

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO. 1337
TO BE ANSWERED ON: 06.12.2024

STRATEGY TO PROMOTE AI AND BLOCKCHAIN TECHNOLOGY

1337. SMT. KIRAN CHOUDHRY:

Will the Minister of ELECTRONICS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) Government's strategy for promoting Artificial Intelligence (AI) and blockchain technology?
- (b) the specific incentives for Startups in the Electronics and Information Technology (IT) sectors working on emerging technologies; and
- (c) if so, the details thereof especially for Haryana?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI JITIN PRASADA)

(a): Artificial Intelligence and Blockchain are emerging fields with potential for widespread applications in several key sectors. The Government of India emphasizes the concept of 'AI for All,' aligning with the Prime Minister's vision to foster and promote the use of cutting-edge technologies across the country. This initiative aims to ensure that AI benefits all sectors of society, driving innovation and growth.

For Artificial Intelligence: The Government had constituted 7 expert groups to deliberate and prepare a design document on IndiaAI. The first edition of IndiaAI expert group report, published on October 2023, detailed out the operational aspects of foundational pillars of India's AI mission. The report also recommends on how India can leverage its demographic dividend and play to its strengths as an IT superpower to further the penetration of IndiaAI skills in the country, strengthening the IndiaAI compute infrastructure in India to support IndiaAI innovation through public-private partnerships (PPPs). Earlier, NITI Aayog had also published the National Strategy on Artificial Intelligence (NSAI) in 2018.

Subsequently, Union Cabinet led by Hon'ble Prime Minister Shri Narendra Modi ji has approved the IndiaAI Mission on 7th March 2024, a strategic initiative to establish a robust and inclusive AI ecosystem that aligns with the country's development goals. This mission is driven by a vision to position India as a global leader in artificial intelligence by focusing on seven foundational pillars.

For Blockchain Technology, Government of India issued the National Strategy on Blockchain in Dec 2021, which focuses on R&D, innovation, Technology which in turn helps to create Blockchain talent and capabilities in Tech workforce. The strategy document is available at <https://www.meity.gov.in/content/national-strategy-on-Blockchain>.

MeitY has launched the **National Blockchain Framework (NBF)-Vishvasya** on 4th September, 2024 to offer Blockchain-as-a-Service (BaaS). The NBF supports distributed infrastructure, smart contracts, security, privacy, interoperability and development & deployment of permissioned blockchain based applications. It supports secure, permissioned blockchain applications for government services and sectors like healthcare, education, and agriculture. NBF ensures only authorized users can access the network, providing secure and verifiable transaction records.

(b) and (c): The government has taken various steps to support startups in the electronics and IT sectors working on emerging technologies:

IndiaAI Startup Financing: One of the key Pillars of the IndiaAI Mission is the IndiaAI Startup Financing which aims to support and accelerate deep tech AI startups by providing streamlined access to funding for enabling futuristic AI Projects. It covers a spectrum of startup development stages starting from product development to commercialization.

Centres of Excellence on AI & IoT: MeitY, along with NASSCOM has established four Centres of Excellence on AI & IoT at Bengaluru, Gurugram, Gandhi Nagar and Visakhapatnam with the objectives to enable India emerge as an innovation hub in AI & IoT through democratization of innovation and realization of prototypes. Centres of Excellence on AI & IoT connect various entities such as startups, enterprises, venture capitalists, government and academia.

Centre of Excellence in Artificial Intelligence Labs: NIC has built two Centre of Excellence in Artificial Intelligence Labs in Delhi & Kolkata with State-of-the-art AI Supercompute Infrastructure of 2 AI Peta flops in Delhi in 2019 and upgraded it by 5 AI Peta Flops in Delhi and Kolkata each in 2021. Further 50 AI Peta flops was added to Meghraj Cloud of NIC at Delhi in 2024 under National Supercomputing Mission. This has further helped in extending AI Services to Digital Courts 2.0.

Centres of Excellence in AI: Government has approved establishment of three Centres of Excellence (CoE) in Artificial intelligence (AI), one each in the areas of health, sustainable cities and agriculture with a total financial outlay of Rs. 990.00 Cr over the period of FY 2023-24 to FY 2027-28. Department of Higher Education has selected following consortiums for establishment of these CoEs through an Apex Committee: Health: Consortium led by AIIMS Delhi and IIT Delhi, Sustainable Cities: Consortium led by IIT Kanpur, Agriculture: Consortium led by IIT Ropar.

Centre of Excellence (CoE) on Blockchain Technology: MeitY in collaboration with Govt. of Haryana, Industry and Software Technology Parks of India (STPI) has established Centre of Excellence (CoE) on Blockchain Technology named APIARY in STPI Gurugram. The CoE is an Incubation-cum-Accelerator through which infrastructure, technology, mentoring, training for product development & product management in the Blockchain technology area are made available.

Centre of Excellence (CoE) on Gaming, VFX, Computer Vision & AI: MeitY in collaboration with Government of Telangana, STPI and Industry has initiated a Centre of Excellence (CoE) on Gaming, VFX, Computer Vision & AI named IMAGE in STPI Hyderabad. It provides resources such as mentoring, technology support and funding for Gaming, Animation, VFX, Computer Vision and AI start-ups.

Centre of Excellence (CoE) on Virtual and Augmented Reality: MeitY in collaboration with Government of Odisha, STPI, IIT Bhubaneswar, and a philanthropist has initiated a Centre of Excellence (CoE) on Virtual and Augmented Reality named VARCoE at IIT Bhubaneswar. VARCoE focuses on conducting world-class research and developing cutting-edge testing facilities and laboratories.

National Mission on Interdisciplinary Cyber Physical Systems (NM-ICPS): The Department of Science & Technology (DST), is implementing National Mission on Interdisciplinary Cyber Physical Systems (NM-ICPS). Under the NM-ICPS, 25 Technology Innovation Hubs (TIHs) have been set up in top institutions across India, with 23 currently active. These hubs focus on advanced technologies like Artificial Intelligence (AI), Machine Learning (ML), Internet of Things (IoT), Robotics, Cybersecurity, FinTech (including Blockchain), and more. Two hubs, C3iHub at IIT Kanpur and IIT Bhilai Innovation and Technology Foundation, specialize in blockchain technology. AI-related projects are spread across multiple hubs, as AI is a key technology for various fields in cyber-physical systems (CPS). The hubs support startups by providing funding, resources, and guidance, helping

them develop innovative solutions in areas like deep tech, electronics, and IT. These efforts aim to build a strong ecosystem for innovation and entrepreneurship in India.

Startup Accelerator of MeitY for Product Innovation, Development, and Growth (SAMRIDH): The SAMRIDH programme was launched in August 2021 for a period of three years to accelerate around 300 Startups through existing and upcoming Accelerators. At present, under SAMRIDH programme, 175 startups have been selected and accelerated through 22 selected Accelerators spread across 12 States of India.

Gen-Next Support for Innovative Startups (GENESIS): The GENESIS Scheme aims to strengthen the startup ecosystem in Tier-II and Tier-III cities across India. The scheme envisages scaling up about 1,600 technology startups, to discover, nurture and grow technology startups with an outlay of Rs. 490 Crore over period of five years and is being implemented by MeitY Startup Hub (MSH).

Chips to Startup (C2S) Programme supports semiconductor innovation by providing funding, mentorship, and resources to early-stage startups. It aims to foster collaboration between startups, research institutions, and industry leaders. The goal is to accelerate the development and commercialization of semiconductor technologies.
