

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

**RAJYA SABHA
UNSTARRED QUESTION NO. 2255
TO BE ANSWERED ON 12TH MARCH, 2026**

DEVELOPMENT OF 6G TECHNOLOGY

2255 SHRI MEDA RAGHUNADHA REDDY:

Will the Minister of Communications be pleased to state:

- (a) whether any work has started on the development of spectrum options, which is basic infrastructure of 6G technology;
- (b) whether any study has been conducted to unearth the business applications and key technologies of 6G technology;
- (c) if so, the details thereof and if not, the reasons therefor;
- (d) whether any specific budget has been allocated for the development of 6G technology; and
- (e) if so, the details thereof and if not, the reasons therefor?

ANSWER

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

(a) Yes. The Government has released the Bharat 6G Vision Document, which outlines the roadmap for research, development, and deployment of 6G in India including identification of the spectrum for 6G. The Spectrum Roadmap for 6G services has also been published, providing visibility on spectrum availability, quantum and timelines across various RF bands over the next 10 years distributed between short term (2025-2026), medium term (2027-2030) and long term (2031-2035) to enable advanced 6G applications.

(b) & (c) Studies on 6G are being undertaken at international forums such as the International Telecommunication Union (ITU). International Telecommunication Union Radiocommunication Sector (ITU-R) has issued ITU-R M.2160-0, which outlines the framework and usage scenarios for IMT-2030 (6G). In addition, ITU-R report M.2376-0 and ITU-R report M.2541-0 provide insights on spectrum feasibility, propagation characteristics, antenna techniques, deployment architectures, and other technology enablers for future IMT systems.

(d) & (e) The Telecom Technology Development Fund (TTDF) scheme of DoT supports indigenous telecom R&D. As on February 2026, 104 projects amounting Rs. 271 Crore approved for research and development of 6G technology. These initiatives provide financial and institutional support for research, testbeds, innovation and commercialization of emerging telecom technologies including 6G.
