GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
STARRED QUESTION No. *243
ANSWERED ON 06/08/2025

ASSISTANCE BY TECHNOLOGY DEVELOPMENT BOARD

***243. DR. SANJAY JAISWAL:**
SHRI JASHUBHAI BHILUBHAI RATHVA:

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

(a) the details and the total financial assistance provided by the Technology Development Board (TDB) to various industrial concerns/agencies for the development and commercialisation of indigenous technologies including for the establishment of the Industrial Meta Tattva Facility;

(b) the key features of the Metamaterial Surface Cloaking System (MSCS) and the manner in which it enhances the concealment of assets;

(c) whether any entities have field-tested and validated the above system and if so, the details thereof along with the outcomes of these trials; and

(d) the details and the timeline for the operational deployment of the MSCS along with the manner in which it aligns with country's objectives of achieving self-reliance in technologies?

ANSWER
MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES
(DR. JITENDRA SINGH)
विज्ञान और प्रौद्योगिकी तथा पृथ्वी विज्ञान मंत्रालय के राज्य मंत्री (स्वतंत्र प्रभार)
(डॉ. जितेंद्र सिंह)

(a) to (d): A statement is laid on the Table of the House.

STATEMENT AS REFERRED IN REPLY TO PARTS (a) to (d) OF LOK SABHA STARRED QUESTION NO. 243 FOR 06.08.2025 REGARDING "ASSISTANCE BY TECHNOLOGY DEVELOPMENT BOARD"

(a) Technology Development Board (TDB) has sanctioned a total financial assistance of Rs. 2958.95 crores and disbursed Rs. 2255.87 crores till 31.07.2025 to 422 industrial concerns/ agencies for the development and commercialization of indigenous technologies including for the establishment of the Industrial Meta Tattva Facility.

(b) The Metamaterial Surface Cloaking System (MSCS) is a cutting-edge technology. The key features of the MSCS include its high efficacy over a wide bandwidth of spectrum including, visible, Infrared (IR), Microwave and Ultraviolet (UV) sensors-based surveillance platforms thereby reducing detection. Additionally, for mixing with surroundings, camouflage scheme is put-over with visual/IR/other compliant substances. MSCS is aimed at masking vital defence assets from detection across a wide range of spectrums. The systems offer a transformative advantage in battlefield concealment.

(c) Yes, Sir. The Metamaterial Surface Cloaking System (MSCS) has been field-tested and validated by various end users in the defence domains which have acknowledged successful trials and the outcomes have largely been positive.

(d) The MSCS has been field tested and validated for deployment. The deployment of the fully indigenous camouflage systems will mark an important step toward strengthening India's technological edge in modern warfare. The technology exemplifies the spirit of 'Atmanirbhar Bharat' with the translation of research into state-of-art defence capabilities.

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