

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION No. 4576
TO BE ANSWERED ON 20/03/2020**

INTERDISCIPLINARY CYBER-PHYSICAL SYSTEMS

4576. SHRI CHANDRA SEKHAR BELLANA:

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

- (a) whether the Government has approved the launching of the National Mission on Interdisciplinary Cyber-Physical Systems and if so, the details and salient features thereof;**
- (b) the details of the targets fixed under the said mission and whether any timeframe has been fixed to achieve the target and if so, the details thereof; and**
- (c) the manner in which the Government will review the progress made to achieve these targets?**

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) Yes Sir. Government on 6th December, 2018 has approved launching of National Mission on Interdisciplinary Cyber-Physical System (NM-ICPS) to be implemented by Department of Science and Technology (DST) at a total outlay of Rs. 3660 crore for a period of five years. The Mission aims to create a strong foundation and a seamless ecosystem for Cyber-Physical System (CPS) technologies by coordinating and integrating nationwide efforts encompassing knowledge generation, human resource development, research, technology and product development, innovation and commercialization.

Salient features of NM-ICPS are to create 25 Technology Innovation Hubs (TIH) across the country. Each Technology Innovation Hub to work on technology development, translational research, development of human resource, Start-up eco-system, international collaboration, supporting project to industry etc.

(b) Details of the targets of the mission are as under:

Sl No	Major Components			Targets in numbers
(1)	(2)			(3)
1.	Technology Development	1	Technology Development Projects	525

(1)	(2)			(3)
2.	HRD & Skill Development	1	Graduate Fellowship	6200
		2	Post-Graduation Fellowship	1050
		3	Doctoral Fellowship	525
		4	Post-Doctoral Fellowship	525
		5	Faculty Fellowship	105
		6	Chair Professor	105
3.	Innovation, Entrepreneurship & Start-up Ecosystem	1	CPS-GCC - Grand Challenges and Competitions	4
		2	CPS-Promotion and Acceleration of Young and Aspiring technology entrepreneurs (CPS-PRAYAS)	25
		3	CPS-Entrepreneur In Residence (CPS-EIR)	525
		4	CPS-Start-up	800
		5	CPS-Technology Business Incubator (TBI)	25
		6	CPS-Dedicated Innovation Accelerator (CPS-DIAL)	25
		7	CPS-Seed Support System (CPS-SSS)	25
4.	International Collaboration	1	International Collaboration	25

A time frame of five years starting from 2019-20 to 2023-24 has been fixed to achieve these targets.

(c) To review the progress made to achieve these targets, a three layered mechanism is in place.

Level-I: Each Technology Innovation Hub (TIH) is to be reviewed and monitored by the Hub Governing Body (HGB) constituted by the Host Institutes. HGBs are delegated with powers for re-appropriation, recruitment and international collaboration.

Review at Level-II is to be carried out by a Scientific Advisory Committee (SAC), a technical committee to monitor, evaluate and review the technical progress of all 25 Technology Innovation Hubs (TIH), once in 3 months. SAC recommendations are required to be placed before Mission Governing Board (MGB) for further directions.

Mission Governing Board (MGB), an apex body for overall supervision, control, monitoring and evaluation of Mission activities and achievement of set targets. Level-III review is to be carried out by the MGB once in 6 months.
