GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS

RAJYA SABHA
UNSTARRED QUESTION NO. 2251
TO BE ANSWERED ON 12TH MARCH, 2026

STATUS OF 5G ROLLOUT

2251 DR. K. LAXMAN:

Will the Minister of Communications be pleased to state:

(a) whether the country has achieved 5G network coverage in all the districts;

(b) the specific enhancement in connectivity and network quality experienced in Telangana, particularly in its industrial corridors, educational campuses and rural areas;

(c) how the proliferation of 5G is enabling transformative use-cases in sectors like telemedicine, precision agriculture, smart manufacturing and education; and

(d) the steps being taken to foster the development of an indigenous 5G ecosystem and prepare for future technologies like 6G?

ANSWER

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

(a) 5G services have been rolled out in all States/ UTs across the country and presently it is available in 99.9% of the districts in the country. As on 28.02.2026, 5.23 Lakhs 5G Base Transceiver Stations (BTSs) have been installed across the country.

(b) 5G technology has significantly improved connectivity and overall network performance while transforming communication experiences across the country including Telangana. Major Educational institutions covered in the State of Telangana are BITS Pilani (Hyderabad), IIT Hyderabad, NIT Warangal, IIIT Basara, IIIT Gachibowli etc. and Major Industrial corridors covered are Balanagar, Pasamailaram, Medchal, Zaheerabad, Shamshabad, Shadnagar, Bollaram, Patancheru etc.

During the last three years in the State of Telangana, number of Base Transceiver Stations (BTSs) have increased from 96,786 as on 31.03.2023, to , 1,17,517 as on 28.02.2026 , including 5G BTSs from 7,589 as on 31.03.2023 to 19,798 as on 28.02.2026.

(c) & (d) The several initiatives are being undertaken to promote the adoption of 5G use cases in telemedicine, precision agriculture, smart manufacturing, and education, while fostering the development of an indigenous 5G ecosystem and strengthening preparedness for next-generation technologies, including 6G. The details are attached here as **Annexure I**.

Annexure-I

1. **Indigenous 5G Test Bed** :

I. Government approved a financial grant of Rs. 224 Crore in March 2018 to establish an 'Indigenous 5G Test Bed' in India, recognizing India's specific requirements and aiming to take lead in 5G deployment.
II. The project involved eight collaborating institutes working together on this initiative, including Indian Institute of Technology Madras, Indian Institute of Technology Delhi, Indian Institute of Technology Hyderabad, Indian Institute of Technology Bombay, Indian Institute of Technology Kanpur, Indian Institute of Science Bengaluru, Society for Applied Microwave Electronics Engineering & Research (SAMEER), and Centre of Excellence in Wireless Technology (CEWiT), Chennai.
III. The Indigenous 5G test bed was dedicated to the nation by Hon'ble PM on 17th May 2022.

2. **5G labs**:

I. Government has setup 100 5G labs across the country with an outlay of Rs. 97.67 Cr.
II. These labs are utilized for development of 5G use cases/applications in various socio-economic sectors such as education, agriculture, health, power, urban management, mining, logistics, resource management, tourism, sports, security, e- governance, etc.

3. **6G Initiative:**

I. Hon'ble Prime Minister has released India's 6G vision "Bharat 6G Vision" document in March, 2023 which envisaged India to be a frontline contributor in design, development and deployment of 6G technology by 2030.
II. Department of Telecom has facilitated setting up of 'Bharat 6G Alliance' which is an alliance of domestic industry, academia, national research institutions and standards organizations to develop action plan according to the Bharat 6G Vision.
III. Bharat 6G alliance has also signed MoU with leading global 6G alliance to enhance global collaborations for the development of 6G wireless technologies.

4. **TTDF Scheme**:

I. Telecom Technology Development Fund (TTDF) Scheme was launched by Digital Bharat Nidhi under the Ministry of Communications on 1st October 2022. The scheme aims to fund Research & Development (R&D) in communication technologies, fostering collaboration between academia, start-ups, research institutes, and industry to enhance the telecom ecosystem in India.
II. As on 28.02.2026, 136 R&D projects have been approved under TTDF scheme. These projects cover frontier areas including 6G, quantum communication, satellite and non terrestrial networks, optical systems, indigenous 5G core, and telecom security. Out of 136 projects, 104 projects are related to R&D in 6G technology, covering areas like 6G Thz test bed, transmitter module, cell free access points, RIS based hardware system, use of AI/ML in 6G etc. Further, 11 projects are approved under 5G technology covering areas like millimeter wave power amplifier, core development, Fully integrated transceiver etc.

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