

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION No. 2048
TO BE ANSWERED ON 12/02/2021**

Make in India Body Armour for Forces

2048. SHRI PATEL HASMUKHBHAI SOMABHAI:

Will the Minister of SCIENCE AND TECHNOLOGY विज्ञान और प्रौद्योगिकी मंत्री be pleased to state:

- (a) whether NITI Aayog has prepared a Roadmap on "Make in India" in Body Armour which includes recommendation on setting up of raw material manufacturing plant in India based on Ultra High Molecular Weight Polyethylene (UHMWPE) fibre to make more efficient and lightweight body armours for army and para-military forces;
- (b) if so, the details thereof;
- (c) whether it is a fact that the Government has launched a National Mission on Interdisciplinary Cyber Physical Systems (NM-ICPS) at a total cost of Rs. 3660 crore for a period of 5 years; and
- (d) if so, the details thereof?

ANSWER

**MINISTER OF HEALTH AND FAMILY WELFARE; MINISTER OF SCIENCE AND TECHNOLOGY; AND
MINISTER OF EARTH SCIENCES
(DR. HARSH VARDHAN)**

स्वास्थ्य और परिवार कल्याण मंत्री, विज्ञान और प्रौद्योगिकी मंत्री और पृथ्वी विज्ञान मंत्री
(डॉ. हर्ष वर्धन)

(a) & (b) Yes Sir, the NITI Aayog has prepared a Raodmap on "Make in India" in Body armour including several recommendations for promoting "Make in India" in Body armour and submitted to PMO in August, 2017. The recommendations also include setting up of raw material manufacturing plant in India based on Utra High Molecular Weight Polyethylene (UHMWPE) fibre to make more efficient and lightweight body armours for army and para-military forces.

(b) The Empowered Committee constituted under the chairmanship of Member (S&T), NITI Aayog on the subject is following up with DPIIT and Ministry of Textiles in the matter. The Empowered Committee has advised Department for Promotion of Industry and Internal Trade (DPIIT) to invite Honeywell, Dupont, DSM Dyneema and Teijin to set up a raw material manufacturing plants in India. As per information available with the NITI Aayog, DPIIT has started negotiations with Honeywell.

(c) Yes Sir.

(d) Government has approved National Mission on Interdisciplinary Cyber Physical System (NM-ICPS) in December 2018 with a total outlay of Rs.3660 Crores for a period of five years. The Mission is to develop advanced technologies and applications as per the requirements of stakeholders. The Mission has already established 25 Technology Innovation Hubs (TIH) across the country in reputed academic institutes. All TIHs are focused on (i) Technology Development and Translation, (ii) HRD, (iii) Technology Business Incubator (TBI) & Start-ups Development and (iv) International Collaborative Research. Each TIH is a technology platform for collaboration of Academia, Industry and Government. The details of the TIHs are placed as Annexure I.

List of National Mission on Interdisciplinary Cyber Physical System Technology Innovation**Hubs**

S. No	Name of Institute	Vertical Areas
1.	Indian Institute of Technology (IIT) Kharagpur	Artificial Intelligence and Machine Learning
2.	Indian Institute of Technology Bombay	Technologies for Internet of Things & Internet of Everything
3.	International Institute of Information Technology, Hyderabad	Data Banks & Data Services, Data Analysis
4.	Indian Institute of Science, Bengaluru	Robotics & Autonomous Systems
5.	Indian Institute of Technology Kanpur	Cyber Security and Cyber Security for Physical Infrastructure
6.	Indian Institute of Technology Jodhpur	Computer Vision, Augmented and virtual reality
7.	Indian Institute of Technology Roorkee	Device Technology and Materials
8.	Indian Institute of Technology, Patna	Speech, Video & Text Analytics
9.	Indian Institute of Technology Madras	Sensors, Networking, Actuator & controls
10.	Indian Institute of Technology Hyderabad	Autonomous Navigation and Data Acquisition systems (UAV, RoVetc)
11.	Indian Institute of Technology (Banaras Hindu University)	Data Analytics & Predictive Technologies
12.	Indian Institute of Technology Guwahati	Technologies for Under water exploration
13.	Indian Institute of Technology, Mandi	Human Computer Interaction
14.	Indian Institute of Technology Delhi	Cobotics
15.	Indian Institute of Technology Ropar	Technologies for Agriculture & Water
16.	Indian Institute of Technology, Dhanbad	Technologies for Mining
17.	Indian Institute of Technology Palakkad	Intelligent Collaborative Systems
18.	International Institute of Information Technology Bengaluru	Advanced Communication System
19.	Birla Institute of Technology & Science Pilani	Bio-CPS
20.	Indian Statistical Institute Kolkata	Data Science, Big Data Analytics and Data curation etc.
21.	Indian Institute of Technology Indore	System Simulation, Modelling & Visualization
22.	Indraprastha Institute of Information Technology, New Delhi	Cognitive Computing & Social Censing
23.	Indian Institute of Science Education and Research Pune	Quantum Technologies
24.	Indian Institute of Technology Tirupati	Positioning and Precision Technologies
25.	Indian Institute of Technology Bhilai	Technologies for financial sector (Fintech)
