

RESPONSE OF

ONEOTT ENTERTAINMENT LIMITED

(OIL)

TO THE

CONSULTATION PAPER ON DRAFT AMENDMENTS

TO THE STANDARDS OF QUALITY OF SERVICE OF ACCESS (WIRELINE

AND WIRELESS) AND BROADBAND (WIRELINE AND WIRELESS) SERVICE

REGULATIONS, 2024

Submitted on: 21st August 2026

To:

The Telecom Regulatory Authority of India (TRAI)

Subject: Comments of OIL on the Consultation Paper on Draft Amendments to the Standards of Quality of Service of Access (Wireline and Wireless) and Broadband (Wireline and Wireless) Service Regulations, 2024

Reference: TRAI Consultation Paper on Draft Amendments to QoS Regulations, dated 5 August 2026

1. Introduction

ONEOTT ENTERTAINMENT Ltd (OIL) appreciates the opportunity provided by the Telecom Regulatory Authority of India ("TRAI") to submit its comments on the proposed amendments to the Standards of Quality of Service of Access (Wireline and Wireless) and Broadband (Wireline and Wireless) Service Regulations, 2024.

OIL fully supports TRAI's objective of improving broadband service quality and enhancing consumer experience. As broadband has become an essential service for consumers, enterprises, education, work-from-home, digital services and other applications, service providers have a shared responsibility to ensure reliable, resilient and high-quality connectivity.

At the same time, OIL believes that the QoS framework should ensure that the prescribed benchmarks are:

- technically measurable;
- objectively verifiable;
- capable of consistent implementation across service providers;
- based on parameters within the reasonable control of the service provider;
- independent of factors outside the service provider's network;
- supported by clearly defined measurement methodologies; and
- operationally practical without creating unintended consequences for network investment and customer service.

With this objective, OIL submits the following comments and recommendations on the proposed amendments relating to Broadband (Wireline).

2. Executive Summary of Key Recommendations

OIL respectfully recommends that TRAI consider the following before finalising the amendments:

No.	Proposed area	OIL's recommendation
1	MTTR ≤10 hours	Retain the KPI, but clearly define the start/stop points and exclusions
2	Fault incidence	Clarify methodology and ensure faults outside the ISP's control are treated appropriately
3	Significant Network Outage	Provide a detailed and objective methodology before implementation
4	20% speed degradation	Do not classify this as SNO without a standardised measurement methodology
5	>10% affected subscribers	Define denominator, sampling methodology and measurement period
6	Speed measurement	Exclude Wi-Fi/CPE/customer-side factors and external Internet congestion
7	100% tariff-speed compliance	Reconsider the absolute 100% benchmark or provide statistically robust methodology
8	Typical speed	Provide minimum guidelines for declaration and measurement
9	SNO reporting within 24 hours	Allow initial notification followed by detailed RCA after restoration
10	Compensation for >24-hour outage	Define applicability, exclusions and calculation methodology clearly
11	Billing/validity compensation	Enable automated implementation after objective determination of qualifying outage
12	PMR reporting	Ensure separate reporting for Broadband Wireline and Access Wireline
13	Complaint handling during outages	Permit system-generated tickets where a common outage is established

No. Proposed area	OIL's recommendation
14 QoE Score	Ensure methodology is transparent and service-provider data is appropriately normalised

Detailed comments are provided below.

3. Addition of Mean Time-To-Repair (MTTR) – Benchmark ≤10 Hours

TRAI Proposal

TRAI proposes introducing **Mean Time-To-Repair (MTTR)** as a new QoS parameter for Broadband (Wireline), with a benchmark of **≤10 hours**.

TRAI has explained that MTTR was prescribed for Access Service (Wireline) but was not included for Broadband (Wireline), and therefore proposes to introduce the same benchmark for broadband.

OIL's Comments

OIL supports the objective of monitoring the average time taken to restore broadband faults.

However, MTTR is highly dependent on the methodology used to determine the beginning and end of the repair period.

In a wireline broadband environment, fault restoration may involve multiple elements, including:

- customer premises equipment;
- indoor wiring;
- building infrastructure;
- distribution fibre;
- access fibre;
- OLT;
- aggregation network;
- core network;
- upstream connectivity; and
- third-party infrastructure.

Accordingly, the MTTR calculation should measure the period during which the service provider has effective responsibility and control over restoration.

Recommendation

TRAI is requested to clearly specify:

1. MTTR calculation will only include business working hours i.e. from 8 am to 8 pm
2. The precise start time for MTTR calculation.
3. The precise end time for MTTR calculation.
4. Treatment of customer-caused faults.
5. Treatment of faults caused by customer premises wiring/CPE.
6. Treatment of force majeure.
7. Treatment of third-party infrastructure failures.
8. Treatment of faults requiring customer access to premises.
9. Treatment of cases where the customer is unavailable for restoration.
10. Treatment of planned maintenance.
11. Treatment of multiple related tickets generated for the same underlying network fault.

OIL therefore supports the proposed **≤10- Working hour MTTR benchmark**, subject to a clear and uniform measurement methodology and appropriate exclusions.

4. Fault Incidence – Per 100 Subscribers Per Month

TRAI proposes clarifying the parameter as:

"Fault incidences (No. of faults per 100 subscribers/month)".

OIL supports the clarification.

However, it is important that the methodology prevents multiple tickets generated by the same underlying network event from artificially inflating the fault-incidence number.

Recommendation

Where multiple subscribers are affected by the same common network failure, TRAI may consider providing a clear distinction between:

- individual customer faults; and

- common network outages affecting multiple subscribers.

A common fibre cut, OLT failure or aggregation failure should not result in thousands of independent fault incidents being counted in a manner that disproportionately distorts the fault-incidence KPI.

OIL therefore requests TRAI to prescribe an appropriate methodology for common-cause faults.

5. Significant Network Outage (SNO) – Need for Detailed Measurement Methodology

TRAI Proposal

TRAI proposes defining a Significant Network Outage for Broadband (Wireline) where:

1. broadband service in a district remains unavailable for more than four continuous hours; or
2. more than 10% of subscribers in the Service Area experience complete loss of service or material degradation for more than four continuous hours.

Material degradation is proposed to mean a reduction of **20% or more in download or upload speed compared with the declared typical speed.**

OIL appreciates TRAI's objective of ensuring timely reporting of major broadband outages.

However, the proposed definition requires greater technical clarity before implementation.

6. Material Degradation – 20% Speed Reduction

This is one of the most important areas requiring clarification.

The proposed definition considers a reduction of **20% or more** from the declared typical download/upload speed as material degradation.

For example, if the declared typical speed is 500 Mbps, a measured speed of 400 Mbps would represent a 20% reduction.

However, broadband speed measured at a customer's premises is affected by several factors that may not be under the service provider's control, including:

- Wi-Fi technology and configuration;
- customer device capability;

- customer LAN/Wi-Fi congestion;
- number of simultaneously connected devices;
- CPE limitations;
- customer-selected Wi-Fi band;
- distance from Wi-Fi access point;
- third-party content server capacity;
- Internet Exchange/peering congestion;
- congestion outside the service provider's network;
- international/transit network congestion;
- speed-test server capacity; and
- application/server-side limitations.

Consequently, measuring speed at the customer device cannot, by itself, establish that degradation has occurred within the ISP's network.

OIL Recommendation

TRAI should prescribe a **standardised, operator-independent speed measurement methodology** before the SNO provision becomes applicable.

The methodology should specify:

- measurement point;
- test server;
- test protocol;
- measurement frequency;
- test duration;
- minimum sample size;
- treatment of Wi-Fi;
- treatment of wired Ethernet testing;
- treatment of CPE limitations;
- treatment of external Internet congestion;
- treatment of peering/transit failures; and
- treatment of individual versus network-wide degradation.

Until such a methodology is established, OIL recommends that **20% speed degradation should not independently trigger SNO classification.**

7. More Than 10% Subscribers – Definition Requires Clarification

The proposed SNO definition refers to more than **10% of subscribers in the Service Area** being affected.

OIL requests TRAI to clarify:

What is the denominator?

Whether it is:

- total active subscribers;
- total registered subscribers;
- subscribers with active sessions;
- subscribers in the affected geographic area; or
- subscribers actually connected to the affected network element.

The denominator should reflect **active subscribers who could reasonably be impacted by the relevant network event.**

Recommendation

OIL recommends that TRAI prescribe a standardised denominator and measurement methodology to ensure uniform implementation across service providers.

8. Four-Hour SNO Threshold

TRAI proposes that an outage exceeding four continuous hours at district level may constitute an SNO.

OIL recommends that TRAI distinguish between:

- planned maintenance;
- emergency maintenance;
- force majeure;
- third-party infrastructure failures;
- electricity/grid failures;

- municipal/civil works;
- fibre cuts caused by third parties;
- natural disasters; and
- failures directly attributable to the service provider.

Such events should be appropriately categorised rather than automatically treated as service-provider QoS failures.

9. SNO Reporting Within 24 Hours

TRAI proposes a benchmark of **100% reporting of significant network outages within 24 hours of commencement**.

OIL supports the objective.

However, during a major network event, the service provider's first priority is restoration of customer services.

Accordingly, OIL recommends a two-stage reporting mechanism:

Stage 1 – Initial notification

A concise notification containing:

- date/time of outage;
- affected geography;
- estimated affected subscribers;
- nature of outage; and
- current restoration status.

Stage 2 – Detailed report

After restoration:

- final duration;
- actual affected subscriber base;
- root cause;
- corrective action;
- preventive action; and
- restoration details.

This would ensure that regulatory visibility is achieved without diverting operational resources from restoration.

10. Root Cause Analysis and Corrective Action

OIL supports TRAI's objective of requiring root-cause analysis and corrective action following major outages.

However, the RCA format should be standardised.

OIL recommends a categorisation such as:

- Fibre cut;
- Power failure;
- OLT failure;
- Aggregation failure;
- Core failure;
- ISP gateway failure;
- Upstream provider failure;
- Internet Exchange failure;
- Third-party infrastructure;
- Customer premises;
- Force majeure; and
- Other.

This will allow TRAI to identify systemic industry-level trends rather than simply measuring outage counts.

11. Compensation for Significant Network Outages Exceeding 24 Hours

TRAI proposes proportional rent rebate for post-paid subscribers and equivalent validity extension for prepaid subscribers for significant network outages exceeding 24 hours.

OIL supports the principle of protecting customers from prolonged service disruption.

However, the regulation should clearly establish that compensation applies only where the outage:

- meets the defined SNO threshold;
- is attributable to the service provider; and
- is not covered under defined exclusions such as force majeure or other events outside the reasonable control of the service provider.

Recommendation

TRAI should also clarify:

- whether compensation applies to all subscribers or only demonstrably affected subscribers;
- how partial-day outages are calculated;
- how multiple outages in the same period are treated;
- treatment of customers who joined after the outage started;
- treatment of customers who terminated service during the outage; and
- treatment of customers whose account was already suspended.

12. Speed Compliance Across All Tariff Offerings

TRAI proposes the parameter:

"Tariff offerings in which 90th percentile value of measured download and upload speed is $\geq$ offered typical download and upload speed"

with a benchmark of **100%**.

TRAI also proposes including all tariff offerings for reporting, with a sampling relaxation for tariff offerings having lower subscriber bases.

OIL supports greater transparency in declared speeds.

However, a **100% benchmark** for every tariff offering may create disproportionate compliance exposure because broadband performance is inherently influenced by customer-side and Internet-side variables.

Recommendation

OIL requests TRAI to consider:

- an appropriate statistical confidence interval;
- a minimum sample size;
- exclusion of statistically insignificant tariff offerings;

- standardised test servers;
- standardised wired test methodology; and
- exclusion of customer-side limitations.

Alternatively, TRAI may consider retaining the 100% benchmark but defining a statistically robust measurement methodology that ensures the KPI measures **network performance rather than individual customer experience variability**.

13. Declaration of Typical Speed

TRAI states that the regulations do not prescribe specific criteria for determining typical speed and that service providers may determine typical speed based on factors including network dimensioning and loading.

OIL appreciates this flexibility.

However, because the declared typical speed will now have significant regulatory consequences, OIL recommends that TRAI publish minimum guidelines for its determination.

Such guidelines could include consideration of:

- network architecture;
- peak-hour loading;
- subscriber density;
- access technology;
- aggregation capacity;
- Internet gateway capacity;
- peering capacity; and
- expected network utilisation.

This will ensure consistency across service providers.

14. Customer Complaint Registration During Network Outages

OIL supports the proposal that customers should continue to have a mechanism for registering complaints during network-wide or localised disruptions.

However, where a common network fault has already been identified, creating individual manual tickets for every affected customer may create unnecessary operational load.

OIL recommends that:

A system-generated master outage ticket, automatically mapped to affected subscriber accounts, should be considered equivalent to individual complaint registration.

This would ensure customer visibility while avoiding unnecessary duplication of tickets.

15. Billing Complaint Resolution – One Week

TRAI proposes reducing the resolution timeline for billing/charging complaints from four weeks to **one week**, with a 100% benchmark.

OIL understands the rationale for the proposed reduction.

However, complex billing disputes may involve:

- historical billing records;
- plan migration;
- usage reconciliation;
- discounts;
- refunds;
- taxes;
- payment gateway reconciliation; and
- third-party payment systems.

OIL recommends that the one-week benchmark apply to **resolution/communication of the complaint**, while cases requiring third-party reconciliation or customer-provided information should be appropriately treated under a defined exception mechanism.

16. Separate Reporting for Broadband Wireline

OIL supports TRAI's proposal to clearly separate reporting for Broadband (Wireline) and Access Service (Wireline).

TRAI has already observed inconsistencies where some providers reported the two services on different bases.

OIL recommends that TRAI provide a standard PMR template clearly defining:

- subscriber base;
- assessment period;
- service area;
- denominator;
- measurement methodology; and
- treatment of common infrastructure.

This will improve comparability across operators.

17. Quality of Experience (QoE) Score

The consultation paper proposes enabling publication of a service-wise **Quality of Experience Score (QoES)** based on network performance, consumer service and consumer perception collected from multiple sources.

OIL supports the principle of measuring consumer experience beyond technical QoS.

However, if QoES is published publicly, TRAI should ensure that:

1. The methodology is transparent.
2. All service providers are assessed using identical criteria.
3. Sample sizes are statistically representative.
4. Consumer perception is appropriately normalised.
5. Network performance and customer-service parameters are weighted transparently.
6. Factors outside the service provider's control are appropriately excluded.

OIL recommends that the QoES methodology be published for stakeholder consultation before being used for public ranking or comparison of service providers.

18. Need for a Standardised Fault and Outage Taxonomy

OIL recommends that TRAI consider introducing a standard industry-wide classification of faults and outages.

For example:

Level 1 – Customer Premises

- CPE
- Wi-Fi
- indoor fibre
- power

Level 2 – Access Network

- ONT
- OLT
- feeder fibre
- distribution fibre

Level 3 – Aggregation

- aggregation switch
- backhaul
- transport

Level 4 – Core

- BRAS/BNG
- routing
- DNS
- authentication

Level 5 – Upstream/Internet

- ISP gateway
- peering
- IXP
- transit

Level 6 – External

- third-party fibre cut
- utility damage
- force majeure

A standard taxonomy would significantly improve the reliability and comparability of QoS reporting.

19. Force Majeure and Third-Party Failures

The proposed framework should clearly distinguish between service quality failures attributable to the service provider and events outside the service provider's reasonable control.

Broadband networks frequently depend upon:

- electricity providers;
- municipal infrastructure;
- road authorities;
- building societies;
- utility providers;
- third-party fibre infrastructure;
- upstream Internet providers;
- international cable systems; and
- Internet exchanges.

OIL recommends that TRAI define an appropriate exclusion mechanism supported by documentary evidence.

Such exclusions should not reduce the transparency of reporting; rather, they should ensure that the QoS benchmark correctly measures the service provider's controllable performance.

20. Transition Period

Considering the introduction of new parameters such as:

- MTTR;
- SNO;
- speed degradation;
- tariff-level speed compliance; and
- customer compensation,

OIL recommends providing a **minimum six-month implementation and transition period** after notification of the final regulations.

This period would allow service providers to:

- modify OSS/BSS systems;
- modify NOC monitoring;
- implement subscriber-level performance measurement;
- modify CRM workflows;
- integrate billing systems;
- establish regulatory reporting;
- validate measurement methodologies; and
- conduct parallel reporting.

21. Overall Position of OIL

OIL supports TRAI's objective of strengthening the QoS framework for broadband wireline services.

In particular, OIL supports the introduction of:

- MTTR monitoring;
- stronger fault monitoring;
- major outage reporting;
- improved speed transparency;
- customer compensation for prolonged outages; and
- greater transparency in QoS reporting.

However, OIL respectfully submits that the proposed framework should ensure that the measurement methodology is technically robust and does not attribute customer-experience variations arising from factors outside the service provider's control to the service provider.

The proposed **20% speed degradation criterion**, **10% affected-subscriber threshold**, **four-hour SNO threshold**, and **100% tariff-level speed compliance** require detailed and standardised measurement methodologies before implementation.

OIL therefore requests TRAI to consider the recommendations contained in this submission and suitably modify/clarify the proposed provisions before final notification.

22. Summary of Specific Recommendations

OIL respectfully requests TRAI to consider the following:

Recommendation 1: Introduce MTTR ≤ 10 Working hours with a clearly defined measurement methodology and exclusions.

Recommendation 2: Clarify fault-incidence calculation and treatment of common-cause network faults.

Recommendation 3: Introduce a standardised methodology for identifying Significant Network Outages.

Recommendation 4: Do not classify a 20% speed reduction as SNO until a standardised speed-measurement methodology is established.

Recommendation 5: Clearly define the denominator and methodology for determining the 10% affected-subscriber threshold.

Recommendation 6: Exclude customer-side Wi-Fi/CPE/device limitations and external Internet congestion from network speed compliance measurements.

Recommendation 7: Retain the flexibility of service providers to determine typical speed but provide appropriate guidelines for its declaration.

Recommendation 8: Reconsider the absolute 100% tariff-level speed compliance benchmark or establish statistically robust sampling and measurement criteria.

Recommendation 9: Implement a two-stage SNO reporting mechanism consisting of immediate notification followed by detailed RCA.

Recommendation 10: Clearly define force-majeure and third-party failure treatment.

Recommendation 11: Clearly establish eligibility and methodology for customer compensation for outages exceeding 24 hours.

Recommendation 12: Permit system-generated master outage tickets to satisfy complaint-registration requirements for customers affected by an already identified common outage.

Recommendation 13: Establish standardised PMR templates and separate reporting for Broadband Wireline and Access Wireline.

Recommendation 14: Publish the QoE Score methodology and undertake stakeholder consultation before public comparative publication.

Recommendation 15: Provide at least six months for implementation after notification of the final amendments.

For and on behalf of OIL

Name: _____

Designation: _____

Organisation: OIL

Date: _____

Place: Mumbai
