

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

**LOK SABHA
UNSTARRED QUESTION NO.2504
TO BE ANSWERED ON 26TH DECEMBER, 2018**

QUALITY NORMS FOR TELECOM OPERATORS

†2504. SHRI SUMEDHANAND SARSWATI:
SHRI BIDYUT BARAN MAHATO:
SHRI NARANBHAI KACHHADIYA:
SHRI RAMDAS C. TADAS:
SHRI CHANDRA PRAKASH JOSHI:

Will the Minister of COMMUNICATIONS be pleased to state:

- (a) whether the Government has laid down any norms for quality of network of mobile service providers and if so, the details thereof;
- (b) if not, the reasons therefor;
- (c) whether the Government has any information relating to the total number of subscribers of each of the Telecom Service Providers (TSPs) and if so, the details thereof TSP-wise and State/UT-wise;
- (d) whether the Government has any data relating to such subscribers who are availing the services of two or more than two TSPs; and
- (e) if so, the number of such subscribers who are using the services of another TSP in addition to BSNL State/ UT-wise?

ANSWER

**THE MINISTER OF STATE (IC) OF THE MINISTRY OF COMMUNICATIONS &
MINISTER OF STATE IN THE MINISTRY OF RAILWAYS
(SHRI MANOJ SINHA)**

- (a) & (b) Telecom Regulatory Authority of India (TRAI) has laid down the norms for Quality of network of mobile service providers. Details are given at **Annexure-I**.
- (c) The wireless subscriber base, Telecom Service Provider-wise (TSP-wise) and State/Union Territory-wise, reported as on 30th September 2018 is given at **Annexure- II**.
- (d) to (e) Such data is not maintained by the Government.

Annexure-I

Network Performance Benchmarks notified by TRAI
for compliance by TSPs in each License Service Area

Sr.	Parameters		Bench mark
1	Network Availability	Base Station (BS) Accumulated down-time (not available for service) (%)	$\leq 2\%$
		Worst affected BS due to down-time (&)	$\leq 2\%$
2	Connection Establishment (Accessibility)	Call set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VOLTE as applicable (within licensee's own network)	$\geq 95\%$
		Stand-alone Dedicated Control Channel (SDCCH)/ Paging Channel Congestion/ Radio Resource Control (RRC) Congestion (%)	$\leq 1\%$
		Traffic Channel (TCH), Radio Access Bearer (RAB) and E-RAB Congestion (%age)	$\leq 2\%$
3	Connection Maintenance (Retainability)	Network QoS Drop Call Rate (DCR) Spatial Distribution Measure [Network_ QSD(90,90)]	$\leq 2\%$
		Network QoS Drop Call Rate (DCR) Temporal Distribution Measure [Network_ QTD(97,90)]	$\leq 3\%$
4	Connections with good voice quality, Circuit Switched Voice Quality and VOLTE quality		$\geq 95\%$
5	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)		$\leq 0.5\%$

Annexure-II

Wireless Subscriber base, Telecom Service Provider –wise and State/Union Territory-wise, reported as on 30th September 2018 is given below:

Sr	Name of State/ UT	Bharti Airtel	Vodafone	MTNL (GSM)	BSNL (GSM)	Idea	Tata (GSM)	Tata (CDMA)	RCL (GSM)	Reliance JIO	Total
1	Andhra Pradesh	1,49,95,564	37,54,966		68,20,117	85,22,555	13,19,918	21,298	1,065	1,00,70,215	4,55,05,698
2	Arunachal Pradesh	5,29,206	2,44,939		3,04,394	3,163	-	-	-	1,77,286	12,58,988
3	Assam	84,18,266	44,06,691		23,36,741	13,69,539	-	-	-	50,28,609	2,15,59,846
4	Bihar	2,82,47,007	82,52,173		34,74,150	1,23,34,020	89,909	11,822	102	1,19,63,419	6,43,72,602
5	Chhattisgarh	37,17,724	6,90,450		20,10,300	75,31,581	2,25,044	28	-	68,95,305	2,10,70,432
6	Goa	2,15,132	10,34,530		1,81,507	6,17,325	1,708	60	7	5,85,910	26,36,179
7	Gujarat	1,22,58,760	1,97,87,295		56,22,759	1,42,67,285	10,52,022	6,382	287	1,63,45,938	6,93,40,728
8	Haryana	38,69,469	85,33,850	33,826	47,79,107	62,68,822	9,71,888	9,865	76	83,14,883	3,27,81,786
9	Himachal Pradesh	36,57,922	5,01,889		27,15,771	9,93,491	4,940	1,133	72	25,05,658	1,03,80,876
10	Jammu & Kashmir	56,59,892	8,09,122		12,08,592	6,74,860	-	-	-	29,75,802	1,13,28,268
11	Jharkhand	1,13,46,319	21,22,921		12,50,522	23,27,757	2,84,121	920	-	58,16,810	2,31,49,370
12	Karnataka	2,71,96,971	75,29,192		70,14,510	93,76,999	35,26,914	6,296	3,743	1,36,66,438	6,83,21,063
13	Kerala	50,92,299	77,45,232		1,07,50,161	1,27,57,000	3,89,373	872	260	65,01,146	4,32,36,343
14	Madhya Pradesh	1,21,04,824	49,08,165		40,06,778	2,06,56,615	19,90,385	7,005	498	1,18,45,356	5,55,19,626
15	Maharashtra Incl. Mumbai	2,48,24,486	3,02,32,110	12,60,470	67,43,945	3,43,67,389	29,89,895	1,01,684	7,964	2,84,82,527	12,90,10,470
16	Manipur	11,53,903	2,94,512		1,75,047	1,13,694	-	-	-	5,71,658	23,08,814
17	Meghalaya	9,24,693	4,39,121		3,11,932	72,818	-	-	-	3,92,632	21,41,196
18	Mizoram	4,98,435	2,17,330		2,44,377	22,957	-	-	-	2,33,498	12,16,597
19	Nagaland	8,11,090	1,92,169		1,48,010	86,903	-	-	-	3,85,996	16,24,168

Sr	Name of State	Bharti Airtel	Vodafone	MTNL (GSM)	BSNL (GSM)	Idea	Tata (GSM)	Tata (CDMA)	RCL (GSM)	Reliance JIO	Total
20	Odisha	1,31,94,247	44,48,021		55,10,262	21,35,684	6,43,762	2,774	47	71,80,438	3,31,15,235
21	Punjab	97,35,986	41,01,152		50,92,640	74,22,456	9,76,578	6,002	82	97,10,762	3,70,45,658
22	Rajasthan	2,38,50,722	1,20,05,472		56,40,989	80,36,988	1,50,622	12,356	248	1,61,65,830	6,58,63,227
23	Sikkim	2,20,680	3,54,291		35,599	3,472	339	6	-	1,41,861	7,56,248
24	Tamil Nadu (incl. Chennai)	2,56,43,322	1,98,86,953		1,14,66,142	61,69,435	16,89,206	4,168	4,720	1,60,08,791	8,08,72,737
25	Telangana	1,50,31,002	21,62,258		32,97,236	95,38,031	5,82,757	7,276	1,558	1,03,28,831	4,09,48,949
26	Tripura	14,69,748	4,46,086		4,19,407	2,20,280	-	-	-	5,88,264	31,43,785
27	Uttar Pradesh	4,48,41,024	2,90,57,998	69,444	1,63,60,018	2,83,53,721	33,42,141	13,319	527	2,95,05,816	15,15,44,008
28	Uttarakhand	25,59,467	1,04,40,420		14,32,366	39,82,380	64,764	55	2	24,77,144	2,09,56,598
29	West Bengal Incl. Kolkata	2,48,22,160	2,82,43,756		29,81,458	94,04,512	12,38,034	27,586	243	1,73,58,494	8,40,76,243
Union Territories											
1	Andaman & Nicobar Is.	1,77,911	23,056		2,68,603		-	-		-	4,69,570
2	Chandigarh	7,14,851	3,07,500		1,19,706	1,59,825	47,218	13	2	5,99,419	19,48,534
3	Dadar & Nagar Haveli	1,89,495	1,04,874		13,580	1,85,249	4,096	18	-	1,25,699	6,23,011
4	Daman & Diu	1,620	1,18,198		5,425	1,01,286	4,171	31	-	1,05,251	3,35,982
5	Delhi	1,51,72,046	82,23,488	21,30,686		48,58,843	-	1,37,248	6,424	89,08,510	3,94,37,245
6	Lakshdweep	5,238	-		75,578		-	-	-	-	80,816
7	Puduchery	3,71,864	2,37,469		2,30,291	1,69,822	12,880	68	86	2,87,807	13,10,287
	Total (Mn)	343.5	221.8	3.4	113.0	213.1	21.6	0.3	0.02	252.2	1,169.2
