

Information note to the Press (Press Release No. 47/2024)

For Immediate Release

Telecom Regulatory Authority of India

TRAI releases the revised Standards of Quality of Service for Access and Broadband Service.

New Delhi, 2nd August 2024 – The Telecom Regulatory Authority of India (TRAI) releases revised Regulations namely “*The Standards of Quality of Service of Access (Wirelines and Wireless) and Broadband (Wireline and Wireless) Service Regulations, 2024 (06 of 2024)*”. These Regulations are applicable for Access (Fixed and Mobile) and Broadband services. The full text of the Regulations is available on TRAI’s website at www.trai.gov.in.

TRAI had earlier issued three different regulations prescribing standards of Quality of Service (QoS), for Basic and Cellular Mobile Services, Broadband Services, and Broadband Wireless Services, namely (i) *The Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service Regulations, 2009* (ii) *Quality of Service of Broadband Service Regulations 2006* and (iii) *The Standards of Quality of Service for Wireless Data Services Regulations 2012*, amended from time to time.

The new Regulations shall supersede above referred three regulations.

2. The above three regulations were notified more than a decade ago. Since then, the technology landscape of telecom networks has completely changed and moved towards converged networks. To account for the quality aspects arising out of large-scale penetration of new & emerging technologies such as 4G & 5G and high-speed broadband services on fiber, the Authority decided to carry out an extensive review of the existing regulations and put forward a comprehensive regulatory framework which encompasses QoS benchmarks for all three services at one place. The QoS standards set will achieve the delivery of high-Quality Service to consumers.

3. The revised regulations have been finalized after following a detailed consultative process through a Consultation Paper on '*Review of Quality-of-Service Standards for Access Services (Wireless and Wireline) and Broadband (Wireless and Wireline) Services*' issued on 18th August 2023 inviting comments from the stakeholders. An Open House Discussion (OHD) was held with the stakeholders on 9th April 2024 where in representatives from stakeholders and consumer forums shared their views on different provisions of the Regulations.

4. The salient features of the regulations include following:

- (i) Mandating service providers to display technology (2G/ 3G/ 4G/ 5G) wise mobile coverage maps on their website, to enable consumers to make informed decisions.
- (ii) To bring transparency in QoS performance reporting, the service providers have been mandated to publish QoS

- performance, against prescribed parameters, on their website.
- (iii) Considering the performance requirement of new emerging applications, the benchmark for Latency parameter has been aligned with global standards and new parameters for Jitter and Packet drop rate have been introduced.
 - (iv) To enable timely redressal of network issues by the service providers, QoS performance of mobile service shall now be monitored on monthly instead of quarterly basis. However, for smooth transition to monthly reporting, service providers have been given six months' time from the effective date of the regulation.
 - (v) To have insight of performance at granular level, the Authority has decided to collect performance against certain parameters like network availability, call drop, voice packet drop rate in uplink and downlink etc. on Cell level.
 - (vi) To achieve adoption of uniform methodology by different service providers while measuring and reporting the performance, a detailed and unambiguous measurement methodology has been prescribed in the regulation.
 - (vii) The Authority has decided to tighten the benchmarks for some key parameters like network availability (cumulative downtime and worst affected Cells due to downtime), call drop rate, packet drop rate, latency etc. in a graded manner over a

time frame of six months to two and half years to enable service providers to upgrade their networks, wherever needed.

- (viii) As averaging on QoS parameter performance in certain cases does not clearly bring out problem areas, the measurement methodology for some key parameters like Downlink and Uplink Packet Drop Rate, Latency, Point of Interconnection (PoI) Congestion, Download and upload speed, Maximum Bandwidth utilization between radio and core network during busy hour etc. has been changed from average to percentile basis. This will enable identification of pockets of degraded QoS performance for corrective action by service providers.
- (ix) In addition to requirement for display of mobile coverage map, new parameters like reporting of significant network outages, jitter, maximum bandwidth utilization between radio and core network during busy hour and SMS delivery success rate etc. have been introduced.
- (x) QoS parameters have been rationalized further, based on the impact on consumer experience and relevance in the present context, as against global benchmarks. For example, parameters like Shifting of Telephone Connections, Grade of Service for Local Exchange etc have been deleted and few parameters have been shifted from compliance to monitoring by the service providers.
- (xi) With the simplification and objectivity in the QoS performance measurement criteria and smooth compliance, the service

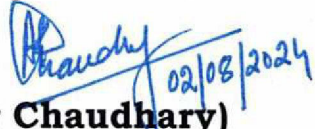
providers have been mandated to upgrade their system for online monitoring and reporting of QoS performance.

(xii) Delivering QoS is a lifecycle activity that can only be achieved through the adoption of best practices in the quality management domain. Therefore, Service providers have been asked to adopt Six Sigma Quality Management Plan to achieve continuous improvement in the quality of services.

(xiii) In order to achieve time bound action on QoS related issues and early resolution of non-compliant QoS performance in the network, graded financial disincentives, increasing with continued non-compliance, have been introduced for all services.

5. The regulations shall come into force with effect from 1st October 2024.

6. For any clarification/information, Shri Tejpal Singh, Advisor (QoS-I) TRAI may be contacted on email: **adv-qos1@trai.gov.in** or at Tel. No. **+91-11-20907759**.


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