

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

**LOK SABHA
UNSTARRED QUESTION NO. 237
TO BE ANSWERED ON 12th DECEMBER, 2018**

POOR NETWORK CONNECTIVITY

237. DR. KULAMANI SAMAL:
SHRI J.J.T. NATTERJEE:
DR. THOKCHOM MEINYA:

Will the Minister of COMMUNICATIONS be pleased to state:

- (a) whether the Government has noticed that call drop phenomenon was common in all networks in the country and if so, the details thereof and the steps taken in this regard;
- (b) whether the Government has received numerous petitions/ representations about call drops;
- (c) if so, the details thereof, operator-wise and State-wise;
- (d) whether the call drops are common in BSNL networks;
- (e) if so, the details thereof and the reasons therefor;
- (f) whether the Government has any concrete action plan to improve the situation and if so, the details thereof; and
- (g) whether there is a gap between the norms laid down for quality services and the actual service provided and if so, the details thereof and reasons therefor, operator-wise and State-wise?

ANSWER

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

(a) The call drop in a mobile network can happen due to many reasons including characteristics of radio propagation for wireless communications, non-availability of sites due to acquisition problems, sealing of sites by local authorities due to fear of Electro-Magnetic Fields (EMF) from mobile radiations etc. Therefore, the occurrence of call drops is found to be common in mobile networks across the world with varying degree of occurrences. Telecom Service Providers in India are required to ensure that the call-drop rate in their mobile networks remain within the benchmarks laid down by Telecom Regulatory Authority of India (TRAI).

TRAI has issued “The Standards for Quality of Service for Basic (Wireline) and Cellular Mobile Telephone Services (Fifth Amendment) Regulations, 2017” effective from 1st October 2017. These Regulations have prescribed two revised parameters for assessing call drop in mobile network, viz. Call drop-rate Spatial distribution measure (benchmark $\leq 2\%$) implies that at-least 90% of Cells in the network should perform better than specified 2% benchmark on at-least 90% of days. Similarly, another new parameter, Call drop-rate Temporal distribution measure (benchmark $\leq 3\%$) will give confidence that on at-least 90% of Days, network performed better than specified 3% benchmark for at-least 97% of the Cells.

(b) & (c) Service Area-wise total number of consumer complaints received in TRAI and DoT against Call Drops w.e.f. 01st January, 2018 to 05th December, 2018 are mentioned in **Annexure- I & II** respectively.

(d) & (e) BSNL complies to both the Call-drop rate benchmarks in all License Service Areas except West Bengal for the quarter ending in September, 2018.

Main reasons include problems due to hilly terrain in Sikkim, Darjeeling and isolated islands in Sunderbans (South 24 Parganas); frequent thefts of waveguide and battery bank in areas particularly in Asansol, Berhampur, Kharagpur, and Kolkata SSAs; frequent OFC cut in major routes; prolonged power outages as well as low voltage in most areas of West Bengal and LWE affected areas such as Bankura, Purulia & West Midnapore which results in difficulty in Operations & Maintenance (O&M) activity and fault restoration work.

(f) In order to address call-drops, following steps have been taken by the Government/ TSPs:

(i) DoT has taken several policy initiatives to facilitate infrastructure growth for delivery of quality services. These include permitting trading/sharing/liberalisation of spectrum already granted, permitting passive & active infrastructure-sharing, Notification of Right of Way Rules- 2016, making available government land/buildings for installations of towers etc.

(ii) About 9.74 lakh additional Base Transceiver Stations (BTS) for 2G/3G/4G-LTE services have been added by TSPs since July, 2015 across the country. The number of BTS installed has been significantly increased from about 7.94 lakh in March 2014 to about 20.07 lakh in November 2018. Moreover, about 9.59 lakh 2G/3G Cells have been rectified/ optimised by TSPs during July 2016 to October 2018.

(iii) In order to obtain direct feedback from subscribers, DoT has launched an Integrated Voice Response System (IVRS) wherein, around 2.15 crore subscribers have been individually contacted since December 2016, out of which 30.1 lakh subscribers have participated in the survey. The feedback is shared with the TSPs every week for taking corrective actions.

(g) As per TRAI Report for the quarter ending September 2018, TSPs are mostly complying with benchmark for various parameters. The details of the non-compliance are given in **Annexure -III**.

ANNEXURE –I

**Service Area wise total number of consumer complaints received in TRAI against
Call Drop w.e.f. 01.01.2018 to 05.12.2018**

| Sr | Service Area | Telecom Service Providers | | | | | | | | | Total |
|----|------------------|---------------------------|------------|-----------|-----------|-----------|----------|----------|------------|--------------|-------------|
| | | Aircel | Airtel | BSNL | Idea | MTNL | TTSL | Telenor | Vodafone | Reliance Jio | |
| 1 | Andhra Pradesh | 0 | 27 | 2 | 2 | 1 | 0 | 0 | 3 | 2 | 37 |
| 2 | Assam | 3 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 13 |
| 3 | Bihar | 0 | 12 | 0 | 2 | 0 | 2 | 1 | 12 | 3 | 32 |
| 4 | Chennai | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 10 |
| 5 | Delhi | 1 | 129 | 0 | 16 | 5 | 1 | 0 | 55 | 13 | 220 |
| 6 | Gujarat | 0 | 21 | 6 | 2 | 0 | 1 | 0 | 31 | 6 | 67 |
| 7 | Haryana | 0 | 10 | 0 | 6 | 0 | 0 | 0 | 5 | 2 | 23 |
| 8 | Himachal Pradesh | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| 9 | Jammu & Kashmir | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 10 | Karnataka | 0 | 73 | 0 | 0 | 0 | 0 | 0 | 10 | 6 | 89 |
| 11 | Kerala | 0 | 5 | 0 | 4 | 0 | 0 | 0 | 5 | 1 | 15 |
| 12 | Kolkata | 0 | 16 | 0 | 2 | 0 | 1 | 0 | 24 | 4 | 47 |
| 13 | Madhya Pradesh | 0 | 18 | 1 | 12 | 0 | 0 | 0 | 1 | 10 | 42 |
| 14 | Maharashtra | 0 | 41 | 2 | 27 | 0 | 1 | 0 | 27 | 3 | 101 |
| 15 | Mumbai | 0 | 47 | 0 | 9 | 11 | 0 | 0 | 88 | 8 | 163 |
| 16 | North East | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 17 | Orissa | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 8 |
| 18 | Punjab | 0 | 17 | 0 | 4 | 0 | 1 | 0 | 3 | 4 | 29 |
| 19 | Rajasthan | 0 | 24 | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 29 |
| 20 | Tamil Nadu | 1 | 30 | 0 | 1 | 0 | 0 | 0 | 7 | 7 | 46 |
| 21 | UP – West | 0 | 17 | 2 | 4 | 0 | 0 | 0 | 1 | 6 | 30 |
| 22 | UP- East | 2 | 20 | 1 | 3 | 0 | 0 | 1 | 6 | 6 | 39 |
| 23 | West Bengal | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 10 | 7 | 28 |
| | Total | 7 | 543 | 16 | 95 | 17 | 7 | 2 | 290 | 96 | 1073 |

Service Area wise total number of consumer complaints received in Public Grievances Cell, DoT against Call drop/ improper Network coverage w.e.f. 01.01.2018 to 05.12.2018

| Sr. No. | State Name | Count of grievances |
|----------------|-----------------------------|----------------------------|
| 1. | Andaman and Nicobar Islands | 4 |
| 2. | Andhra Pradesh | 21 |
| 3. | Arunachal Pradesh | 2 |
| 4. | Assam | 27 |
| 5. | Bihar | 68 |
| 6. | Chandigarh | 7 |
| 7. | Chhattisgarh | 28 |
| 8. | Dadra and Nagar Haveli | 0 |
| 9. | Daman and Diu | 0 |
| 10. | Delhi | 179 |
| 11. | Goa | 1 |
| 12. | Gujarat | 54 |
| 13. | Haryana | 88 |
| 14. | Himachal Pradesh | 8 |
| 15. | Jammu & Kashmir | 13 |
| 16. | Jharkhand | 29 |
| 17. | Karnataka | 130 |
| 18. | Kerala | 28 |
| 19. | Lakshadweep | 0 |
| 20. | Madhya Pradesh | 18 |
| 21. | Maharashtra | 165 |
| 22. | Manipur | 0 |
| 23. | Meghalaya | 2 |
| 24. | Mizoram | 1 |
| 25. | Nagaland | 0 |
| 26. | Odisha | 70 |
| 27. | Puducherry | 1 |
| 28. | Punjab | 37 |
| 29. | Rajasthan | 87 |
| 30. | Sikkim | 0 |
| 31. | Tamil Nadu | 60 |
| 32. | Telangana | 28 |
| 33. | Tripura | 2 |
| 34. | Uttar Pradesh | 280 |
| 35. | Uttarakhand | 25 |
| 36. | West Bengal | 106 |

**TSP-wise total number of consumer complaints received in Public Grievances
Cell, DoT against Call drop/ improper Network coverage w.e.f. 01.01.2018 to
05.12.2018**

| Sr. | State Name | Count of grievances |
|------------|-------------------|----------------------------|
| 1 | Bharti Airtel | 482 |
| 2 | BSNL | 312 |
| 3 | Idea | 118 |
| 4 | Reliance Jio | 398 |
| 5 | Tata Tele | 13 |
| 6 | Vodafone | 203 |
| 7 | MTNL | 49 |

Service Provider wise analysis of non-compliance against identified parameters related to Network Performance for quarter ending in September 2018

| Telecom Service Provider | Parameter | Bench-mark | License Service Area | Performance |
|---------------------------------|---|-------------------|-----------------------------|--------------------|
| BSNL | Network QoS DCR Spatial Distribution Measure [Network_QSD(90,90)] | ≤ 2% | West Bengal | 3.09 |
| | Network QoS DCR Temporal Distribution Measure [Network_QTD(97,90)] | ≤ 3% | West Bengal | 3.67 |
| | Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter) | ≤ 0.5% | Rajasthan | 1 |
| Idea | TCH, RAB and E-RAB Congestion (%age) | ≤ 2% | Madhya Pradesh | 2.22 |
| | | | UP-West | 2.51 |
| | Network QoS DCR Spatial Distribution Measure [Network_QSD(90,90)] | ≤ 2% | Assam | 2.16 |
| | | | Himachal Pradesh | 2.24 |
| | | | Jammu & Kashmir | 2.16 |
| | | | North East | 2.22 |
| | Network QoS DCR Temporal Distribution Measure [Network_QTD(97,90)] | ≤ 3% | Assam | 3.51 |
| | | | North East | 3.39 |
| | | | North East | 61.64 |
| | | | Rajasthan | 99.97 |
| RJio | Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter) | ≤ 0.5% | Rajasthan | 1 |
| Vodafone | Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable (within licensee's own network) | ≥ 95% | UP-West | 94.97 |
| | TCH, RAB and E-RAB Congestion (%age) | ≤ 2% | UP-East | 3.04 |
| | | | UP-West | 5.00 |
