GOVERNMENT OF INDIA

MINISTRY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF SCIENCE AND TECHNOLOGY

RAJYA SABHA

UNSTARRED QUESTION No. 1669

ANSWERED ON 13/03/2025

STRATEGIC TECHNOLOGY PARTNERSHIPS

1669 SHRI S NIRANJAN REDDY:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) the details of countries with whom India has signed Strategic Technology Partnerships along with the sectors involved;

(b) whether such partnerships have resulted in the transfer of technology to the country and the details thereof; and

(c) the manner in which Government is ensuring that Strategic Technology Partnerships do not erode India's technological sovereignty and the details thereof?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) FOR THE MINISTRY OF SCIENCE AND TECHNOLOGY & EARTH SCIENCES

(DR. JITENDRA SINGH)

(a) Government of India (GoI) has signed several Strategic Technology Partnerships with many countries. The Initiative on Critical and Emerging Technologies (iCET) between India and the United States of America (USA), now renamed as "Transforming the Relationship Utilizing Strategic Technology" (TRUST) and the Technology Security Initiative (TSI) between India and the United Kingdom (UK) include sectors such as semiconductors, quantum, Artificial Intelligence (AI), biotechnology, advanced telecommunications and critical minerals. India-European (EU) are engaged on enhancing cooperation in the areas of strategic technologies, digital governance and digital connectivity, green and clean energy technologies, semiconductors and High Performance Computing. India and Australia signed the framework arrangement on Cyber and Cyber–Enabled Critical Technology Cooperation in June, 2020. The Joint Statement on the India-Czech Strategic Partnership on Innovation was issued in January 2024 to enhance India-Czech relations in innovative sectors such as cooperation in scientific research, environment, energy, transport, agriculture, health, technology development, defense

and security, and innovative industries. India-Denmark Green Strategic Partnership announced in September, 2020 entails cooperation to promote greater investments from Danish companies in Green sectors – renewable energy and climate change, water & waste management, smart cities, circular economy, S&T, shipping, food & agriculture. With Finland, the GoI has established sustainability partnership and digital partnership. Under India-Israel Joint Committee on S&T, India-Israel Joint Research Program 2023 was launched, seeking proposals in the field on AI application in climate change and agriculture for food security. In 2017, the Memorandum of Understanding (MoU) between the Department of Science and Technology (DST), India and National Authority for Technological Innovation, Israel was signed for establishing the India-Israel Industrial Research & Development and innovation (I4F). In September 2020, India's International center for Entrepreneurship and Technology (iCREATE) and Israel signed bilateral program to accelerate innovation and technology cooperation. India and Japan have also entered into a Memorandum of Cooperation (MoC) on semiconductor supply chain partnership. An MoU on India-Singapore Semiconductor Ecosystem Partnership has also been signed to cooperate in developing a resilient semiconductor supply chain. With Sweden, both countries signed the 'Joint Declaration on Innovation Partnership for a Sustainable Future' in April 2018. This partnership aims to deepen collaboration in innovation, science and technology focusing on areas such as smart cities, green energy, transportation, smart industry, clean technologies, new materials, advanced manufacturing, AI, digitization, space, circular and bio-based economy and health and life sciences. India and Sweden have also jointly launched the global initiative 'Leadership for Industry Transition' (LeadIT) initiative. At COP28 in 2023, the Prime Ministers of India and Sweden launched the second phase of LeadIT and Indian Sweden Industry Transition Partnership (ITP), a new collaboration focusing on de-carbonising heavy industry. GoI has also made efforts to strengthen technology partnerships with several other European, Asian, and Gulf countries among others with focus on critical and emerging technologies. International technology collaborations supplement our domestic policy measures to develop internal capacities in critical and emerging technologies (CET).

(b) Under these strategic technology partnerships, efforts are being made to gain greater access to technology, facilitate transfer of technology and address regulatory restrictions and talent mobility issues in priority sectors so as to achieve co-development and co-production of products related to CET. India offers great opportunities for absorption of new technologies and their application at scale to the world and is all set to leverage its domestic strengths for bolstering the country's participation in the new technology value chains that are taking shape at the global level. These partnership aims at technology co-development and co-production as

well as on developing indigenous R&D capabilities with a view to achieve self-reliance in manufacturing and designing, building supply chain resilience and mitigating risks, in critical and emerging technologies and to build a strong, vibrant and resilient domestic technological ecosystem that advances economic progress and development as well as national security.

(c) For safeguarding India's technological sovereignty, GoI maintains a strategic trade/ export control list (SCOMET - Special Chemicals, Organisms, Materials, Equipment and Technologies), which contains a list of goods and technologies that are strategic in nature (especially dual-use and military goods and technologies). Any Indian company / organization that intends to export / transfer such goods and technologies outside India or to a foreign individual / entity including through intangible mode, would require a license from the Directorate General of Foreign Trade (DGFT) in Ministry of Commerce and Industry (MoC&I) / Department of Defence Production (DDP) in Ministry of Defence (MoD), as the case maybe. The licensing process comprises inter alia, checks on end-user of the goods / technology, and consideration on potential of the goods or technology to contribute to end-uses that are not in conformity with India's national security or foreign policy goals and objectives, etc. The various organizations of the GoI including MEA have been partnering with industry and other stakeholders in organizing outreach programs towards awareness raising and furthering compliance in this domain, including on technology transfers.

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