

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

**LOK SABHA
STARRED QUESTION NO. 260
TO BE ANSWERED ON 20TH DECEMBER, 2023**

ADOPTION OF 6G TECHNOLOGY

***260. SHRI TAPIR GAO:**

Will the Minister of COMMUNICATIONS be pleased to state:

- (a) whether the Government has any plans for promoting 6G adoption and ensuring its widespread rollout across India;
- (b) if so, the details of Government's initiatives for promoting digital literacy and inclusion in the context of 6G technology; and
- (c) the manner in which Government intends to bridge the digital divide and ensure that the benefits of 6G technology reach all citizens, regardless of their location or socio-economic status?

ANSWER

**MINISTER OF RAILWAYS, COMMUNICATIONS AND ELECTRONICS AND
INFORMATION TECHNOLOGY
(SHRI ASHWINI VAISHNAW)**

- (a) to (c) A statement is laid on the Table of the House.

STATEMENT TO BE LAID ON THE TABLE OF LOK SABHA IN RESPECT OF PARTS (a) TO (c) OF THE LOK SABHA STARRED QUESTION NO. 260 FOR 20TH DECEMBER, 2023 REGARDING “ADOPTION OF 6G TECHNOLOGY.”

(a) to (c) Telecom connectivity in Country has improved significantly in last 10 years. The total number of BTSs (Base Transceiver Station) have increased from 6.49 Lakh in March-2014 to 25.42 Lakh in March-2023. Total mobile subscribers have increased from 90.45 Crore in March 2014 to 114.84 Crore in August 2023. Internet subscribers have increased from 25.15 Crore in March-2014 to 88.12 Crore in March-2023.

As of September 2023, out of 6,44,131 villages in the country (village data as per Registrar General of India), around 6,16,300 villages are covered with mobile connectivity at a coverage of 95.7%.

In order to provide telecom connectivity in uncovered villages in the country, the Government has undertaken numerous schemes. Government has planned 41,160 towers in uncovered areas of the country to provide connectivity to more than 54,000 villages at the cost of more than Rs.41,331Crore.

As on 31.10.2023, a total of 6,394 Mobile towers have already been commissioned in the country in various schemes under Universal Service Obligation Fund (USOF), covering 7,535 villages.

For 6G adoption and ensuring its widespread rollout across India, the Government has released Bharat 6G Vision Document with the following objectives:

- i. Design, develop and deploy 6G network technologies to provide ubiquitous, intelligent and secure connectivity for high quality living experience.
- ii. Affordability, Sustainability and Ubiquity which align with the national Vision of Atmanirbhar Bharat that seeks to empower every Indian to become self- reliant.

In order to take a lead in 6G technology, the Government has constituted Bharat 6G Mission and Apex Council to lay down the Phase-wise objectives of 6G, suggest the research and innovation pathways to be explored and review the progress of implementation of Bharat 6G Vision from time to time. Further, Bharat 6G Alliance (B6GA), an alliance of domestic industry, academia, national research institutions and standards organisations has been launched to enable India to become a leading global supplier of Intellectual Property (IP), products and solutions. B6GA has also signed a Memorandum of Understanding with NextG Alliance of USA to explore collaboration opportunities on 6G wireless technologies.

The Government has also taken following steps to take a lead in development and deployment of 6G technology:

- a. Government has launched Telecom Technology Development Fund (TTDF) Scheme with 5% of annual collections from Universal Service Obligation Fund for funding research & development of technologies, products, and services. Under TTDF, two proposals for test beds have been approved, viz. 6G THz Testbed through consortium of Society for Applied Microwave Electronics Engineering and Research (SAMEER), IIT Madras, IIT Guwahati and IIT Patna; Advance Optical Communication Test Bed with Consortium Members as IIT Madras, IIT Delhi and other academic institutions.
- b. Government has sanctioned 100 5G and beyond labs at academic institutions, across India. This initiative is also a pivotal step for building a 6G ready academic and start-up ecosystem in the country.

c. India has contributed in International Telecommunications Union International Mobile Technology (IMT) 2030 framework, also called 6G by industry for inclusion of 'Ubiquitous Connectivity' as one of the six usage scenarios of 6G and coverage, interoperability and sustainability as capabilities of 6G technology;

6G technology will be harnessed to address the country's needs and improve the connectivity. It will provide newer avenues for economic and social development and employment opportunities.
