

**GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS**

**RAJYA SABHA
UNSTARRED QUESTION NO. 650
TO BE ANSWERED ON 05TH FEBRUARY, 2026**

5G-ROLL OUT

650 SHRI AYODHYA RAMI REDDY ALLA:

Will the Minister of Communications be pleased to state:

- (a) how the symbiotic relationship between 5G networks and emerging technologies like blockchain and artificial intelligence would be leveraged to create novel applications and services that drive economic growth, improve governance and enhance citizen engagement, while mitigating potential risks and challenges; and
- (b) the details of implications of 5G on India's digital identity and cybersecurity frameworks and how the policymakers would balance the need for robust security measures with the imperative of promoting innovation and entrepreneurship in the digital space?

ANSWER

**MINISTER OF STATE FOR COMMUNICATIONS AND RURAL DEVELOPMENT
(DR. PEMMASANI CHANDRA SEKHAR)**

(a) & (b) The Government has taken several measures to promote development of applications over 5G networks. 5G provides high-speed connectivity, low latency and support for a large number of connected devices, enabling use of Artificial Intelligence (AI) and blockchain for digital services and automation. Government has also established 100 5G Use Case Labs across educational institutions to promote 5G application development in sectors with integration of emerging technologies such as Artificial Intelligence (AI) and blockchain etc. The 5G Innovation Hackathon 2025 was launched under the 5G Use Case Labs initiative to promote development of solutions using 5G, AI and advanced technologies. These initiatives support development of socioeconomic use cases and capacity building, with the objective of fostering innovation, academia–industry collaboration and strengthening academic and start-up ecosystem for economic growth.

5G networks have been rolled out in all States and Union Territories and are available in 99.9% of districts with a population coverage of 85%, with 5.08 lakh 5G Base Transceiver Stations (BTSs) installed as on December 2025. The median mobile broadband has also witnessed a substantial increase to 131.47 Mbps in October 2025.

(Reference: <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2206477®=3&lang=1>)

Additionally, 5G includes enhanced security features such as authentication, encryption and network isolation. Cybersecurity requirements are implemented as per mandates of the National Security Council Secretariat (NSCS), and the Trusted Telecom framework ensures procurement from trusted sources. Under the Communication Security Certification (ComSec) scheme, Indian Telecom Security Assurance Requirements (ITSARs) have been developed for 5G network functions. Adoption of these standards by industry helps balance security and innovation.
