

GOVERNMENT OF INDIA  
MINISTRY OF EXTERNAL AFFAIRS  
**LOK SABHA**  
**UNSTARRED QUESTION NO-2169**  
ANSWERED ON- 15/12/2023

**CRITICAL AND EMERGING TECHNOLOGIES**

2169. SHRI MANOJ TIWARI

Will the Minister of EXTERNAL AFFAIRS be pleased to state :-

- (a) whether the Government has made efforts to strengthen partnerships in critical and emerging technologies;
- (b) if so, the details of such partnerships with various countries; and
- (c) the importance of developing national capacities in such technologies during Amrit Kaal for achieving a Viksit Bharat by 2047?

**ANSWER**

THE MINISTER OF STATE IN THE MINISTRY OF EXTERNAL AFFAIRS

(DR. RAJKUMAR RANJAN SINGH)

(a to c) The Government is constantly making efforts to strengthen partnerships in critical and emerging technologies with various countries. Some recent efforts in this context are as follows:

In May 2022, India and US announced the U.S.-India initiative on Critical and Emerging Technology (iCET) to elevate and expand strategic technology partnership and defence industrial cooperation between the governments, businesses, and academic institutions of two countries. The initiative is led by National Security Advisor's (NSA) of both the countries and has six priority sectors – defence, space, quantum, artificial intelligence, semiconductors and telecommunications.

The India-EU Trade and Technology Council (TTC) was established in May 2023. Under the TTC three working groups have been set up which are focused on enhancing cooperation in the areas of strategic technologies, digital governance and digital connectivity, green and clean energy technologies and trade, investment and resilient value chains. A Memorandum of Understanding (MoU) on cooperation in the areas of semiconductors between India and EU has been signed in November 2023. India and EU have also signed an intent of cooperation in the area of High Performance Computing in 2022.

India and Australia signed the Framework Arrangement on Cyber and Cyber – Enabled Critical Technology Cooperation in June 2020. In 2023, India and Japan have also entered into a Memorandum of Cooperation (MoC) on semiconductor supply chain partnership.

India and Israel signed a Memorandum of Understanding on Industrial Research and Development Cooperation in May 2023 with focus on several key technology areas, like Aerospace,

Electronics Instrumentation, Civil, Infrastructure & Engineering, Ecology, Environment, Earth & Ocean Sciences and Water, Mining, Minerals, Metals & Materials, Chemicals and Petrochemicals, Energy (Conventional & Non-Conventional) and Energy Devices, Agri, Nutrition & Biotech and Healthcare.

In addition, the Government has also made efforts to strengthen partnership with several other European, South East Asian and Gulf countries in the field of critical and emerging technologies.

The Government believes that our approach of developing national capacities will be strengthened by engaging with key international partners and sharing perspectives on managing, regulating and exploiting critical and emerging technologies. This will also help in developing a vibrant ecosystem in India to maximize the use of such technologies for our economic growth, development and national security.

\*\*\*\*\*