

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

**LOK SABHA
UNSTARRED QUESTION NO. 1523
TO BE ANSWERED ON 31ST JULY, 2024**

6G TECHNOLOGY

†1523 **SHRI CHANDRA PRAKASH JOSHI:**

Will the Minister of COMMUNICATION be pleased to state:

- (a) the measures taken by the Government to establish India as a leading contributor in development and manufacturing of 6G technology by the year, 2030;
- (b) the details of the initiatives taken by the Government to facilitate the implementation and expansion of 5G networks in India;
- (c) the current status of the work related to fiberization of 5G cell towers in Rajasthan, districtwise; and
- (d) the progress made so far in mapping the telecom assets on the PM Gati Shakti and National Master Plan (NMP) platform?

ANSWER

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

- (a)
 - i. Government has released Bharat 6G Vision Document to design, develop and deploy 6G network technologies to provide ubiquitous, intelligent and secure connectivity for high quality living experience.
 - ii. Government is funding two testbeds namely 6G THz Testbed & Advance Optical Communication Test Bed to promote R&D and innovation in the country.
 - iii. Government sanctioned 100 5G and beyond labs at academic institutions in FY 2023-24, across India for capacity building & for building a 6G ready academic and start-up ecosystem in the country.
 - iv. 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.
 - v. The government has also organized an international workshop on 6G standardization at IMC 2023 to bring all stakeholders together and initiate research work in 6G technology.
- (b) Government has taken several initiatives for proliferation of 5G services, which, inter alia, include the following:
 - Assignment of sufficient spectrum for mobile services through auction.

- Series of financial reforms resulting in rationalization of Adjusted Gross Revenue (AGR), Bank Guarantees (BGs), interest rates and penalties.
- Spectrum sharing, trading and surrender has been permitted as per extant Notice Inviting Application (NIA) terms & conditions and guidelines issued from time-to-time.
- Simplification of Procedure for SACFA (Standing Advisory Committee on Radio Frequency Allocations) clearance.
- Notification of Right of Way (RoW) Rules and launch of PM GatiShakti Sanchar portal has resulted in streamlining of RoW permissions and expeditious clearance for installation of telecom infrastructure.
- Provision has been made in RoW Rules for application and time-bound permission for usage of street furniture for installation of small cells and telegraph line.

(c) District-wise fiberization status of 5G cell towers in Rajasthan :

District-Wise 5G BTSs as on dated 30.06.2024				
S.No	State/UT	District	No's of 5G BTS installed	No's of 5G BTS Fiberized
29	Rajasthan	Ajmer	1319	837
		Alwar	1456	868
		Banswara	298	178
		Baran	270	170
		Barmer	707	483
		Bharatpur	680	382
		Bhilwara	796	447
		Bikaner	1063	788
		Bundi	303	204
		Chittorgarh	508	275
		Churu	664	445
		Dausa	460	269
		Dholpur	253	130
		Dungarpur	290	157
		Hanumangarh	668	394
		Jaipur	4520	3198
		Jaisalmer	232	184
		Jalore	676	345
		Jhalawar	367	186
		Jhunjhunu	845	445
		Jodhpur	1907	1271
		Karauli	281	180
		Kota	1018	755
		Nagaur	1111	656
		Pali	729	393
		Pratapgarh	157	88
		Rajsamand	498	311
		Sawaimadhopur	387	257
		Sikar	1096	574
		Sirohi	354	203
Sriganganagar	714	450		
Tonk	319	179		
Udaipur	1342	946		
		Total	26288	16648

(d) The following telecom assets have been mapped on the PM GatiShakti National Master Plan platform:

- ~13 lakh RKM (route km) OFC from PSUs of Railtel/ BSNL/ BBNL/ MTNL/GAIL/MoRTH
- ~ 43,000 km OFC of State and other private operators
- 7.97 lakh mobile towers having 29.05 lakh BTSs (April 2024).
- 1.72 lakh PM-WANI Wi-Fi (June 2024) hotspots
- 17,764 Proposed Mobile Towers of 4G saturation project.
- 4,135 mobile towers(planned/radiating) of various USOF projects. 26 sites are located in UP.
- 5 HIP (high impact projects) of DoT
