned Aerial Vehicle

The Hindu, September 03, 2021

India and the U.S. had signed a Project Agreement (PA) in the end of July for Air-Launched Unmanned Aerial Vehicle (ALUAV) under the ambit of DTTI, the Defense Ministry said on Friday. The PA was signed between the Ministry of Defense (MoD) and U.S. Department of Defense (DoD) by the co-chairs of the Joint Working Group (JWG) on Air Systems, under the DTTI on July 30.

"The PA outlines the collaboration between Air Force Research Laboratory, Indian Air Force, and Defense Research and Development Organisation towards design, development, demonstration, testing and evaluation of systems to co-develop an ALUAV prototype," a Ministry statement said.

The PA for the ALUAV fell under the Research, Development, Testing and Evaluation Memorandum of Agreement between MoD and U.S. DoD, which was first signed in January 2006 and renewed in January 2015, the statement said. It was a significant step towards deepening defense technology collaboration between the two nations through co-development of defense equipment, it stated.

The main aim of the DTTI is to bring sustained leadership focus to promote collaborative technology exchange and create opportunities for co-production and co-development of future technologies for Indian and U.S. military forces. The DTTI was announced in 2012 as an ambitious initiative for co-production and co-development of military systems but has never really taken off despite several efforts.

https://www.thehindu.com/news/international/india-us-signed-co-development-agreement-for-air-launched-unmanned-aerial-vehicle-defense-ministry/article36268029.ece

### India, U.S. Resolve to Expand Defense Technology Cooperation

Business Standard, November 10, 2021

In sync with their fast-expanding strategic ties, India and the US have resolved to strengthen defense technology cooperation. The two sides have firmed up an agreement for developing an air-launched unmanned aerial vehicle under the joint working group on air systems as part of the framework on DTTI.

To further encourage US and Indian industries to develop niche technologies under the DTTI group, an expo of the Defense Industry Collaboration Forum (DICF) was organised virtually. This forum offers an opportunity for Indian and US industries to be directly involved in DTTI and facilitates dialogue between government and industry on issues that impact industrial collaboration.

In June 2016, the US had designated India a "Major Defense Partner". The two countries have also inked key defense and security pacts over the past few years, including the Logistics Exchange Memorandum of Agreement (LEMOA) in 2016 that allows their militaries to use each other's bases for repair and replenishment of supplies as well as provides for deeper cooperation.

The two sides also signed COMCASA (Communications Compatibility and Security Agreement) in 2018 that provides for interoperability between the two militaries and provides for the sale of high-end technology from the US to India.

In October last year, India and the US sealed the BECA (Basic Exchange and Cooperation Agreement) agreement to further boost bilateral defense ties. The pact provides for sharing of high-end military technology, logistics and geospatial maps between the two countries.

https://www.business-standard.com/article/current-affairs/india-us-resolve-to-expand-defensetechnology-cooperation-121111001285 1.html

## Growing Defense Trade One of the Great Success Stories of India-U.S. Ties

The Times of India, December 15, 2021

The growing defense trade between India and the U.S. is one of the major success stories of the bilateral relation, US President Joe Biden's nominee for next envoy to New Delhi has told lawmakers. Eric Michael Garcetti, 50, is currently serving as the Mayor of Los Angeles and is a personal confidant of Biden. Garcetti, during his confirmation hearing as US Ambassador to India, said that he fully supports the law of the land, the implementation of CAATSA and part of that is the waiver provision.

He was responding to a question on enforcement of CAATSA sanctions on India now that New Delhi has started receiving delivery of the S-400 missile system from Russia. The Los Angeles Mayor said, if confirmed, he would advocate the continued diversification of India's weapons system, the threats to US own weapons systems. "If that diversification doesn't occur because we have to protect our data and our systems," he said, adding that he would work towards growing India US Major Defense Partnership.

Having concluded four major defense enabling agreements since 2016, the U.S. and India have made significant progress as Major Defense Partners and America looks forward to further increasing information sharing, bilateral and multilateral exercises, maritime security cooperation, liaison officer exchanges, and logistical cooperation.

Responding to questions related to human rights in India, Garcetti assured the lawmakers that he would personally be talking to various stakeholders in India on this issue. "I would not only just bring it up, but it would not be something at the end as an obligation. It will be a core piece of what I'll be engaging my Indian counterparts have confirmed with," he said.

"There are groups that are actively fighting for the human rights of people on the ground in India that will get direct engagement from me. We know that democracies are complicated and we can look at our own and at India's, but it's a cornerstone of our shared values," Garcetti said.

https://timesofindia.indiatimes.com/india/growing-defense-trade-one-of-the-great-success-stories-of-india-us-ties-garcetti/articleshow/88290190.cms

## Rajnath Singh Invites U.S. Defense Companies to Invest, 'Make In India'

NDTV, April 24, 2022

Defense Minister Rajnath Singh on Monday urged American companies to come and invest in India and support the 'Make in India' programme. "I have talked to American companies for Make in India and aerospace and world programme. I have invited them for these programmes," Mr Singh told reporters at a joint news conference with External Affairs Minister S Jaishankar along with their American counterparts Defense Secretary Lloyd Austin and Secretary of State Antony Blinken.

"We are talking to US companies for co-development and co-production. We are proposing it to them. We have asked the US companies to work in the UP and Tamil Nadu corridor and invest in that area," he said at the conclusion of the India-US 2+2 ministerial meet, the first of the Biden administration.

Earlier, in his opening remarks at the 2+2 ministerial meeting, Mr Singh said that India places the highest priority upon the strategic partnership with U.S. "Major defense partnership is one of the most important pillars of India-US strategic relations," he said.

"As the largest country and the centre to Indian Ocean, and as a democracy, India has critical roles to play in the Indian Ocean region and in the wider Indo-Pacific following the Act East and the Neighbourhood First policy," he said.

Despite the pandemic, India-U.S. military engagements increased with higher capability in communication, closer information sharing, and enhanced mutual logistic support, he said adding that this is a reflection of their growing depth and scale of the defense partnership.

"In a decade, our defense suppliers from U.S. rose from negligible to a cumulative around of over US\$20bn. We look forward to U.S. companies investing in India and support the Make In India programme," he said. "India, he said, is working with the US to double up capabilities across conventional and emerging defense domains. "We have made good progress in a number of defense cooperation activities since the visit of Secretary Austin to India in March 2021".

https://www.ndtv.com/india-news/defense-minister-rajnath-singh-invites-us-defense-companies-to-invest-make-in-india-2880210

### India-U.S. Defense Relationship Evolved from Mistrust to Deep Trust

NE Now, July 01, 2022

The second in a series of workshops under the Defense News Conclave Project, titled "India-US Collaborations in Defense Industry, Technology, Innovation and Trad, saw distinguished panelists addressing diverse themes relating to India-U.S. cooperation on these issues. This Project is being implemented by CUTS International with the support of the U.S. State Department (U.S. Consulate Kolkata), said a statement.

This workshop series aims at creating awareness about the importance of India-U.S. defense relations, particularly in the context of contemporary developments in the Indo-Pacific region. The session was moderated by Sandhya Sharma, Editor, Technology Policy and Foreign Policy, ET Prime.

Colonel K.V Kuber, Director, Aerospace and Defense, Ernst and Young remarked that the India-U.S. defense relationship was driven by "mutual interest in commercial and geopolitical areas, which was the basis of trust". He mentioned the 2+2 dialogue between the two countries and the DTTI as the cornerstone of this relationship.

Noting that the DTTI aims to "transform and transmigrate the buyer-seller relationship into a co-production and co-development relationship", he pointed to the Air Launched Small Unmanned Systems and intelligence, surveillance, target acquisition, and reconnaissance (ISTAR) projects as successful examples.

https://nenow.in/world/india-us-defense-relationship-has-evolved-from-mistrust-to-deep-trust-experts.html

### India, U.S. to Launch Emerging Defense Capabilities Dialogue Soon

The Print, September 08, 2022

India and the U.S. discussed ways to further strengthen the strategic partnership by launching the inaugural emerging defense capabilities dialogue later this year. This was announced at the conclusion of the India- U.S. 2+2 Inter-sessional meeting and the Maritime Security Dialogue.

The Indian delegation for the inter-sessional meeting on Wednesday was led by Vani Rao, Additional Secretary (Americas) in the Ministry of External Affairs and Donald Lu, Assistant Secretary of State (South and Central Asian Affairs) and Ely Ratner, the Assistant Secretary of Defense (Indo-Pacific Security Affairs).

"They discussed ways to further strengthen the Major Defense Partnership, including in new and emerging areas in the defense domain such as space, AI and cyber," an External Affairs Ministry statement said. In a separate statement, John Supple, the spokesman for the US Department of Defense said the officials of the two countries also reviewed progress toward operationalising major bilateral initiatives on information-sharing, defense industrial cooperation, and joint service engagements to support combined, multi-domain operations.

At the 5<sup>th</sup> India-US Maritime Security Dialogue (MSD), held here on Thursday, officials discussed the developments in the global maritime domain, bilateral maritime cooperation endeavours, regional support initiatives and collaborative efforts such as Indo-Pacific Partnership for Maritime Domain Awareness, the MEA statement said.

"They identified new opportunities to coordinate capacity-building activities in South and Southeast Asia, deepen logistics cooperation, and drive forward high-end Navy-to-Navy cooperation to address challenges, including in the undersea domain," Supple said, The Indian delegation to the MSD comprised Sandeep Arya, Additional Secretary (Disarmament & International Security Affairs), Vani Rao, Additional Secretary (Americas), Ministry of External Affairs and Mr. Dinesh Kumar, Joint Secretary (Maritime & Systems), Ministry of Defense.

The U.S. delegation was led by Assistant Secretary of State Donald Lu and Assistant Secretary of Defense for Indo-Pacific Security Affairs, Ely Ratner.

According to the External Affairs Ministry, the dialogues also provided an opportunity to discuss regional issues pertaining to South Asia, Indian Ocean Region and the Indo-Pacific.

"The two sides agreed to remain engaged with the objective of further enhancing the depth and substance of the India-US Comprehensive Global Strategic Partnership," the MEA statement said.

https://theprint.in/india/india-us-to-launch-emerging-defense-capabilities-dialogue-soon/1121569/

### U.S. Invites Indian Industry to Become Part of its Defense Supply Chain

Dalip Singh, The Hindu Business Line, October 04, 2022

The Indian industry is gearing up to explore opportunities to become a part of the US defense supply chain following a discussion the Society of Indian Defense Manufacturers (SIDM) delegation had with representatives of the Biden administration and industrial association during their recent Washington trip.

The move assumes significance since the two countries are supposed to announce a new defense dialogue later this year — a fact that emerged from External Affairs Minister S Jaishankar's last month meeting with US Defense Secretary Lloyd Austin on bilateral defense industrial cooperation.

#### Participating companies

The maiden SIDM delegation of eight companies — MKU Ltd, Idea Forge Technologies Pvt Ltd, Larsen and Toubro, Investments and Precisions Castings Ltd, Newspace Research & Technologies Pvt Ltd, Rossell Techsys, Abhyuday Bharat Projects Pvt Ltd and Delta Combat Systems Pvt Ltd — were in the US for five days from September 19.

#### Tapping opportunities for all

A few indigenous defense companies are already part of the global supply chain. The SIDM, though, is pushing for stretching the opportunities to other Indian companies including MSMEs given that the National Defense Industrial Association (NDIA) represents 1,800 US military firms.

During their various engagements, the SIDM stated that the delegation was accorded due importance by US government officials as well as by industry representatives. In March 2022, Jesse Salazar Deputy Assistant Secretary of Defense for Industrial Policy held an interaction with SIDM to lay out US DOD priorities *vis-à-vis* Indian Industry.

https://www.thehindubusinessline.com/economy/us-invites-indian-industry-to-become-part-of-its-defense-supply-chain-says-sidm/article65967548.ece

## India Looks to be a Promising High-Tech Military Supplier

Rutam Vora, The Hindu Business Line, October 19, 2022

In order to meet the growing need for high-tech and effective weapons, India possesses the required intellectual capacities to become a dependable arms supplier. The U.S. would look for more opportunities in sourcing military requirements from India, stated a senior US defense official to India Rear Admiral Michael Baker in the U.S. Navy.

The US is importing a significant part of its military requirements from India. At the DefExpo 2022 in Gandhinagar, the US is exploring more opportunities to co-develop and co-produce military items that can be "a win-win not only for U.S. and India but a win for the entire region," Baker said in an interaction. U.S. invites Indian industry to become part of its defense supply chain, says SIDM. A delegation of the Society of Indian Defense Manufacturers visited Washington and interacted with US govt officials

#### Advancements in technology

For India to become a potential alternative to China in sourcing military goods, Baker believed that every nation should look at an alternative to China, "to safeguard their own supply line, their own capabilities. Being able to diversify in that sense is good. India is a pretty capable country across a whole variety of sectors. This may be a great opportunity and alternative for countries in this region. If we, from the U.S. can help India to achieve that goal, that will be a positive development," said Baker.

"We see a lot of advancements in technology deployment on the battlefield. We see some examples of high-tech weapons being very effective against older weapons. It is a dynamic time in the defense industry. Those who can innovate well, marketing quickly with a good sound product that meets military capability requirements, are going to be successful," said Baker, adding that India has exhibited its capabilities as it builds ships, Apache fuselages, C-130 J fuselages, wings for aircrafts, Tejas aircrafts, ground armaments, light guns, and more.

"India has got capabilities as it is already working on all of these areas. They certainly have intellectual capacities," he said.

#### Military trade

Further, the U.S. is currently in discussion for some major military trade partnerships with India. "There is a next-generation fighter (jet) for India, for which the U.S. is competing. There is also a next-generation naval fighter as well among others. We continue to work on this with our Indian partners and our team in Washington," he said.

The US interest in engagement with India is to look for what capabilities the Indian military need, and what capabilities the U.S. military need, so as to be able to collaborate to deter aggression in the Indo-pacific region.

The U.S. looks to leverage DTTI with India to explore areas where both can collaborate and help startups, or established industries.

https://www.thehindubusinessline.com/news/national/india-looks-to-be-a-promising-high-tech-military-supplier-says-top-us-defense-official/article66029989.ece

### Rajnath Invites U.S. Firms to Set Up Units in India

The Tribune, October 20, 2022

Defense Minister Rajnath Singh invited US companies to set up manufacturing units in India and develop technology collaborations with industries to create a global supply chain. He was addressing a seminar jointly organised by the US-India Business Council and the Society of Indian Defense Manufacturers as part of the Def Expo here. During the seminar on "New Frontiers in US-India Defense Cooperation: Next Generation Technology, Innovation and Make in India", Rajnath said, "India seeks to build indigenous technological and production capacity in collaboration with reputed manufacturers from friendly nations.

As our defense base grows, private sector companies from the US can explore the potential for 'creating in India' and 'exporting from India'." Talking about the agreement between India and the US to co-develop Air-Launched UAVs under the auspices of the India-US Defense Technology and Trade Initiative, he said unmanned aerial systems and an intelligence, surveillance, target acquisition and reconnaissance platform must be developed under the initiative.

https://www.tribuneindia.com/news/nation/rajnath-invites-us-firms-to-set-up-units-in-india-443237

## Indian Navy Re-Initiates Stalled Programme to Buy 6 More P8I Aircraft from U.S.

Vishal Thapar, Businessworld, December 09, 2022

The Indian Navy has re-initiated the programme to buy 6 more Boeing P8I Long Range Maritime Reconnaissance (LRMR) aircraft from the US under a multi-billion-dollar Government-to-Government deal which stalled after the expiry of the price offer on July 31. "A restated Letter of Offer and Acceptance (LOA) has been sought from USG (US Government)," Chief of Naval Staff Admiral R Hari Kumar said.

It also provides a clear indication that the decks have been cleared for fresh price negotiations for the procurement of additional numbers of this key force multiplier, which is a prominent symbol of India-US military cooperation. The re-negotiated price would first have to be cleared by India's Defense Acquisition Council (DAC) headed by the defense minister and then the case put up for final approval to the Cabinet Committee on Security chaired by the Prime Minister before the deal can be signed.

Several critical military procurements though the import route were either scrapped or put on a deferred list after India's Aatmanirbhar Bharat (self-reliant India) policy reinforcement last year. Admiral Hari Kumar's statement is an indication that the Indian Navy stood its ground on the import of the P8Is and was able to convince the political decision-makers about the necessity of these force multipliers representing a capability which cannot be indigenised in the near term.

The Indian Navy operates 12 P8Is, of which 8 are based at the naval airbase INS Rajali in Arakonam on the Eastern Seaboard and 4 at INS Hansa in Goa on the West. The additional P8Is are meant to augment numbers on the Western Seaboard. The induction of the P8I in 2013 has often been hailed as a game-changer for the Indian Navy's long-range reconnaissance and anti-submarine warfare capabilities, giving it a clear edge over adversaries in the Indian Ocean Region.

https://www.businessworld.in/article/Indian-Navy-Re-initiates-Stalled-Programme-To-Buy-6-More-P8I-Aircraft-From-US/09-12-2022-457370/

## India Takes Atmanirbhar Route to Enhance Defense Exports

By Pradeep S. Mehta and Purushendra Singh, The South Asian Times, November 28, 2022

India has started to transform towards becoming a major defense manufacturing hub and a major exporter, driven by the 'Make in India, Make for the world' initiative. Nations from Africa, Latin America, the Caribbean, and Central and Southeast Asia have already started inquiring and placing orders for indigenously built Indian equipment.

India envisions becoming a major defense exporter by 2047 when it celebrates 100 years of independence. To accomplish this mission, India aims to forge defense partnerships with technologically advanced nations and leading manufacturers for co-production and comanufacturing. This would boost the economy, create jobs, provide security, produce advanced weapons, and help maintain a rules-based global order.

According to SIPRI data, around 50 per cent of India's defense exports from 2017-2021 went to Myanmar, followed by 25 per cent to Sri Lanka, showing India's role as a security provider in the South Asian region. However, exports have mostly been limited to petty military hardware so far.

The Defense Acquisition Procedure (DAP) 2020 introduced 'Make in India' and 'Atmanirbhar Bharat' initiatives to focus on scaling up indigenous industries and producing high-value defense products. With future wars becoming hybrid, there will be higher global demand for emerging technology weapons that India needs to produce indigenously across domains. India marked 75th Independence Day by using an indigenously developed Advanced Towed Artillery Gun System (ATAGS) for the ceremonial 21-gun salute, which has bagged a US\$155mn export order. The target is US\$5bn in defense exports by 2025.

Indigenous products finding export success include HAL's HF-24 Marut fighter-bomber, Tejas Light Combat Aircraft, Pinaka multi-rocket launcher system, and Nag Anti-Tank Guided Missile. The defense minister is urging cutting import dependence, boosting domestic manufacturing, and enabling co-production/co-manufacturing with other countries and private players.

Increased global defense budgets indicate growing security reliance, presenting export opportunities for India across developed and developing nations. Exports would boost forex reserves, support domestic industry, facilitate acquiring scarce weapons, produce critical technologies, and position India as a net security provider. While the India-US Defense Technology Trade Initiative has lagged, recent pacts like the Space Situational Awareness agreement showcase willingness for deeper cooperation to address global challenges. As the 5th largest economy boosting manufacturing prowess, India is transforming into a 'Modern Atmanirbhar Bharat' driven by indigenousness for a secure world.

https://cuts-global.org/article-india-takes-the-aatmanirbhar-route-to-enhance-defenseexports.htm

## India, U.S. Explore Development of Enhanced M777 Howitzers

Kapil Kajal, Janes, March 13, 2023

The 155 mm/39 calibre M777 ultra lightweight howitzer, displayed above undergoing trials with the UK Army, has a maximum range of 24.7 km using unassisted rounds and a sustained rate of fire of 2 rds/min. India and the US are exploring the development of a 155 mm/52 calibre M777 with an extended range. (BAE Systems Land systems UK). India and the US are exploring the development of an extended-range, longer barrel variant of the M777 155 mm/39 calibre ultra lightweight howitzer (ULH), manufacturer BAE Systems told Janes.

Ravi Nirgudkar, managing director, BAE Systems – India, Bangladesh, Sri Lanka, told Janes that "discussions have been held [to develop an enhanced version of M777], and the belief is that we will see them [discussions] continue as both parties [India and the US] recognise the potential benefits that an extended-range variant of the M777 could bring".

According to Nirgudkar, the enhanced version will likely be equipped with a 155 mm/52 calibre. "It is far too early to speculate on any aspect of the programme, as discussions are still under way," he added, without delving into technical or range-related details. However, Nirgudkar said that it "would not make sense" to upgrade the Indian Army's existing 39 calibre M777 howitzers to the improved 52 calibre M777s across the whole fleet.

"The extended-range barrel provides a different capability [compared with existing 39 calibre M777s], albeit with a common logistics footprint," he said. "It is envisaged that the extended-range capability could be offered as a possible kit, but the intention was never to offer this as a [39 calibre M777] fleet-wide upgrade," Nirgudkar added.

https://www.janes.com/defense-news/news-detail/india-us-explore-development-of-enhanced-m777-howitzers

# U.S.-India Defense Partnership Progresses with Information-Sharing Agreement and Jet Engine Technology Deal

The Kootneeti, March 22, 2023

The American Air Force Secretary Frank Kendall announced that the US and India were collaborating on an information-sharing agreement between their air forces. The partnership comes at a time of heightened tensions between India and China, and Kendall highlighted the importance of expanding the relationship between the two countries.

Responding to concerns over India's 'Atmanirbhar Bharat' initiative, Kendall suggested that the requirement for a larger share of domestically manufactured products should be implemented gradually rather than all at once. He also noted that the US-India defense partnership had been progressing well and highlighted the potential for increased collaboration in various areas, including the space sector.

The announcement comes after External Affairs Minister S Jaishankar met with Kendall to discuss global strategic scenarios and new opportunities for India-US defense cooperation.

### General Electric's Proposal to Share Technology with India for Fighter Jet Engines is a 'Breakthrough'

The U.S. Air Force Secretary, Frank Kendall, praised General Electric's proposal to share fighter jet engine technology with India, saying that it is a step in the right direction towards strengthening India-US defense ties. Kendall stated that India and the US are currently working on an air information-sharing agreement, which he hopes will be finalised soon.

Regarding General Electric's proposal, Kendall highlighted its potential significance as a "breakthrough," and expressed his hope that both countries can work together to move the proposal forward, despite the need to work through some processes.

https://thekootneeti.in/2023/03/22/us-india-defense-partnership-progresses-with-information-sharing-agreement-and-jet-engine-technology-deal/

### India Nears US\$300mn Weapons Deal with U.S.

www.livemint.com, April 03, 2023

India is working to acquire a slew of American weapons for its Navy - including Hellfire missiles and Mark 54 anti-submarine torpedoes for its MH-60 Romeo multirole helicopters. Negotiations are currently underway with the American authorities for the US\$300mn deal. India is moving towards clearing a proposal to buy American weapons including the Hellfire missiles and Mark 54 anti-submarine torpedoes for its MH-60 Romeo multirole helicopters. 24 of these choppers have been contracted for by the Indian Navy in a fast-track deal worth over US\$2bn in 2020 and they have to be equipped with weapons for carrying out operations.

The proposal for buying the weapons package for the MH-60 Romeo choppers is at an advanced stage in the Defense Ministry and negotiations are also going with the American administration for the US\$300mn deal to be concluded under the Foreign Military Sales route, defense officials told ANI here. India and the US had signed over- ₹16,000 crore deal to buy 24 MH-60 Romeo helicopters from Lockheed Martin in 2020 under fast-track procedures on a government-to-government deal to hasten the process.

The 24 MH-60 Romeos would be equipped with multi-mode radars and night-vision devices as well as armed with missiles, torpedoes, and other precision-guided weaponry. The MH-60s are going to replace Sea King choppers which would be on their way out of the force very soon.

https://www.livemint.com/news/india/india-nears-usd-300-million-weapons-deal-with-us-11680534155582.html

### Defense Collaboration to Manufacture Sophisticated, Modern Equipment in India

The Times of India, April 21, 2023

A major India-US bilateral defense collaboration is in the works for India to make sophisticated modern defense equipment. "I think it makes eminent sense for India to produce world class defense equipment for its own needs, and potentially as an exporter, for the world," US Assistant Secretary of State for South and Central Asia Donald Lu said.

"We are already major partners in the defense field. We, over the last 20 years, have had a defense trade of over US\$20bn. And I know our private companies and our governments, our ministries of defense are talking on a regular basis about how we cooperate," he said.

Lu pointed out that last April during the Two Plus Two Dialogue involving India's Minister of Defense and External Affairs Minister and their American counterparts Secretary of Defense and Secretary of State, for the first time there was American support for Prime Minister Narendra Modi's Make in India initiative.

According to an Indian Embassy fact sheet, India-US defense cooperation is based on the "New Framework for India-US Defense Cooperation," which was renewed for a period of ten years in 2015. In 2016, the defense relationship was designated as a Major Defense Partnership (MDP) to build a comprehensive, enduring and mutually beneficial defense partnership. On July 30, 2018, India was moved into the Tier-1 of the US Department of Commerce's Strategic Trade Authorisation license exception.

Several defense agreements have been signed, including the Logistics Exchange Memorandum of Association (2016); the Memorandum of Intent between the US Defense Innovation Unit (DIU), and the Indian Defense Innovation Organisation - Innovation for Defense Excellence (2018); Communications Compatibility and Security Agreement (2018); Industrial Security Agreement (2019); Basic Exchange and Cooperation Agreement (2020).

Bilateral exercises include Yudh Abhyas (Army); Vajra Prahar (Special Forces), and a tri-services exercise— Tiger Triumph (inaugurated in 2019). India joined the multilateral Combined Maritime Force (CMF) based in Bahrain, as an Associate Partner in April 2022. In November 2022, the Australian Navy joined the US-India-Japan MALABAR annual Naval Exercise. The US participated in India's multilateral Exercise Milan 2022.

https://timesofindia.indiatimes.com/india/major-defense-collaboration-in-work-tomanufacture-sophisticated-modern-equipment-in-india-usofficial/articleshow/99653410.cms?from=mdr

## India-U.S. Push for Strengthening Foundational Defense Agreements

Dalip Singh, The Hindu Business Line, May 18, 2023

Ahead of Prime Minister Narendra Modi's US visit next month, the two countries are trying to enhance defense industrial cooperation and operationalising India-US major defense partnership. To prepare ground for a possible breakthrough in the joint production of core technologies, India is looking at GE-414 engines that would power AJT Tejas MK-2. High level meetings between the top representatives of two governments are already taking place on this matter.

#### 'Past troubles may crop up'

Sources do not rule out issues of F/A-18 Super Hornet Block III on offer to the Indian Navy and GE-414 engine joint-production in India cropping up during Aramane's meetings in the US. It is learnt that the US is trying to push F/A-18s, which is competing against Rafale-N, for Navy's pick for its aircraft carrier INS Vikrant, since that would give more business and employment opportunities to its manufacturer Boeing. Sources also pointed out that there is pressure from the US Congress on the Biden administration to pull off this big-ticket deal.

India is also shopping for 98 KN engines to provide the thrust for Tejas MK-2, which will be advanced, bigger, and faster than Tejas MK-1. The discussions are on for GE-414 engine technology transfer for co-production in India.

#### Focus on cooperation

Important aspects such as military-to-military cooperation, exercises and the ongoing and future cooperative activities in the Indian Ocean Region also came up during the DPG interaction, said the Ministry of Defense. The DPG is an apex official-level mechanism between Ministry of Defense, India, and US Department of Defense of US.

"Considerable focus was given on the ways and means to enhance the defense-industrial cooperation, including technology partnership, long-term research and development, and improving supply chain security," the Ministry of Defense stated.

https://www.thehindubusinessline.com/news/india-us-pushahead-of-modis-us-visit-two-countries-pushing-for-foundational-defense-agreements/article66866358.ece

### India, U.S. Close in On Jet Engine Deal

Dinakar Peri, The Hindu, June 05, 2023

India and the U.S. have agreed to initiate negotiations for a 'Security of Supply' (SoS) arrangement and a 'Reciprocal Defense Procurement' (RDP) agreement which will promote long-term supply chain stability. The deal for assembling the General Electric GE-414 jet in India is "almost done" with expectations that it could be concluded during the upcoming visit of Prime Minister Narendra Modi to the U.S. later in June 2024.

During the visit of U.S. Secretary of Defense Lloyd J. Austin to India, the two sides concluded a roadmap for 'Defense Industrial Cooperation' which shall guide the policy direction for the next few years.

In addition, capacity building, including Maritime Domain Awareness (MDA), strategic infrastructure and infra development as well U.S. companies setting up Maintenance, Repair and Overhaul (MRO) facilities in India were top among the issues during talks between Defense Minister Rajnath Singh and Mr. Austin, a defense source said. India also asked U.S. companies to increase sourcing from India particularly by Boeing under the mega-civil aircraft deal signed with Air India recently.

On MRO, noting that two U.S. ships have so far visited India for repairs at Larsen & Toubro (L&T) yard at Kattupalli in Tamil Nadu, sources said an agreement is in place to take this forward and a third ship is expected for repairs very soon. "India is keen that this be scaled up further which will boost the country's MRO capabilities and also boost the local industry," a source said.

According to the DoD, the new Roadmap will fast-track technology cooperation and coproduction in areas such as air combat and land mobility systems; intelligence, surveillance, and reconnaissance; munitions; and the undersea domain.

The RDPs are agreements that relate to research, development, or production of defense equipment, or to the reciprocal procurement of defense items, according to a paper from the U.S. Chamber of Commerce. "The U.S. Government has also indicated that RDP MoUs have a goal of promoting rationalisation, standardisation, and interoperability of defense equipment with Allies and friendly governments," its states.

https://www.thehindu.com/news/national/india-us-conclude-roadmap-for-defense-industrial-cooperation/article66933320.ece

### U.S. Seals Key 'Jet Engine Deal'

Prashant Jha, The Hindustan Times, June 19, 2023

The US administration has completed the executive approvals for the manufacture of F414 jet engines in India. Sealing a key deliverable during Prime Minister Narendra Modi's state visit to Washington DC, the U.S. administration has completed the executive approvals for the manufacture of F414 jet engines in India and begun the process of notifying the US Congress about the impending Memorandum of Understanding to be signed between General Electric (GE) and Hindustan Aeronautics Limited (HAL), people familiar with discussions on the subject said.

This is the first time that the US will share what it called a "crown jewel" in its defense capabilities with a non-ally; it is the first time that there will be coproduction of jet engines with a country with which Washington DC doesn't have a treaty; it is also the first time that the US system is sharing a substantial share of sensitive jet engine technology with a provision for tech transfer ratio to increase.

Explaining the significance of the decision, from the American perspective, Sameer Lalwani, a senior expert at the US Institute of Peace (USIP), said, "For the US, this is a significant move – a 'costly signal' as social scientists say – to share some highly sensitive technology, which it has never shared with a non-ally. Such transfers can be made possible, not simply with blueprints but from the transmission of tacit and organisational knowledge through a shared ecology of joint research, manufacturing, and supply chains."

From the Indian perspective, Lalwani said, the deal offered access to better fighter jet engines than what China possessed – "with greater power and efficiency, longer service life, and less maintenance."

https://www.hindustantimes.com/india-news/us-seals-key-jet-engine-deal-ahead-of-modi-s-visit-101687114785567.html

### The Nuts and Bolts of The Engine Modi Brings to Power Atmanirbhar Bharat

The Economic Times, June 23, 2023

With the prospect of a two-front war with China and Pakistan always present before India, the country needs a stronger air force, a key edge India can have over both these countries. India's dependency on foreign countries for fighter aircraft is a big handicap for its military. India can manufacture fighter aircraft domestically, as it has proved with Light Combat Aircraft (LCA) Tejas Mk1, but it can't manufacture the engines by itself and has to import them.

Amid Prime Minister Narendra Modi's official state visit to the U.S., General Electric Co's GE Aerospace has signed an MoU with Hindustan Aeronautics Limited (HAL), the maker of LCA Tejas MK1, to jointly produce in India the fighter jet engine, GE414. It is the most important deal among various defense and technological agreements between India and the US that have materialised with Modi's visit.

#### Inside the GE414 jet engine

In 1986, GE began working with the Aeronautical Development Agency and HAL to support the development of the LCA with F404 engines. Subsequently GE Aerospace's F404 and F414 have been part of development and production programmes of LCA Mk1 and LCA Mk2 programmes. In total, 75 F404 engines have been delivered and another 99 are on order for LCA Mk1A. Eight F414 engines have been delivered as part of an ongoing development programme for LCA Mk2.

#### Atmamirbhar in defense

India needs more fighter aircraft to tackle the joint threat of Pakistan and China as a large number of its own aircraft are aging. Citing the increasing number of fighter aircraft in the Chinese and Pakistan air forces, then Vice Chief Air Marshal Sandeep Singh had said last year that there would be a requirement for 42 squadrons of fighter aircraft by the Indian Air Force, ANI had reported. The IAF is authorised to have 42 squadrons which would mean around 800 fighter aircraft.

The scenario not only calls for speedier manufacturing but also self-reliance. The acquisition of engine-making knowhow, as the GE deal promises transfer of technology, will provide India independence in manufacturing jet fighters. Now India buys its fighter jets from Russia and France. The deal will also put India ahead of China as India will be one of the very few countries that produce jet engines indigenously --- the US, the UK, France, and Russia.

#### The ripple effects

The GE414 deal is a landmark agreement since the US has been wary of sharing advanced defense tech with India. It is America's big vote of confidence for India, which will reverberate in the American corporate sector for a long time. If GE Aerospace starts engine production in India, it will be an encouraging sign for many other American manufacturers, especially those who make high-tech products, undecided about shifting production to India, given India's proximity to Russia, among other factors.

https://economic times. indiatimes. com/news/defense/the-nuts-and-bolts-of-the-engine-modibilities to-power-atmaniabhar-bharat/printarticle/101217217. cms

## U.S. military deals not enough to wean India off Russian arms yet

Krishn Kaushik and David Brunnstrom, Reuters, July 10, 2023

India's multi-billion-dollar purchases of U.S. arms are less about shifting its reliance on Russian defense equipment and moving towards the West - it's more about developing its own domestic weapons industry, security officials and analysts say.

India is the world's biggest arms importer but almost all its major weapons purchase now include provisions for joint manufacture or technology transfer, irrespective of which country it is dealing with. Also, Russia's war in Ukraine has disrupted some military supplies to India, reinforcing New Delhi's long-term desire to diversify imports or replace them with home-built hardware, Indian defense officials said.

India bought weapons worth over US\$60bn in the last 20 years, of which 65 per cent or nearly US\$39bn were from Russia, according to Stockholm International Peace Research Institute data. India announced significant purchases of U.S. defense equipment during Prime Minister Narendra Modi's state visit to Washington last month, including an over one billion dollar order for GE (GE.N) engines for fighter jets. A possible US\$3bn deal for MQ-9B SeaGuardian drones is also being discussed.

#### Gap with China

India still uses mostly Russian technology for traditional arms. India's main aim is to narrow the technological gap with better-armed arch-rival China, with which it has a tense relationship, and which is also closely allied with traditional foe Pakistan.

One problem for India is that Russia's war in Ukraine has severely dented Moscow's ability to deliver weapons and equipment. India is buying French fighter jets, Israeli drones, American jet engines and potentially German submarines. Over time these purchases will reduce the share of Russian military technology used by India, but this would take at least two decades, Indian officials said.

#### **Least Limitations**

Bill Greenwalt, a former senior Pentagon official for industrial policy, said the days of U.S. and Russian domination of the global defense market and being able to control defense technology was coming to end, but what would replace it was "still a work in progress. He said India could become frustrated by the strict U.S. export control system for armaments and the restrictions it places both on technology sharing and its ability to develop systems it acquires.

Exports to India must satisfy stringent U.S. International Trafficking in Arms (ITAR) regulations and the two countries are not treaty allies - which for instance means the level of technology sharing provided under the AUKUS deal to supply Australia with nuclear-powered submarines is not on the cards.

### India to Acquire 31 U.S. Drones for Armed Forces

Sounak Mukhopadhyay, Livemint, jukuly 3, 2023

India is set to submit a letter of request to the US government to procure 31 MQ-9B drones under the foreign military sales programme. The deal is estimated to be valued at US\$3.07bn.

During PM Modi's state visit to the US, a joint statement by the two nations mentioned the proposed deal. The acceptance of necessity (AoN) for the purchase of the MQ-9B General Atomics high-altitude long endurance (HALE) drones was granted by India's defense acquisitions council (DAC) on June 15.

zlThis marked the first step towards acquiring military hardware. The U.S. will respond to the LoR with a letter of offer and acceptance (LoA) after a formal congressional notification. Following this, India will engage in negotiations with the US, considering the price and terms offered, before finalising the deal through the contract negotiation committee and seeking approval from the cabinet committee on security led by Prime Minister Narendra Modi.

Out of the 31 drones, 15 will be allocated to the navy and eight each to the Indian Army and the Indian Air Force. Ten drones are expected to be procured as ready-made units while the remaining 21 will be assembled in India, HT reported.

India will also seek a higher element of technology transfer, aiming to double the current offering from 8-9 to 15-20 per cent. The versatile MQ-9B platform can strike targets, conducting intelligence, surveillance, and reconnaissance (ISR) operations, and fulfilling roles such as electronic warfare, defensive counter air, and airborne early warning.

https://www.livemint.com/news/india/india-to-acquire-31-us-drones-for-armed-forces-deal-worth-rs-25-000-crore-check-details-11688348379689.html #:~: text=terms % 20 of % 20 procurement., The % 20 deal % 20 is % 20 estimated % 20 to % 20 be % 20 valued % 20 at % 20 % 24 3.07 % 20 billion, (DAC) % 20 on % 20 June % 20 15.

## Senate Defense Act Draft Opens Door for Deeper U.S. Cooperation with India

Prashant Jha, Hindustan Times, July 13, 2023

As part of the National Defense Authorisation Act (NDAA), the umbrella legislation that determines the U.S. defense budget and priorities, the Senate Armed Services Committee (SASC) has asked Pentagon to ensure that India is "appropriately considered for security cooperation benefits" consistent with its status as a major defense partner.

In particular, the draft NDAA asks the US defense secretary to deepen cooperation with India in areas such as artificial intelligence (AI), undersea domain awareness, air combat and support, munitions, and mobility. The House of Representatives is in the process of finalising its own version of the NDAA.

#### The build-up

But the Senate's version is understood to have the sanction of the chamber's top political leadership. It is based on inputs from DOD and is a result of the intense engagement between the US Congress and India in recent months.

The Senate majority leader, Chuck Schumer, led what was the most high-powered Congressional delegation to India in diplomatic history earlier this year, where he highlighted the centrality of the partnership with India in the competition with China and met Prime Minister Narendra Modi. Jack Reed, the chair of the SASC, was a part of the delegation.

#### The NDAA text

The NDAA draft asks the defense secretary, in coordination with the Secretary of State and other relevant heads of agencies, to explore four lines of effort to ensure India benefits from its status as a major defense partner.

The first is "eligibility for funding to initiate or facilitate cooperative research, development, testing, or evaluation projects" with the DOD in AI, undersea domain awareness, air combat, and support, munitions, and mobility. The second is "eligibility to enter into reciprocal agreements with the Department of Defense for the cooperative provision of training on a bilateral or multilateral basis in support of programmes for the purpose of building capacity."

It specifies eight areas of cooperation in this regard, including counterterrorism operations; counter-weapons of mass destruction operations; counter-illicit drug trafficking operations; counter-transnational organised crime operations; maritime and border security operations; military intelligence operations; air domain awareness operations; and cyberspace security and defensive cyberspace operations.

The third line of effort that the Senate asks the Pentagon to pursue about India is its "eligibility to enter into a memorandum of understanding or other formal agreement with the Department of Defense for the purpose of conducting cooperative research and development projects on defense equipment and munitions". And finally, it mandates DOD to explore "eligibility for companies from India to bid on contracts for the maintenance, repair, or overhaul" of DOD equipment located outside the US.

https://www.hindustantimes.com/india-news/us-senate-urges-pentagon-to-deepen-security-cooperation-with-india-in-defense-and-technology-fields-101689135321822.html

### Modi's U.S. Visit Paves Way for Robust Deals and Strategic Partnership

Huma Siddiqui, Financial Express, July 21, 2023

Prime Minister Narendra Modi's recent State Visit to the US has been a resounding success, garnering significant attention as India holds the G20 presidency amidst the ongoing Russia-Ukraine war, impacting global food and energy security.

Dr Mukesh Aghi, President & CEO of the US-India Strategic Partnership Forum (USISPF), shared his insights with Huma Siddiqui on the visit and the inked deals, shedding light on the visit's significance and the robust agreements achieved in critical and emerging technologies and defense.

#### How successful do you think the visit was in acknowledging the recent diplomatic issues?

The visit was symbolic and only the third state visit for an Indian leader, the last being in 2009 and the third state visit hosted by the Biden administration. So, this clearly reflected the importance of India and India's place in the world for the Biden Administration.

But beyond the ceremonial festivities, the visit was extremely successful and elevated the strategic partnership to the next level with robust agreements in critical and emerging technologies and defense particularly.

### The US wants India to be weaned away from Russia and has been offering all sorts of technologies to India. Will it really happen without any riders?

The priority is to secure a clean energy future and one where American investment in India's clean energy potential will wean India of needing Russian energy imports. Presently India imports oil from Russia factoring in India's energy security priorities. But gradual steps are being made and the Strategic Clean Energy Partnership between India and the U.S.

### How dependent should India be on the US, even though most of the agreements signed have not yet become fully operational?

India is the fastest growing economy and now the largest populous nation on the planet. India needs to add 12-15 million jobs a year in order to remain competitive and add new jobs to those joining the workforce. Services alone can't solve this and need to focus on manufacturing sectors as well. For this to happen, the bulk of the investments need to come in from American companies and investors.

#### The India-US Trade Agreement has not happened. Your views?

The State Visit highlighted important steps in trade resolutions as the U.S. and India agreed to resolve six separate trade disputes at the World Trade Organisation, including President Trump's previous tariffs on steel and aluminium and India's retaliatory duties. While there is no

existing trade agreement, the signs are still auspicious as India and the US have restarted the Trade Policy Forum (TPF) to solve existing issues. One needs to understand that diplomatic ties are not concurrent with trade relations.

https://www.financialexpress.com/business/defense-exclusive-us-india-strategic-partnership-forum-ceo-says-modis-us-visit-paves-way-for-robust-deals-and-strategic-partnership-3180844/

## L&T signs Master Ship Repair Agreement with U.S. Navy

The Hindu Business Line, July 12, 2023

Larsen & Toubro has signed the Master Shipyard Repair Agreement with the US Navy to further strengthen the partnership between the two countries in the defense sector. L&T's Kattupalli Shipyard, near Chennai, a major node in the Southern Defense Corridor, has been undertaking voyage repairs of the Military Sealift Command vessels, the firm said in a statement.

"This MSRA is yet another milestone in our ever-expanding US-India partnership. This historic agreement is a direct outcome of the 2022 US-India 2+2 Ministerial Dialogue and demonstrates US commitment to utilise repair facilities on a regular basis at the L&T shipyard in Kattupalli.

This agreement will serve to strengthen our two nations' strategic partnership and contribute to a free and open Indo-Pacific," US Consul General in Chennai Judith Ravin was quoted as saying in the statement.

USNS Salvor ship was received at Kattupalli Shipyard for voyage repairs. This is the third US ship coming to the shipyard for voyage repairs. Earlier, voyage repairs of Marine Sealift Command (MSC) Fleet Support Ships -- USNS Charles Drew and USNS Matthew Perry -- were undertaken and completed on time by the company, it added.L&T's Kattupalli Shipyard is one of the modern shipbuilding and ship repair facilities in this part of the world, the statement said.

https://www.thehindubusinessline.com/companies/lt-signs-master-ship-repair-agreement-with-us-navy/article67070313.ece

## The U.S. and India's Non-Aligned Alliance

Shashi Tharoor, Project Syndicate, July 05, 2023

Indian Prime Minister Narendra Modi is riding high. His triumphant visit to Washington, which featured a state dinner at the White House and a rare second address to a joint session of Congress, appears to mark a new chapter in the relationship between India and the U.S. following a quarter century of ups and downs.

Modi's visit was preceded by several major breakthroughs, including the recent US-India initiative on Critical and Emerging Technology, which seeks to foster bilateral collaboration on technologies such as artificial intelligence, biotechnology, quantum computing, 5G, and cybersecurity. US semiconductor manufacturer Micron Technology recently announced that it plans to invest US\$825mn in a new chip assembly and testing facility in India.

The US and India have also unveiled several defense agreements, including a deal for India to acquire 30 MQ-9B Predator armed drones from the US and a separate plan to produce F414 fighter jet engines for the Indian Air Force jointly with General Electric. These deals, which have not been previously extended to a country that is not formally an ally, highlight the intensifying bilateral defense partnership.

This shift has been partly driven by China's geopolitical assertiveness under President Xi Jinping, which represents a radical departure from his predecessors' adherence to the doctrine of China's "peaceful rise." The US clearly views China as its primary adversary and has been actively pursuing regional alliances to counter its growing influence.

India has traditionally been reluctant to pick sides, but China's repeated encroachments on its territory across the disputed Himalayan border, and its killing of 20 Indian soldiers in June 2020, have rendered neutrality untenable. While India maintains its independent posture, the recent G7 summit in Hiroshima notably included the second-ever in-person Quad summit between Biden, Modi, Japanese Prime Minister Fumio Kishida, and Australian Prime Minister Anthony Albanese. The message to China is clear. While India maintains that it is not a US ally but a partner, it has increasingly aligned itself with the democratic West in its escalating rivalry with communist China.

In the past, it was often said that Pakistan was a US ally but not a friend, while India was a friend but not an ally. With the US out of Afghanistan, Pakistan has become a less significant ally. But while India still isn't one, owing to its insistence on strategic autonomy, even US sceptics who say the two countries' interests are more aligned than their values concede that those interests warrant closer cooperation. Modi's visit was one more indication of how close that cooperation has become.

https://www.project-syndicate.org/commentary/us-india-relations-remarkable-transformationby-shashi-tharoor-2023-07

# Initiative Begins to Prepare Defense Start-ups to Expand to U.S. Markets

The Hindu, August 29, 2023

INDUS-X (India-U.S. Defense Acceleration Ecosystem), an initiative to build a defense innovation bridge by Innovations for Defense Excellence (iDEX) of the Ministry of Defense, and the US Department of Defense (DoD), began an exercise to begin the Indo-US CrossLinx accelerator programme to prepare defense start-ups to expand to the US markets, on Monday. IIT-Hyderabad's iTIC Incubator - supported by the Department of Science and Technology (DST), and H4XLabs organised a workshop for the same at the launch event.

Once the start-ups are ready, they would embark on a trip to the US for seven to 10 days to engage with government officials, investors, defense contractors, and stakeholders.

The launch event included a series of sessions on the US defense landscape by experts from diverse domains. The event saw the participation of various defense start-ups and MSMEs – medium, small-scale, and micro-enterprises from across India.

IDex programme director Capt. Roy Joseph talked about opportunities for start-ups under the Indo-US collaboration agenda. Since its inception in 2015, iTIC supported 130+ start-ups through pre-incubation, incubation, and acceleration programmes and has directly sanctioned more than ₹8 crore to start-ups. So far, iTIC start-ups have generated over ₹1,200 crore of revenues and created 1,000 plus jobs.

Other dignitaries present were D. Alan Johnson (Lt Col- U.S. Air Force, Director-Defense Cooperation in Armaments DCA, U.S. Embassy, New Delhi), Jonathan Mangrum (Policy Advisor for South Asia, OSD - OUSD Policy- Indo Pacific Security Affairs), ecosystem partner Erik Azulay (Director and Founder-ACIR), Capt. Roy Joseph, Programme Director, iDEX) and team from iDEX.

https://www.thehindu.com/news/national/tamil-nadu/us-india-maritime-patrol-and-reconnaissance-training-at-ins-rajali-in-arakkonam-draws-to-a-close/article67250939.ece

# Boeing Starts Production of Indian Army's Apache Choppers

The Hindu, August 16, 2023

American aerospace major Boeing on August 16 said it is starting production of the Apache choppers to be delivered to the Indian Army. The company will deliver a total of six AH-64E Apaches to the Indian Army. The AH-64 Apache is one of the world's most advanced multi-role combat helicopters and is flown by the U.S. Army. "Boeing is starting production of the Indian Army's Apaches in Mesa, Arizona," the company said.

Earlier this year, Tata Boeing Aerospace Limited (TBAL) delivered the Indian Army's first AH-64 Apache fuselage from its advanced facility in Hyderabad.

In 2020, Boeing completed delivery of 22 E-model Apaches to the Indian Air Force and signed a contract to produce six AH-64Es for the Indian Army. The delivery of the Indian Army's Apaches is scheduled for 2024.

The IAF had signed a multi-billion-dollar contract with the U.S. government and Boeing Ltd in September 2015 for 22 Apache helicopters. Additionally, the Defense Ministry in 2017 approved the procurement of six Apache helicopters along with weapons systems from Boeing at a cost of ₹4,168 crore for the Army.

https://www.thehindu.com/news/national/boeing-starts-production-of-indian-armys-apachechoppers/article67201003.ece

# Defense Ministry Inks US\$2.3bn Contract with HSL For 5 Ships

Wion, August 26, 2023

The ministry said the project would be a major boost towards achieving the goal of self-reliance in defense manufacturing as the ships will be indigenously designed and constructed by HSL, Visakhapatnam. The Defense Ministry sealed a Rs 19,000 crore deal with Hindustan Shipyard Ltd (HSL) for acquisition of five fleet support ships for the Indian Navy. The ships of 44,000 tonnes category will be the first of its kind to be built in India by an Indian shipyard, officials said.

The ministry said the project would be a major boost towards achieving the goal of self-reliance in defense manufacturing as the ships will be indigenously designed and constructed by HSL, Visakhapatnam. "The Defense Ministry signed a contract with HSL on August 25, Visakhapatnam for acquisition of five fleet support ships (FSS) for the Indian Navy at an overall cost of approximately Rs 19,000 crore," it said.

https://www.wionews.com/india-news/defense-ministry-inks-usd-23bn-contract-with-hsl-for-5-ships-629500

## Will U.S., India Pact Boost Defense Innovation?

Josh Luckenbaugh, National Defense Magazine, September 01, 2023

Driven in part by the need to pull powerful countries from the orbit of its peer competitors, the U.S. has entered a new strategic technology partnership with India, but regulatory hurdles could limit the near-term impact of the agreement.

Announced on June 21 during a visit to the U.S. by Indian Prime Minister Narendra Modi, the India-U.S. Defense Acceleration Ecosystem, or INDUS-X, is meant to "vitalise our defense industrial cooperation.

The Defense Department two weeks before the announcement released a "Roadmap for U.S.-India Defense Industrial Cooperation," which identified several "priority areas with [the] most cooperation potential," including: intelligence, surveillance, and reconnaissance; undersea domain awareness; air combat and support, including aero engines; munitions systems; and mobility.

To ensure successful collaboration, a senior advisor group will assess progress and make recommendations to the defense establishments and other stakeholders, the Defense Department fact sheet said. The U.S. Institute of Peace, Carnegie India, the U.S.-India Business Council, the U.S.-India Strategic Partnership Forum and the Society of Indian Defense Manufacturers "will convene follow-on programming to drive implementation of the collaboration agenda and identify barriers to implementation" for the senior advisor group's consideration.

Identifying potential roadblocks is the likely first step for INDUS-X partners "before we see some big successes" on the technology and innovation front, Bhandari said. One potential stumbling block — and an area where both nations' governments can play a key role — is policy. https://www.nationaldefensemagazine.org/articles/2023/9/1/will-us-india-pact-boost-defense-innovation

## Biden-Modi Talks: Tech, Democracy, Defense Cooperation

The Times of India, September 08, 2023

Prime Minister Narendra Modi and US President Joe Biden held a bilateral meeting in New Delhi and reaffirmed the enduring and close partnership between India and US. This meeting underscored the significance of the India-US Strategic Partnership, with both leaders committing to advancing collaboration in various dimensions of their multifaceted global agenda. Topics that were discussed during the meeting:

#### G20 and Multilateral Cooperation

President Biden praised India's leadership in the G20, noting its vital role in delivering important outcomes. Both leaders reiterated their commitment to the G20 and expressed confidence in the upcoming G20 Leaders' Summit in New Delhi.

### Quad and Indo-Pacific

PM Modi and President Biden reaffirmed the importance of the Quad in supporting a free, open, inclusive, and resilient Indo-Pacific region. They looked forward to the next Quad Leaders' Summit, to be hosted by India in 2024. India welcomed the US decision to co-lead the Indo-Pacific Oceans Initiative Pillar on Trade Connectivity and Maritime Transport, following its decision to join IPOI in June 2023.

#### **UN Reform and Security Council**

Both leaders shared the view that global governance must be more inclusive and representative. President Biden reaffirmed his support for a reformed UN Security Council with India as a permanent member.

#### **Technology Cooperation**

PM Modi and President Biden highlighted the defining role of technology in deepening their strategic partnership. They commended the ongoing efforts through the India-US iCET to build open, secure, and resilient technology ecosystems. A midterm review of iCET is scheduled for September 2023, with the next annual review planned for early 2024, co-led by the National Security Advisors of both countries.

#### **Space Cooperation**

President Biden congratulated India on Chandrayaan-3's historic landing at the Moon's south polar region and the successful launch of India's first solar mission, Aditya-L1. The leaders announced efforts toward the establishment of a Working Group for commercial space collaboration.

### Semiconductor Supply Chains and Telecommunications

The leaders reiterated their support for building resilient semiconductor supply chains. US companies, including Microchip Technology, Inc., and Advanced Micro Devices, are making substantial investments in India. They welcomed the ongoing implementation of announcements made by US companies, such as Micron, LAM Research, and Applied Materials, in June 2023. In the field of telecommunications, they welcomed the signing of a Memorandum of Understanding between Bharat 6G Alliance and Next G Alliance.

### Quantum Technology and Biotechnology Collaboration

Both nations reaffirmed their commitment to working together in the quantum domain, with India's S.N. Bose National Centre for Basic Sciences joining the Quantum Economic Development Consortium. They also highlighted collaborations in biotechnology, facilitated by an Implementation Arrangement between US NSF and India's Department of Biotechnology.

#### **Defense and Aerospace Cooperation**

Prime Minister Modi and President Biden pledged to deepen defense and aerospace cooperation, particularly in new and emerging domains like space and AI. They applauded the commencement of negotiations for a commercial agreement between GE Aerospace and Hindustan Aeronautical Limited (HAL) to manufacture GE F-414 jet engines in India.

### Renewable Energy and Nuclear Cooperation

The leaders highlighted their commitment to renewable energy and efforts to expand electric mobility in India.

Collaboration in nuclear energy and support for India's membership in the Nuclear Suppliers Group were also reaffirmed. The Renewable Energy Technologies Action Platform (RE-TAP) was established to promote renewable energy technologies.

### **Trade and Economic Cooperation**

They applauded the settlement of outstanding WTO disputes between India and the U.S., marking significant progress in trade relations. An ambitious "Innovation Handshake" agenda under the India-US Commercial Dialogue aims to connect start-ups, venture capital firms, and government officials in both countries' innovation ecosystems.

#### Healthcare and Education Collaboration

Collaboration in healthcare, including cancer research and care, was discussed, with the launch of the India-US Cancer Dialogue and the US-India Health Dialogue on the horizon. They also welcomed educational collaborations, such as the establishment of the India-US Global Challenges Institute.

https://timesofindia.indiatimes.com/india/us-president-biden-pm-modi-discussed-technologydemocracy-and-defense-cooperation-during-bilateraltalks/articleshow/103517377.cms?from=mdr

## INDUS-X: Indo-U.S. Defense Tech Collaboration

Smruti Deshpande, The Print, September 09, 2023

At the bilateral meeting held a day ahead of the G20 meet, Prime Minister Narendra Modi and US President Joe Biden discussed the India-U.S. Defense Acceleration Ecosystem (INDUS-X). Coinciding with Prime Minister Modi's state visit to the US, the INDUS X was launched at an event in Washington DC in June. It was co-organised by Innovations for Defense Excellence (iDEX), Ministry of Defense, and US Department of Defense and hosted by US-India Business Council (USIBC).

The purpose of the INDUS X launch was co-development and co-production of advanced technologies by Indian and American start-ups with the involvement of both the governments along with businesses, and academic institutions for strategic technology partnership and defense industrial cooperation.

https://theprint.in/defense/indus-x-india-us-project-aimed-at-greater-collaboration-on-defense-tech-lauded-at-modi-biden-meet/1754128/

## India to Purchase 31 MQ-9B Drones from the U.S.

Hindustan Times, November 08, 2023

The proposed deal found mention in the June 22 joint statement issued by the US and India during Prime Minister Narendra Modi's first state visit to the US. India has initiated the process to purchase hi-tech drones from the US and issued a letter of request to Washington for 31 MQ-9B remotely piloted aircraft systems, officials familiar with the matter said on condition of anonymity.

The drone deal will involve technology transfer and help bridge the technological gaps faced by the Defense Research and Development Organisation in developing such systems indigenously. The acquisition of the drones will be under the foreign military sales programme — Washington's government-to-government method of selling US-built platforms.

India's defense acquisitions council, the country's apex weapons procurement body, accorded its acceptance of necessity to buy the General Atomics high altitude long endurance drones. The Indian Navy will get 15 drones, and eight each will be allocated to the Indian Army and the Indian Air Force. General Atomics has offered the drones to India for US\$3.07bn, subject to negotiations, as previously reported by HT.

India will negotiate a higher element of technology transfer. It is looking at doubling the element of technology transfer that is currently on offer, from 8-9 to 15 to 20 per cent. To be assembled in India, the versatile platform will have the capability to strike targets with its on-board weapons, it will be used for intelligence, surveillance, and reconnaissance (ISR); and its other roles include electronic warfare, defensive counter air and airborne early warning.

https://www.hindustantimes.com/india-news/india-initiates-process-to-purchase-31-mq-9b-drones-from-the-us-101694148571608.html

# U.S.-India Forge Innovation Alliance for Defense Advancements in Virtual Summit

The Financial Express, September 14, 2023

The US Department of Defense (DoD) and the Indian Ministry of Defense (MoD) recently came together for an important virtual meeting, marking a pivotal moment in the India-US Defense Acceleration Ecosystem (INDUS-X) Senior Advisory Group's collaboration.

At this meeting, the discussion was led by Doug Beck, Director of the Defense Innovation Unit (DIU), and Lindsey Ford, Deputy Assistant Secretary for South and Southeast Asia. They cochaired the event alongside Anurag Bajpai, Joint Secretary (Defense Industries Promotion) of the Indian MoD. One exciting development is the announcement of the first two joint challenges by DIU and iDEX. These challenges concentrate on enhancing undersea communication and bolstering maritime intelligence, surveillance, and reconnaissance capabilities.

Inclusivity is a key theme of INDUS-X, and the Senior Advisory Group is keen about involving non-governmental stakeholders. On August 25, Hacking4Allies and IIT Hyderabad organised a programme to empower 50 Indian start-ups, helping them with commercialisation, talent acquisition, and expansion. Just a few days later, on August 29, Pennsylvania State University and IIT Kanpur united US and Indian academics, government officials, and industry representatives in a virtual gathering. Private investors are also making strides in supporting US and Indian defense and dual-use technology start-ups.

In conclusion, the recent virtual meeting of INDUS-X's Senior Advisory Group signifies a strong commitment to fostering innovation and collaboration between the U.S. and India in the realm of defense technology. The announced challenges and initiatives demonstrate a shared determination to address common defense challenges, ultimately strengthening the security of the Indo-Pacific region.

https://www.financialexpress.com/business/defense-us-and-india-forge-innovation-alliance-for-defense-advancements-in-virtual-summit-3243966/

# U.S.-India Challenge for Startups to Fix Underwater Comms Issues

Georgina DiNardo, Insidedefense.com, October 04, 2023

At the India-U.S. Defense Acceleration Ecosystem Advisory Group meeting in early September, the first two INDUS-X challenges were announced, with the second one, focusing on addressing issues related to underwater communication. The second challenge, called the iDEX Underwater Communication Challenge, aims to find new hardware and software technologies with the ability to support high-bandwidth underwater communication and will provide the winner with \$150,000.

The first challenge, the iDEX Maritime Intelligence, Surveillance and Recognizance Challenge, intends to identify tracking and oil spill detection technologies, also with a total award amount of \$150,000. Both challenges are open to U.S.-owned and operated startups at the early-mid stage or are considered non-traditional until Nov. 10, according to the Defense Innovation Unit.

The first virtual meeting of the INDUS-X Senior Advisory Group between the Defense.

https://insidedefense.com/insider/us-india-challenge-launched-startups-fix-underwater-commsissues

## INDUS-X Maritime ISR and Underwater Communications Challenges Launched

Defense Innovation Unit, October 04, 2023

The first two INDUS-X challenges, initially announced in early September at the India-U.S. Defense Acceleration Ecosystem (INDUS-X) Advisory Group meeting, are now live. The first challenge is the iDEX Maritime Intelligence, Surveillance, and Recognisance (ISR) Challenge. This challenge seeks oil spill detection and tracking technologies. The total prize purse is US\$150,000.

The second challenge launching today is the iDEX Underwater Communication Challenge. This challenge seeks new hardware and software technologies that can support high-bandwidth underwater communication. The total prize purse is \$150,000.

On September 5, 2023, The U.S. Department of Defense (DoD) and the Indian Ministry of Defense (MoD) held the first virtual meeting of the INDUS-X Senior Advisory Group.

DIU and iDEX announced topics for the first two joint challenges, focused on undersea communication and maritime intelligence, surveillance, and reconnaissance. Aligned with the Roadmap for U.S.-India Defense Industrial Cooperation, the challenges provide for start-ups in both countries to develop technological solutions for shared defense challenges, culminating in financial awards for the most promising technology along with potential procurement opportunities. DIU and iDEX will open the challenges to start-ups later this month.

https://www.diu.mil/latest/idex-maritime-isr-and-underwater-communications-challenges-launched

## Upcoming India-U.S. 2+2 Ministerial Talks

Huma Siddqui, The Financial Express, October 23, 2023

Amidst the ongoing conflicts in Israel, Hamas, and the Russia-Ukraine war, the stage is being set for the fifth India-US 2+2 Ministerial Level Talks in New Delhi, scheduled for the first half of November. According to sources, the US Secretary of State Antony J Blinken and Secretary of Defense Lloyd Austin, both are expected to visit India.

Their Indian counterparts, Defense Minister Rajnath Singh and External Affairs Minister S Jaishankar, will host them for discussions. The central focus of these talks is to address the ongoing conflicts and regional security concerns while strengthening the strategic ties between India and the U.S.

### **Defense Cooperation**

Defense hardware cooperation is a substantial part of these talks, given India's significant purchases of American weaponry, including over US\$3bn worth of Predator drones and related systems from General Atomics. This not only strengthens India's defense capabilities but also underscores the deepening partnership between the two nations in the defense sector.

Recently, India and the US made commitments to expedite negotiations on the Security of Supply Arrangement and Reciprocal Defense Procurement agreements, further solidifying their defense ties and cooperation in this critical sector.

The agenda of these talks also involves identifying opportunities to enhance interoperability and logistics cooperation. This includes joint maritime engagements in the Indian Ocean region and expanded collaboration in the domains of space and cyber security. These talks hold immense significance, not only in bolstering India-US relations but also in addressing complex regional and global security challenges.

Observers from around the world will closely watch the outcomes of these discussions as India and the U.S. navigate the intricate web of international diplomacy and geopolitics.

https://www.financialexpress.com/business/defense-upcoming-india-us-22-ministerial-talks-addressing-ongoing-conflicts-and-strengthening-bilateral-ties-3284065/

# India and U.S. Push Defense Deals Amid 'Global Challenges'

YP Rajesh and Shivangi Acharya, Reuters, November 10, 2023

India and the U.S. announced progress on key defense deals and said they would expand their growing partnership in the face of geopolitical challenges as their top diplomats and senior ministers met. U.S. Secretary of State Antony Blinken and Defense Secretary Lloyd Austin met Indian Foreign Minister Subrahmanyam Jaishankar and Defense Minister Rajnath Singh in New Delhi as part of their annual "2+2 Dialogue", focused on the Indo-Pacific region.

Indian Defense Secretary Giridhar Aramane said that deal between the aerospace unit of General Electric and India's state-owned Hindustan Aeronautics (HIAE.NS) was on track. A more than US\$3bn deal for India to buy 31 armed drones made by General Atomics is also being processed and India is waiting for the company to get U.S. government clearances for the next steps, Aramane said.

Washington had offered several infantry combat vehicle systems and New Delhi has expressed interest, he added without giving details. Indian media reports have said the Pentagon has offered the Stryker family of eight-wheeled armoured fighting vehicles produced by General Dynamic Land Systems (GD.N) and that New Delhi is interested in jointly manufacturing them in India. Before the talks, Defense Secretary Austin said it was more important than ever that the world's two largest democracies exchange views and find common goals "in the face of urgent global challenges".

https://www.reuters.com/world/india-us-begin-talks-boost-partnership-amid-global-challenges-2023-11-10/

### India and U.S. to Co-Produce Armoured Vehicle

The Indian Express, November 10, 2023

India and the US will co-produce an infantry combat vehicle as part of defense industrial cooperation, US Defense Secretary Lloyd Austin said on Friday. He said this while speaking to a small group of journalists after the '2+2' defense and foreign ministerial dialogue in Delhi.

Besides Austin, the US delegation comprised Secretary of State Antony Blinken. The Indian side was headed by External Affairs Minister S Jaishankar and Defense Minister Rajnath Singh. "We are working together to co-produce an armoured vehicle and that is extremely important," Austin said.

At the same time, he said the US-India relationship is not just based on challenges that China represents but it is based on shared values between the two countries. Asked about the project under which India will procure 31 MQ-9B drones from the US, Austin said it will be announced at the right time.

https://indianexpress.com/article/india/india-and-us-to-co-produce-armoured-vehicle-us-defense-secretary-austin-9021883/

## U.S.-India Defense Partnership at an All-Time High

J Gupta, Smart Governance, November 22, 2023

The U.S.-India Defense Partnership is functioning at an all-time high, said Rear Admiral Michael Baker, Senior Defense Official and Defense Attaché at the U.S. Embassy, New Delhi.

The Rear Admiral was speaking at a day-long workshop titled "Defense News Conclave: Stories of the U.S.-India Defense and Security Partnership," organised recently by the U.S. Department of State through the U.S. Consulate General Kolkata and CUTS International. Arguing that the U.S.-India defense partnership is important for establishing peace and stability in the Indo-Pacific Region, the U.S. senior defense official further said that this partnership has various opportunities, such as ammunition, aircraft, underwater awareness technology, and cyber security.

He added that moving ahead, the U.S.-India strategic partnership is following a three-prong strategy, viz., defense-industrial cooperation, contemporary operational partnership, and future emerging domains for investment and partnership.

Former Flag Officer Commanding-in-Chief of the Western Naval Command, Vice Admiral Girish Luthra (Retd.), stated that the US-India Defense Partnership is multifaceted, multisectoral, and multidomain. In his opening remarks, Greg Pardo, Spokesperson, US Consulate General Mumbai, stated that the US regards India as a key partner in the Indo-Pacific and vice versa.

Former Deputy Chief of Army Staff Lt. Gen. Subrata Saha (Retd.) stated that we are now entering an era of technological manoeuvres over force manoeuvres in future wars. The innovative use of dual-use technologies is increasing in gray zone and non-contact warfare. Lt. Gen. Sanjay Verma, former Director General of Defense and Consultant at DRDO, emphasised India's thriving private industry and its role in software, aiming to strengthen US-India cooperation.

According to KP Vijayalakshmi, Professor and Head of the Department of Geopolitics and International Relations at Manipal University, interdependence and interconnectedness are the foundations of US-India naval collaboration. The best thing is the naval collaboration between the US and Indian Navy. Cmde. Srikant B. Kesnur (Retd.), former director of the Maritime Warfare Centre in Mumbai, stated that India and the U.S. could improve their maritime cooperation in some areas. The first is agreement and exchanges; the second is operational interaction; and this is where deliverables have become deliveries.

https://www.smartgovernance.in/u-s-india-defense-partnership-at-an-all-time-high/

# Indo-U.S. Special Forces Wrap up "Vajra Prahar" Joint Military Exercise

The Economic Times, December

12, 2023

In a significant display of military collaboration and shared expertise, the 14th edition of the Indo-US Joint Special Forces exercise, "Vajra Prahar 2023," concluded successfully at the Joint Training Node in Umroi, Meghalaya.

The conclusion of this joint military endeavour was marked by a congratulatory message from the US Ambassador to India, Eric Garcetti, expressing gratitude to both the U.S. Army and the Indian Army Special Forces for their commendable efforts.

Ambassador Garcetti emphasised the pivotal role of such bilateral joint military exercises in not only elevating the US-India defense partnership to new heights but also reinforcing interoperability through the exchange of top-notch practices.

The joint exercise "Vajra Prahar 2023" commenced at the Joint Training Node, Umroi, in November earlier this year, according to the Ministry of Defense. The US contingent was represented by personnel from the 1st Special Forces Group (SFG) of the US Special Forces.

Exercise Vajra Prahar is a joint exercise conducted between the Indian Army and US Army Special Forces, the ministry said in a press release. It aims at sharing best practises and experiences in areas such as joint mission planning and operational tactics.

The first edition was conducted in 2010 in India and the 13<sup>th</sup> edition of the Indo-US Joint Special Forces exercise was conducted at the Special Forces Training School (SFTS), Bakloh (HP). The current edition is being conducted in Umroi Cantonment, Meghalaya, from Exercise Vajra Prahar has evolved as a mechanism to exchange ideas and share best practices between the Special Forces of both nations.

https://economictimes.indiatimes.com/news/defense/meghalaya-indo-us-special-forces-wrap-up-vajra-prahar-joint-military-exercise/articleshow/105934973.cms?from=mdr

# Defense Ministry Clears Army's Case for 73,000 More Assault Rifles From U.S.

Rajat Pandit, The Times of India, December 13, 2023

The defense ministry has now finally cleared the Army's proposal for the import of another 73,000 SiG Sauer assault rifles from the US, which will add to the 72,400 such guns bought earlier for frontline troops, amid the continuing delay in the manufacture of Russian AK-203 Kalashnikov rifles in India.

The move comes at a time when the military confrontation with China in eastern Ladakh has entered the fourth successive winter now, and the much-awaited deliveries of the over six lakh AK-203 Kalashnikov rifles from the Korwa ordnance factory in Amethi district of UP are yet to begin.

The delay in the project had led to the import the first lot of 72,400 SiG-716 assault rifles (66,400 for the Army, 4,000 IAF and 2,000 Navy) under a Rs 647 crore contract inked with US firm SiG Sauer under the fast-track procurement route in February 2019.

While the SiG-716 rifles will meet the immediate operational requirements of frontline troops, the AK-203 guns – with an effective range of 300-metre -- will cater to the overall needs of the 12-lakh strong Army, as also the IAF and the Navy. The Ak-203 rifles are also part of the Army's long-delayed 'future infantry soldier as a system' (F-INSAS), which is aimed at equipping soldiers with three primary subsystems.

The first is the AK-203 assault rifles, with day and night holographic and reflex sights mounted on the weapons as well as helmets to enable a 360-degree visibility and accuracy in operational conditions. The second subsystem is protection through a specially-designed helmet and bullet-proof jacket, while the third consists of a communication and surveillance system. "F-INSAS is capable of being upgraded further by incorporating real-time data connectivity," an officer said. https://timesofindia.indiatimes.com/india/defense-ministry-clears-armys-case-for-73000-more-assault-rifles-from-us/articleshowprint/105941970.cms?val=3728

## Tata-Boeing India Facility Hits New Milestone

Sidharth MP, WION, December 21, 2023

The Tata Boeing Aerospace Limited (TBAL) facility in the southern Indian city of Hyderabad reached a major milestone by successfully delivering the 250th made-in-India fuselage for the AH-64 Apache attack helicopter. The US Army and Indian Air Force are among the users of the helicopter with the latter having placed orders for six of them already.

The defense-aerospace firm said that this latest milestone reflects TBAL's continuous dedication to bolstering India's defense capabilities and advancing the nation's indigenous manufacturing prowess.

At its 14,000 sqm facility, the joint venture firm between Boeing and Tata Advanced Systems Limited (TASL), employs over 900 engineers and technicians, leveraging cutting-edge robotics, automation, and advanced aerospace concepts in its manufacturing processes.

According to the firm, over 90 per cent of the parts used in the Apache aerostructure assemblies are manufactured in India through more than 100 Micro, Small, and Medium Enterprises (MSME) suppliers. With the contemporary AH-64E Apache variant in production till at least 2028, Boeing foresees that the aircraft will remain in service as a primary attack helicopter for various nations, into the 2060s.

Boeing delivered the first US Army Apache AH-64A variant in 1984 and thereafter went on to deliver more than 2700 of these choppers for various global customers including Egypt, Greece, India, Indonesia, Japan, Israel, Korea, Kuwait, UAE, UK, Qatar and Saudi Arabia among others.

https://www.wionews.com/india-news/tata-boeing-india-facility-hits-new-milestone-delivers-250th-made-in-india-apache-attack-helicopter-fuselage-672184

## U.S. Bolstering Defense Relations with India

The Hindu, December 13, 2023

The U.S. has made great progress in bolstering its defense relationship with India and the Pentagon is looking forward to making further progress in Military-to-Military ties in 2024.

"In terms of the relationship between the U.S. and India, you know, with obvious focus on the Department of Defense, I think it has been a very good year. I think we've made great progress in terms of further bolstering our relationship and cooperation," Pentagon Press Secretary Pat Ryder told reporters at a news conference in Washington.

"You've heard us talk about things like INDUS-X and working on Defense Cooperation efforts to include in the industrial base as far as developing things like jet engines in India, working collaboratively to produce armoured vehicles in India, the ability of our ships to go to India. Our navy ships to go to India to be repaired," he said in response to a question on December 12.

https://www.thehindu.com/news/international/pentagon-to-further-bolster-ties-with-india-in-2024/article67634129.ece

## 1.2 Opinion Articles

## Indo-U.S. Defense "Make in India" Aviation Initiative

Air Marshal Anil Chopra, India Defense Review, February 24, 2020

The Indo-US strategic cooperation, catalysed by the Indo-US nuclear deal in 2005, has evolved into a multifaceted partnership, particularly in the realm of military relations. Rooted in shared interests of security, stability, counterterrorism, and countering the proliferation of weapons of mass destruction, this collaboration signifies a significant shift in geopolitical dynamics, with India emerging as a pivotal player in the US vision of a stable Indo-Pacific region amid China's ascendance.

Military exercises between the two nations have progressed significantly, reflecting a deepening engagement. From the early days of Exercise 'Shiksha' in 1963 to the contemporary Malabar exercises involving the navies of the US, India, and Japan, these joint drills have facilitated mutual learning and interoperability, enhancing regional security and deterrence capabilities.

The procurement of high-technology American military hardware by India underscores the depth of this partnership. From Lockheed C-130J-30s to Boeing P-8I Poseidon aircraft, India has sought advanced weaponry to modernise its armed forces, aligning with its strategic objectives of enhancing deterrence and operational capabilities.

Boeing and Lockheed Martin, among other US defense giants, have made significant investments in India, fostering indigenous manufacturing and technology transfer. Boeing's joint venture with Tata Advanced Systems Limited and Lockheed Martin's sponsorship of the India Innovation Growth Programme highlight the commitment to bolstering India's defense industrial base and technological capabilities.

India's designation as a Strategic Trade Authorisation-1 (STA-1) country by the US underscores the growing trust and strategic convergence between the two nations. This status not only facilitates the acquisition of sensitive technologies but also signifies India's elevation as a key defense partner on par with traditional US.

http://www.indiandefensereview.com/news/indo-us-defense-make-in-india-aviation-initiative/

# India-U.S. Defense Trade and Technology Initiative is the Silent Enabler

Capt Vikram Mahajan (retd), Financial Express, September 15, 2020

A Standard Operating Procedure (SoP) to harmonise the processes for identification, development, and execution of projects under the DTTI has been formulated and was ratified last year. The Secretary, Department of Defense Production, Raj Kumar and the U.S. Under Secretary of Defense for Acquisitions and Sustainment, Ms Ellen Lord are scheduled to meet for the 10th edition of the DTTI. Let us look at the various vicissitudes that DTTI has undergone in the eight years of its formation.

The DTTI was formed in 2012 between the US and India, to enhance the bilateral relations in defense by venturing into the field of advanced defense research and development and manufacturing. The aim was to strengthen the US and India's defense industrial base by moving away from the traditional "buyer-seller" dynamic toward a more collaborative approach.

This would be through exploring new areas of technological collaboration through codevelopment and co-production. The enabling agreements which have been signed between the two countries are GSOMIA, LEMOA and COMCASA.

The projects under DTTI will be identified as the near-, medium- and long-term projects. The near-term projects included so far are Air-launched Small Unmanned Systems, Light Weight Small Arms Technology and Intelligence-Surveillance-Targeting Or Reconnaissance (ISTAR). The medium-term projects identified are Maritime Domain Awareness Solution and Virtual Augmented Mixed Reality for Aircraft Maintenance or VAMRAM.

The two long term projects are Terrain Shaping Obstacle and Counter-UAS, Rocket, Artillery & Mortar (CURAM) system for the Indian Army. While the progress of these projects was supposed to have been monitored on a monthly basis, the ongoing pandemic is likely to have delayed their timely execution.

https://www.financialexpress.com/business/defense-india-us-defense-trade-and-technology-initiative-is-the-silent-enabler-2083679/

## The India-U.S. Defense Partnership is Deepening

Rakesh Sood, The Hindu, October 30, 2020

The India- U.S. defense partnership received a major boost earlier this week with the visit of U.S. Secretary of State Mike Pompeo and U.S. Defense Secretary Mark Esper for the third round of the 2+2 Dialogue with their Indian counterparts, External Affairs Minister S. Jaishankar and Defense Minister Rajnath Singh.

#### A long road

It has been a long process, with many ups and downs since the first modest steps were taken with the end of the Cold War three decades ago. The 1991 Kicklighter proposals (Lt. Gen. Claude Kicklighter was the Army commander at the U.S. Pacific Command) suggested establishing contacts between the three Services to promote exchanges and explore areas of cooperation.

The end of the Cold War had helped create this opening but the overhang of the nuclear issue continued to cast a shadow on the talks. There was little appreciation of each other's threat perceptions and the differences came to a head when India undertook a series of nuclear tests in 1998. The U.S. responded angrily by imposing a whole slew of economic sanctions and leading the international condemnation campaign.

#### A bipartisan consensus

A bipartisan consensus supporting the steady growth in India-U.S. ties in both New Delhi and Washington has been a critical supporting factor. The biggest push has come from Prime Minister Narendra Modi overcoming the "hesitations of history" and taking forward the relationship, first with a Democratic Obama administration by announcing a Joint Strategic Vision for the Asia-Pacific and Indian Ocean Region in 2015, followed by elevating the India-U.S. Strategic and Commercial Dialogue (launched in 2009 and the first round held in 2010) into the 2+2 dialogue in 2018 with the (Republican) Trump administration reflecting the 'Comprehensive Global Strategic Partnership'.

The signing, last week, of the Basic Exchange and Cooperation Agreement (BECA) providing for the sharing of geospatial data is the last of the foundational agreements.

#### Breaking away from 'labels'

Developing the habit of working together has been a long process of building mutual respect and trust while accepting differences. The U.S. is used to dealing with allies (invariably junior partners in a U.S.-dominated alliance structure) and adversaries. India falls into neither category.

Therefore, engaging as equal partners has been a learning experience for both India and the U.S. Recognising this, the U.S. categorised India as "a Major Defense Partner" in 2016, a position unique to India that was formalised in the National Defense Authorisation Act (2017) authorising the Secretaries of State and Defense to take necessary measures.

https://www.thehindu.com/opinion/lead/the-india-us-defense-partnership-is-deepening/article32975949.ece

## DTTI: Lost in the Acronym Bowl

Javin Aryan, Observer Research Foundation, December 10, 2020

The US-India defense cooperation under the Barak Obama and Donald Trump administrations including the recent 2+2 dialogue have laid the basic foundations of the India-US defense partnership. While a deluge of abbreviations like BECA, COMCASA & LEMOA have consequently highlighted the upward trajectory of the relationship, the DTTI stands out as an exception. The DTTI has failed to meet its objectives of sharing defense technologies and creating partnerships across industries for co-production and co-development.

Created in 2012, under the Obama administration and after persistent efforts of the then US Deputy Secretary of Defense Ashton B. Carter, the initiative aims to enhance cooperation between the two democracies in the defense production and trade sectors by overcoming impediments due to "unique national bureaucratic structures, acquisition models, and budget processes," that is by cutting down, or at the very least, reducing red tape.

Further, India was recognised as a Major Defense Partner (MDP) of the US in June 2016, a designation that is unique to India and has since been codified in US law; and in August 2018 was granted the status of Strategic Trade Authority Tier 1 (STA-1) that allowed advanced, dualuse technology products to be exported to India by US companies.

Near, medium, and long-term projects have reportedly already been identified, though they are yet to leave the first stage of the process. These projects should now be given a much-needed boost, especially in the wake of the new Defense Acquisition Procedure (DAP) 2020 being unveiled. Sections 127 and 128 of DAP 2020 talk about the inclusion of products/equipment co-developed and co-produced between India and a foreign country.

https://www.orfonline.org/expert-speak/defense-technology-trade-initiative-dtti-lost-acronym-bowl/

## A Look at the Indo-Pacific in 2020

Jyotsna Mehra, Stimson Centre, January 13, 2021

On January 3, 2020, as U.S. military strikes killed Iran's Major General Soleimani in Baghdad, the foreign policy world buzzed with speculations about its implications for Washington's nascent Indo-Pacific strategy. There were concerns that the U.S. would be pulled back into the Middle Eastern abyss, deflecting its attention and resources away from an increasingly aggressive China in the Indo-Pacific. Indo-Pacific partnerships appear to have only strengthened over 2020. Unprecedentedly negative views on China and tensions across the Indo-Pacific theatre helped cement these partnerships.

### Widening Schisms: Annus Horribilis, China, and the Indo-Pacific

The gradual policy embrace of the Indo-Pacific concept was aided by a growing convergence in the worldviews of countries such as India, Japan, the U.S., and Australia—chiefly, their shared (but often silent) concerns about China's aggressive rise. The events of 2020 only accentuated these concerns, giving their partnership a powerful fillip.

#### 2020 Woes Strengthen Indo-Pacific bonds

Steady deliberation over recent years has led many regional Indo-Pacific powers, including India, the U.S., Japan, Australia, ASEAN, and France, to articulate their vision of the Indo-Pacific and forge bilateral, minilateral, and multilateral partnerships to advance it. The events of 2020 only proved to be a potent catalyst for a wider acceptance of this strategic framework and greater cooperation within it. Notwithstanding restrictions posed by the pandemic, the Indo-Pacific received a tremendous diplomatic impetus.

Beyond the Quad, 2020 saw the Netherlands and Germany joining France in outlining a European outlook of the region.

#### **Looking Ahead**

There is an ongoing debate about whether the Indo-Pacific strategy will live past a change of administration in the U.S. It remains to be seen how the shift from the Trump administration's "Free and Open" Indo-Pacific strategy to the incoming Biden administration's quest to ensure the region's "Security and Prosperity" materialises. If "security" and "prosperity" with a focus on trade and a reset on decoupling with China discounts the importance of safeguarding a rules-based order, this policy could push Indo-Pacific middle powers to diversify their relationships.

https://southasianvoices.org/a-look-at-the-indo-pacific-in-2020/

# U.S.-India Defense Ties: Rebalancing the Indo-Pacific

Richard M. Rossow, Centre for Strategic and International Studies, February 11, 2021

Defense relations are today the brightest area of U.S.-India cooperation. The perseverance of forward-thinking leaders in both countries in previous years has resulted in a potent mixture of successes on a range of fronts.

Momentum in defense cooperation should easily continue into the Biden administration, with such cooperation becoming "hardwired" given our shared threat assessments in the region and regular, tangible progress in our bilateral ties. However, for the most part, recent successes have positioned the partnership for today; it must evolve and grow to prepare for tomorrow's challenges.

When the "Free and Open Indo-Pacific" was articulated by the Trump administration, India rightly had concerns about the "Indo." Did it mean *India* or *the Indian Ocean*? If the former, it would be received as a dialectal ploy to pressure India to play a larger role in East and Southeast Asian security affairs. If it meant Indian Ocean, it could signify greater U.S. recognition of the rising security challenges India sees in its maritime neighbourhood. The answer is now clear.

India today has greater access to U.S. regional commands looking at the Indian Ocean; India has invited a U.S. representative to the Information Fusion Centre for the Indian Ocean Region (IFC-IOR); and the first-ever tri-service exercise, Tiger Triumph, took place in the Bay of Bengal.

Despite continued progress in our defense relationship, there is much more required. Some areas that can form the basis of a new era of bilateral defense cooperation include: A shared "future threats" assessment in the South Asia/Indian Ocean Region.

Much of our recent work focuses on threats that are on the near horizon. But regional threats to stability may take novel forms, some of which have played out in other geographies. The U.S. and India will certainly face bumps as they look to expand security cooperation. The most obvious is possible U.S. sanctions against India under the Countering America's Adversaries through Sanctions Act (CAATSA). However, India's increasing role as a security provider in the region, paired with quantifiable progress in bilateral ties, creates crucial gravity for continued engagement and progress.

https://www.csis.org/blogs/adapt-advance-refreshed-agenda-us-india-relations/us-india-defenseties-rebalancing-indo

# The Impact of India-U.S. Defense Collaboration Agreements

Adam A. Azim, The Diplomatist, February 12, 2021

#### Introduction

India's elective affinity for defense cooperation with the U.S. began immediately after the end of the Cold War but more specifically after the attacks on 9/11 in the U.S.

### The Evolution and Stumbling Blocks of the India-US Defense Relationship

In 2016, India became a "Major Defense Partner" of the U.S., which falls short of a conventional defense treaty. But in 2018, India gained access to 99 per cent of American military technology, which is a privilege that is not afforded to many nations by the United States. Towards the end of 2020, India also signed an intelligence sharing agreement with the U.S. known as "BECA" (Basic Exchange and Cooperation Agreement).

India also participates with the U.S. in military and naval exercises in the Indo- Pacific region, and India contributes greatly to UN peacekeeping missions around the world but particularly in Africa where there is a large Indian diaspora. But the main reason as to why the defense relationship between the U.S. and India has not penetrated beyond the surface is because the nucleus of the defense relationship between the two sides has not congealed to a significant degree.

#### Conclusion

It is important to emphasise that fear and paranoia is what prompted Western excursions into the East in the past, and this pattern of behavior persists even in an era of American global domination. While there are certain business considerations that go into American engagements with Asian nations, the U.S. is largely an isolated country with a largely independent market that is self-sufficient. Thus, if we are to fully grasp the drivers for American engagements with the world, one must take the psychological factor into full consideration.

https://diplomatist.com/2021/02/12/the-impact-of-india-us-defense-collaboration-agreements/

# Lloyd Austin's India Visit Boosts Defense Cooperation

Arvind Kumar and Monish Tourangbam, The Sunday Guardian, March 27, 2021

The visit of U.S. Defense Secretary to India has reflected a continuity in their approach towards strengthening the existing India-US defense cooperation. There is no denying the fact that the most constant and unstinted growth in the entire gamut of India-US strategic partnership has been seen in the realm of India-US defense cooperation. The way the bilateral cooperation got unfolded is becoming more visible and is evident in both nature and scale of cooperation.

The India-US Defense Framework Agreement has provided a strong base for both nurturing and intensifying the bilateral relationship. The evolving partnership is getting augmented because of the changing dynamics of geopolitics and the shared threat perceptions in the Indo-Pacific region.

Initiatives like the DTTI Standard Operating Procedure (SOP) and the DTTI Industry Collaboration Forum (DICF) are very concrete steps not only in terms of identifying mutually beneficial cooperative projects but also in terms of realising them through defined parameters. defense materials, including in new technologies have been a major focus of deliberations.

The militaries of the two countries, in service-to-service as well as tri-service formats have been carrying out a number of interoperability military exercises, aimed primarily at humanitarian assistance and disaster relief (HADR) missions. The joint Malabar exercise among the Quad members, India, the US, Japan and Australia as well as bilateral India-US Army exercises like the "Yudh Abhyas", focusing on a number of areas of shared interest such as counter terrorism, show a cross-agency collaboration unlike anything seen before.

Moreover, India and the U.S. have been involved in training African partners under the United Nations Peacekeeping framework. Austin's meeting with his Indian counterpart Defense Minister Rajnath Singh reemphasised the primacy accorded to the defense cooperation in the political leadership of both the countries, and it's imperative in the evolving geopolitics of the Indo-Pacific.

https://sundayguardianlive.com/opinion/lloyd-austins-india-visit-boosts-defense-cooperation

# India Now a Major Defense Partner for the U.S. As it Gangs Up on China

John Cherian, The Hindu Frontline, April 11, 2021

The U.S. recognises India as "a major defense partner" as it prepares for a confrontation with China. The special status gives India access to military technology but it comes with a caveat that India must not buy arms from Russia.

Austin's visit to New Delhi, the first by a senior member of the Biden administration, came after he held talks in Japan and South Korea in mid-March soon after the virtual summit of the Quad grouping on March 12 between President Joe Biden and Prime Ministers of India, Australia, and Japan. At the diplomatic and military levels New Delhi and Washington have got into a tighter embrace since President Joe Biden assumed office in the U.S. For all practical purposes, India has now become a de facto military ally of the U.S. as it prepares for a confrontation with a rising China.

#### Focus on China, Russia

India's role is vital to the U.S' long-term game plan in the Asia-Pacific region, given its strategic location and size. Only India, Japan and Australia have aligned openly with the U.S. in the region in the looming confrontation with China. Other close military and political allies of the U.S. such as South Korea have refused to join anti-China groupings such as Quad. Prime Minister Narendra Modi, on the other hand, has described the Quad grouping as "a force of good."

The U.S. Navy has been regularly carrying out provocative "freedom of navigation" operations in territorial waters claimed by China. The joint statement re-affirmed that the Quad strives "for a region that is free, inclusive, healthy, anchored by democratic values, and unconstrained by coercion."

The U.S. justifies its provocative "freedom of navigation" operations in the disputed South China Sea under the laws enshrined in the UNCLOS treaty. Washington wants Beijing to adhere to UNCLOS rules while refusing to do so itself.

Shinzo Abe, the ultra-nationalist Japanese Prime Minister at the time, was one of its biggest backers. President Barack Obama's military pivot to the East announced in 2011 was another reason why the U.S. wanted India to be on board in its plans to prevent the peaceful ascent of China to the status of a superpower.

Before the recent Quad summit, an article in Foreign Policy Journal, authored by James Mattis, a former Defense Secretary in the Trump administration and retired Army General, and two other foreign policy analysts, said that the Quadrilateral Security Dialogue "is the best hope of standing up against China." The article praised Biden for continuing with the hardline anti-China policy of the previous administration.

https://frontline.thehindu.com/world-affairs/ganging-up-on-china-america-gives-india-major-defense-partner-tag/article34289277.ece

## Biden's First 100 Days and India-U.S. Relations

Monish Tourangbam and Priyanjali Simon, The Diplomat, May 11, 2021

Policy mandarins in New Delhi need to pay attention to the shifting domestic and foreign imperatives that are shaping Washington's foreign policy.

From the final days of Bill Clinton's presidency to the single term of Donald Trump and the first 100 days of Joe Biden's administration, the India-U.S. relationship has seen a broad positive arc, withstanding changes of administration in Washington.

The priority accorded to India in Washington's strategic view of the Indo-Pacific remains strong. High-level visits and virtual calls between the two have set the tone of how Washington intends to chart the course for its strategic partnership with New Delhi. The defense and security cooperation that have formed the fundamental plank of the partnership will continue to gather steam just as it did during the Trump administration.

The "2+2" dialogue between the defense and foreign ministries of the two countries, the signing of foundational agreements, and the many joint working groups under the defense cooperation framework are tangible features of this growing partnership.

Under the Biden administration, the India-U.S. partnership perhaps will exhibit a more multifaceted character. While this could mean more avenues for cooperation, this could also foretell a more complex policymaking environment, requiring New Delhi to be more dexterous in terms of protecting and promoting its interests in dealing with Washington.

While the Trump administration showed strong commitments to the defense and security foundations of the India-U.S. partnership in the Indo-Pacific, economic ties fell behind, with Trump prioritising a starkly transactional approach to tariff reciprocity and balance of trade, and losing focus of the strategic imperatives of closer economic ties between the two nations.

The Trump era failed to produce a transformative agreement to advance the India-U.S. economic partnership. The widely expected signing of the mini-trade deal fell through despite work on both ends to resolve pending issues on market access and intellectual property embroilments.

The Biden administration is intent on building a U.S. foreign and domestic policy that caters to the American middle class, restores infrastructure, brings troops back from a two-decade war in Afghanistan, pushes back Chinese and Russian moves against American interests, and creates jobs – all while catering to the ambitious demands of a greener economy. Therefore, policy mandarins in New Delhi will have to think of ways to grasp and deal with the shifting domestic and foreign imperatives that will shape policymaking in Washington.

https://thediplomat.com/2021/05/bidens-first-100-days-and-india-u-s-relations/

# An Agenda for Innovation in the U.S.-India Defense Relationship

Observer Research Foundation and The Asia Group, July 21, 2021

The Asia Group (TAG) and the Observer Research Foundation (ORF) convened a significant roundtable on March 30, 2021, under the TAG-ORF India Innovates platform, uniting key figures from the Indian and US governments, policy community, and industry. The roundtable aimed to assess the current status and future trajectory of the defense relationship between the two nations.

The discussion highlighted the robust foundation of the US-India defense ties, underscored by a bipartisan commitment to strengthening bilateral cooperation. This commitment led to significant achievements, including India's designation as a Major Defense Partner by the US in 2016. Moreover, between 2017 and 2020, the two countries finalised critical foundational agreements like COMCASA and BECA, facilitating the sharing of high-end capabilities and intelligence.

Additionally, defense trade between the two nations surpassed US\$20bn, with sales of advanced military equipment such as the P-8I anti-submarine warfare aircraft and MH-60R naval helicopters. The initiation of the annual "2+2" ministerial dialogue and the revitalisation of the Quadrilateral Security Dialogue further underscored the deepening strategic partnership between the US and India.

However, amidst these achievements, several persistent challenges were identified. The Defense Trade and Technology Initiative (DTTI), while facilitating greater defense technology cooperation, has faced criticism for perceived delays and misunderstandings regarding its purpose.

Additionally, the looming threat of CAATSA sanctions over India's planned purchase of the Russian S-400 air defense system poses a significant obstacle, potentially jeopardising decades of progress in the bilateral relationship. Furthermore, procurement challenges, including export controls, acquisition delays, and budget constraints, continue to impede the advancement of defense technology cooperation between the two countries.

In response to these challenges, roundtable participants outlined four key priorities for the defense relationship: supporting India's role as a defense leader in the Indo-Pacific, enhancing collective capacity to respond to disasters and bolster deterrence, expanding high-end defense technology cooperation, and anchoring the relationship within the broader Indo-Pacific security architecture. Additionally, there was a consensus on the need to expand bilateral defense cooperation into broader multilateral forums, aligning with India's Act East policy framework.

https://www.orfonline.org/research/an-agenda-for-innovation-in-the-u-s-india-defense-relationship/

# Toward a Mature Defense Partnership: Insights from a U.S.-India Strategic Dialogue

Sameer Lalwani, Elizabeth Threlkeld, Christopher Clary, Zoe Jordan, Stimson Centre, November 16, 2021

The Stimson Centre's U.S.-India Strategic Dialogue conducted in 2020-2021 brought together national security experts and practitioners from both countries. The dialogue, spanning 20 hours of group discussions and 40 hours of individual follow-ups, provided insights on competition in the Indo-Pacific, strategic cooperation, and future challenges.

Key Findings and Recommendations:

- U.S. Government Leadership: The U.S.-India relationship requires clear leadership signals and cabinet-level oversight to overcome bureaucratic inertia and advance defense technology cooperation.
- Rhetorical Adjustments: The U.S. should emphasise discreet cooperation with India
  on issues like intelligence, maritime security, and cybersecurity, while respecting
  Indian sovereignty and autonomy.
- Department of Defense Recommendations: Joint intelligence assessment and revitalising defense technology partnership are crucial. The U.S. should assist India in modernising its defense infrastructure, despite budgetary constraints and interservice rivalries.
- U.S. Navy Initiatives: Increased frequency and complexity of naval exercises, along with support for India's maritime security, are highlighted. The focus should be on integration rather than interoperability.
- India's Shift in Strategy: India's defense strategy, while evolving, remains cautious about provoking China. Despite bolder signals post-Ladakh crisis, India hasn't fully embraced deep defense cooperation with the U.S.
- Threat Environment: India's focus on continental encirclement threats diverts attention from the maritime domain. Challenges from Pakistan, China, and instability in Afghanistan are significant concerns.
- India's Tension Between Self-Help and External Help: India seeks the right balance in its relationship with the U.S., aiming for support without compromising its regional primacy.
- India's Model of Cooperation: Expectations from both sides are high, with India seeking active U.S. assistance in defense capabilities and economic support, while the U.S. expects greater military cooperation and political support.
- Technology Cooperation: Focus on small to medium-sized enterprises, civilian technology partnerships, and human capital development are recommended for immediate technology cooperation.
- Defense and Naval Cooperation: Recommendations include advanced naval cooperation, increased interoperability, and a focus on joint assessments of regional threats.

Recommendations for the Department of Defense include engaging in joint intelligence assessments, revitalising defense technology partnerships, focusing on human-centric defense technology partnerships, exploring lower-cost arms transfers, and investing in infrastructure development.

The dialogue underscores the importance of strategic cooperation between the U.S. and India in navigating the challenges posed by China's rise and regional security dynamics, while also highlighting the need for nuanced approaches to address India's concerns and priorities <a href="https://www.stimson.org/2021/toward-a-mature-defense-partnership-insights-from-a-u-s-india-strategic-dialogue/">https://www.stimson.org/2021/toward-a-mature-defense-partnership-insights-from-a-u-s-india-strategic-dialogue/</a>

## S-400s, CAATSA Complicate India-U.S. Ties

Rajeswari Pillai Rajagopalan\*, The Diplomat, November 25, 2021

India appears to be going ahead with the controversial Russian S-400 air defense system. Dmitry Shugaev, director of Russia's Federal Service for Military-Technical Cooperation (FSMTC), recently stated that Russia has started the scheduled delivery of S-400s to India. The delivery of these missiles brings with it the risk of possible sanctions by the U.S. under the 2017 Countering America's Adversaries Through Sanctions Act (CAATSA), which will create considerable difficulties in India-U.S. ties.

India inked the US\$5.43bn deal with Russia for five squadrons of S-400s in October 2018. The delivery of the first squadron of the S-400 system will be completed by the end of the year. In October, the chief of the Indian Air Force (IAF), Air Chief Marshal (ACM) V.R. Chaudhari, commented that the "first regiment should be inducted within this year." The deliveries appear to have been accelerated ahead of Russian President Vladimir Putin's visit to India and summit meeting with Prime Minister Narendra Modi.

After the deliveries are completed, they will be assembled for "acceptance trials" in the presence of Russian officials. Indian press previously reported that IAF officers were already in Russia undergoing training in assembly, operations, and maintenance of the S-400 systems. According to sources, the first squadron is to be deployed in the western sector. Specifically, the S-400s are meant to address India's "inadequate" radar and air defense coverage.

China, of course, already has two squadrons of S-400s that are reportedly deployed at Ngari Gar Gunsa and Nyingchi airbase in Tibet, across Ladakh and Arunachal Pradesh, respectively.

That still leaves the CAATSA problem to be resolved. This is likely to be high on the agenda of the upcoming India-U.S. 2+2 ministerial dialogue in December, having already come up in talks between Indian and U.S. officials. The U.S. has imposed sanctions on other countries for buying S-400s. Both Turkey, a NATO ally, and China have bought the missiles and been sanctioned for it. Unless a presidential waiver is issued, there could be sanctions imposed on India too. In the case of Turkey, in addition to economic penalties, the U.S. cancelled the sale of fifth-generation F-35 fighter aircraft to Ankara.

https://thediplomat.com/2021/11/s-400s-caatsa-complicate-india-us-ties/

## India's Place in the New U.S. Indo Pacific Strategy

Rajeswari Pillai Rajagopalan, The Diplomat, February 22, 2022

Earlier this month, the Biden administration released its new Indo-Pacific Strategy which laid out Washington's objectives in the region, America's role in advancing a free and open Indo-Pacific, building connectivity across the region and beyond, pushing for a prosperous region, augmenting the region's security, and building regional resilience to deal with a range of transnational threats and challenges.

The strategy also prioritises the U.S. "network of security alliances and partnerships" with whom the U.S. intends to "develop and deploy advanced warfighting capabilities." India finds prominent space in this context.

Although the documents detail the logic of U.S. strategy and a number of challenges, mostly emanating from China, there are critics who believe that Biden's Indo-Pacific Strategy is not focused enough on addressing the China threat. Craig Singleton, analyst at the Foundation for Defense of Democracies, said that the strategy has so many similarities with the Obama and Trump efforts on Indo-Pacific that the "US will continue to muddle along in the region. This plan lacks specificity, lacks detail, and there are major gaps in terms of strengthening America's geoeconomic position in Asia."

https://thediplomat.com/2022/02/indias-place-in-the-new-us-indo-pacific-strategy/

## Despite Russia Tensions, U.S. and India Deepen Defense Ties

Joe Gould, Defense News, April 12, 2022

President Joe Biden meets virtually with Indian Prime Minister Narendra Modi in the South Court Auditorium on the White House campus in Washington. Eyeing China, U.S. and India committed to deeper defense ties in space and cyberspace as well as an expansion of their joint military exercises, officials from both countries announced.

U.S. President Joe Biden spoke with Indian Prime Minister Narendra Modi virtually before the "two-plus-two meeting" about managing climate change, fighting COVID-19 and mitigating economic shocks from the invasion of Ukraine. Afterward, Indian officials emphasised their call for an end to the war and New Delhi's provision of humanitarian aid in the conflict.

Few details on the defense agreements were released immediately, but Austin said the U.S. signed an agreement with India on space situational awareness and exchanges between U.S. Space Command and India's Defense Space Agency — and to deepen cyberspace cooperation through training and exercises later this year. "India continues to acquire key U.S. defense platforms, and that is forging important and new ties between our defense industrial bases," Austin said. "We're doing all this because the U.S. supports India as a defense industry leader in the Indo-Pacific and a net provider of security in the region."

Austin said the two sides agreed Monday to "expand the scope and complexity" of Tiger Triumph, a joint tri-service exercise between the two countries. Though the U.S. is India's largest defense exercise partner, the two have only conducted Tiger Triumph once, in 2019.

"We are standing here for a two-plus-two with substantial defense collaboration, which has happened in the last decade, which we have been discussing how to take forward — and that wasn't an option for about 20 years before," Jaishankar said. "The world is changing; the world will keep changing. What we have to do now is to watch it and see how our interests are best advanced."

Amid the tensions over Ukraine, Washington must decide whether it wants to risk a promising relationship to counter China in exchange for short-term gains against Russia, said Richard Rossow, an India scholar at the Center for Strategic and International Studies.

https://www.defensenews.com/pentagon/2022/04/11/despite-russia-tensions-us-and-india-deepen-defense-ties/

### India-U.S. Reaffirm Defense Partnership

Ranjit Kumar, www.spsnavalforces.com, April 15, 2022

The India-U.S. 2+2 ministerial dialogue held in Washington on April 11, 2022, in the backdrop of Russia-Ukraine war, emerged unscathed from the diplomatic fallouts of the conflict. It is significant that in view of the new emerging global order and fast changing geo-politics of the world, India and the U.S. reaffirmed their commitment to further deepen, strengthen and expand the scope and intensity of defense and security cooperation between the world's two largest democracies.

The joint foreign and defense ministerial dialogue, fourth after its inception and first under the Biden administration, provided a good opportunity to deeply review the progress made so far in the bilateral defense cooperation and exchanges, especially after the grant of the status of 'Major Defense Partner' to India in 2016.

It further elevated to the level of Strategic Trade Authorisation Tier-1 status in 2018, which allows India to receive license- free access to a wide range of military and dual use technologies regulated by the department of commerce of U.S.

The US Defense Secretary Lloyd Austin pressed Rajnath Singh to go for the Lockheed Martin F-21 and Boeing's F/A-18 Super Hornet and F-15EX Eagle as part of India's future fighter aircraft acquisitions. The visit of Rajnath Singh to U.S. for the 2+2 dialogue provided an opportunity to both sides to extensively review the entire gamut of bilateral defense cooperation.

Though US side expected India to support the sanctions whole heartedly against Russia and directly condemn Russia for launching a unilateral military attack on Ukraine and taking a stand against Russia during the motions placed on the United Nations table, the US side realised India's compulsions and the historic background to the India-Russia relationship.

After the 2+2 talks, both sides issued a joint statement which extensively referred to the deepening collaboration in science and technology in the U.S.-India Joint Technical Group (JTG), and in evolving new defense domains, including Space, Artificial Intelligence (AI), and Cyber. Austin and Rajnath underscored the importance of cooperation in space and welcomed plans to conduct an inaugural Defense Space Dialogue in 2022.

The U.S. also welcomed India's decision to join the Combined Maritime Forces Task Force as an Associate Partner to expand multilateral cooperation in the Indian Ocean. The Ministers lauded the 2022 Indo-Pacific Military Health Exchange, which India and the U.S. co-hosted to bring together experts from 38 countries to discuss challenges and solutions to military medical issues. Both sides look forward to India's co-hosting of the Indo-Pacific Armies Chiefs Conference and Indo-Pacific Armies Management Seminar in 2023.

Both sides reaffirmed the importance of regular bilateral and multilateral exercises, including the MALABAR exercise with inclusion of Australia, the tri-service TIGER TRIUMPH exercise, the multilateral MILAN naval exercise, the bilateral YUDH ABHYAS and VAJRA PRAHAR Army exercises, the bilateral COPE India air exercise and Indian participation in RED FLAG. https://www.spsnavalforces.com/features/?id=199&h=India-US-reaffirm-defense-partnership

## India and the U.S: Defense Collaboration is Key

Yusuf Unjhawala, The Diplomat, April 19, 2022

The two countries do not have a single project that they can hold up as symbolic of the depth of their defense cooperation. India and the U.S. need a landmark defense deal to strengthen their defense ties, like the 2005 nuclear agreement, which marked a turning point in their overall bilateral relationship. Such a deal will demonstrate to India that the U.S is capable of being a strong ally as Russia has been.

Ten years after the U.S. set up the DTTI with India and conferred Strategic Trade Authorisation-1 status on it, which Washington only does for close allies, the two countries do not have a single project that they can claim symbolises the depth of their defense relationship.

#### Joint Production

An important reason for the DTTI's failure to deliver is the vast economic and defense technology gap between India and the U.S. This is why a game-changing collaborative project has not even been considered. In the case of such projects with Russia, India brought in money and expertise and frequently bailed out struggling Russian defense companies.

One such opportunity, and a missed one at that, was the development of a long-range air defense system. In 2015, India expressed interest in the Russian S-400. Instead of proposing a creative solution, the U.S., which lacks a comparable system, warned India about sanctions under the Countering America's Adversaries Through Sanctions Act (CAATSA). India did not propose joint development either. It has built strong air defense capabilities, including ballistic missile defense. It collaborated with Israel in the creation of the Barak system.

A trilateral project including India, the U.S., and Israel could have been possible. In addition to being a collaborative project, this would have been a watershed moment in bilateral relations.

#### Conclusion

As Secretary of Defense Lloyd Austin noted at therecent 2+2 talks, a strong India-U.S. partnership is a critical building block in a more resilient, regional security architecture. Global challenges have multiplied, and the order that has kept the peace since the Cold War's end is under strain.

With the rise of China, a new Cold War has begun, this time in the Indo-Pacific, where India is a key player. With its global presence and multiple theatres opening up, U.S. power is reaching its limits and becoming increasingly stretched. A strong India that not only balances China but also plays a larger security role in the region will relieve some pressure on the U.S.

https://thediplomat.com/2022/04/india-and-the-us-defense-collaboration-is-key/

# Indo-U.S. Joint Defense Production: Trade to Partnership

Pradeep S Mehta & Purushendra Singh, The South Asian Times, July 25, 2022

By Recently, India's Defense Minister Rajnath Singh invited US companies to carry out joint research, manufacturing, and maintenance of defense equipment in India to achieve "Make in India, Make for the World." He stressed moving from a buyer-seller relationship to partner nations.

The India-U.S. defense relationship is driven by mutual commercial and geopolitical interests based on increasing trust. The 2+2 ministerial dialogue and DTTI have been cornerstones.

India exported US\$1.63bn worth of defense items in 2021-22, a 54.1% increase over the previous year. From an importer, India is becoming an export hub, fulfilling ambitions of being a net arms exporter.

Though designated a "Major Defense Partner" by the US in 2016, India's self-reliance policy doesn't eliminate other players. Many gaps could be filled by American tech and R&D with the Indian diaspora.

The US military-industrial complex is private sector driven. Encouraged by new policies, India's private sector like Kalyani, Mahindra, Tata are looking to co-produce with US firms like General Atomics, Lockheed, Boeing, Raytheon, GE.

Eleven Indian states now have aerospace and defense policies. UP and TN have set up major defense industrial corridors.

"Production possibilities are increasing with trust," said Subimal Bhattacharjee, independent defense consultant.

The DTTI framework needs to move faster for co-production and co-development viability, observed Rick Rossow of CSIS.

The US supports India as a strategic Indo-Pacific partner and security provider. Future technology-intensive warfare makes defense tech cooperation crucial.

The air-launched small drone and iSTAR project, talks to sell Tejas to Malaysia/Egypt, and iCET initiative show deepening cooperation. Under Quad, both are jointly working on ship repair facilities.

Roadblocks include technology transfer concerns, data policies, taxation, offsets, and intellectual property issues.

They could explore directed energy weapons, drone countermeasures, hypersonics. Reports suggest a US\$500mn US military aid package for deeper security ties.

A hybrid Foreign Military Sales route could be effective. India's strategy aims at large-scale production and becoming a net arms exporter.

With focus on innovation, R&D, India positions itself as a serious player. Aircraft carriers, submarines, space offer huge markets amid deteriorating global security.

Low cost is India's proposition. It already supplies UAE with mortars/shells, and the US could be a potential market with upgraded facilities/tech.

Increased trust and responsible manufacturing can enhance their global presence and influence to counter threats like aggression, terrorism, cybercrime while underpinning stability and economic growth.

https://thesouthasiantimes.info/

## India-U.S. Defense Engagement: From Buyer-Seller to Co-Production and Co-Development

Harsh V. Pant and Sameer Patil, ORF, September 02, 2022

On August 29, 2022, the Observer Research Foundation and the American Chamber of Commerce in India co-hosted a closed-door roundtable on the India-US defense partnership in New Delhi. The discussions focused on boosting defense exports from India with a focus on Codevelopment and Co-production. Based on that discussion, the following aspects came to light.

#### Indian defense-industrial capabilities

The Defense Industrial Consultative Forum has deepened the industrial cooperation between the US and India by identifying opportunities to jointly research, develop, and produce warfighting capabilities. With these exchanges, Indian and US defense establishments now recognise mutual priorities.

India has purchased complex systems from the U.S. This equipment has added a significant capability, particularly for the Indian Air Force. It has also immensely benefitted in skills and knowledge-sharing by participating in joint exercises with the US Air Force.

#### Indian defense acquisition

The Indian defense planners are currently contemplating T1–a technical criterion for defense procurement, in addition to L1. While it is easier to evaluate bids on L1, a similar evaluation is not possible for the T1 since different systems on offer have varying technical specifications. However, T1 will not replace L1.

#### Suggestions for advancing cooperation

Indian defense planners note that with the US equipment, there is a certain degree of reliability *vis-à-vis* the quality of the components in the equipment. However, it is not the case with domestic equipment. Therefore, a potential area of bilateral cooperation would be quality control and quality assurance for the Indian defense companies. Industry partners have noted the stringent requirement of the Indigenous Component (IC) in the Indigenously Designed, Developed and Manufactured (IDDM) and Make 2 categories. For instance, there is a requirement of 50 per cent IC in the prototype stage of Make 2.

https://www.orfonline.org/research/india-us-defense-engagement/

## Celebrating 75 Years of India-U.S. Defense Ties

Bipul Chatterjee and Purushendra Singh, The Daily Guardian, September 01, 2022

The engagement between the world's largest and oldest democracies, the US and India, has overcome historical hesitations. Their diplomatic and strategic ties began in 1941 when the American Ambassador to the UK urged the British to set a date for granting India dominion status. This culminated in formal diplomatic relations in 1947, after which both nations pursued defense and security ties keeping national interests and military security in mind.

Despite India's non-alignment policy, as an emerging democratic power, it cooperated with the US at crucial junctures to prevent the Cold War escalating into full-fledged war. During the Korean War (1950-53), India cautioned the US about Chinese entry and threats to US troops, worked together at the UN to denounce aggression against South Korea, and sent a medical unit to support UN forces including Americans. In the 1950s, India procured Fairchild C-119 transport aircraft from the US.

In the 1960s Congo crisis, India sent 5,000 soldiers as part of the UN peacekeeping force with US troops. The US sanctioned \$500 million military aid for India in the context of the Indo-China war to equip mountain divisions and assist defense industries, including the Tarapur nuclear plant. By the 1980s, there were talks on India-US arms trade like howitzers and antitank missiles, MoUs on sensitive technology exports, and agreements to create indigenous defense production capabilities.

The 9/11 and Indian Parliament attacks in 2001-02 precipitated a rapid thaw. The US waived sanctions on India post its 1998 nuclear tests. Both recognised terrorism challenges, giving new impetus to defense ties with the General Security of Military Agreements (GSOMIA) in 2002 for information sharing. The 2005 India-US nuclear agreement was a milestone. The New Framework for Defense Cooperation (NFDC) in 2005 and DTTI in 2012 marked a shift from buyer-seller to co-production.

2016 saw the Logistics Exchange Memorandum of Agreement (LEMOA) for engagement as geopolitical partners, and India's designation as a "Major Defense Partner" enabling future coproduction and co-development. The next four years saw the unique Communications Compatibility and Security Agreement (COMCASA) in 2018 and Basic Exchange and Cooperation Agreement (BECA) in 2020 for technological interoperability and defense trade facilitation.

The defense relationship has emerged as a key pillar. The next 25 years are crucial for shaping security dynamics in West Asia and the Indo-Pacific. Bilateral, trilateral and multilateral initiatives offering technology transfer, joint production, economic resilience through infrastructure and development for regional and global peace and stability will be the base for growing ties. While celebrating 75 years of diplomatic ties, reaffirming their comprehensive strategic partnership's importance in ensuring peace, security, stability and prosperity is key.

https://cuts-global.org/media-celebrating-75-years-of-india-us-defense-ties.html

## India- U.S. Joint Defense Production Possibilities: Buyer-Seller to Partner Nations

Purushendra Singh, USANAS Foundation, September 05, 2022

The article analyses the India-US defense cooperation and how this relationship is evolving from a buyer-seller relationship to that of co-production and co-development.

Recent developments in India-US defense cooperation through bilateral agreements, joint military exercises, procurement, etc. along with the increasing role of private players indicate the potential for flourishing relations between the two democracies. The relationship is evolving from a buyer-seller dynamic to co-production and co-development.

Recently, India's Defense Minister Rajnath Singh invited US companies for joint R&D, manufacturing and maintenance of defense equipment in India to achieve "Make in India, Make for the World", stressing the need to move from buyer-seller to partner nations.

The defense relationship is driven by mutual commercial and geopolitical interests based on increasing trust. The 2+2 ministerial dialogue and DTTI group meetings have acted as cornerstones, facilitating foundational agreements between the large armed forces for truly joint co-produced products.

India exported defense items worth US\$1.63bn in 2021-22, a 54.1 per cent rise over the previous year. From an importer, it's now becoming a major export hub and the U.S. is the best bet amid global uncertainty. It fulfills India's ambition of becoming a net arms exporter while conveying capacity to neighbours.

When designated a "Major Defense Partner" in 2016, the US showed awareness of India's population and talent pool. India's Atmanirbhar Bharat policy does not eliminate other players - many gaps could be filled by American tech and R&D advantage with the Indian diaspora.

The US military-industrial complex is private sector driven. India's private sector like Jindal, Mahindra, MKU, Tata are looking to co-manufacture and co-produce with firms like General Atomics, Lockheed, Boeing, Raytheon, GE, showcasing the quest for joint production and growth.

Almost 11 Indian states now have aerospace and defense policies. UP and TN have set up major defense corridors with more states joining. Production possibilities are enriching as the foundation transforms from mistrust to deep trust, according to Subimal Bhattacharjee, former Country head of General Dynamics.

Rick Rossow of CSIS observed that DTTI is an ambitious, unique framework needing to move faster towards co-production and co-development realisation.

Joint production is a two-way street. The then US Defense Secretary noted building capabilities of like-minded nations fosters military interoperability while creating a stronger domestic industrial base globally competitive.

The US supports India as an Indo-Pacific defense industry leader and security provider. With modern warfare's changing nature and AI's role, future wars will be technology-intensive with electronic warfare overtaking hand-to-hand combat. The US is aware of Indian talent in this domain.

Joint emerging tech production would have dual civil-military use like C4ISR systems and data analytics with defense tech's peaceful spillover.

Successful examples include the air-launched drones and iSTAR project, talks to sell Tejas with a GE engine to Malaysia and Egypt, Quad efforts on ship MRO benefiting navies, and iCET on critical emerging tech.

Roadblocks include legal issues around American companies' IP, tech transfer, cross-border data flows and policies. The US must devise ways on government-funded tech while India eases taxation and safeguards IP laws. Offset problems need innovative solutions.

The way forward involves co-developing air-launched drones, long-range missiles, propulsion systems, engines, AI, VR within Quad, iCET, I2U2 for trusted future-ready networks. They could explore directed energy weapons, drone countermeasures, hypersonics. The US could consider nuclear submarine cooperation with India which wants lighter, faster tanks.

Reports suggest a US\$500mn US military aid package deepening security ties. With a good strategy and policies for large-scale production, India has the potential to join the US in producing for the world as a net exporter.

A hybrid Foreign Military Sales route, ecosystems for innovation, training, R&D facilities supporting state manufacturing are the way ahead alongside cooperation on aircraft carriers, submarines, space and catering to responsible third-country markets for regional stability and economic growth.

https://usanasfoundation.com/india-us-joint-defense-production-possibilities-buyer-seller-topartner-nations

# India-U.S. Relations: The Blossoming of an Indispensable Partnership

Ashok Sajjanhar, The Sunday Guardian, December 31, 2022

Former US diplomat Dennis Kux wrote a book on India-US ties in the early 1990s which he titled as "Estranged Democracies." According to him, while both the countries were democracies sharing several common values and ideologies like holding of regular free and fair elections; freedom of speech, expression, media and religion; pluralism, free trade etc., relations between the two countries were anything but warm and friendly.

Relations between the two countries witnessed a significant uptick with the signing of the India-US framework civilian nuclear deal in July 2005 and US's heavy lifting for grant of a unique waiver by the Nuclear Suppliers' Group to India in September 2008 for conducting global commerce in nuclear technology and material. However, bilateral relations continued to stagnate even after the lofty statement by Obama to the Indian Parliament in 2010.

The Quad had been put on the back-burner in 2007 following objections by China was revived on the margins of the East Asia summit in November 2017 to counter the growing assertiveness of China in the South and East China Seas and other neighbouring areas.

The warm, cordial and friendly relations between President Biden and PM Modi have been evident on several occasions over the last 23 months since Biden assumed office. Also, notwithstanding the fact that Biden has been actively engaged with the ongoing Russia-Ukraine conflict, he has not taken his eyes off the Indo-Pacific. Four summit level interactions of the Quad leaders have taken place over this period—two in the virtual format and two in in-person mode. The in-person meetings took place in Washington, DC in September 2021 and in Tokyo in May 2022.

Both PM Modi and President Biden have displayed very gracious, affable and respectful attitude towards each other in the multitude of international platforms on which they have met and interacted over the last 23 months.

Today there is a convergence not only of values but also of interests between the two countries. Today the two countries have more than 60 bilateral dialogue mechanisms encompassing renewable energy, climate change, it, innovation, healthcare, agriculture, cyber security and more. The US has emerged as the second largest supplier of defense equipment to India. The countries are coming out of the shadows of engaging in a mere buyer-seller relationship in defense supplies. India does more defense exercises with US than with any other partner.

https://www.sundayguardianlive.com/special-supplement/india-u-s-relations-blossoming-indispensable-partnership

# India-U.S. Military Exercises and China's Woes: Stop Reacting, Start Responding

Rajasimman Sundaram, Indian Defense Review, January 05, 2023

The state of Sino-Indian bilateral relations according to India's Foreign Minister and former Foreign Secretary Dr Subrahmanyam Jaishankar is 'not normal.' Even while the militaries of both countries have made worthwhile efforts to normalise the situation along the Line of Actual Control, both sides are struggling to recover each other's trust and respect lost on the night of June 15 and 16, 2020, in the Galwan Valley.

According to India's official narrative, Indian forces are deployed in strength along the Sino-Indian border which is a response to China's mass mobilisation of its troops along the border in gross violation of standing border agreements between the two sides.

#### From The US' Viewpoint

According to the US Department of Défense, in its mandated annual report on China's military development (2022) to the US Congress, "the PRC seeks to prevent border tensions from causing India to partner more closely with the U.S. PRC officials have warned US officials to not interfere with the PRC's relationship with India." In April this year, the US told India that the consequences of a "more explicit strategic alignment" with Moscow would be "significant and long-term."

#### China's Attitude towards India-US Bonhomie

It is within this ongoing great blame game that the spokesperson for China's Ministry of Foreign Affairs Zhao Lijian on November 30 mentioned that the ongoing joint military exercise held by India and the US near the Line of Actual Control (LAC) violated the 'spirit' of relevant agreements signed by China and India in 1993 and in 1996, and does not help build 'bilateral trust'. India's Ministry for External Affairs Spokesperson Arindam Bagchi hit back by stating, "India conducts exercises with whomsoever it chooses to and it does not give a VETO to third countries on this issue."

#### China's Strategic Philosophy

All this must raise no alarm in Beijing given that China champions the centrality of the UN within the in-vogue international system and holds veto powers as a permanent member of the UN Security Council. Although China has the unique experience of fighting a war against the UN, such a situation no longer persists.

#### **India's Foreign Policy**

According to India's foreign minister, "The way to rise is to maximise opportunities and the opportunities are provided by the contradictions of the world.... if there are no contradictions, then there is no space for the rising power to move." In implication, India will seek opportunities for its rise within the contradictions in China-US relations. India's political and military relations

with the West and the US have come a long way and are no longer constrained by the past [Prime Minister Modi; 2015].

#### Conclusion

India's narrative suggests that despite its best efforts to build cooperation with China, it often faces deception. India's Defense Minister's emergency departure to Russia to order a squadron of MIG-29 following the Galwan crisis, unplanned economic sanctions and banning Chinese apps is a case in point. Sino-India trade stood at US\$100bn for the year when Galwan incident occurred.

http://www.indiandefensereview.com/news/india-us-military-exercises-and-chinas-woes-stop-reacting-start-responding/

## Partnership, Not Threats: How to Deepen U.S.-Indian Naval Cooperation

Karambir Singh And Blake Herzinger, War on the Rocks, January 12, 2023

Aircraft carriers from the U.S. and Indian navies sailed together to lead the second phase of the Malabar 2020 exercise, conducting advanced air defense drills with their respective MiG 29K and F-18 fighters. In 2021, American and Indian guided-missile destroyers worked closely together, alongside the USS Carl Vinson and Japanese and Australian frigates and destroyers.

Yet despite increased cooperation and regular statements from American and Indian naval leaders expressing a desire to work together more, the India-U.S. naval relationship remains one of considerable untapped potential.

Security Assistance: The U.S. and India each have a multiplicity of regional bilateral security assistance relationships that could be increased by coordinating and integrating their parallel approaches.

Building Stronger Staff Links: Staff exchanges are a time-tested mechanism for creating confidence and clear communication at the operational levels of militaries and have the bonus of creating positive interpersonal ties that pay dividends over time and build trust. The U.S. Navy has one liaison officer placed within Delhi's Information Fusion Centre–Indian Ocean Region supporting its domain awareness mission, but this is insufficient for two navies of this calibre.

Maritime Domain Awareness: Maritime domain awareness and information-sharing are priorities for both the U.S. and India, and the two have made inroads on that front, both together and separately. Both are part of the Quad's Indo-Pacific Maritime Domain Awareness initiative, and both are active in delivering radars, software, and other sensors to regional states needing support in surveilling their exclusive economic zones. The two could do even more to integrate and share their own common operating pictures.

Learning to Share: The U.S. Navy's ability to refuel and resupply its own ships relies on 15 Henry J. Kaiser-class replenishment oilers that entered service in the mid-1980s. But the Indian Navy operates four tankers in the Indian Ocean, with another five of a new class likely to enter service by 2027. Under the terms of the existing Logistics Exchange Memorandum of Agreement, U.S. ships can take on food, water, petroleum, and other critical supplies from Indian vessels and vice versa.

Getting Beyond Training: Bringing U.S.-Indian cooperation a step beyond exercises and into the operational realm should be the next priority. These operations will not be fully integrated at the outset. Coordinated operations in key areas of importance to both navies will suffice to lay a foundation for building upon.

#### What Does the Future Hold?

Each of the proposed areas of cooperation will require deft staff work and considerable effort on behalf of operational forces to achieve. But the proposed areas of cooperation are achievable and reflect the strategic priorities that both navies in the region see as most important to their national security. The fact that these proposals will require concerted effort is precisely the reason that the two navies should start work on them now so they are ready when called upon to perform these tasks.

https://warontherocks.com/2023/01/partnership-not-threats-how-to-deepen-u-s-indian-naval-cooperation/

## How will U.S.-India Cooperation Unfold in 2023?

Manish Kumar Jha, The Financial Express, January 25, 2023

In a recent 2023 US-India Trade Policy Forum (TPF) meeting, the deputy assistant to US president Joe Biden, Kurt Campbell talked about more presidential and vice-presidential visits to the Asian region, saying that "one of the most essential algorithms of Asia is the importance of showing up."

#### Defense industrial cooperation

The India-US discussion is now mostly centred around defense talks as Campbell, who is also coordinator for the Indo-Pacific, said "the U.S. is ready to assist India in moving away from Russia's dependence (on defense)." The US-India DTTI remains the cornerstone of the bilateral defense cooperation in its entirety. While DTTI is the overarching entity for defense cooperation, Defense Technology and Trade Initiative Industry Collaboration Forum (DICF) aims to deepen industrial cooperation between the US and India.

#### India's defense relationship with the US

How is the US-India relationship faring in the military-industrial domain? Boeing has been a key player in supplying strategic military platforms, including the P-8I for critical intelligence, surveillance, target acquisition, and reconnaissance.

But critics also point out that the finer aspect of US-India defense cooperation rests on strategic military exercises like the Quad among others.

https://www.financialexpress.com/business/defense-how-will-us-india-cooperation-unfold-in-2023-2960345/

# How iCET Dialogue Can Be the Next Chapter in Stronger US-India Defense, Trade Ties

Kriti Upadhyaya, The Print, January 30, 2023

The US-India Initiative on Critical and Emerging Technologies or iCET was launched by Prime Minister Narendra Modi and US President Joe Biden on the sidelines of the Quad summit in May 2022. The first meeting of the iCET will take place in Washington D.C. on 31 January between National Security Advisor Ajit Doval and his counterpart Jake Sullivan.

#### The iCET promise

The significance of the iCET lies in its assertion of "outcome-oriented cooperation" as it is led by the two nations' national security advisors. The dialogue focusses on dual-use and deep technology areas of strategic importance such as artificial intelligence (AI), quantum computing, 5G/6G, biotech, space, and semiconductors.

#### Sharp focus

The iCET has its work cut out for the first meeting. Although no details have been divulged, a sharp focus on high-priority issues surrounding the technology areas outlined is expected. In AI, the US and India can emerge as leaders by establishing norms and standards for ethical AI and data use. India's space industry is getting liberalised and has been undergoing reforms ever since it was opened up to the private sector.

#### Heralding a new era

The iCET presents a real opportunity to create momentum in the India-US trade ties through an industry-focused agenda. And with the trade deal limbo, long spell without a confirmed ambassador, and geopolitical distractions, a strong iCET agenda will signal a recommitment of the US to a strong relationship with India. Both countries can use the iCET as a platform to usher in a new era of strategic cooperation. Some ideas that iCET may explore are as follows:

- Indian companies as validated end users
- Regulatory ease and clarity for space industry
- Make India a DFARS qualifying country

https://theprint.in/opinion/how-icet-dialogue-can-be-the-next-chapter-in-stronger-us-indiadefense-trade-ties/1341171/

### U.S.-India iCET: Old Wine in a New Bottle?

Rahul Bedi, The Wire, February 10, 2023

The newly agreed US-India iCET appears to be a technologically upgraded reincarnation of the earlier bilateral DTTI between New Delhi and Washington, which had failed miserably in its endeavours to indigenously develop and manufacture US military equipment.

But the formal unveiling in Washington recently of the iCET – first announced in May 2022 by Prime Minister Narendra Modi and US President Joe Biden – to augment strategic technology partnership and defense industrial cooperation between the two sides, studiously avoided any reference to DTTI.

#### Why did DTTI fail?

Launched with great fanfare in Delhi by US deputy defense secretary Ashton Carter in 2012, following four years of negotiations, the DTTI was aimed at furthering defense cooperation between the two newly emergent strategic allies, shorn of bureaucratic hiccups from either side.

Primarily, it included four 'pathfinder' projects like the joint development of Mobile Electric Hybrid Power Systems (MEHPS) and Integrated Protection Ensemble Increment 2 clothing for protection against chemical and biological exposure with India's government-run Defense Research and Development Organisation (DRDO).

Thereafter, in June 2015 India and the US extended their 10-year bilateral Defense Framework Agreement to mid-2025 to further strategic and military ties, but also to provide the framework for progressing the DTTI and its supposed 'transformative' potential. And, a year later in mid-2016, DTTI added the Digital Helmet Mounted Display and the Joint Biological Tactical Detection System projects to its list, but the two prospective endeavours progressed little beyond the discussion stage.

#### What's new in iCET?

Many years later, on the ashes of the DTTI, the iCET envisages six broad areas of cooperation, involving co-development and co-production in critical emerging technologies in defense, space and next generation telecommunications, including 6G networks. Artificial intelligence and semiconductor know-how, in addition to other vital sundry areas of engineering, science and biotechnology too were included.

#### Prevention of 'jugaad' a key hindrance

Other service officers who had dealt with US military and defense industry officials said a possible beginning in ensuring iCETs eventual success lay in Washington permitting India's military to exercise the jugaad or innovative option on acquired US platforms like attack and heavy lift helicopters, heavy transport and naval surveillance aircraft.

Presently, India has to execute a complex set of protocols, pacts and agreements with the US ahead of acquiring these combat and support assets. This forecloses the possibility of pursuing the services' long established – and at times essential – jugaad route by equipping major platforms with either locally developed ancillaries or those acquired commercially.

https://thewire.in/diplomacy/us-india-icet-old-wine-new-bottle

### Is the U.S. Ready to 'Friendshore' India Finally?

Colonel Baljinder Singh Retd, The Financial Express, April 06, 2023

Commercially, the US -India engagement in the defense sector over the last two decades has paused at US\$20bn, dominated mainly by government to government and Foreign Military Sales (FMS) exchanges. Historically, it is a case of missed opportunities for the US more than India, as both countries did not form a strategic and mutually beneficial long-term relationship that also covers security cooperation.

The US must conduct a reality check when discussing the ease of business with India. It conveniently forgets the red-tape bureaucratic regime it supports when sharing technology or selling high-tech equipment to countries other than NATO. However, things are changing as the US tries to shore India as a long-lost friend. Towards this end, the meeting of NSAs of both countries on January 31 this year set the tone for events.

Firstly, a White House Fact Sheet was released where both countries agreed to resolve issues related to regulatory barriers and business and talent mobility in both countries through a standing mechanism under iCET.

Secondly, the US presence in the follow-up Indian Aero Show on February 23 this year was by far the largest compared to others and its presence earlier, with the DSCA driving the US agenda.

Thirdly, the bonhomie seen during US Commerce Secretary Gina Raimondo's visit to India in March where she proactively participated in the Holi festivities with the Indian Defense Minister Rajnath Singh and other Indian cabinet ministers, is a testament to the 'strategic and cordial' relationship currently in play. This was followed by signing the US-India Strategic Trade Partnership to work on deregulating 'Export Controls' and Indo -US Commercial Dialogue to stabilise semiconductor supply chains.

The recent shift in geopolitics alignment indicates the friend-shoring exercise at the highest level. Chinese President Xi's prowess to strike a deal between the Saudis and the Iranians is no less than a feather in the cap, making the US reflect upon its stand in relations with these countries.

With China's growing influence in the Indo-Pacific region and geopolitically, it is in the interest of the US to have a militarily strong and reliable partner in this region to thwart the ill intentions of China. It would be a pillar of stability and strength for the US in the Indo-Pacific, Japan, South Korea, and Australia. The US must realise that India must develop as a manufacturing hub. India today contributes only 2 per cent of global manufacturing, which needs to be proportional to its potential in size, HR, and natural resources available.

https://www.financialexpress.com/business/defense-is-the-us-ready-to-friendshore-india-finally-3036664/

### A New Chapter for India-U.S. Defense Ties

Basant S. Sanghera, The Diplomat, January 27, 2023

Over the past two years, China has continued its unpredictable and unsettling behavior along the LAC. Just last month, Chinese and Indian troops exchanged blows in the Indian state of Arunachal Pradesh. (Coincidently, it was Kennedy's ambassador to India – John Kenneth Galbraith – who recognised Arunachal as part of the Indian union.) And while U.S. support has continued, more needs to be done in both New Delhi and Washington to build a defense relationship that meets the demands of the moment.

Following Galwan, swift U.S. assistance was made possible by the investments both countries had made to deepen interoperability and logistics coordination, namely through defense enabling agreements like the Communications Compatibility and Security Agreement, which vastly expanded bilateral information sharing, and the Logistics Supply Agreement of 2016.

This alphabet soup of enabling agreements was just one of several ingredients in a maturing partnership that included increased defense trade and investment, maritime cooperation, complex exercises, technological exchanges, and the Obama administration's designation of India as a "Major Defense Partner."

In recent years, the India-U.S. relationship has been performing below its full potential. Bilateral differences over Ukraine and sanctions, a lackluster trade agenda, and the absence of a U.S. ambassador in New Delhi have contributed to this malaise. But 2023 presents an important opportunity to reverse this trend and restore momentum.

A defense roadmap could also complement lines of effort already underway, including on artificial intelligence and the Pentagon's dialogue on emerging technologies, and set new ambitious targets for undersea domain awareness (UDA) cooperation. India could take steps to increase interoperability with U.S. forces through the adoption of Link 16 and assigning additional liaison officers.

Both sides could deepen habits of cooperation through additional exercises and rotational presence, with bureaucratic red-tape like visas and clearances waived beforehand. Congress could even play a supporting role by authorising funds to pilot joint technology projects, much akin to the Israel-U.S. Binational Industrial Research and Development Foundation established in the 1970s.

https://thediplomat.com/2023/01/a-new-chapter-for-india-us-defense-ties/

## U.S. Companies Trying to Woo IAF

Suchet Vir Singh, The Print, February, 14, 2023

Since Independence, the Indian Air Force (IAF) has inducted fighter jets mostly from western superpowers into its fleet, barring one striking omission — the U.S. Despite this exception, the IAF fleet does operate many American air systems. The first helicopters used by the IAF, the Sikorsky S-55, were American. Currently, the IAF operates US-made helicopters such as the AH-64 Apache and the CH-47 Chinook manufactured by defense conglomerate Boeing.

India has continued to purchase more fighters from the Soviet Union, including various variants of the MiG-29s, MiG 27s, the MiG-23 and the Sukhoi Su 30s. These came with agreements to manufacture some of these fighters in India.

Further, the country also expanded its portfolio to include fighters from western countries it had bought from in the past. These included the Mirage 2000 and the more recent Rafale from France and the Jaguar, which was jointly produced by Britain and France. Later, India bought fighters from Russia, after the fall of the Soviet Union.

While the India-US relationship has moved to a strategic partnership hallmarked by close economic and security ties — the prospect of an American fighter jet being procured by the IAF seems unlikely. "India has been an end user of US-made helicopters and transports for a long time, but operating fighters is an altogether different ball game," a defense expert said.

The inherent hindrance has been the political aspect of any deal. The implications for the aircraft or technology to stop being sent to India due to differences on contemporary issues has also drawn on the mind of decision-makers, the expert added. Moreover, with the push for indigenisation in the armed forces, there is a thrust to procure domestically. With the Indian establishment focused on producing the 5th generation advanced medium combat aircraft, there seems little space to buy an American fighter.

The main opportunity presents itself through the IAF's multi-role fighter aircraft deal, however, that has been in a limbo since it was first announced almost two decades ago. "I only see India buying a fighter from the US if a state-of-the-art modern fighter such as the F-35 is offered. That would entail a paradigm shift in India's air power and require New Delhi to look at the offer seriously," said Singh.

https://theprint.in/defense/us-companies-trying-to-woo-iaf-but-heres-why-its-never-inducted-an-american-fighter/1368692/

# Building Bridges: Exploring India-U.S. Partnerships in Critical and Emerging Technologies

Abbinav Arya, www.investindia.gov.in, May 09, 2023

#### Introduction

Today, as countries around the world look to advance their technological capabilities, India and the U.S. have emerged as key players in the field of critical and emerging technologies. Ranging from advanced computing and nuclear energy to artificial intelligence, both countries recognise the role that these technologies can play in strengthening national capacity and addressing developmental challenges.

India's recent effort to become a powerhouse of emerging technologies has not gone unnoticed with the country ranking 42nd at the global stage and ranked 1 among 10 economies in Central and South Asia in the Global Innovation Index 2022 by the World Intellectual Property Organisation (WIPO).

#### Where does India-U.S. Bilateral Technological Cooperation stand?

Trade and Investment have been a key aspect to India-U.S. relations. The bilateral trade between the two countries in 2021-22 stood at US\$119.42bn as against US\$80.51bn in 2020-21. Further, India was the tenth-largest market for American exports (2.3 per cent share), and America was India's biggest market (a nearly one-fifth share) by country, for goods exports.

Oil and gas, miscellaneous manufactured goods, coal and petroleum gases, basic chemicals, waste and scrap, and aerospace products and parts were among the main American imports to India in 2022 whereas major Indian goods imported by the U.S. included miscellaneous manufactured goods, pharmaceuticals and medications, clothing, basic chemicals, textile furnishings, and petroleum and coal products. The IT (Information Technology) services, software, business services, pharmaceuticals, and industrial equipment industries get most of the Foreign Direct Investment (FDI) from India in the U.S.

The two nations leverage innovative technologies with an aim to address issues including climate change, health, energy, education, cyber, defense, and security. To expand their cooperation in science and technology, India and the US launched the US-India Artificial Intelligence (USIAI) Initiative in March 2021.

Further, the recent agreement between India and the U.S. in the form of iCET is a step in the right direction towards adapting to new strategic realities in the Indo-Pacific region. The National Security Councils of the two nations came up with the idea of establishing iCET to increase cooperation in critical and emerging technologies. The iCET's primary objectives are to advance and broaden India and the US's strategic technological collaborations and their industrial cooperation in the field of defense.

The U.S. has also recognised India as a major defense partner. Both sides have concluded several defense agreements i.e., the Logistics Exchange Memorandum of Agreement in 2016, Communications Compatibility and Security Agreement in 2018, a Memorandum of Intent between US Defense Innovation Unit and Indian Defense Innovation Organisation-Innovation for Defense Excellence in 2018, Industrial Security Agreement in 2019, and Basic Exchange and Cooperation Agreement for Geo-Spatial Cooperation in 2020. The iCET initiative is further expected to bolster the defense cooperation in AI and military equipment.

Another area where India and the US can collaborate is in high-performance computing (HPC) technologies and processing units. Plans to ease US - HPC technology export restrictions by India were discussed in the iCET lately.

The new world order post-pandemic has highlighted the importance of critical and emerging technologies in developing national resilience. It is evident that developing a deeper relationship, sharing technology, expanding trade, and building trust is profoundly in the two countries' interests.

It is a win-win scenario on several fronts – technologic, economic, political, and geopolitical. Building a bilateral system of positive technology sharing between the U.S. and India will be essential to their success in this next stage.

https://www.investindia.gov.in/team-india-blogs/building-bridges-exploring-india-us-partnerships-critical-and-emerging

### Modi's U.S. Visit: From Handshakes to Outcomes

Pradeep S Mehta and Purushendra Singh, The Economic Times, June 30, 2023

India and the US, having the strength to find solutions to global geopolitical challenges, have put behind hesitations of the past and are moving towards trusted partnership.

This was reflected during PM Modi's visit to the US on 21-22nd June 2023 - only the fifth State Visit by an Indian PM. More significantly, Modi was the third world leader to speak to the US Congress twice, joining Nelson Mandela and Winston Churchill, reflecting strong bipartisan support in American polity.

The visit witnessed deals in defense, renewable energy, technology collaboration, healthcare and climate change. Technology transfer, promise for joint dual-use technology production and US willingness to help build India's robust industrial manufacturing base to match Atmanirbhar Bharat plans were key takeaways.

Along with the 21-gun salute reception, this visit has more to offer recipients including sceptics in both countries. Deliverables would engage facilitators at government, business and people levels, including Indian expats in the US.

It's good news the US is willing to play a major role in building India's manufacturing base and assist creating resilient supply chains, as some American companies look to exit China and India aims to be an alternative. The Indian private sector should reap benefits, though regimes like ease of doing business, documentation processes, outdated labour/land laws need addressing.

A major outcome is the pact to jointly produce engines for next-generation fighter jets. There were announcements on co-producing GE's 414 engines for indigenously produced Tejas Mk-2 by HAL, signifying a shift from mistrust to trust in co-production of critical dual-use technologies.

Adding to air power is the General Atomics MQ-9B Reaper drone deal, making India the only non-treaty US ally with defense tech transfer. These dual-use drones would aid intelligence, surveillance, reconnaissance and disaster relief.

The defense industries launched the India-US Defense Acceleration Ecosystem to expand joint tech partnerships, startups and industrial cooperation long missing at G2G level.

This deepening partnership will strengthen the Quad's role in a free, open, secure and prosperous Indo-Pacific. India and US deepened interoperability by signing a Master Ship Repair Agreement allowing US Navy MRO at Indian shipyards.

Significantly, amid geopolitical Eurasian challenges, technology race and new warfare domains, India showed willingness to join the Artemis Accords for space exploration. NASA-ISRO agreed to deploy a 2024 joint space station mission.

It's now time to convert official handshakes into outcomes. A CUTS survey found majority support but more needs complementing at inter-governmental level by state governments, businesses, civil society and expat Indians to harness the visit's full potential.

Recalling Vajpayee's "India and US are natural allies" statement, this strategic nexus has a role as counterweight to China. On the road to becoming Atmanirbhar and developed by 2047, the US would play a large role.

https://economictimes.indiatimes.com/news/india/modis-us-visit-from-handshakes-to-outcomes/articleshow/101371869.cms?from=mdr

## Assessing PM Modi's Visit to the U.S.

SD Pradhan, Times of India, July 03, 2023

PM Modi's recent visit to the U.S. has sparked a range of opinions regarding its significance, from being hailed as a potential game-changer to being viewed skeptically as a "bad bet" with exaggerated expectations. Analysis of the joint statement issued during the visit reveals both areas of convergence and points of contention between the two nations.

Firstly, there is a shared commitment to fostering a free, open, and inclusive Indo-Pacific region, with a focus on cooperation through regional platforms such as the Indian Ocean Rim Association, the Indo-Pacific Oceans Initiative, and ASEAN. However, despite this alignment, differences persist.

Secondly, cooperation in technology, space, and supply chains is emphasised, with initiatives like the iCET marking significant milestones. Both government agencies and private sectors are urged to collaborate to advance the objectives of the strategic partnership.

Thirdly, the establishment of a Joint Indo-U.S. Quantum Coordination Mechanism underscores the commitment to collaboration in Quantum Information Science and Technology, alongside recognition of the importance of Artificial Intelligence (AI).

Fourthly, the US reaffirms its commitment to deepening defense cooperation, evident in the adoption of a Defense Industrial Cooperation Roadmap aimed at facilitating joint production of advanced defense systems and collaborative research.

Fifthly, while the Ukraine crisis is acknowledged for its humanitarian and economic impacts, there is no direct criticism of Russia. Additionally, concerns over oil imports from Russia remain unaddressed by President Biden.

Sixthly, both nations condemn terrorism in all forms and call for concerted action against UN-listed terrorist groups, including those operating from Pakistani territory.

Seventhly, progress in resolving WTO disputes and market access issues highlights efforts to strengthen economic relations.

Lastly, President Biden reiterates support for India's permanent membership in the UN Security Council.

Overall, PM Modi's visit signifies growing ties between the two nations, driven by shared interests in countering China's influence and promoting regional stability. The US views India as a crucial partner in shaping the strategic environment and seeks its support in technology, supply chain diversification, and regional security. India's growing economic and military strength is seen as a potential bulwark against Chinese coercion, further underlining the importance of the US-India relationship.

https://timesofindia.indiatimes.com/blogs/Chanakya Code/assessing-pm-modis-visit-to-the-us-broad-picture-of-the-indo-us-relationship/

## Modi's U.S. Technology Transfer Deals May Stumble on Export Controls

Biswajit Dhar, The Wire, July 08, 2023

The central theme of the Joint Statement from the U.S. and India issued at the conclusion of Prime Minister Narendra Modi's recent state visit to the US was 'Technology Partnership.' It was around this theme that the two countries inked several agreements involving critical technologies, with the US announcing that it would facilitate the 'transfer' of these technologies to India in several emerging areas.

The agreements endorsed by the leaders in Washington owe their origins to the iCET, an initiative for expanding strategic technology partnership and defense-industrial cooperation between the governments, businesses, and academic institutions of the two countries.

The most eye-catching among the outcomes of Mr. Modi's visit was the memorandum of understanding (MoU) between General Electric (GE) and Hindustan Aeronautics Limited (HAL) for the manufacture of GE F414 jet engines in India. This initiative has been projected as one that will enable greater transfer of US jet engine technology to India.

The two countries also launched joint initiatives in telecommunications, and a principally public-private cooperation was initiated in telecommunications on Open Radio Access Network field trials and rollouts between operators and vendors of both markets, with financial support from the US International Development Finance Corporation.

And finally, a \$2 million grant programme was launched under the US-India Science and Technology Endowment Fund for the joint development and commercialisation of artificial intelligence (AI) and quantum technologies, with possibilities of public-private collaborations to develop high performance computing facilities in India.

While this is an impressive list of sectors in which the US has agreed to 'transfer' technologies to India, the key question is the extent to which the US will meet its commitments. This question arises due to two sets of factors.

The first is that historical evidence tells us that the US has not cooperated with India and other developing countries in making critical technologies accessible. A second factor is the fact that advanced technologies from US entities are tagged with several conditions, especially those arising from the country's complex export control regime.

Further, as in the case of exports of dual use products, exports of military items are governed by strict licensing policies set out under the International Traffic in Arms Regulations (ITAR). Clearly, the US administration and the Congress exercise considerable control not only over the exports of dual use and military items, but more importantly, they set conditions for the use of these items in the recipient countries.

https://thewire.in/security/modi-tech-transfer-deals-may-stumble-on-export-controls

## Challenges in Recent U.S.-India Defense Deals

Sanjib Kr Baruah, The Week, July 09, 2023

Hopes were high in New Delhi of a generous transfer of technology (ToT) because of the US interest to prop up India as a "strategic partner" in the Indo-Pacific to counter China and the fact that the deals were to be wrapped up during Prime Minister Narendra Modi's state visit to the US, which followed US Defense Secretary Lloyd Austin's June 4-5 India tour.

The expectations were on three critical counts. General Electric's GE F414 engines to power India's indigenous Tejas Mk2 fighter aircraft; General Atomics MQ-9B Reaper armed drones; and semiconductor manufacture. It was expected that there would be a 100 per cent ToT in GE F414s that would lead to co-development and co-production from India, and substantial transfer of technical know-how for the armed drones and chip making. 0But it was not to be.

Indian officials tried to put up a brave face. An official involved in framing the pact for ToT of GE F414s told THE WEEK that the deal was significant because the U.S. rarely shared so much technology—80 per cent. The deal is valued at more than US\$1bn. Another official in the defense ministry's production wing said no country today would offer total ToT of a key platform, no matter how close the ties were.

The key question, therefore, revolves around the fine print. What kind of technology will be shared and which ones will be off-limits? For instance, will the US transfer aero-engine metallurgical know-how?

Tejas light combat aircraft, the first home-made fighter, was fitted with GE F-404 engines that were bought with no ToT. The F-414 powers the US F-18 Super Hornet fighters—expected to be phased out from 2025 onwards. The most advanced frontline fighter in the US fleet is the Lockheed Martin F-35, fitted with the Pratt and Whitney F-119 engine.

While it is being said that India has no requirement for a deep-strike aircraft like the F-35, it or its F-119 engine is yet to be offered to India despite being in use in many countries, including Japan, Korea and Israel. Six countries—Belgium, Poland, Singapore, Finland, Germany and Switzerland—are set to induct it soon.

The HALE (high altitude long endurance) MQ-9B drones achieved near-legendary status in West Asia and Afghanistan in the 2000s. But its relevance will be put to test in India. After the border clash with China, the Indian Navy has been operating two MQ-9Bs taken on lease. In the latest deal, India is looking at 15 MQ-9Bs for the Navy and eight each for the Army and the IAF. In the US, there is already talk of phasing out the MQ-9B.

The latest deal agrees to carry forward plans to ink a security of supply arrangement and a reciprocal defense procurement agreement—the fourth foundational agreement to underline the major defense partner status given to India in June 2016. These two initiatives seek to ensure

uninterrupted supply of military equipment in the event of unanticipated supply chain disruptions.

It is therefore only fair to ask whether the military hardware and the stated terms and conditions offered are really commensurate with the close bound and warming ties that India and the US are beginning to cherish.

https://www.theweek.in/theweek/more/2023/07/01/is-us-india-defense-deal-a-failure.html

## U.S.-India Defense Cooperation

### - Deepening Strategic Engagement

Dr. Vivek Lall, Chief Executive General Atomics Global Corporation, The Economic Times, August 14, 2023

Following the historic visit by Mr. Modi to Washington and a series of new commitments on defense and other cooperation, New Delhi is looking ahead to the coming decades from an unprecedented position of influence and access. For all the opportunity that appears in store, it's critical that India not lose sight of the importance of partnerships – relationships such as strategic defense alliances throughout the Indo-Pacific and the wider world.

Mr. Modi's agreement with Washington will enable India to contribute more than it ever has, thanks to the huge expansion in intelligence gathering and operational flexibility that will be possible with the new MQ-9B SeaGuardian remotely piloted aircraft system.

India has already taken a major step with its lease-hire programme involving two of these aircraft. Building that fleet over time in partnership with our firm, General Atomics Aeronautical Systems, Inc., will take military and intelligence capacities to new heights. SeaGuardian can fly for 30 hours or more, depending on configurations -- different mission specific payloads -- and operate over any territory – open ocean, coastal areas, land – and provide intelligence of a breadth but also detail that isn't available with any other system hitherto.

The intelligence, surveillance, reconnaissance and operational flexibility these aircraft provide are, firstly, essential to India's sovereignty and will only strengthen its ability to reserve decisions and actions for itself, if necessary, as is the right of any nation.

Japan also is another operator of the MQ-9B, in service with the Japan Coast Guard and Japan Maritime Self-Defense Force (JMSDF), conducting patrols and other operations in the Western Pacific. Japan also may be on track to grow its fleet of these aircraft. Greater commonality between Indian and Japanese military and security officials will pay dividends for the partnership and regional security. The bilateral exercises between the two countries, including, JIMEX, DHARMA GUARDIAN (Army) and VEER GUARDIAN (Air Force) are gradually increasing both in terms of frequency and complexity.

The India-Japan relationship also is one facet of the larger, less formal grouping that has become known as "the Quad," which also includes Australia and the U.S. India has always been a key plank in the Quad and its expanding capabilities will only grow its importance in this regional bloc. And much as Indo-Japanese air and military interoperability is a critical part of that relationship, so too is India's ability to integrate its intelligence, operations and other instruments of power with those of the other nations.

https://economictimes.indiatimes.com/news/company/corporate-trends/us-india-defense-cooperation-deepening-strategic-engagement/articleshow/102715739.cms

# India-U.S. Ties are Maturing into a Strong Partnership

Uma Purushothaman, Deccan Herald, November 13, 2023

The fifth 2+2 dialogue between India and the U.S. took place on November 10 against the backdrop of increasing concern over the Israel-Hamas conflict, the continuing conflict in Ukraine, and disquiet about China's actions in the Taiwan Strait. The dialogue brings together India's External Affairs Minister and Defense Minister, and the US Secretary of State and Defense Secretary for an annual discussion on defense and security matters.

The joint statement from this year's dialogue mentions the situation in West Asia, though quite clearly India stuck to its position of condemning the terrorist attacks against Israel while also reiterating a Two-State Solution, calling for the release of hostages, and aid to Palestinian civilians.

The two sides discussed the possible impact of this current escalation of tensions on the India Middle East Europe Economic Corridor (IMEEC) announced at the New Delhi G20 Summit. The portion of the statement on Ukraine was quite like the G20 statement, which expressed concern over the situation in Ukraine without directly naming or condemning Russia.

Surprisingly, there was no mention of either China or Pakistan in the statement. The allusion to China was in an indirect reference to India's and the US' "strong commitment to safeguarding a free, open, and inclusive Indo-Pacific through mechanisms like the Quad," a nod to both countries watching developments in the maritime space around China closely.

However, there does not seem to have been much progress on one of the issues bedevilling India-US ties lately — the diplomatic spat between India and Canada. The US has stuck to its guns suggesting again that India should work with Canada on its investigation. The two states have also agreed to increase investments in India's maintenance, repair, and overhaul (MRO).

In the case of semiconductors, the two sides discussed collaborating in training and capacity building; some major investments have already been made in India's semiconductor ecosystem by US companies under the (India-US iCET.

The latest 2+2 dialogue is a sign that the US and India are developing 'habits of cooperation' despite differences of opinion on some issues. It shows that New Delhi and Washington are deeply invested in strengthening their co-operation and that the relationship is gradually maturing into one where they can agree to disagree on many issues without taking their eyes off the larger goal of managing China's rise.

https://www.deccanherald.com/opinion/india-us-ties-22-dialogue-china-imeec-bilateral-defense-cooperation-2768044

# U.S.-India Strength and Synergy at a Time of Geopolitical Strife

Dr Mukesh Aghi, The Financial Express, November 19, 2023

The fifth edition of the U.S.-India 2+2 ministerial dialogue concluded with a resounding message. Secretary of State Antony Blinken and Secretary of Defense Lloyd Austin together with their counterparts, External Affairs Minister Dr S. Jaishankar and Defense Minister Rajnath Singh, addressed the deteriorating situation in the Middle East.

The U.S. and India unequivocally condemned all forms of terrorism or violent extremism by state and non-state actors. Both Secretaries and Ministers united in expressing sympathy for Israel for the heinous attacks of October 7, 2023.

With India to host the next Quad Leader's visit in 2024, the 2+2 dialogue served as an important platform to underscore the importance of working with Quad partners in Australia and Japan, and other ASEAN nations and like-minded principled partners in securing a free, open, and inclusive Indo-Pacific region.

2023, marked a monumental success in the history of U.S.-India relations with the historic state visit of Prime Minister Narendra Modi in June and President Joe Biden in September 2023 to India for the G20 Summit. The Summit saw world leaders make a call for peace and diplomacy at a time of geopolitical differences. Both visits emphasised the importance of the U.S.-India Comprehensive Global Strategic Partnership in upholding international peace and security, much needed with twin wars in West Asia and Eastern Europe.

The diplomatic momentum gained during the visits of Prime Minister Modi and President Biden is beyond symbolic visits to a concrete strategic roadmap for future collaboration in multifaceted areas such as space, semiconductors, quantum computing, drone technology, and artificial intelligence with accelerated joint projects such as manufacturing GE F-414 jet engines in India, putting India in the elite club of countries with such manufacturing capability.

Both Washington and New Delhi are working towards the co-production and co-development of defense systems with increased multifaceted defense partnership. Robust military exercises to enhance maritime domain awareness, with a focus on undersea technology, and India's role as a hub in the maintenance, repair, and overhaul (MRO) sector for U.S. naval vessels.

The U.S.-India defense pillar is further codified with the recent U.S.-India Defense Acceleration Ecosystem (INDUS-X) launched during the week of the State Visit in June 2023. USISPF in partnership with the Department of Defense, the Ministry of Defense, and IndUS Tech convened the INDUS-X Investors Strategy Session in New Delhi on November 8, 2023. The goal was to connect investors and startups in the defense and space sector and shine a light on the burgeoning defense ecosystem in the country.

The multifaceted nature of the Strategic Partnership ensures that the relationship is beyond Washington and New Delhi, beyond the President and Prime Minister, Secretaries, and Ministers, and not confined to just diplomacy but a deep trust. It's this trust and synergy that will help forge the tangible aspects of the relationship in areas of defense, trade, technology, and other commercial aspects to address the complex challenges of the 21st century.

https://www.financialexpress.com/business/defense-us-india-strength-and-synergy-at-a-time-of-geopolitical-strife-3311095/

## Analysing the Fifth Indo-U.S. 2+2 Ministerial

Pradeep S Mehta and Sohini Nayak, The Economic Times, November 25, 2023

The Fifth 2+2 Ministerial Dialogue between India and the US has captured global curiosity, ratcheting up their 'comprehensive global strategic partnership'. Foreign and defense ministers laid out a blueprint for coalescing across converging interests. One hopes this becomes a 3+3 dialogue including trade ministers, as trade intrinsically links to foreign and defense policies, needing closer cooperation with reduced frictions while respecting each other's policies and practices.

The dialogue reinforced notions of a rules-based order, resilience and global peace. With the changing geopolitical landscape, the Indo-Pacific's salience covered furthering defense collaborations pivoting around the Quad's vitality for global good. The Indo-Pacific Economic Framework is also moving forward on trade. On foreign policy, issues like Ukraine-Russia and Israel-Hamas need addressing while respecting India's strategic autonomy.

As a geostrategic global preeminence locus, the Indo-Pacific is also a theatre of disputes and competition for influence by regional and extra-regional players. The annual dialogue envisions a multilateral structure premised on the recent Biden-Modi meeting on maintaining a 'free, open, inclusive and resilient Indo-Pacific'. With India hosting the 2024 Quad Summit, this meeting was crucial for executing the Indo-Pacific Oceans Initiative Pillar on Trade Connectivity and Maritime Transport.

The ocean as a global common holds potent maritime security, economy, environment and trade significance. Maritime Domain Awareness (MDA) impacts countering revisionist intentions. India's maritime strategy and the US Indo-Pacific strategy articulate ocean governance relevance. The Indian Navy's Indo-Pacific Regional Dialogue 2023 highlighted this after the 2+2 meeting.

The group addressed the Navy's engagements, private industry's role in Indo-Pacific safety/security, and maritime trade. It promoted a common stand with like-minded partners as an enabler for the Global South's voice. Indo-US defense industrial cooperation enhances Indo-Pacific Maritime Domain Awareness through the information-decision-action cycle and information sharing.

The 2+2 dialogue addressed dialogues, exercises, joint projects under the June 2023 defense industrial cooperation roadmap expanding to space and AI. The India-US Defense Acceleration Ecosystem encourages investors and new education for defense startups for shared technological solutions.

This defense association targets a China containment strategy while banking on Atmanirbhar Bharat and 'Make in India for the World'. GE's F414 engine supply with 80% tech transfer to HAL for the Tejas jet is hailed as transformative, enhancing MDA through digital oceans and undersea capabilities.

Though aiming to be a net Indo-Pacific security provider, India's feasibility relies on institutions like Quad and multilateral support. Interdependence and reciprocity are crucial as other powers also balance between the US and China amid their tensions.

India must assess its strategic autonomy regarding defense ties with Russia. Nonetheless, the US-India partnership has moved beyond uncertainty towards an ambitious security community ensuring a safe, accessible Indo-Pacific with open sea lanes, compatible strategies and historical identity.

Reduced geopolitical uncertainty after the Xi-Biden meeting and healthy trade policy engagement through the joint working group can help increase trade volumes while addressing frictions.

https://economictimes.indiatimes.com/news/india/analysing-the-fifth-indo-us-22-ministerial/articleshow/105494145.cms?from=mdr

### S&T Initiatives and the Strategic Advance of India-U.S. Relations

Cherian Samuel, www.idsa.in, November 30, 2023

The successful completion of another 2+2 dialogue marks one more step in the saga of Indo-US cooperation. Structured India–US dialogues have had a long and checkered history. Economic cooperation was the initial focus, with an agreement being signed in 2000 to institute a commercial dialogue through a financial and economic forum and a working group on trade.

The first Strategic dialogue was held from June 01-04, 2010 in Washington. In US terminology, this was ostensibly to serve as a capstone dialogue to assess progress, provide policy guidance and propose new areas of cooperation.

The mechanism attained its present 2+2 format in 2018 to "better elevate strategic communication on cross-cutting defense and security issues". The change in the tone and tenor of each subsequent dialogue is evident through the Joint Statements released at the end of each dialogue. In the most recent dialogue held on 14 November 2023, as per the joint statement issued, the principals declared their satisfaction with the substantial progress in transforming India-U.S. relations.

They reaffirmed the importance of the India-U.S. Comprehensive Global Strategic Partnership, including the Quad. They discussed developments in the Indo-Pacific, Middle East, Ukraine, and terrorism. They also pledged to deepen the defense partnership and strengthen counter-terrorism cooperation.

If defense and security relations are finally on an even keel after many decades of differing perspectives and priorities on the two sides, it could be said that it is the multi-faceted cooperation in science and technology that is providing the ballast for a new phase of the relationship.

During the Dialogue, there was considerable attention paid to the progress of the science and technology partnerships. The ministers highlighted the progress made under the India-US iCET to foster collaborations in science, technology, and critical technology value chains.

The ecosystem for partnerships between the academic, research and corporate sectors in emerging technologies across the two countries would be further strengthened through programmes such as the India– U.S. Defense Acceleration Ecosystem (INDUS X) initiative which serves to build an innovation bridge to connect defense start-ups.

Thus, it may be said that the evolution of India–US relations, particularly through the framework of the 2+2 dialogues, has consistently moved towards deeper strategic collaboration. Moving beyond the initial focus on economic cooperation and strategic and defense alignment, there is now a forward-looking embrace of science and technology cooperation. The pioneering spirit inherent to science and technology can be seen in initiatives like the iCET and Indus-X.

https://www.idsa.in/idsacomments/S-T-Initiatives-and-the-Strategic-Advance-of-India-US-Relations-csamuel-301123

### U.S.-made Predator Delayed, How India is Developing Own Combat Drone

Pradeep R. Sagar, India Today, December 20, 2023

While India's deal with the U.S. to procure advanced 'hunter-killer' Predator drones is taking time to materialise, the Defense Research and Development Organisation (DRDO) has moved a step closer to developing the country's own stealth combat drones capable of firing missiles and dropping bombs.

India-US ties are going through a rough patch after Washington asked New Delhi to come clear on an alleged conspiracy to eliminate Khalistani separatist Gurpatwant Singh Pannun, an American-Canadian citizen, on US soil. While leaders of both nations are working hard to iron out the differences, voices from a section in the Washington power corridors have started calling for a review of bilateral defense ties.

The strain in diplomatic relations has, to some extent, hit the pace of negotiations for military purchases, including the Predator drone deal. The proposed deal is for 31 drones, in which the Indian Navy will get 15 Sea Guardian drones and the Indian Air Force and the Indian Army eight Sky Guardian drones each from US defense major General Atomics. These high-altitude, long-endurance drones can fly continuously for over 35 hours and carry four Hellfire missiles and around 450 kilos of bombs.

The US is yet to respond to India's Letter of Request for the deal worth US\$3bn (around Rs 24,935 crore) despite the Defense Acquisition Council (DAC), India's top weapons procurement body, on June 15 giving the deal a go-ahead.

In the meantime, Indian defense scientists have cracked an opportunity. On December 15, the DRDO carried out a flight test of SWiFT, a stealth wing technology demonstrator that looks similar to the deadly US B-2 Bomber jet, in Chitradurga, Karnataka. The SWiFT is the prototype, or scaled-down version, of the upcoming unmanned combat aerial vehicle (UCAV) Ghatak, a stealth combat drone. While the SWiFT weighs just one tonne, the Ghatak UCAV is expected to be 13 tonnes.

DRDO scientists claim Ghatak will be much faster than foreign armed drones like the MQ9 Reaper, Predator and Sea Guardian. According to a defense scientist, Ghatak is capable of firing missiles and dropping bombs fast enough to avoid detection by enemy radars.

The Aeronautical Development Establishment, DRDO's lab that developed the SWiFT, announced that a successful flight trial with tailless configuration had been carried out from the Aeronautical Test Range in Chitradurga. The ministry of defense stated that with this flight in the tailless configuration, India had joined an elite club of countries that have mastered this flying wing technology.

The SWiFT project was sanctioned in 2016 with barely Rs 70 crore, the primary intent being to demonstrate stealth technology and high-speed landing technology in autonomous mode, said a defense scientist. Another scientist explained that every aircraft, to be able to fly, requires a wing, horizontal and vertical tail, and fuselage. However, SWiFT had none of these things and is a single lift surface.

The SWiFT's airframe, undercarriage and landing gear, flight controls, and avionics system were developed indigenously, powered by a Russian turbofan made by NPO-Saturn. Most of its avionics and electronics are part of Tapas-BH-201, a medium-altitude long-endurance (MALE) unmanned aerial vehicle (UAV). Development of the Tapas drone is in its final stages and may well end the Indian military's dependence on foreign UAVs.

India is among the few modern militaries not to have armed drones. Even smaller countries like Nigeria, Somalia, Pakistan and South Africa have been using weaponised drones. Currently, Indian forces are dependent on foreign drones, such as UAVs Heron and Searcher from Israel, but even these are used only to gather intelligence.

The Russia-Ukraine war has highlighted the role of drones in combat. A video footage circulating on social media shows the Turkish combat drone Bayraktar TB2 successfully striking the Russian army and armoured vehicles. The same drones were used in Libya and in the battle between Azerbaijan and Armenia over Nagorno-Karabakh.

https://www.indiatoday.in/india-today-insight/story/us-made-predator-delayed-how-india-is-developing-own-combat-drone-2478415-2023-12-20

# Chapter 2. Stakeholder Survey Results

# Best Description of India's Extended Neighbourhood

A maximum number of respondents (118) chose Indo-Pacific as the best description of India's extended neighbourhood. This was followed by Asia-Pacific (32) as a distant second as the best description of India's extended neighbourhood. South Asia as the best description of India's extended neighbourhood was selected by (23) respondents and only 5 respondents chose Eurasia.

The highest share of respondents (66.29%) described India's extended neighbourhood as Indo-Pacific. Asia-Pacific (17.98%) had the second-highest share in the description of India's extended neighbourhood. Eurasia as the best description as South Asia had the third highest share (12.92%). Eurasia (2.81%) had the lowest share from among survey respondents.

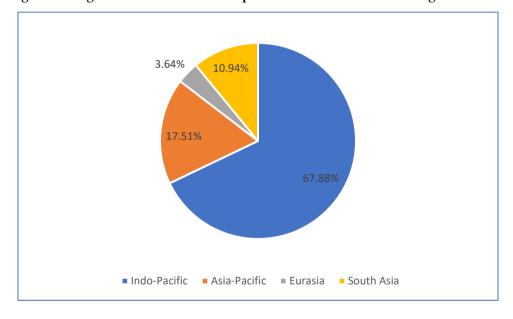


Figure 1: Region-wise share of description of India's Extended Neighbourhood

Describing the **Indo-Pacific** as India's extended neighbourhood by a majority share of respondents (66.29 per cent) that participated in the survey is an apt characterisation, considering India's geographical location and strategic interests in the region. The term 'Indo-Pacific' refers to a vast maritime space that encompasses the Indian Ocean and the Western and Central Pacific Ocean.

As a major maritime power with a long coastline along the Indian Ocean, India has significant economic, political, and security interests in the Indo-Pacific. The region is crucial for India's trade, energy security, and connectivity with East Asia. Additionally, India shares maritime boundaries with key players in the Indo-Pacific, including Southeast Asian nations and major powers like China.

Describing the Indo-Pacific as India's extended neighbourhood, emphasises its proactive engagement and leadership role in promoting peace, stability, and prosperity in the region. India's 'Act East' policy underscores its efforts to strengthen partnerships, enhance maritime security, and promote economic cooperation across the Indo-Pacific.

Moreover, framing the Indo-Pacific as India's extended neighbourhood underscores the interconnectedness of regional dynamics and highlights India's willingness to cooperate with regional and extra-regional actors to address common challenges, such as maritime security threats, climate change, and economic development. Overall, this characterisation underscores India's strategic interests and active involvement in shaping the future of the Indo-Pacific region.

A distant second highest share of respondents in the survey chose Asia-Pacific (17.98 per cent) as the best description of India's extended neighbourhood. While the term 'Asia-Pacific' is often used to describe the broader region encompassing East Asia, Southeast Asia, and the western Pacific Ocean, it may not be the most accurate description of India's immediate neighbourhood or its strategic interests.

India's geographical and geopolitical position primarily places it within the Indian subcontinent and the Indian Ocean region. While India does have interests and engagements in the broader Asia-Pacific region, its core focus lies more in the Indian Ocean region and the contiguous landmass.

Therefore, while 'Asia-Pacific' may indeed describe a significant portion of the world, it might not fully capture India's immediate neighbourhood or its primary strategic focus. Instead, 'Indo-Pacific' or simply 'Indian Ocean region' may provide a more nuanced understanding of India's neighbourhood and strategic interests.

South Asia (12.92 per cent) had the third highest share as the best description of India's extended neighbourhood. Compared with 'Asia-Pacific', 'South Asia' is indeed the more accurate description of India's immediate neighbourhood. South Asia comprises the countries of the Indian subcontinent, including India itself, along with its neighbouring countries.

India shares historical, cultural, economic, and geopolitical ties with these neighbouring countries, making South Asia a critical region for India's foreign policy and strategic interests. Issues such as trade, security, cross-border terrorism, and regional stability are significant priorities for India within the South Asian context. Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, and the Maldives.

Therefore, when discussing India's neighbourhood, 'South Asia' accurately delineates the geographic area where India's immediate neighbours are situated and where its primary foreign policy focus lies.

Eurasia (2.8 per cent) did not curry much favour amongst survey respondents as best description of India's extended neighbourhood. 'Eurasia' typically refers to the landmass that encompasses both Europe and Asia. While India shares some borders with Eurasia, particularly through its

northern boundaries with countries like China, Nepal, and Bhutan, the term itself doesn't accurately capture the entirety of India's neighbourhood.

While India does have interactions and interests extending into Eurasia, especially through trade, diplomacy, and geopolitical considerations, its immediate neighbourhood and primary focus remain within South Asia. Therefore, while Eurasia may play a role in India's broader regional engagement, it is not the best description of India's neighbourhood.

### World Order Best Serving India's Defense and Security Interests

The majority of respondents to the survey i.e. 157 held that a Multipolar World Order best serving India's defense and security interests. The number of respondents who said Can't Say was a distant second to 14. Those selecting a Bipolar world order best served India's defense and security interests were a meagre 5. Those who chose Unipolar were the least with 2.

The highest share of respondents to the survey say that Multipolar World (88.20 per cent) best serves India's security interests. A distant second highest share of stakeholders to the survey chose can't Say (7.87 per cent). The share of respondents who chose Bipolar (2.81 per cent) was the third highest share of stakeholders to the survey and Bipolar (1.81 per cent) had the lowest share.

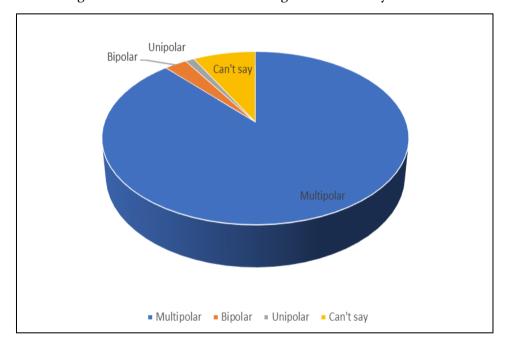


Figure 2: World Order Best Serving India's Security Interests

The survey results show that a maximum number of respondents chose multipolar world order, with several major powers balancing each other, best serves India's interests. This may be explained considering that India has traditionally been non-aligned and strategic autonomy has been a cornerstone of its foreign policy. As a rising power but not yet a superpower, India benefits from the flexibility afforded by a multipolar structure where no single state dominates globally. Hence, a multipolar structure where India enjoys strategic autonomy offers the most upside.

Geopolitically, a multipolar structure gives India room for manoeuvrability in its neighbourhood and extended region. India has complex relations with China and Pakistan where both cooperation and competition coexist. The presence of other major powers in the Indo-Pacific

dilutes China's influence and compels it to moderate assertions in the region. It also constrains Pakistan's tendency to escalate tensions with India.

In a multipolar world, major powers must court the support of swing states. This provides India with more diplomatic space allowing it to shape global governance norms across issues like climate change and nuclear proliferation where it has abiding interests. Therefore, a multipolar structure with flexible coalitions is most aligned with India's international outlook and best serves its development and security.

Meanwhile, can't say was the response chosen by a distant second-highest share of respondents to the survey. A possible reason could be that India's interests are complex and evolving based on many strategic and economic factors. Rather than claiming one structure is simply the best, it would be more accurate to analyse the potential opportunities and challenges each world order poses for India and how India could navigate them.

A multipolar world order may provide India the most strategic flexibility to pursue independent foreign policy goals, while a bipolar order led by the U.S. and China could also furnish economic opportunities if equilibrium between the major powers persists. However, a unipolar structure risks limiting India's policy options and strategic autonomy.

Therefore, different world orders have differential costs and benefits for Indian interests across economic, security, and diplomatic dimensions. This view argues that rather than a definitive "best" structure, India would ideally leverage its partnerships to maximise advantages within the prevailing global configuration.

A bipolar structure, led by the US and China, may also arguably suit Indian interests. Bipolar was chosen as the best world order by the third maximum share of survey respondents. Despite divides on issues like trade and human rights, India shares a mutually beneficial economic relationship with China. Western firms use India as a hub to access the Chinese market while Indian companies leverage China to access global supply chains. A volatile US-China relationship threatens these economic ties that power India's growth.

Moreover, a confrontation between the US and China risks polarisation in India's neighbourhood, forcing New Delhi to pick sides. India has deepening defense ties with the US but also seeks to manage tensions with China given unresolved border issues. India would prefer that US-China competition stay within bounds so it can balance these major powers.

Furthermore, unlike the Cold War era, economic interdependence between the US and China acts as a buffer today. The two countries have an understanding that while competition is inevitable, direct conflict would prove economically disastrous. This equilibrium between the two mega economies prevents the international system from getting structurally unstable, creating room for emerging powers like India.

A unipolar structure led by one superpower, namely the US, is least aligned with India's strategic preferences. Historically, India has struggled with the unilateral assertions of hegemonic powers and fiercely guards its strategic autonomy.

Despite growing ties, India continues to have divergences with the US on issues ranging from trade to climate change.

A US-led unipolar order constrained India's policy options during much of the post-Cold War period. India had to navigate global institutions shaped by US influence and adjust its Iran and Afghanistan policies to cater to American interests. It also accelerated India's strategic programmes to deter US pressure following India's 1998 nuclear tests.

Moreover, US support to Pakistan during the War on Terror undermined Indian security with cross-border terrorism continuing unabated. It again restricted India's response options both after the 2001 Parliament attack and the 2008 Mumbai terror strikes. An unchecked superpower leaves less room for India to manoeuvre ties in its neighbourhood.

# Quad as the Most Important Security Grouping for India to Meet its Security Needs

The maximum number of respondents to the survey (114) said that Quad comprising (Australia, India, Japan, U.S). is by far the most important security grouping for India to meet its defense and security needs. The new block I2U2 (India, Israel, UAE, U.S.) trailed (34) behind Quad as the second most important security grouping for India to meet its security needs as per respondents. Other (27) was the third most preferred category while the Australia-India-France trilateral had the least (3) respondents.

The highest share of respondents to the survey say that Quad (64.04 per cent) best serves India's security interests. A distant second highest share of stakeholders to the survey chose I2U2 (19.10 per cent). The share of respondents who chose Other was 15.13 per cent and had the third highest share of stakeholders to the survey and Australia-India-France (1.69 per cent) had the lowest share.

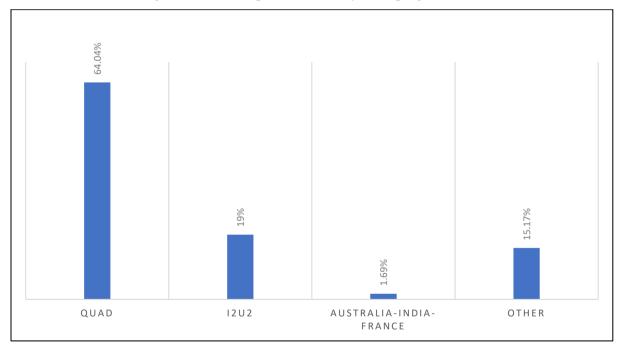


Figure 3: Most Important Security Grouping for India

Highest share of respondents (64.04 per cent) of the survey held that the **Quad**, is the most critical security grouping for advancing India's geopolitical interests in the 21st century. Binding these major Indo-Pacific democracies is a shared objective to uphold a rules-based international order and constrain China's growing assertiveness that threatens regional stability.

The Quad provides India with a platform to coordinate security policies with powerful partners and gain support for defending its land borders and maritime interests. Joint military drills,

intelligence sharing, and advanced technology transfers under the Quad enhance India's capabilities to protect its sovereignty and territorial integrity.

Equally importantly, the Quad signals the resolve of its members to politically and militarily counter aggressions against any one of them. China is now cognizant that unilateral actions against India along the LAC or in the Indian Ocean carry the severe risk of triggering coordinated responses from Quad partners. This deterrence effect is invaluable for India as it manages an increasingly hostile relationship with China.

The Quad provides a platform for India, US, Australia and Japan to cooperate on maritime security issues in the Indo-Pacific like freedom of navigation, countering piracy, etc. This aligns with India's security interests. Joint military drills among Quad countries like the Malabar naval exercises allow for greater interoperability between the armed forces. It enhances India's deterrence capabilities.

The Quad working groups on critical and emerging technologies like 5G and semiconductor supply chains helps India get greater access to these technologies for economic and security reasons.

The I2U2 grouping of India, Israel, the United Arab Emirates, and the U.S. trailed Quad with a substantial margin 45.04 per cent) as the second highest grouping vital for advancing India's security priorities in an increasingly unstable region. With volatile dynamics across West Asia and the Indian Ocean Region, India requires reliable partners that bring defense capacity, advanced technologies, and economic heft to secure its expanding interests.

I2U2 delivers for India on coordinating policies with two technologically advanced militaries in Israel and the U.S. and facilitates India's capabilities build-up in drones, robotics, cybersecurity, and border surveillance against assertive rivals. Meanwhile, intensifying trade and maritime cooperation with the UAE buttresses India's presence in its strategic backyard.

Most importantly, I2U2 provides India a platform to harmonise security perspectives with statusquo powers that equally fear destabilisation from terrorism, religious extremism, and Chinese belligerence. Aligned on these threats that imperil Indian defenses along volatile frontiers, the I2U2 counties have the joint capacity and willingness to invest resources that develop India's deterrence capabilities.

With converging threats and united capabilities, I2U2 represents India's most promising partnership for closing defense gaps against hostile regional forces. The grouping signals India has devoted friends across the Indian Ocean and Mideast committed to its security interests.

Meanwhile, the third highest share of respondents (15.13 per cent) chose the Other as the most important security grouping for India to meet its security needs. This meant that the respondents had either another grouping (other than Quad, I2U2 and Australia-France-India Trilateral in mind or they thought that no specific grouping could serve India's security needs. A few also reasoned that India follows a non-aligned foreign and strategic policy and hence neither of the groupings can be meet India's security needs solely.

While one response said that no security grouping but a series of partnerships with like-minded countries best suits India's security interest, the other stated strategic needs cannot be met by groupings but by strategic autonomy for choosing the other option. Yet, another response reasoned if India is looking for strategic cooperation apart from the US or beside the US then Australia, UAE, and France are important.

While some respondents while choosing- Other options named- Shanghai Cooperation Organisation (SCO), Brazil Russia India China South Africa (BRICS), and Indian Ocean Rim Association (IORA) were put forward. A few respondents also stated that non-existent partnerships like Quad with France and India-Russia-France-UAE as the groupings that best serve India's security interests.

The Australia-France-India trilateral had the least share for India to meet its security needs. With substantial overlaps in threat perceptions of an aggressively rising China, the three countries have initiated joint measures across maritime security, defense technology cooperation, protecting supply chains, and upholding freedom of navigation.

Regular naval exercises coordinated by the trilateral improve interoperability to monitor Chinese activities in the Indian and Pacific Oceans. France and Australia can provide India with high-end defense platforms and co-production opportunities that enhance its blue water capabilities, especially in vulnerable island territories.

Most importantly, the trilateral signals a unity of purpose among leading Indo-Pacific powers to resist unilateral attempts to change the status quo. France's territories spread across the Indian Ocean Region provide strategic leverage while Australia chairs critical forums like the Indian Ocean Rim Association.

# U.S. as India's Most Trusted Defense and Security Partner

Survey respondents selected the U.S. (73) as India's most trusted defense and security partner in the prevailing global security environment. The second highest number of respondents (51) selected Russia which trailed behind the U.S. as India's most trusted defense and security partner.

Israel as India's most trusted defense and security partner had the third highest number of respondents i.e. 19. France (18) trailed closely behind Israel as the fourth highest. The 'Other' option was chosen by the least number of respondents i.e. 17.

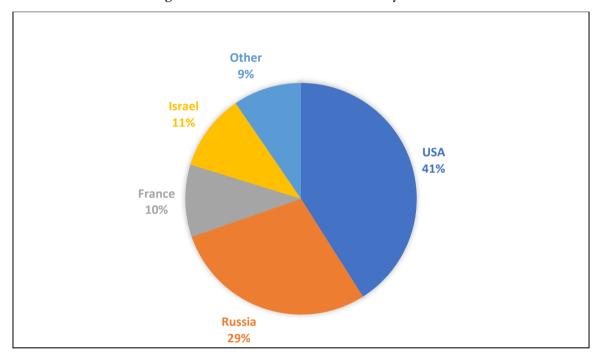


Figure 4: India's Most Trusted Security Partner

U.S. (41.01 per cent) had the highest percentage share with over 41 per cent of respondents choosing it as India's most trusted defense and security partner. India-U.S. defense ties have remarkably evolved from limited early cooperation due to India's non-alignment to a 21st-century strategic partnership vital to the Indo-Pacific. Gradual strategic convergence based on mutual interests has led to deepening defense collaboration. This is transforming a historically transactional buyer-seller dynamic into cooperative development of capabilities spanning technologies to joint exercises.

At the political level, the U.S.-India defense partnership has transcended partisanship and is insulation from trade differences. The unique Major Defense Partner status and 2+2 Ministerial Dialogue showcase high-level commitment. Key agreements now enable interoperability via

secure communication, geospatial data sharing and logistical cooperation between the armed forces.

More than US\$20bn in defense trade over the last decade exhibits fruits of cooperation. Bilateral dialogues, working groups and the 2012 DTTI provide structure for identifying jointly produced technologies. Early DTTI successes like the Air Launched Small Unmanned Systems set the template for more complex projects.

This cooperation is vital amid China's military rise and aggression across the Indo-Pacific. Both nations have a deep interest in upholding a free, open and rules-based regional order. India stands to gain cutting-edge capabilities and reduced technological asymmetry via partnerships with the US and its allies.

Russia (28.65 per cent) was the respondents second most preferred defense and security partners choice in the prevailing environment. This is most likely because, India's relationship with Russia in defense and security matters has been historically robust and enduring. Since the Cold War era, Russia has been a steadfast ally, providing India with advanced military technology, equipment, and support. This relationship is underpinned by mutual strategic interests and a shared history of cooperation.

Russia has consistently supported India's defense modernisation efforts by offering state-of-theart weaponry, including fighter jets, tanks, submarines, and missile systems. India values Russia's reliability and consistency in its defense partnership, unlike other suppliers whose commitments might fluctuate due to geopolitical considerations.

Furthermore, Russia's willingness to transfer technology and allow for indigenous production of defense equipment aligns with India's aspirations for self-reliance in defense manufacturing. Bilateral defense exercises and joint ventures between the two nations enhance interoperability and strengthen strategic coordination, fostering mutual trust and confidence. As such, Russia remains an indispensable pillar of India's defense and security strategy.

Meanwhile, Israel (10.67 per cent) trailed behind U.S. and Russia as the third most preferred defense and security partner of India. India's alliance with Israel in defense and security realms has evolved into a cornerstone of its strategic architecture. This partnership, built on mutual trust and shared interests, stands out as one of India's most reliable and significant relationships.

Israel's status as India's most trusted defense and security partner is substantiated by various factors. Firstly, Israel has been instrumental in providing India with cutting-edge military technology, intelligence cooperation, and counter-terrorism expertise. From drones to missile defense systems, Israel's contributions have significantly bolstered India's defense capabilities.

Secondly, the strategic alignment between India and Israel, marked by common threats and challenges, fosters deep cooperation in areas such as maritime security, cyber defense, and counter-insurgency operations. Additionally, Israel's agility and flexibility in addressing India's defense needs, coupled with its commitment to long-term collaboration, have earned it a reputation for reliability and effectiveness.

Moreover, the strategic partnership extends beyond defense procurement, encompassing joint research and development ventures and extensive military-to-military exchanges. These initiatives not only enhance India's defense preparedness but also foster greater interoperability and synergy between the armed forces of both nations.

France (10.11 per cent) closely trailed behind Israel in being India's most trusted defense and security partner. India's relationship with France in defense and security matters epitomises trust, reliability, and strategic convergence. This partnership, rooted in shared values and interests, has solidified over the years, making France one of India's most trusted allies in this domain.

France's status as India's most trusted defense and security partner is supported by several compelling factors. Firstly, France has consistently demonstrated a commitment to supporting India's defense modernisation efforts, offering state-of-the-art military technology and equipment. This includes the supply of advanced fighter jets, submarines, and missile systems, among other sophisticated defense assets.

The strategic alignment between India and France is evident in their shared concerns regarding terrorism, maritime security, and regional stability. This alignment has led to enhanced cooperation in joint military exercises, intelligence sharing, and counter-terrorism operations, bolstering mutual trust and confidence.

Furthermore, France's willingness to transfer technology and facilitate co-development and coproduction initiatives aligns with India's objectives for indigenous defense manufacturing and self-reliance. This approach not only strengthens India's defense capabilities but also deepens bilateral ties and fosters long-term strategic partnerships.

The Other choice (9.55 per cent) was made by the least number of respondents in the survey. Respondents gave replies like given India's situation- classifying as 'most' is not in the best interests. Another response said that no partner can fulfil India's defense needs. Survey respondents also called for balancing the U.S. and Russia in India's defense and security interests as solely depending on the U.S. may portend problems for the future.

#### U.S. and India Share Both Interests and Values

The maximum number of respondents (115) said that the statement best describing the U.S.-India Strategic Partnership is that the U.S. and India share both values and interests. The second maximum number of respondents (48) said the U.S. and India share interests but not values. The third maximum number of respondents (13) believed that the U.S. and India share values but not interests. Only 2 respondents believed that India and the U.S. share neither values nor interests.

The statement U.S. and India share both interests and values best describes the U.S.-India Strategic Partnership had the highest share among survey respondents with 64.61% share. A distant second highest percentage share of respondents said the U.S. and India share interests but not values (26.97 per cent). The third highest percentage share of respondents (7.30 per cent) choose U.S. and India share values but not interests as the best statement describing the U.S.-India Strategic Partnership.

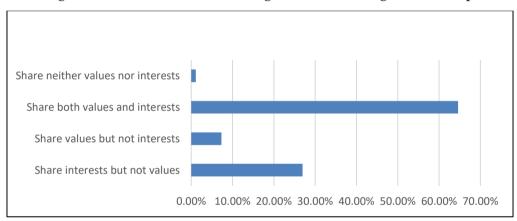


Figure 5: Best Statement Describing U.S.-India Strategic Partnership

The statement about U.S.-Indian relations probes the extent to which the interests and values of the two countries align or diverge. A note on foreign relations by the Indian Ministry of External Affairs says "India-U.S. bilateral relations have developed into a "global strategic partnership", based on shared democratic values and increasing convergence of interests on bilateral, regional, and, global issues" (Ministry of External Affairs, 2016).

However, a few articles mostly in the U.S. media have called into question the alignment of both values and interests between the U.S. and India (Markey, 2023) (Pant, 2020). Thus, this survey question tries to elicit responses from participants on their views about the same.

The highest share of respondents to the survey (64.61 per cent) said that the best statement describing the U.S.-India Strategic Partnership is that the two share both values and interests. The U.S. and India share democratic values and are cooperating on issues like health, climate change, and security. Building trust and partnerships during peacetime is important. The US

stands to strategically and commercially gain from sharing more with India, including defense technologies. This goes on despite some domestic opposition within the US.

India is slowly working to counter China's threats across domains which it cannot tackle alone. While valuing strategic autonomy, India's interests are aligning more with the US. Post the Afghanistan withdrawal, Pakistan has become a less significant US ally compared to before. India has moved from being a friend to a closer security partner of the US, though not a formal ally yet due to its non-alignment policy.

Shared interests in countering China's regional dominance and upholding a rules-based order drive greater convergence. Modi's recent visit signals the defense partnership has become very close.

Advancing shared interests in security, counterterrorism, and non-proliferation is a priority for Indo-US military cooperation amid China's rise. The US sees India as vital for a stable Indo-Pacific order.

Under President Biden, India-US ties may become more multifaceted - with more avenues for cooperation but also more complex policy contours. India will have to adeptly balance and promote its interests with the U.S.-India defense partnership has expanded remarkably, yet faces challenges in furthering cooperation on issues like upholding a rules-based order against authoritarian regimes. Still, shared democratic values and strategic interests drive the strategic alignment.

Politically, convergence exists between India and the U.S. across common interests like counterterrorism and managing China's rise. But differences persist on issues like Russia and economic openness which need bridging.

Militarily, India does more exercises with the US, accelerating interoperability. Defense trade has grown via platforms and technologies, aimed towards joint manufacturing. However, ties seem excessively Hardware-centric currently.

Though foundations like GSOMIA, COMCASA, etc have been instituted, trust-building through personnel exchanges can cement long-term cooperation. Uneven reciprocity in the sharing of defense capabilities also needs redressal.

On global issues like the Ukraine crisis, India's neutral stance amid dependence on Russian weapons does not augur well for the strategic partnership with the US. Though interests too direct partnerships, India's identity as a democracy aligned with a rules-based order needs upholding.

# Threats in Indo-Pacific as the Key Driver of The India-U.S. Defense and Security Partnership

A maximum number of respondents singled out mutually perceived security threats in the Indo-Pacific (121) as the key driver of the U.S.-India Defense and Security Partnership. A distant second highest number of respondents (27) said that Diversification of India's Defense Supplies was the key driver of the US-India Defense and Security Partnership. Countering terrorism in the Indo-Pacific (19) as a key driver of the U.S.-India Defense and Security Partnership was held to be the third highest among the respondents. The number of respondents who said Other (8) was the least among the respondents of the survey.

The highest percentage share of respondents in the survey chose mutually perceived threats in the Indo-Pacific (67.98 per cent) as the key driver of the U.S.-India Defense and Security Partnership. Diversification of India's Defense Supplies (15.17 per cent) saw the second highest share as the key driver of the U.S.-India bilateral strategic partnership. Countering terrorism in the Indo-Pacific had the third highest share as the driver of the India-U.S. Defense and Security Partnership. Other option was selected by (6.18 per cent) least number of respondents to the survey.

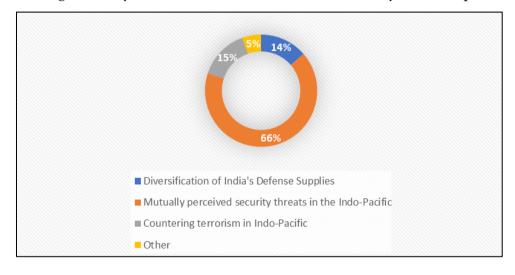


Figure 6: Key Driver of U.S.-India Defense and Security Partnership

The highest share of respondents in the survey i.e. near about 68 per cent mentioned mutually perceived security threats in the Indo-Pacific as the key driver of the U.S.-India Defense and Security Partnership. The relationship between the U.S. and India is evolving into a robust partnership driven by shared democratic values, strategic interests, and mutual concerns, particularly regarding China's rising assertiveness in the Indo-Pacific region.

India's gradual efforts to counter China's threats align with US interests, positioning India as a closer security partner. While not a formal ally due to its non-alignment policy, India's

significance has grown, especially following the Afghanistan withdrawal, which diminished Pakistan's importance to the U.S. The defense partnership, highlighted by Modi's recent visit, has become exceptionally close, driven by shared interests in countering China's regional dominance and upholding a rules-based order in the Indo-Pacific.

With a percentage share of 15.7%, diversification of defense supplies was the second-highest key driver of the U.S.-India Defense and Security Partnership. One of the key drivers of this partnership has been the diversification of defense supplies, which has not only reduced India's dependence on Russia but has also helped strengthen the strategic partnership between the U.S. and India, enabling them to collaborate more closely in addressing regional and global security challenges.

The U.S. has become a major defense supplier to India, with defense trade increasing from near zero in the early 2000s to over US\$20bn in recent years. This includes the supply of advanced military equipment such as combat aircraft, naval vessels, artillery systems, and missile defense systems.

The U.S. and India have been working towards facilitating the transfer of defense technology, including through joint research and development projects, co-production, and co-development of defense systems.

The Logistics Exchange Memorandum of Agreement (LEMOA) signed in 2016 facilitates logistical support, refuelling, and replenishment between the two militaries, enabling greater operational cooperation.

The driver of the U.S.-India Defense and Security Partnership with the third highest share in the survey was Countering Terrorism in the Indo-Pacific. This has emerged as a pivotal shared interest driving closer US-India defense and security cooperation over the last two decades. The 2001 Indian parliament terrorist attack and the 2008 Mumbai terror strikes revealed Pakistan-based outfits like Lashkar-e-Taiba and Jaish-e-Mohammed as persistent threats to Indian security. This led India to realise that despite historical differences, the US - given its own counterterror priorities post 9/11 and capabilities as a global military power - was a natural partner to strengthen its counterterror capabilities.

Consequently, the US designated LeT and JeM as Foreign Terrorist Organisations, demonstrating intent to curb Pakistan's selective approach against terror groups that maintained stovepipe relationships with its security establishment. The two countries also established a Homeland Security Dialogue in 2011 to facilitate operational coordination, intelligence sharing and capacity building to counter terrorism.

Annual military exercises like Yudh Abhyas, Vajra Prahar and Cope India further deepened tactical and operational understanding between US and Indian armed forces for joint missions across conventional and sub-conventional threat scenarios.

With discussions underway on further intelligence-sharing arrangements, counter-terror cooperation will continue to be the strategic glue that binds the US-India defense partnership. It

is likely to shape both New Delhi and Washington's agenda for regional security cooperation in the near future.

The lowest percentage share of respondents (6.18%) chose the other option excluding the above three options. They may have either reasoned that there is no definitive "key driver" of the India-U.S. defense and security partnership. It is shaped by a range of shared interests and objectives.

### Defense Procurement and Technology Transfer as the Most Critical Component of the U.S.-India Defense and Security Partnership

A maximum number of respondents to the survey selected Defense Procurement and Technology Transfer (88) as the most critical component '4' of the U.S.-India Defense and Security Partnership. This was followed by a distant second most critical component of the partnership Cooperation in Counter-terrorism (57). Conducting joint military exercises (55) was the third most critical component of the U.S.-India Defense and Security Partnership. Implementing bilateral agreements (48) was the least critical component of the bilateral partnership.

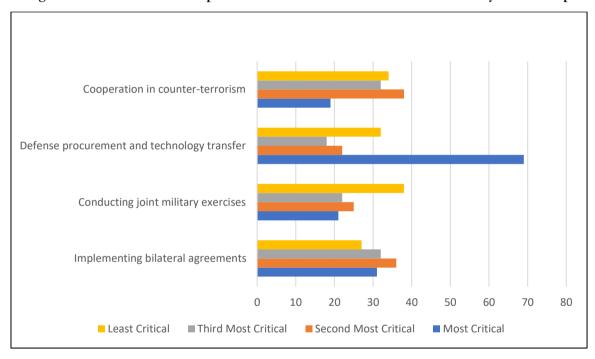


Figure 7: Most Critical Component of the U.S.-India Defense and Security Partnership

Survey respondents held that Defense Procurement and Technology Transfer (88) has emerged as the most critical areas of cooperation between the U.S. and India in strengthening their strategic partnership. As the two largest democracies with common interests in defending security and upholding a rules-based international order in the Indo-Pacific region and beyond, both countries stand to gain tremendously from greater integration between their defense industrial bases.

The U.S. and India have already made significant strides in defense trade and technology sharing over the past two decades. From less than US\$1mn in defense deals in 2000 to over US\$20bn today, defense procurement lies at the heart of the maturing U.S.-India relationship. Major

Indian acquisitions of American military platforms like C-17 transport aircraft, P-8 maritime surveillance planes, Apache and Chinook helicopters, and M777 howitzers underscore the role defense commerce has played in transforming what was once an estranged relationship into a strategic partnership.

Equally important is the technology transfer component that allows joint research, development, co-production, and innovation of advanced defense systems ranging from aircraft carriers to jet engine technology. For instance, the DTTI aims to move beyond a traditional "buyer-seller dynamic" by co-developing next-generation technologies. And the Industrial Security Annex (ISA) facilitates the exchange of classified information between private defense industries in both countries.

As India seeks to modernise its military and indigenise its defense manufacturing capabilities amid growing strategic uncertainties, American technology transfer can help New Delhi bridge critical capability gaps in aerospace, naval systems, and other domains while also creating high-tech jobs through partnerships with U.S. defense companies. At the same time, deeper defense cooperation serves Washington's interest of boosting India's capacity to balance and deter threats in the region.

As per the survey results, counter-terrorism cooperation (57) is second most crucial component of the U.S.-India defense and technology partnership, though arguably not as critical as defense procurement and technology transfer. India has faced cross-border terrorism from Pakistan-based groups like Lashkar-e-Taiba and Jaish-e-Mohammed for decades. Joint counter-terrorism efforts with the U.S. including intelligence sharing and capacity building help India manage this threat.

After 9/11 and the 2008 Mumbai attacks, counter-terrorism became a major area of security convergence between the two countries. Cooperation includes information exchange, terror finance monitoring, and homeland security coordination.

The U.S. and India have established institutions like the Homeland Security Dialogue and Counterterrorism Joint Working Group to collaborate on counter-terrorism analysis, training and technology. This institutionalisation indicates an enduring priority.

However, counter-terrorism cooperation alone cannot define the breadth and depth of the strategic partnership. Defense trade, technology transfer and strengthening India's military capabilities vis-a-vis China factor much more significantly in the calculus of both nations.

In sum, counter-terrorism cooperation reinforces U.S-India ties and helps establish trust. But the defense procurement and strategic technology sharing components remain more vital for the future trajectory of the relationship and for maintaining balance of power in the Indo-Pacific region.

Conducting regular joint military exercises (55) was the third most critical component of deepening defense ties between the U.S. and India. In the overall context of the security partnership, it plays a moderately critical role. Joint exercises such as Yudh Abhyas, Tiger

Triumph and Malabar improve interoperability between US and Indian armed forces to coordinate complex operations, especially maritime domain awareness and anti-submarine warfare. Exercises also allow both militaries to demonstrate strategic messaging in the Indo-Pacific region regarding deterrence, humanitarian aid and commitment to a rules-based order.

Nevertheless, while valuable for trust-building, exercises are still mostly symbolic and have limited operational impact compared to defense technology transfer and weapons sales which boost India's hard power capabilities. Moreover, India still conducts more military exercises with Russia given its legacy of dependence on Russian weapons systems. And there are limits on India's willingness to commit fully to U.S.-led joint exercises.

Therefore, mounting regular joint exercises signals growing defense ties between the U.S. and India. But their utility pales in comparison to defense trade, joint technology development and operational coordination to secure the Indo-Pacific. They remain just one component among many in an increasingly multi-faceted security relationship.

Implementing bilateral defense agreements (58) was the least critical component of the U.S.-India security partnership in recent years. However, the degree of cooperation still falls short of U.S. alliances. Constrained by India's history of non-alignment, full-spectrum defense interoperability remains unlikely.

Agreements such as the Logistics Exchange Memorandum of Agreement (LEMOA), Communications Compatibility and Security Agreement (COMCASA) and Industrial Security Annex (ISA) have operationalised key aspects of defense cooperation from logistics support to secure communications and technology transfer. After, implementing this pact through joint exercises, technology sharing projects and interoperability initiatives is essential to building mutual trust and strengthening India's capability as a deterrent against regional threats.

Successful implementation sets the stage for further agreements on geospatial cooperation, defense trade, and exchange of classified satellite data that can elevate defense ties. It also signals political will in both countries to elevate the partnership amid policy and bureaucratic obstacles on both sides. Steady implementation lends momentum.

Therefore, vigorous implementation of foundational defense agreements is now seen as an important metric of the growing strategic convergence between the U.S. and India. Yet striking an optimal balance across trade, technology and strategic autonomy imperatives is likely to determine long-term success.

### Outcome of the Indian Prime Minister's Official State Visit to the U.S.

Maximum number of respondents to the survey held that the most significant outcome of the Indian Prime Minister's Official State Visit to the U.S. between June 21-24, 2023 was the Launch of the U.S.-India Defense Acceleration Ecosystem (Indus-X) (45). The MoU on the Semiconductor Supply Chain and Innovation Partnership (53) was the second most significant outcome of the Prime Minister's visit to the U.S. according to respondents.

The third most significant outcome of Indian PM Modi's official state visit to the U.S. was the MoU between General Electric and Hindustan Aeronautics Limited for the manufacture of GE-414 jet engines in India (51). Critical Mineral Partnership (40) was the fourth most significant outcome of Indian PM Modi's official state visit to the U.S. in June 2023.

The least significant outcome of PM Modi's visit to U.S. between June 21-24 was India becoming the 27th country to sign the Artemis Accord (56). The choice of Other as the most significant outcome of Prime Minister Modi's Official State Visit to U.S. garnered just 12 responses.

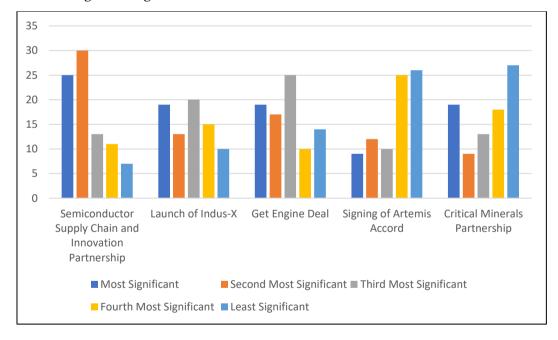


Figure 8: Significance of outcomes of PM Modi's State Vist to U.S.

The launch of the U.S.-India Defense Acceleration Ecosystem (Indus-X) was the most significant outcome of Indian Prime Minister Narendra Modi's Official State Visit to the U.S. between June 21-24, 2023. Indus-X is aimed at accelerating defense technology collaboration between American and Indian industries startups, and academia through facilitating interactions and providing funding avenues. This is believed to have the potential to boost innovation.

Launching an ecosystem like Indus-X signals intent and the potential is certainly promising. INDUS-X is designed to help us expand the Strategic technology partnership and defense industrial cooperation between U.S. and Indian governments, businesses, and academic institutions by serving as an innovation bridge for defense excellence.

Moreover, the iDEX team partners with the US Defense Innovation Unit (DIU) to connect Indian and US defense startups to academic institutions and labs to encourage. During Indian Prime Minister Narendra Modi's Official State visit to the U.S. capital flows and funding for defense innovation and announcement on sponsorship of joint prize challenges were announced.

The second most significant outcome of Prime Minister Modi's official state visit to U.S. was the MoU on Semiconductor Supply Chain and Innovation Partnership (53). The MoU holds strategic significance for both countries as it demonstrates an intent to strengthen innovation linkages and resilient supply chains in advanced chip technologies. For India, the partnership with the U.S. will enable cost-effective access to semiconductor technologies for its emerging device manufacturing industry as well as chip design capabilities to serve global markets.

Attracting U.S. investment and talent can accelerate the development of India's US\$10bn semiconductor mission promoting domestic manufacturing and exports. For the U.S., cooperative mechanisms with India under the MoU provide opportunities to diversify its supply chains reducing dependency on East Asian sources.

Facilitating India's rise as a semiconductor hub ensures reliable long-term access to cost-competitive high-tech microchips for U.S. industries. As digital technologies become integral across defense, consumer and commercial domains, the MoU signals long-term strategic bet by both countries on trusted partnerships in semiconductor innovation.

The MoU between General Electric and Hindustan Aeronautics Limited for the manufacture of GE-414 jet engines in India was the third most significant outcome of Indian Prime Minister's visit to the U.S. The HAL-GE jet engine MoU carries noteworthy potential. The deal holds significance as it provides a boost to indigenous jet engine manufacturing capabilities for Indian combat aircraft - a critical technology India has lagged in.

The MoU specifically covers the supply of GE-414 engines for the LCA-Mk2 fighter jet under development. This will enhance the aircraft's capabilities and overall self-reliance of the Indian aerospace sector. However, similar agreements have run into execution difficulties earlier over technology transfer and production issues between foreign OEMs and Indian PSUs. Proper implementation remains key.

Critical Minerals Partnership (40) was the fourth most significant outcome of the Indian Prime Minister's Official State Visit to the U.S. between June 21-24, 2023. India joined the U.S.-led Mineral Security Partnership (MSP) as its 14<sup>th</sup> member. The United States, Australia, Canada, Finland, France, Germany, Italy, Japan, Norway, Sweden, the United Kingdom, and the European Commission are the other members.

To promote both climatic goals and economic growth, the MSP works to strengthen vital mineral supply networks. It aims to guarantee the production, processing, and recycling of essential minerals by stimulating investments from the public and private sectors along the whole value chain.

According to survey respondents India became the 27th country to sign the Artemis Accord during Prime Minister Narendra Modi's visit to the US was the least significant outcome of the Indian Prime Minister's Official State Visit to the U.S. between June 21-24, 2023.

The accord aims to establish a common vision among the US, India, and other countries for peaceful space activities through principles, guidelines, and best practices. It emphasises transparency and cooperation while avoiding harmful activities.

Probably, the significance of the signing of the accord is little known to the survey respondents. Like for example, a media report argued that there are more questions than there are answers behind the Artemis signing (The Hindu, 2023). It asked, "Why is there such a big deal about an unofficial agreement on human behaviour on the moon? Why did India not ratify the 2020 Artemis Accords at the time of its release? And what will Artemis bring to India?".

The Union Government had however clarified that the purpose of the Artemis Accord is a common vision with U.S. and other countries via principles, guidelines and best practices so that we could supplement each other's activities for peaceful purposes with transparency and also work together for avoiding harmful activities (Press Information Bureau, 2023). It had also highlighted that the joint mission to the International Space Station, was separate of signing of the Artemis Accord (Press Information Bureau, 2023).

The two countries will develop a framework for joint mission to the International Space Station in 2024. This U.S. envisages as a possibility for closer cooperation between the space agencies of the two countries to get closer to the realities of Moon and subsequently to Mars and other planets.

### Technology Transfer- Best Way for U.S. to Help Diversify India's Defense Supply Production and Export

A maximum number of respondents said that technology transfer (146) as the best way for the U.S. to help India diversify its defense supply production and export. The distant second highest number of respondents (13) said that the U.S. can help India diversify defense supply and production through a military aid package. Only 8 respondents believed that by offering weapons at a concessional rate U.S. could help India diversify defense supply production and export—the number of respondents who choose Other was 11.

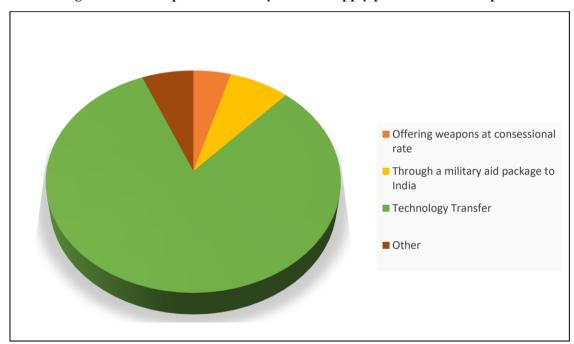


Figure 9: U.S. help India diversify defense supply production and export

The U.S. can help India diversify the latter's defense supply production and export by facilitating technology transfer and joint ventures said the highest percentage share of respondents (82.02 per cent). The U.S. can allow greater technology sharing and co-production/co-development of advanced defense systems with Indian companies. This can range from aircraft carrier design to jet engine technology.

The iCET provides a comprehensive framework for facilitating technology transfer and collaboration between the U.S. and India in critical defense technologies. By leveraging this framework, the U.S. can further substantiate its support for India's efforts to diversify its defense supply production and enhance its export capabilities.

Through iCET, the U.S. and India can coordinate joint research and development efforts in critical technologies. This can involve collaborative projects between government research agencies, academia, and industry partners to develop cutting-edge defense capabilities.

iCET can facilitate the establishment of mechanisms for technology transfer between the U.S. and India. This can include agreements on intellectual property rights, licensing arrangements, and joint ventures to ensure the smooth transfer of defense technologies.

iCET can support capacity building initiatives in India's defense industry by providing training, technical assistance, and expertise in critical technologies. This can help Indian defense companies enhance their capabilities to absorb and utilise transferred technologies effectively.

The U.S. and India can jointly explore opportunities to collaborate on affordable defense tech for export to third countries in Latin America, Africa, Asia by leveraging their respective expertise.

There wasn't a formal 'U.S. military aid package' to India in the traditional sense. However, the U.S. and India have engaged in various forms of defense cooperation and assistance, which have included military aid elements. However, in May 2022 a few Indian media reports published quoted sources saying that the US is preparing a US\$500mn military aid package for India to deepen security ties and reduce the country's dependence on Russian weapons (Hindustan Times, 2022) (The Print, 2022).

Had such a package been announced this would make India one of the largest recipients of such aid behind Israel and Egypt. It was unclear whether the deal would be announced, or what weapons would be included, one of the reports had clarified. Therefore, there isn't a single "military aid package" akin to what the U.S. provides to some other countries.

Offering weapons at concessional rates as how the U.S. could help India diversify the latter's defense supply production and export was never a good idea thought respondents who chose it as the leasted preferred way in which the U.S. can help India diversify the latter's defense supply production and export. India is the world's largest weapons importer by value and is expected to spend about US\$220bn in the coming decade to modernise its armed forces (Congressional Research Service, 2023).

However, 62 per cent of India's of defense imports by value were from Russia. other top suppliers include France (11 per cent), the U.S. (10 per cent), and Israel (7 per cent) (Congressional Research Service, 2023). The U.S. government is actively encouraging India to reduce its dependence on Russian-origin defense articles (Congressional Research Service).

Looking ahead, the Roadmap for U.S.-India Defense Industrial Cooperation jointly adopted by the two countries in June 2023 says that the U.S. and India will work together to identify immediate and high-impact opportunities to cooperatively produce the systems required to meet India's military modernisation objectives (U.S. Department of Defense, 2023).

The Roadmap text further reads, "Such efforts can lead to greater opportunities for cooperative development of new technologies and cooperative production of existing systems, in turn strengthening supply chains and bolstering India's domestic defense industry" (U.S. Department of Defense, 2023).

### Strongest Challenge to Foreign OEMs in India

According to respondents to the survey, the most adequate answer to the question as to the strongest challenge to foreign original equipment manufacturers (OEMs) is B. Legal bureaucracy and red tape cause foreign OEMs to be found by obligations for a long time, resulting in hindrances to doing business (86). There was a tie in the second maximum number of respondents-A and C. Other (10) had the least number of respondents.

The strongest challenge for foreign original equipment manufacturers (OEMs) is being stuck with offset obligations that they are unsure how to discharge, which prevents them from entering the market. The responsibility of discharging these offset obligations falls solely on the foreign OEMs and not on the Indian offset partners (IOPs) they choose to work with. This situation results in penalties or penalisation for the foreign OEMs.

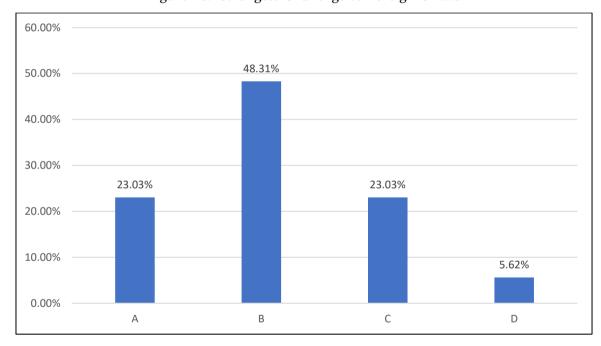


Figure 10: Strongest Challenge to Foreign OEMs

The strongest challenge to foreign OEMs in India's defense industry is the country's stringent offset policy and complex procurement procedures. India's defense procurement process involves significant bureaucratic hurdles, including extensive documentation requirements, long approval timelines, and uncertainty surrounding contracts. Additionally, the offset policy mandates that foreign OEMs invest a portion of the contract value back into India's defense sector, often in the form of technology transfer or local manufacturing.

Meeting these offset obligations while navigating India's regulatory landscape poses a considerable challenge for foreign OEMs. The challenge of offset obligations indeed poses a significant barrier for foreign OEMs looking to enter the Indian defense market. Offset

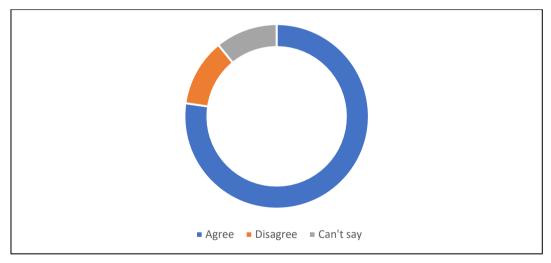
obligations typically require foreign suppliers to invest a certain percentage of the contract value in India's defense industry, either through technology transfer, joint ventures, or sourcing components from Indian suppliers. While these obligations are intended to promote indigenous defense production and technology transfer, they can also deter foreign OEMs due to uncertainty and complexity. Here's how offset obligations present a challenge.

The exclusive responsibility of foreign OEMs for offset obligations in the Indian defense market poses challenges such as limited control over Indian Offset Partners (IOPs), increased complexity and compliance burdens, risks of penalties and consequences for non-compliance, restricted flexibility in partner selection, and a competitive disadvantage compared to domestic counterparts.

To address these challenges, a balanced approach is needed, considering the capabilities and responsibilities of both foreign OEMs and IOPs. Enhancing transparency, accountability, and collaboration between foreign OEMs and IOPs can mitigate risks and create a more conducive environment for foreign investment and participation in India's defense industry.

The highest number of respondents to the survey i.e. 147 agreed to the statement that preserving 'strategic autonomy ' and the vision of a multipolar world are major drivers for India's Defense and Security Partnership with Israel, France, Russia, and countries other than the U.S. The number of respondents who disagreed with the above statement were only 21. The total number of respondents who mentioned Can't Say were 10.

Figure 11: India's Defense and Security Partnerships with Israel, France, and Russia Driven by Strategic Autonomy and Multipolar Vision



Preserving "strategic autonomy" and advancing the vision of a multipolar world are indeed significant drivers for India's defense and security partnerships with countries like Israel, France, Russia, and others, apart from the United States. India's foreign policy has long been characterised by a commitment to non-alignment and strategic independence, seeking to maintain autonomy in decision-making and avoid alignment with any single power bloc.

Moreover, India's defense and security partnerships with countries like Israel, France, and Russia allow it to diversify its sources of military technology and equipment. By not overly relying on any single country, India can maintain its strategic autonomy and independence in decision-making.

Besides, India's partnerships with various countries reflect its commitment to fostering a multipolar world order. By engaging with multiple major powers, India aims to balance influence and avoid over-dependence on any one power, thereby contributing to a more balanced global power structure.

Collaborating with a diverse set of partners enables India to access a wide range of military technologies and capabilities. This helps in modernising its armed forces and enhancing its defense preparedness, contributing to its overall security objectives.

However, 21 respondents disagreed with the statement that preserving 'strategic autonomy ' and the vision of a multipolar world are major drivers for India's Defense and Security Partnership with Israel, France, Russia, and such countries other than U.S

Despite India's efforts to maintain autonomy, its defense partnerships with certain countries may be perceived as aligning too closely with particular geopolitical interests. This perception could undermine India's image as a neutral player and limit its diplomatic flexibility.

India's defense partnerships with countries like Israel, France, and Russia may sometimes conflict with each other or with its strategic objectives. Managing these diverse partnerships while maintaining coherence in its defense strategy can be challenging and may lead to strategic ambiguity.

While diversifying sources of military technology is beneficial, it may also result in compatibility issues and logistical challenges. Different systems and standards from various suppliers could complicate integration and interoperability efforts within India's armed forces.

Therefore, some potential drawbacks and challenges need to be carefully managed. India has traditionally cherished its non-aligned, strategically autonomous stance in foreign policy. It wants to preserve maximum autonomy while also addressing security challenges in the Indo-Pacific.

#### Conclusion

The survey results provide valuable insights into the evolving dynamics of the U.S.-India defense and security partnership, reflecting India's strategic priorities and its quest for preserving autonomy in a multipolar world order.

A clear majority of respondents affirmed the 'Indo-Pacific' as the optimal characterisation of India's extended neighborhood, acknowledging the overlapping economic, political, and security interests across the Indian Ocean region and broader Pacific. This framing demonstrates India's vision to shape regional dynamics while securing its national interests.

Respondents overwhelmingly believed that a multipolar world order with several major powers balancing each other best serves India's interests. This aligns with India's traditional policy of non-alignment and strategic autonomy, allowing for greater flexibility and room for maneuverability in its complex relationships with countries like China and Pakistan.

The survey results highlighted the Quadrilateral Security Dialogue (Quad) as the most critical security grouping for advancing India's geopolitical interests in the 21st century. The Quad provides a platform for India to coordinate security policies with powerful partners, enhance its capabilities, and gain support for defending its borders and maritime interests, particularly in the face of China's assertiveness in the region.

The centrality of the U.S.-India strategic partnership was evident, with respondents indicating a growing convergence of interests and values between the two vibrant democracies. The partnership is seen as qualitatively unique, transcending partisanship and trade differences, and fostered by shared values in democracy, human rights, and transparency.

Respondents identified mutually perceived security threats in the Indo-Pacific as the key driver of the U.S.-India Defense and Security Partnership. India's gradual efforts to counter China's threats align with U.S. interests, positioning India as a closer security partner.

Defense procurement and technology transfer emerged as the most critical area of cooperation between the U.S. and India. As India seeks to modernise its military and indigenise its defense manufacturing capabilities, American technology transfer can bridge critical capability gaps and create high-tech jobs through partnerships with U.S. defense companies.

The survey highlighted significant outcomes from Prime Minister Modi's Official State Visit to the U.S. in June 2023, including the launch of the U.S.-India Defense Acceleration Ecosystem (Indus-X), the MoU on Semiconductor Supply Chain and Innovation Partnership, the HAL-GE jet engine MoU, and India joining the U.S.-led Mineral Security Partnership.

Respondents believed that the U.S. can help India diversify its defense supply production and export by facilitating technology transfer and joint ventures, utilising frameworks like the iCET.

However, the survey also identified challenges, such as India's stringent offset policy and complex procurement procedures, which pose significant hurdles for foreign OEMs in India's defense industry.

Ultimately, the survey underscored India's objective of preserving strategic autonomy and advancing the vision of a multipolar world through its diverse defense partnerships. India aims to equitably further cooperation with major powers to address security challenges while avoiding over-alignment with any single camp that impinges on its independent foreign policy doctrine.

As India navigates the evolving geopolitical landscape, it must carefully balance its relationships, manage potential drawbacks and challenges, and strike a balance between maintaining its non-aligned stance and addressing security challenges in the Indo-Pacific region. The U.S.-India defense and security partnership will continue to play a crucial role in shaping India's strategic priorities and its quest for a multipolar world order.

# Chapter 3. Defense News Conclave Workshops

The Defense News Conclave project is being implemented by CUTS International. Supported by the U.S. Department of State (U.S. Consulate Kolkata), this project aims to create awareness about the importance of U.S.-India defense relations, particularly in the context of contemporary developments in the Indo-Pacific region. The target audience is media professionals, including journalists from all over India.

#### 3.1 Webinars

## India-U.S. Collaborations in Defense Industry, Technology, Innovation and Trade

The second in a series of workshops, held on June 30, 2022, aims at creating awareness about the importance of India-US defense relations, particularly in the context of contemporary developments in the Indo-Pacific region.

Richard M. Rossow, Senior Adviser and Wadhwani Chair in US-India Policy Studies, Center for Strategic & International Studies, observed that India wants to move beyond a buyer-seller relationship in defense, and it wants access to the technologies underpinning defense sales. He noted that while a lot of equipment sales from the US to India were on the cards, getting U.S. firms to build locally in India remained a challenge. Rossow stated that the Defense Technology and Trade Initiative (DTTI) is an ambitious and unique framework between the two sides, which needs to move faster to ensure viability of more projects.

Colonel K.V Kuber, Director, Aerospace and Defense, Ernst and Young remarked that the India-U.S. defense relationship was driven by "mutual interest in commercial and geopolitical areas, which was the basis of trust". He mentioned the 2+2 dialogue between the two countries and the DTTI as the cornerstone of this relationship. Kuber said that India's defense self-reliance programme was driven by an "Aatmanirbharta with Vasudhaiva Kutumbakam" approach, driven by the "combined power of hardware, software, firmware and brainware."

Subimal Bhattacharjee, Independent Consultant on Defense and Cyber Security and Former Country Head, General Dynamics observed that the India-US defense relationship is a "dynamic and evolving one – from a place of mistrust to a place of deep trust". He noted that while R&D cooperation under the DTTI had not been very successful so far, a relook could set the ball rolling.

The virtual session saw enthusiastic participation, with over 50 participants joining to hear experts deliberate on these issues. This was the second of a series of such workshops, which have been conceptualised as capacity-building sessions for media professionals, so that they can have a more informed view of defense and strategic matters.

https://cuts-global.org/workshop-on-india-us-collaborations-in-defense-industry.htm

# Defense Modernisation in India: Policies, Commands and Capabilities

The third workshop in the series, held on July 29, 2022, focused on reforms across the defense sector in India.

Amit Cowshish, Partner, Dua Associates and former Financial Advisor (Acquisition), Ministry of Defense, observed that it was time to focus more on the outcomes of defense budgets in India, rather than looking at them only through the prism of allocation and utilisation. In his opinion, there is a need to restructure Indian defense budgets to make them more result-oriented, in order to match aspirations with execution. Innovations like a system for managing committed liabilities were important areas for defense finance reform which he flagged.

Manvendra Singh, former Member of Parliament and Chairman, Soldier Welfare Advisory Committee, Rajasthan, emphasised the need for India to have a coherent National Security Strategy. On jointness and integration of military commands, he noted the need to adopt a bottom-up approach, starting with joint planning by the services. He suggested the creation of a Joint Logistics Command as the first step towards greater synergy, before moving to joint operational commands.

Capt. Anubha Rathaur spoke about her experiences in a forward field posting during the Kargil conflict. She shared the challenges that are generally faced by women officers in such field postings. Rathaur noted the role of limited indigenous defense production during that period, highlighting the shortages of spares, ammunition, armour, and even mosquito nets, which their units encountered. She accordingly recognised the immense potential of defense indigenisation in contributing to India's overall defense preparedness.

Cmdr Anil Jai Singh also stated that a National Security Strategy is imperative for warfare in the 21<sup>st</sup> century. In the absence of such strategic guidance, there was no real basis on which India was undertaking structural reforms in the military. He also cautioned India against aping other countries' security strategies, and emphasised the need to craft our own model, taking into account the multi-dimensional kinetic and non-kinetic challenges.

The virtual session saw enthusiastic participation, with over 50 participants joining to hear experts deliberate on these issues. This was the third of a series of such workshops, which have been conceptualised as capacity-building sessions for media professionals, so that they can have a more informed view of defense and strategic matters.

https://cuts-global.org/workshop-on-defense-modernisation-in-india-july-29-2022.htm

# India-U.S. Geopolitical Relations: Past Present and Future

This was the final virtual workshop under this series held on September 26, 2022, which have been conceptualised as capacity-building sessions for media professionals, so that they can have a more informed view of defense and strategic matters. It focused on India-U.S. geopolitical and strategic relations, with a particular focus on the bilateral defense relationship. The virtual session saw enthusiastic participation, with over 40 participants joining to hear experts deliberate on these issues.

Lt. Gen (Retd.) D S Hooda, former General Officer Commanding- in-Chief, Indian Army's Northern Command spoke about recent geopolitical events and accompanying strategic realignments, and their consequences in terms of the challenges and opportunities for the India-U.S. relationship. He noted that the India-U.S. partnership is strong today, driven by a recognition of the need to work together to handle geopolitical challenges in the Indo-Pacific region and a rising China.

Raymond Vickery, Senior Adviser, Albright Stonebridge Group, stated that 1991 was a crucial year for the India-U.S. strategic relationship, being the year the Soviet Union collapsed and India opened up its economy – therefore creating a window for India and the U.S. to cooperate across the board. He emphasised that the "strategic values of defending democracy, having non-aggression, building peace and stability, rule of law, is a very strong factor", and that the strategic convergence between India and the U.S. should not be restricted to views on border and territorial concerns, but also be on the broader question of values.

Anit Mukherjee, Associate Professor, S Rajaratnam School of International Studies, Nanyang Technological University, Singapore, stated, on the other hand, that as opposed to values, the issues which bring India and the U.S. together are interests alone. While the interests don't align perfectly, Mukherjee observed that "best friendships are shaped by the interests that bind them", and for India and the U.S., the interests align mainly because of shared concerns of a rising China.

Swasti Rao, Associate Fellow, MP-IDSA, discussed the evolving multilateralism in the Indo-Pacific region, nothing that the various coalitions in the Indo-Pacific address both threat perceptions as well as larger normative goals (climate change, resilient supply chains, green energy, COVID-19 vaccines etc.). In her view, the Transatlantic and the Indo-Pacific security architectures are merging, driven by geopolitical changes. Rao also spoke at length on the role of Europe in the evolving landscape.

Delivering the vote of thanks, Bipul Chatterjee, Executive Director, CUTS International spoke on the future of the India-U.S. relationship. He highlighted that in the coming decades, the way forward would be for the two great democracies of the world to work together, and show that democracies not just can, but will deliver.

https://cuts-global.org/workshop-on-india-us-geo-political-relations-september-26-2022.htm

## 3.2 Hybrid Workshops

Under the Defense News Conclave Project, supported by the U.S. Consulate General Kolkata and the U.S. Department of State, CUTS International organised five workshops covering consular districts of the U.S. Consulate Generals. They aim to create a group of informed stakeholders in India for strengthening U.S.-India Defense and Security Partnership by generating the necessary awareness of diverse media professionals and other relevant stakeholders. They also looked at the milestones set and achieved, and policies and gaps to be addressed in order to secure a free, open, inclusive, and prosperous Indo-Pacific region.

### Dialogues on 'Deliverables to Deliveries'

Kolkata, August 04, 2023

A half-day workshop was organised in Kolkata, August 04, 2023 to inform the media that the bilateral defense relationship between the United States and India is strong and continues to grow.

More than 100 representatives from the media, think tanks, and defense experts, defense industry leaders and civil society participated in the hybrid event to focus on the positive messages highlighted by President Joe Biden and Prime Minister Narendra Modi in the recent joint statement which underscores that the U.S.-India partnership has evolved into a comprehensive global strategic relationship involving joint research, co-development and production of high-end defense equipment, and expanded cooperation in the Indo-Pacific region.

The workshop was spread across two sessions focused on disseminating good practices of the U.S.-India Defense and Security Partnership in general and its relevance in the Indo-Pacific region, in particular. Among others, it looked at the milestones set and achieved, and policies and gaps to be filled in to secure a free, open, inclusive, and prosperous Indo-Pacific region.

Delivering the keynote address, Colonel Douglas Hess, U.S. Army Attache, U.S. Embassy, New Delhi said that it is important to recognise that the U.S. and India have never been more interconnected, whether through the information connection of the Internet or through global supply chains. The U.S. is proud to work alongside India's leadership in South Asia and the Indian Ocean, as a driving force of the Quad and other multinational fora, and as an engine for regional growth and development.

Adrian Pratt, Acting Consul General, Public Affairs Officer and Director of the American Center, U.S. Consulate General Kolkata, mentioned that cooperation with India strengthens our security, bolsters our prosperity, and enriches our society. An enormous range of Americans have a stake in the U.S.-India relationship and expect further progress in achieving the full potential of U.S.-India defense ties as it spans the scope of human endeavour, from sea

to space, from security to health, and from energy to education. These are all positive stories, and through this project with our partner CUTS International, we want to tell these stories to the citizens of India and beyond.

One of the biggest deliveries of the India-U.S. Defense and Security Partnership has been the progression from 'Democracies can deliver' to 'Democracies have delivered', said Bipul Chattopadhyay, Executive Director, CUTS International. Delivering his opening remarks, Chattopadhyay added that the India-U.S. relationship is growing and is going to grow further in the coming years.

Highlighting the historical relationship between India and the U.S., Lieutenant General Subrata Saha, Former Member of the National Security Advisory Board and Deputy Chief of Army Staff, mentioned that the 2+2 Dialogues between India and the U.S. have been instrumental in bridging the gap and provided impetus to this relationship. This has helped to overcome the bureaucratic delays and accelerate the closeness among the top leadership of both the countries.

Speaking about how the U.S.-India defense and security partnership has panned out in the Indo-Pacific, Chintamani Mahapatra, Founder and Honorary Chairman of Kalinga Institute of Indo-Pacific Studies said without India, there would be no Indo-Pacific. He added that it is important for U.S.-India to stand together for an open, free and prosperous Indo-Pacific.

Pointing out that it is in the interest of U.S. to keep India on its side, Shekhar Dutt, Former Governor of Chhattisgarh and Defense Secretary of India, added, "One U.S. added to One India is 11 and together they should seize the opportunities of participating together in the global supply chain."

Partha P. Roy Chowdhury, Commercial Lead, Lockheed Martin India, elucidated that the collaboration of Lockheed Martin India, has also created opportunities for MSMEs in India through forward and backward linkages in production and manufacturing.

Among other illustrious panellists, including Manu Pubby, Senior Editor, Economic Times; Arun Ramchandani, Executive Vice President L&T Defense; Indranil Banerjie, Senior Analyst and Freelance Journalist in their remarks, highlighted that there is a need to deepen trust building between both the countries and this will be the bedrock of this relationship.

Among the other distinguished speakers were Air Chief Marshal Arup Raha, Former Chief of Air Staff and President, CENERS-K, Col. Baljinder Singh (Retd.), Director, Aerospace and Defense, USISPF, India Office and Sucharita Bhattacharjee, Policy Analyst, CUTS International, who presented their succinct presentation on this timely issue.

## Dialogues on 'Deliverables to Deliveries'

Jaipur, September 20, 2023

A day-long workshop was held in Jaipur on September 20, 2023 to create awareness about various aspects of growing India-US defense partnership.

Col. Aaron J. Cooper, Air Attaché, Embassy of the United States of America in India said the US and India have never been more interconnected than they are now. Whether it be through the information connection of the internet or global supply chains and from a person-to-person standpoint the United States and India are unquestionably, like never before.

Col. Cooper concluded his remarks by mentioning that an important aspect of the US Indo-Pacific Strategy is that this goal for the region cannot be achieved by one country alone. Therefore, it is imperative that both the U.S. and India, the two major democracies in the world, along with other allies in the region, should work together towards achieving these goals.

While discussing the theme of the first session, 'Scope of Bilateral Frameworks and Growing Areas of Convergence in U.S.-India Defense and Security Partnership', Lt. Gen. Subrata Saha (Retd.), former Member of the National Security Advisory Board and Deputy Chief of Army Staff said India and the U.S. created a wide range of strategic partnerships based on their values and beliefs. Both nations have similar principles of democratic rules, fighting against terrorism and the proliferation of mass destruction weapons.

During the session, Col. Manvendra Singh (Retd.) Editor-in-chief, Defense and Security Alert, said the strategic relations between two countries- the U.S. and India come from philosophies and policies. To ensure a stronger U.S.-India relationship, it is important that these two countries start working towards joint Research & Development of Equipment, and then work towards joint production and exports.

Prabudh Sharma, President, Raytheon Technologies in India and South Asia said that India enjoys the advantage of the availability of low-cost manpower. He drew a comparison that if an engineer charges US\$300 per hour in the U.S., an engineer in India will probably charge about US\$30 per hour. This makes the defense manufacturing sector attractive to investors.

Speaking about the changing of the ecosystem induced by rapid technological pace, Lt. Gen. Arun Sahni (Retd.), former General Officer Commanding in South Western Command Chief of the Indian Army said that there have been revolutionary changes in Intelligence, Surveillance and Reconnaissance (ISR). Algorithm warfare, Nano-technology, the relevance of lower orbit satellites, integrated kill chain, and hybrid firepower are the new era of warfare and technological upgradation is a must.

Lt. Gen. Anil Kumar Ahuja (Retd.), former Deputy Chief of Integrated Defense, Indian Co-chair of the U.S.-India Defense Technology and Trade Initiative (DTTI) Inter Agency Task Force and a distinguished fellow at CUTS Washington DC Center said that the US-India initiative on

Critical and Emerging Technology (iCET) has elevated and expanded the strategic technology partnership and defense industrial cooperation between these two countries. It provides the platform for achieving technological convergence.

Among other distinguished speakers were Manjari Singh, Assistant Professor, Amity Institute of International Studies, Amity University, Maj. Gen. Sudhakar Jee (Retd.), Former member of Board and Vice President, L&T Defense and Consultant/Advisor, Defense and Aerospace; Cmde. Mukesh Bhargava (Retd.) Former Member of Board and Vice President, L&T Defense and Consultant/Advisor, Defense and Aerospace.

https://cuts-global.org/dialogues-on-deliverables-sep-20-2023.htm

## Dialogue on 'Deliverables to Deliveries'

#### Mumbai, November 21, 2023

A day-long workshop was organised at Mumbai on November 21, 2023. Rear Admiral Michael Baker, Senior Defense Official and Defense Attaché at the U.S. Embassy, New Delhi stated that U.S.-India Defense Partnership is functioning at an all-time high. Arguing that the U.S.-India defense partnership is important for establishing peace and stability in the Indo-Pacific Region, the U.S. Senior Defense Official further said that this partnership has various opportunities such as ammunition, aircraft, underwater awareness technology, and cyber security.

Vice Admiral Girish Luthra (Retd.), former Flag Officer Commanding-in-Chief, Western Naval Command mentioned that the U.S.-India Defense Partnership is a broad-based, multisectoral, and multidomain partnership. He informed that there are three pillars of the U.S.-India comprehensive strategic partnership – working together on local and global issues in the Indo-Pacific; cooperation among armed forces of the two countries; and the defense technology, defense trade, and equipment systems.

Greg Pardo, Spokesperson, U.S. Consulate General Mumbai said US considers India as a key partner in the Indo-Pacific and India and vice versa. Therefore, he underlined the need to take advantage of the momentum built on this synergy and strengthen bilateral ties encompassing people to people ties, and industrial & academic collaborations.

The workshop was spread across two sessions viz—U.S.-India Cooperation in Next Level Warfare and the Significance of U.S.-India Naval Collaboration. It informed the participants that the bilateral defense relationship between the United States and India is robust and continues to grow.

The first session underlined the significance of the U.S.-India defense partnership for 21st-century modern warfare including understanding the dimensions of Hybrid warfare as a subset of statecraft that uses the diplomacy, information, military, and economic elements (DIME).

Lt. Gen. Subrata Saha (Retd.), Former Deputy Chief of Army Staff said today we are moving into an era of maneuvers of technology over maneuver of forces in future wars. Grey Zone warfare and non-contact warfare are witnessing an explosion of innovative exploitation of dual-use technologies.

Lt. Gen. Sanjay Verma (Retd.), Former Director General Weapons and Equipment, Ministry of Defense and Consultant, DRDO held that the Indian private industry is thriving now and we are shifting gears in innovation. India is driving force is software and this will help both (US and India) to strengthen this cooperation.

Discussions in the second session highlighted India's National Security Apparatus including Maritime Security on the Eastern Coast of Africa, and Arabian Sea, and the Strategic Defense Partnership in the Indo-Pacific Region.

KP Vijayalakshmi, Professor & Head, Department of Geopolitics and International Relations, Manipal University pointed out that interdependence and interconnectedness is the bedrock of US-India naval collaboration. The naval collaboration between the US and Indian navy is the best thing.

Cmde. Srikant B Kesnur (Retd.), Former Director of the Maritime Warfare Center in Mumbai said that there are some areas of greater maritime cooperation between India and the U.S. One is the agreement and exchanges, another one is operational interaction and this is the area where deliverables have become the deliveries.

Among other distinguished speakers at Dialogues on "Deliverables to Deliveries" were Cmde. Mukesh Bharagava (Retd.), Deputy Chairman, Defense & Aerospace Committee, FICCI Gujarat and Senior Advisor, Defense & Aerospace Committee, CM Madhya Pradesh; Capt. Nikunj Parashar (Retd.), Founder, Sagar Defense Engineering Pvt. Ltd; Shrikant Paranjpe, Honorary Adjunct Professor, Department of Defense and Strategic Studies, Savitribai Phule Pune University; Alaric Diniz, Partner, Aerospace & Defense, Deloitte, India; Sandhya Sharma, Editor, Technology Policy and Foreign Policy, ET Prime and Rahesha Sehgal, Anchor, WION News.

More than 60 representatives from the media, think tanks, and defense experts, defense industry leaders and civil society participated in the hybrid event hosted in Mumbai.

https://cuts-global.org/dialogues-on-deliverables-to-deliveries-november-21-2023.htm

## Dialogue on 'Deliverables to Deliveries'

#### Hyderabad, January 05, 2024

A day-long workshop was held in Hyderabad on January 05, 2024 to highlight the strength of the bilateral defense and security partnership between the U.S. and India, and the growing U.S.-India strategic relationship in the Indo-Pacific region.

U.S. Consul General Jennifer Larson remarked that "Few areas of U.S.-India relations have seen as much recent progress as the defense relationship. Over the last two decades, the U.S. has become a significant supplier of defense equipment to India and has become India's largest military exercise partner." She added that "Bilateral defense trade with India has grown exponentially year-over-year. We were at essentially zero in 2008, and that number has grown to reach almost US\$25 billion by the end of 2023."

Consul General Larson stated that several U.S. aerospace companies have established partnerships with Indian counterparts, facilitating technology transfer and enhancing indigenous defense production capabilities in India, including several taking place in Hyderabad. "Together, both nations have taken steps to improve inter-operability and coordination and signed technical agreements to further expand India's access to high-end American defense technology."

Addressing distinguished panellists and workshop participants, the Consul General also discussed the increase in joint U.S-India military exercises and cooperation, "including those involving the U.S. and Indian Navies held at Visakhapatnam, the headquarters of the Indian Navy's Eastern Command." Joint service exercises like Tiger Triumph are important as they "help our navies work effectively, side-by-side, in providing disaster relief for communities devastated by tsunamis, earthquakes, and floods across the region."

Finally, Jennifer Larson remarked that the U.S. is committed to achieving a "free, open, interconnected, prosperous, resilient, and secure region for all."

https://cuts-global.org/dialogues-on-deliverables-to-deliveries-january-5-2024.htm

## Dialogue on 'Deliverables to Deliveries'

#### Chennai, February 06, 2024

A day-long workshop was held in Chennai on February 06, 2024 to highlight the strength of the bilateral defense and security partnership between the United States and India, and the growing U.S.-India strategic relationship in the Indo-Pacific region.

Pradeep S. Mehta, Secretary General, CUTS International, began by highlighting the dynamic U.S.-India cooperation, where the two countries have evolved as the most valued partners in today's geopolitical scenario. He mentioned that owing to the converging security and strategic interests, embedded in the commitment to promoting a resilient, rules-based international order, a substantial bilateral progress has been witnessed through the ideation and execution of a "Comprehensive Global Strategic Partnership."

U.S. Consul General in Chennai Christopher Hodges said, "The U.S. and India share a convergence of interests and values and are enjoying a real moment in the bilateral relationship. It's up to us to take advantage of that momentum and draw from the power and dynamism of our diverse populations to drive research and innovation across business, across education, across culture and across defense. We must bring all of our talent on both sides to the table to help drive this relationship forward."

On these lines, the tone was set for the keynote address of S. Christopher, Former Chairman, the Defense Research and Development Organisation (DRDO), mentioning the India-U.S. relationship was going through a dynamic transition.

He said that the relationship has been strengthened through a parallel progression of connecting people of both the nations, creating newer avenues and also partnership. In the present scenario, India is on its way to having the maximum number of youth population, looking forward to connect with the rest of the world, creating further opportunities. Power and partnership model is the new key to connectivity between the two countries.

While discussing the theme of the first session, "U.S.-India Industrial and Strategic Collaboration," Wg Cdr P. Madhusoodanan (Retd.), Vice President, Aerospace and Defense, Tamil Nadu, Chennai, spoke about the co-production and co-development in aerospace and defense, not restricted to the military alone, but holding a much larger domain- aviation, space, and defense. This creates an opportunity beyond the boundaries.

Lt. Gen Anil Ahuja (Retd.), Indian Co-Chair of the U.S.-India Defense Technology and Trade, pointed out that DTII had provided a cushion for adjusting the change between Obama and Trump regimes. Similarly, iCET will give a smooth transition between the Biden administration and its successors.

In this regard, G. Balachandran, former Consultant, Institute of Defense Studies and Analysis (IDSA) mentioned that India's technological presence is vital for its future.

Air Marshall M. Matheswaran (Retd.) Founder Chairman and President, The Peninsula Foundation, spoke about the need to intensify cooperation including the sectors of technology transfer.

With this perspective, India's role in the Quad has come to the forefront, as mentioned by V. Adm M.P. Muralidharan(Retd.), who substantially put forth the notion that the joint capabilities of the four countries of the Quad can send a deterrent message to any country which poses a security threat to this group.

Nikhil K. Rao, Managing Director and Chief Engineer for the Boeing India Engineering, Tamil Nadu, mentioned that India is likely to become the largest economy by 2027 and the U.S., the second largest economy by then and this would define the dynamics of the period, drawing attention to partners like the Boeing, which would take a major lead.

Among other distinguished speakers at the "Defense News Conclave: Stories of U.S.-India Defense and Security Partnership" are Lt. General Anil Ahuja (Retd.), Indian Co-Chair of the U.S. India Defense Technology and Trade; T. Suvarna Raju, Former Chairman and Managing Director, Hindustan Aeronautics Limited (HAL); Vijay Sakhuja, Former Director, National Maritime Foundation; Snehesh Alex Philip, Senior Executive Editor, The Print; Cmde. S. Vasan (Retd.), Director General, Chennai Centre for China Studies and Regional Director, National Maritime Foundation, Tamil Nadu.

https://cuts-global.org/dialogues-on-deliverables-to-deliveries-february-6-2024.htm

## **Epilogue**

The saga of India-US defense relations is emblematic of a broader evolution in international diplomacy, where indifference has often made way for strategic alliances. The story of their defense partnership is one of resilience, adaptation, and unwavering commitment to common goals, a narrative that will continue to unfold in the years to come.

This compendium captures the dynamic progression of this relationship, illustrating how geopolitical shifts and mutual interests have aligned to create a robust partnership. As we reflect on the developments chronicled in this Compendium, it becomes clear that this alliance is not merely about defense cooperation but is also a testament to values and visions that the two countries share in their drive for a stable secure and prosperous future.

As we stand on the threshold of a new era, the seeds of India-US defense relations, sown in the post-Cold War era, have bloomed into a robust and enduring partnership. Looking ahead, several areas hold promise for further expanding U.S.-India defense cooperation.

#### **Future Areas of Cooperation**

Cybersecurity and space are two domains that are poised to witness increasing collaboration between the U.S. and India. As modern warfare increasingly relies on secure digital infrastructure and space-based assets, joint efforts to secure critical infrastructure, share threat perspectives and intelligence, and develop resilient space capabilities will be vital. Initiatives such as the establishment of a joint Indo-U.S. Quantum Coordination Mechanism and support for joint research on quantum artificial intelligence and advanced technologies are steps in the right direction.

Moreover, while, enhanced joint military exercises, such as the Malabar naval exercises, reflect the growing interoperability between the two forces, future exercises are likely to expand in scope and complexity, incorporating new domains like cyber and space warfare. This will not only strengthen operational coordination but also foster a better understanding of each other's military doctrines and capabilities.

As the Indo-Pacific region continues to be a focal point of strategic convergence between India and the United States both nations share a common interest in ensuring a free, open, and inclusive Indo-Pacific, a vision that is increasingly challenged by the rise of authoritarian regimes and unilateral actions that undermine international norms. The establishment of initiatives like the Quad—a strategic dialogue involving the United States, India, Japan, and Australia—underscores the collective resolve to uphold a rules-based order in the region.

While the U.S.-India partnership is strong, the need for a mature and inclusive approach that embraces collaboration with other nations in the region can hardly be exaggerated. Inclusivity is crucial for effectively addressing regional challenges and fostering stability, security, and peace in the Indo-Pacific.

#### **Technology Transfer**

One of the pillars of the dynamic India-US defense partnership is the emphasis on defense procurement and technology transfer. In this respect, the future of the U.S.-India defense partnership lies in maintaining trust and focusing on realistic and cooperative goals. By leveraging India's talented human resources and combining them with U.S. computational power, the two nations can achieve significant co-development and commercialisation of technology. This collaboration must ensure that benefits flow equally to both partners, enabling India not only to gain skills, jobs, and financial benefits today but also to share intellectual property rights (IPRs) and build its capabilities in the long run.

Thus, technology transfer remains a cornerstone of this partnership, with joint research and development projects enhancing India's defense preparedness and contributing to the growth of its indigenous defense industry. This aligns with the broader goal of self-reliance and paves the road to a robust and mutually beneficial defense relationship.

Establishing a common operating picture and intelligence-sharing mechanism will enhance realtime situational awareness, and a shared mission and vision. The iCET initiative on Critical and Emerging Technologies will serve as the central hub for these efforts. This initiative, better described as an integrated support system in critical and emerging technologies, is essential for achieving these goals.

#### Countering Mis/Disinformation

There is a need to build the capacity of media professionals to leverage emerging technologies and ensure the dissemination of accurate and timely information. India-U.S. collaboration in areas such as critical and emerging technologies can significantly enhance the ability of journalists to counter misinformation and disinformation.

Also, the use of digital diplomacy and political communication tools, such as social media, can play a crucial role in combating misinformation and promoting transparency. By leveraging these platforms effectively, both nations can create a positive global image and counter false narratives. Building trust and a shared understanding of each other's perspectives and concerns is essential for seamless cooperation in countering misinformation and disinformation. Fostering a cultural understanding between operatives at the strategic and functional levels is crucial for effective collaboration.

While the India-US defense relationship has made remarkable strides, the future holds its own set of challenges and opportunities. Strategic autonomy remains a cornerstone of India's foreign policy, necessitating a delicate balancing act between deepening ties with the United States and maintaining cordial relations with other global powers, including Russia and China.

Compatibility issues and logistical challenges arising from the integration of diverse defense systems also pose significant hurdles. Ensuring seamless interoperability between Indian and American military hardware requires continuous effort and adaptation. Moreover, the perception of over-alignment with US strategic interests could potentially limit India's diplomatic flexibility, a concern that necessitates careful navigation.

#### Opportunities and the Way Forward

Despite these challenges, the opportunities for furthering this partnership are immense. The evolving security landscape in the Indo-Pacific, coupled with the growing threat of asymmetric warfare and cyber threats, underscores the need for greater collaboration. Joint efforts in areas such as cyber defense, space security, and artificial intelligence can propel the partnership into new frontiers, addressing emerging security challenges in innovative ways.

As we look at the future, the India-US defense relationship stands at a crossroad. Ensuring a rules-based order in the Indo-Pacific will remain a key deliverable, with both nations committed to translating strategic frameworks into tangible outcomes.

Strengthening institutional frameworks for defense cooperation, expanding joint training programs, and fostering greater people-to-people ties through military exchanges will be essential in sustaining the momentum. The vision articulated in the recent leaders' joint statement—to build a "free, open, inclusive, and prosperous" Indo-Pacific—must be underpinned by constructive steps that reinforce mutual trust and operational synergy.

#### Conclusion

The India-US defense partnership is a testament to the power of diplomacy and strategic alignment. It reflects a shared commitment to upholding democratic values and addressing common security challenges.

Beyond the pages of this compendium, we need to remind ourselves that the strength of this partnership lies not just in the agreements signed or the exercises conducted, but in the shared vision that the two countries nurture of a world that is more safe and more secure. The journey ahead will undoubtedly be complex, but with continued resolve and collaboration, the India-US defense partnership will remain a cornerstone of regional and global stability.

As sentinels of sovereignty and guardians of liberty, India and the United States remain united in their pursuit of a more secure and prosperous world.

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#### About the Project

Under the Defense News Conclave Project, supported by the U.S. Department of State through the U.S. Consulate General, Kolkata, CUTS International organised a series on virtual and in-person workshops. The project deliverables aimed to create a circuit of informed stakeholders in India for strengthening the U.S.-India defense and security partnership by generating necessary awareness among diverse media professionals and other relevant stakeholders.

The project covered sessions focusing on good practices of the U.S.-India defense and security partnership in general and its relevance for the U.S.-India strategic partnership in the Indo-Pacific region, in particular. Among others, the conclave looked at the milestones set and achieved, policies, and gaps to be filled to secure a free, open, inclusive, and prosperous Indo-Pacific region.

In light of the above, CUTS International, through this project, organised a series of in-person and virtual workshops to train 120-150 informed journalists, storytellers, media professionals, social media influencers, and community leaders from India on the subject. Defense experts, government officials, corporate leaders, defense companies, entrepreneurs, and researchers from the U.S and India were chosen to impart the training.

https://cuts-global.org/defense-news-conclave.htm





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