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The Objectives of the 'Initiative on Critical and Emerging Technology' Conference

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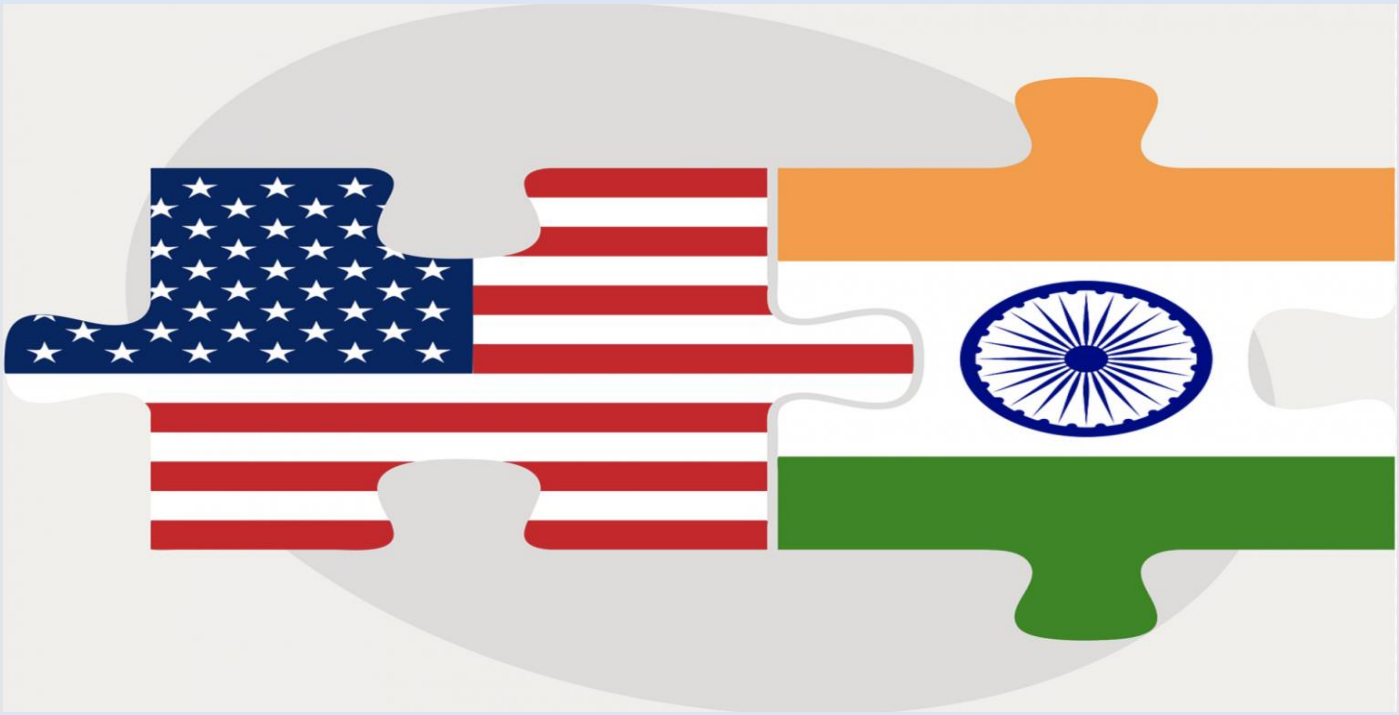

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The United States (US) and India believe that their shared democratic ideals and respect for all human rights should guide how technology is invented, developed, managed, and exploited. Keeping this particular objective in mind, the two countries have managed to establish a 'strategic partnership' in the Indo-Pacific region.[1] This Indo-US partnership was echoed in the commitment President Biden and Prime Minister Narendra Modi made, when they agreed to establish the 'Initiative on Critical and Emerging Technologies' (ICTE).[2] The US and India are working closely to cooperate over technological and defence partnerships. This is aimed at containing China from posing itself as a leader of global technological initiatives and paving the way for its hegemonic status in the world. The actual realization of this commitment occurred on January 30, 2023, with a roundtable conference.

Scheme of the Initiative

The event comes at a crucial juncture as President Biden recently asked India to reduce its dependence on Russian defence exports.[3] A weak show of Russian military prowess in Ukraine also nudged India to diversify the source of its military equipment. Through a standing mechanism under ICTE, the US and India reaffirmed their commitment to cooperate in addressing concerns relating to regulatory impediments, corporate mobility, and talent mobility in both countries. To deepen and expand the technology partnership, India and the US launched new initiatives in the fields of artificial intelligence, quantum technologies, defence, space, and other areas crucial to developing a robust innovation ecosystem between the countries. The agreements will serve as a test to see if the Biden administration can implement its plan for "friend-shoring," or moving the production of some key elements to friendly nations.[4] The persistent reliance of the US on China for semiconductors, telecom components, and other vital items has raised concerns from officials in the Biden administration. They have tightened restrictions on the export of cutting-edge semiconductor technology to China in recent months in a bid to halt the sector. The White House claims that semiconductors may give China a strategic advantage in the future.

Creating a new bilateral defence industrial collaboration roadmap with a primary focus on investigating projects connected to jet engines, munition-related technologies, and other systems to enhance technical collaboration between the two countries for joint development and manufacture. Recently, General Electric submitted a request to the US for permission to co-produce jet engines that might power Indian-operated and produced jet aircraft. The nations also committed to stepping up their efforts to help launch and produce a variety of defence technology, such as artillery systems, jet engines, and armoured infantry vehicles. The US pledges to consider this application as soon as possible, improving long-term research and development collaboration with a focus on discovering operational use cases for maritime security and

intelligence, surveillance, and reconnaissance (ISR), and establishing a new 'Innovation Bridge' to link military start-ups between the US and India.

The broadening of the semiconductor supply chain is another component of the program. This issue has become more serious as a result of Chinese threats against Taiwan, which controls the majority of the world's supply of high-tech semiconductors. The Government of India Semiconductor Mission is a member of a task force established by the US Semiconductor Industry Association (SIA) in collaboration with the India Electronics Semiconductor Association (IESA) to develop a 'readiness assessment' to identify short-term commercial opportunities and enable the longer-term corporate strategy of supplementary semiconductor ecosystems.[5]

The initiative also takes into account the strengthening of space cooperation between both nations. It hopes to enhance collaboration in human spaceflight, notably by creating partnerships that will involve NASA Johnson Space Center and the Indian Space Research Organization (ISRO) and provide extensive training for astronauts. It also aspires to find creative ways for the two countries' business sectors to work together, particularly concerning initiatives connected to NASA's Commercial Lunar Payload Services (CLPS) project. To develop this project, NASA and ISRO will bring together American CLPS companies and Indian aerospace companies within the next year.

Way Ahead for India

For many years, technology has been at the heart of the U.S.-India relationship. It was a major cause of conflict starting in the middle of the 1970s when export restrictions were put in place by the US following an Indian nuclear test explosion. However, in more recent years, technology cooperation—including a landmark civil nuclear agreement reached in 2006—has fuelled stronger ties between the US and India. The recent geopolitical environment and post-pandemic recovery of world economic growth came as a potential benefit for India. However, finding the manufacturing space and experienced staff that many businesses would require to shift their supply chains out of China has proven to be a challenge. However, India has a highly qualified labour population and a leadership that wants to increase foreign investment. Global corporations are looking to set up shop in the subcontinent but continue to lament the country's strict rules, poor infrastructure, and other obstacles. In light of these calculations, the India-US technological partnership has come at a significant moment.

Notes:

[1] Mahrukh Khan, "Growing India-US Strategic Cooperation: An Analysis." *Strategic Studies*, vol. 37, no. 4, 2017, pp. 97–117. *JSTOR*, https://www.jstor.org/stable/48537574. Accessed on February 1, 2023.

[2] "FACT SHEET: United States and India Elevate Strategic Partnership with the initiative on Critical and Emerging Technology (iCET)," *White House*, https://www.whitehouse.gov/briefing-room/statements-releases/2023/01/31/fact-sheet-united-states-and-india-elevate-strategic-partnership-with-the-initiative-on-critical-and-emerging-technology-icet/ Accessed on February 1, 2023.

[3] Sudhi Ranjan Sen and Peter Martin, "US seeks to reduce India's dependence on Russian weapons with arms-aid package," *The Print*, May 18, 2022, https://theprint.in/world/us-seeks-to-reduce-indias-dependence-on-russian-weapons-with-arms-aid-package/960496/ Accessed on January 31, 2023.

[4] Alexander Benard, "What America's Plan to Bring Home Technology Manufacturing Gets Wrong," *Foreign Policy*, September 29, 2022, https://foreignpolicy.com/2022/09/29/us-china-technology-it-supply-chains-manufacturing-decoupling-reshoring-friend-shoring-chips-act/ Accessed on January 31, 2023.

[5] "US Semiconductor Industry Association signs MoU with IESA," *Times of India*, April 12, 2022, https://timesofindia.indiatimes.com/gadgets-news/us-semiconductor-industry-association-signs-mou-with-iesa/articleshow/90806998.cms. Accessed on February 1, 2023.