

Respected Sir/Madam,

Subject: Submission of Consumer Recommendations on Draft Amendments to the Standards of Quality of Service of Access (Wireline and Wireless) and Broadband (Wireline and Wireless) Service Regulations, 2024

I am writing as an individual telecom consumer to submit my observations and recommendations for consideration in the ongoing consultation on the proposed amendments to the **Standards of Quality of Service of Access (Wireline and Wireless) and Broadband (Wireline and Wireless) Service Regulations, 2024**.

I appreciate TRAI's continuing efforts to strengthen the Quality of Service framework in response to evolving technology and increasing consumer expectations.

I have attached a detailed discussion document titled:

“Consumer-Centric Quality of Service (QoS), Quality of Experience (QoE) and Service Accountability – Recommendations for Consideration by TRAI”

The submission approaches the subject from the perspective of a consumer who ultimately experiences the service—not merely the network statistics reported by the service provider.

Key areas highlighted in the submission include:

1. **Actual service experience versus declared/advertised speeds**, including meaningful measurement of download, upload, latency, jitter, packet loss and reliability.
2. **Mobile services**, including 4G/5G availability, coverage, indoor experience, network congestion and the distinction between theoretical coverage and practically usable service.
3. **Broadband services**, covering both wireline and wireless access, with greater emphasis on actual delivered performance rather than only subscribed or declared speeds.
4. **A transparent framework for actual-versus-committed performance**, including consideration of appropriate consumer remedies where persistent service performance materially falls below the committed or represented level.
5. **Consumer Service Charter**, establishing measurable service commitments for installation, activation, fault resolution, complaint handling, restoration and communication.
6. **Closed-loop complaint resolution**, where a complaint should not be considered genuinely resolved merely because it has been closed in an operator's system. The consumer should have an opportunity to confirm or dispute the resolution.
7. **Root Cause Analysis (RCA), Corrective Action and Preventive Action (CAPA)** for recurring or systemic complaints, rather than repeatedly treating each occurrence as an isolated incident.
8. **Enhanced scrutiny of repeated complaints**, including where substantially similar complaints arise from the same connection within a defined period.
9. **Accountability for unjustified delays**, including consideration of an appropriate and proportionate mechanism where prescribed resolution timelines are exceeded.
10. **Consumer feedback/rating of complaint resolution**, with appropriate aggregation and reporting to enable TRAI to identify operators, services or locations experiencing persistent customer-service deficiencies.
11. **Independent escalation and dispute resolution**, particularly where the consumer disputes an operator's closure or considers the response inadequate.
12. **Greater transparency and comparability between operators**, enabling consumers to make informed choices based on actual service quality and customer-service performance.
13. **Recognition of legitimate technical limitations**, while distinguishing these from persistent, measurable and avoidable deficiencies. The objective is therefore not to penalise operators for circumstances genuinely beyond their reasonable control, but to create accountability where deficiencies are persistent and actionable.
14. **International best-practice benchmarking**, drawing lessons from regulatory approaches adopted in jurisdictions including Australia, Singapore, the European framework, the UK, Canada and the United States, while recognising that Indian conditions require an appropriately adapted framework.
15. **Consumer welfare and sustainability considerations**, including the wider consequences of persistent poor connectivity and inefficient service performance.

The recommendations are intended to complement—not undermine—the interests of telecom service providers. A reliable and transparent QoS framework can improve consumer confidence, reduce avoidable complaints, encourage service quality improvements and ultimately support a healthier and more sustainable telecom ecosystem.

A particularly important principle underlying the submission is simple:

A service should be assessed not only by whether the network technically exists, but by whether the consumer can reliably use the service for which they have paid.

I respectfully request TRAI to consider these recommendations while finalising the proposed amendments and, where appropriate, examine them through stakeholder consultation, pilot implementation, data-driven evaluation and periodic review.

I would also request that this submission be treated as my formal consumer representation for the ongoing consultation.

Thank you for providing consumers an opportunity to contribute to the regulatory process.

Yours faithfully,

Rajendar Reddy

Individual Telecom Consumer

India

Enclosure:

Consumer-Centric Quality of Service (QoS), Quality of Experience (QoE) and Service Accountability – Recommendations for Consideration by TRAI

[Final Discussion Document – PDF]

CONSUMER DISCUSSION DOCUMENT

Strengthening Telecom Quality of Service (QoS), Quality of Experience (QoE) and Consumer Accountability

Recommendations for TRAI consideration

Submitted to
Telecom Regulatory Authority of India (TRAI)

Submitted by
Rajendar Reddy
Independent Contributor | Consumer Perspective

PROMISED → DELIVERED → MEASURED → VERIFIED → REMEDIED

A constructive consumer-policy contribution. The recommendations seek proportionate accountability while recognising legitimate technical, geographical, device and network constraints.

Table of Contents

1. Executive Summary
2. Scope and Consumer Perspective
3. The Consumer Outcome Principle
4. Actual Service Delivered vs. Declared/Contracted Service
5. Coverage, Availability, Accessibility, Usability and Performance
6. Mobile QoS/QoE — 4G and 5G
7. Broadband — Wireline, Fibre and FWA
8. Material Degradation and Consumer Remedies
9. Consumer Service Charter
10. Closed-Loop Complaint Accountability
11. Repeat Complaints and Systemic Deficiency
12. Consumer Rating, Disputed Closure and QoE
13. Complaint Ageing and Time-Linked Accountability
14. Independent Dispute Resolution and Escalation
15. Transparency, Standardised Labels and Public Reporting
16. Accessibility and Consumer Communication
17. International Best-Practice Benchmark
18. Consolidated Recommendations to TRAI
19. Implementation and Safeguards
20. Conclusion
21. About the Contributor
22. Selected Sources

1. Executive Summary

This discussion document proposes a consumer-centric strengthening of the telecom Quality of Service (QoS) and Quality of Experience (QoE) framework. It is intended to complement technical network standards with measurable consumer outcomes, transparent service commitments, effective complaint resolution and proportionate remedies.

The central proposition is simple: a consumer should receive a reliable and usable service reasonably corresponding to what was represented, contracted and paid for. Where a persistent and material deficiency is established through a fair and approved methodology, accountability should follow.

“Measure the network. Measure the complaint. Measure the resolution. Measure whether the consumer agrees it was resolved. Measure recurrence. Then regulate the outcome.”

The recommendations deliberately distinguish normal network variability and legitimate technical constraints from persistent, material and attributable service deficiencies. The aim is not punitive regulation for its own sake; it is better service, earlier correction, fewer repeat contacts and greater trust.

2. Scope and Consumer Perspective

The framework should cover mobile voice and data, 4G and 5G, fixed wireline broadband, fibre/cable/DSL and fixed wireless access including 5G FWA. It should address both network performance and the consumer-service lifecycle.

- Service representation and plan disclosure
- Actual service performance and usability
- Coverage and availability
- Reliability and outages
- Installation, repair and appointment commitments
- Complaint handling and escalation
- Resolution quality, recurrence and prevention
- Consumer remedies and independent dispute resolution
- Public reporting and comparable service-quality information

3. The Consumer Outcome Principle

QoS compliance and consumer experience are related but not identical. A technically available service can still be practically unusable because of low throughput, latency, packet loss, repeated disconnections, congestion, indoor penetration limitations or other conditions.

TRAI may therefore consider an outcome-based layer alongside technical QoS metrics: Availability → Accessibility → Usability → Performance → Reliability → Resolution.

The operator should retain appropriate protection against factors genuinely outside its reasonable control. However, such factors should not become a blanket explanation for persistent service deficiencies without evidence.

4. Actual Service Delivered vs. Declared/Contracted Service

Operators should disclose service performance in a standardised, comparable consumer format. Depending on technology, this should include advertised, typical/normally available and, where technically appropriate, minimum/guaranteed performance. Upload speed, latency, data allowance, network-management limitations and other material restrictions should be visible.

Proposed principle: If repeated, statistically meaningful measurements demonstrate a persistent and material discrepancy from the applicable declared or contracted service level, the consumer should have access to a proportionate remedy.

- Repeated measurements rather than a single speed test should ordinarily determine a service-performance dispute.

- TRAI-approved test methods should specify device, location, time, duration, measurement server/method and other relevant variables.
- Consumer-collected evidence should be admissible where it meets the approved methodology.
- Remedies may include service credit, pro-rata adjustment/refund, downgrade, corrective action or penalty-free exit, depending on severity and duration.
- For mobile services, performance should not be represented solely by the presence of a 4G/5G indicator.

5. Coverage, Availability, Accessibility, Usability and Performance

A coverage map can show that a technology is nominally available without demonstrating that a consumer can obtain a useful service at the point of use. The framework should distinguish:

- Coverage — signal/service footprint.
- Availability — whether the service can be accessed at the relevant location/time.
- Accessibility — whether a session/call can be established and maintained.
- Usability — whether the service is practically usable for ordinary consumer needs.
- Performance — speed, latency, jitter, packet loss, quality and reliability.

Where practicable, mobile coverage information should distinguish indoor and outdoor experience and should make meaningful technology-specific limitations clear. Consumers should have a mechanism to challenge materially inaccurate coverage information through an approved measurement process.

6. Mobile QoS/QoE — 4G and 5G

Mobile QoE should include more than peak download speed. For 4G/5G, the regulatory framework should consider, as appropriate:

- Download and upload throughput
- Latency, jitter and packet loss
- Call accessibility, call setup and dropped calls
- Data-session accessibility and continuity
- Indoor and outdoor performance
- Time-of-day/congestion effects
- Signal/service quality and technology availability
- SMS delivery where relevant
- Reliability and recurring degradation
- 5G availability versus meaningful 5G performance

A 5G coverage claim should not automatically be interpreted by consumers as a promise of a particular speed. Conversely, where a provider markets a 5G plan or experience, the consumer should receive clear information about the service conditions and meaningful performance characteristics.

7. Broadband — Wireline, Fibre and FWA

For fixed broadband, QoS/QoE should include download/upload performance, minimum/typical performance where applicable, latency, reliability, outages, repair time and installation commitments.

For 5G FWA and other fixed wireless services, the framework should recognise the hybrid nature of the service and address radio conditions, congestion, equipment/location limitations, latency and performance variability.

For customer-premises Wi-Fi, provider and consumer-side factors should be distinguished. Consumers should receive clear guidance on determining whether a problem lies in the provider network, access link, router or local Wi-Fi environment.

Installation and appointment commitments should also be measurable: promised installation date versus actual date; appointment attendance; cancellations; repair commitment versus actual completion.

8. Material Degradation and Consumer Remedies

Consumer harm can arise without a complete outage. A service that remains technically connected but is persistently and materially degraded may be practically unusable.

Condition	Suggested regulatory response
Normal network variation	No automatic remedy; monitor under approved methodology.
Persistent material degradation	Corrective action plus proportionate service credit/remedy.
Severe or prolonged shortfall	Enhanced remedy such as larger credit, pro-rata adjustment or other relief.
Complete outage	Applicable outage compensation/credit.
Repeated recurrence	RCA + CAP/PAP + enhanced regulatory scrutiny.
Unresolved after prescribed period	Escalation and potential penalty-free exit/downgrade, subject to safeguards.

9. Consumer Service Charter

TRAI may consider a mandatory Consumer Service Charter setting minimum requirements for making, tracking, resolving and escalating complaints.

- Complaint channels should be free/easy to access and include phone, digital and written options as appropriate.
- Every complaint should receive a unique reference number, date/time, category, responsible function and committed resolution date.
- The consumer should be told what will be investigated and what the next step is.
- Closure should include the finding, action taken, restoration/correction date and any preventive action.
- Where the issue cannot be resolved, the consumer should receive a reasoned explanation and escalation route.
- The charter should cover network complaints, billing, provisioning, installation, repair, outages and customer-service failures.

10. Closed-Loop Complaint Accountability

A complaint should not be treated as successfully resolved merely because an internal ticket has been marked “closed”.

- Problem reported
- Investigation undertaken
- Root Cause Analysis (where identifiable)
- Corrective Action Plan (CAP)
- Preventive Action Plan (PAP), where required
- Evidence of action/restoration
- Consumer informed in writing
- Consumer confirms resolution or disputes closure
- Reopened/disputed cases remain visible in performance reporting

“Action completed” should not automatically mean “consumer problem resolved.”

11. Repeat Complaints and Systemic Deficiency

Two or more substantially similar complaints concerning the same service/connection within a rolling 12-month period should trigger enhanced review. The trigger should create accountability without treating every second complaint as automatically deserving a punitive fine.

- Second similar complaint: supervisory review and RCA.
- Third or subsequent similar complaint: systemic-deficiency flag and mandatory CAP/PAP.
- Recurrence after corrective action: enhanced regulatory scrutiny.
- Maintain a systemic-issues register with owner, action, due date and effectiveness measure.

- Report recurrence separately from raw complaint volume.

12. Consumer Rating, Disputed Closure and QoE

After closure, the consumer should receive a standardised question: Was the problem actually resolved? Yes / Partially / No. A 1–5 rating may supplement this.

A “No” response should create a disputed closure status rather than disappear into the operator's resolved statistics. The operator may retain its technical closure status, but TRAI reporting should distinguish “resolved by operator” from “consumer-confirmed resolved”.

Consumer feedback should be securely transmitted to TRAI in a standardised form and should not be alterable by the operator. Reopened complaints and repeat contacts should contribute to QoE analysis.

13. Complaint Ageing and Time-Linked Accountability

Aggregate average resolution time can conceal long-running cases. TRAI should consider complaint-ageing bands and overdue visibility.

- 0–3 days; 4–7 days; 8–15 days; 16–30 days; >30 days, or other appropriate bands.
- Publish overdue complaint rates, not only average resolution time.
- Where a prescribed resolution deadline is missed without a valid documented reason, a daily accruing financial disincentive may apply.
- Repeated or systemic breaches may attract progressively stronger consequences.
- Genuine exceptional circumstances should have a documented exception process subject to audit.

The term daily accruing financial disincentive is preferable to an undefined “compounded penalty”, leaving TRAI to determine the appropriate legal and financial mechanism.

14. Independent Dispute Resolution and Escalation

India could strengthen the consumer journey by ensuring that an unresolved telecom complaint does not end with an operator's internal closure. A time-bound, affordable and independent dispute-resolution route should be available after the prescribed internal escalation process, or earlier where the operator issues a deadlock/unsatisfactory closure.

International examples demonstrate that independent mechanisms can coexist with operator-level complaint handling. Canada requires telecom providers to participate in the independent CCTS, whose services are free to consumers; Australia's framework provides escalation to the Telecommunications Industry Ombudsman; and the UK's telecom ADR arrangements provide independent dispute resolution after the provider process. These are models for consideration, not proposals for direct transplantation.

15. Transparency, Standardised Labels and Public Reporting

Consumers should be able to compare services before purchase and assess performance after purchase.

- A standardised consumer service label for broadband/mobile plans, where feasible.
- Clear speed/performance definitions and measurement methodology.
- Disclosure of material network-management limitations and data allowances.
- Operator complaint rate per defined subscriber/service base.
- Resolution time and overdue rate.
- Repeat/reopened/disputed-closure rate.
- Consumer-confirmed resolution rate.
- Consumer rating and service-quality trends.
- Meaningful coverage/performance information rather than coverage alone.

A public dashboard can create a positive competitive incentive: operators that resolve problems quickly and consistently should be able to demonstrate that performance.

16. Accessibility and Consumer Communication

Complaint systems should be accessible to consumers with disabilities and to consumers who require alternative communication formats. Operators should provide reasonable assistance and clear alternatives to voice-only processes.

During significant outages or known material degradation, affected consumers should receive timely information where practicable: nature of the issue, affected service/area, expected restoration time and status updates. This can reduce repeated contacts and improve trust.

17. International Best-Practice Benchmark

Jurisdiction / body	Established practice	Possible lesson for India
Australia / ACMA	Complaint records; monitoring, analysis, systemic-issue identification and recurrence prevention; provider complaint data published.	Treat complaint handling as a measurable regulatory quality process.
Singapore / IMDA	QoS standards, periodic reporting and financial penalties; consumer-feedback statistics published.	Combine measurable QoS, enforcement and transparent customer-service performance.
EU / BEREC framework	Transparent and comparable information on service performance and QoS parameters.	Make performance claims meaningful, comparable and understandable.
UK / Ofcom	Broadband service commitments, compensation mechanisms and approved ADR arrangements.	Connect service commitments with remedies and independent escalation.
Canada / CRTC / CCTS	Independent complaint-resolution organisation; telecom providers required to participate; service free to consumers.	Provide a credible independent route after operator escalation.
US / FCC	Standardised Broadband Facts label covering price, speeds, latency, data and network-management information.	Use simple standardised consumer disclosure.

These examples are comparative policy evidence, not claims that another country's legal framework should be copied wholesale.

18. Consolidated Recommendations to TRAI

- 1. Create consumer-facing performance disclosure covering advertised, typical/normally available and, where appropriate, minimum/guaranteed performance.
- 2. Establish a TRAI-approved repeated-measurement methodology for actual service performance.
- 3. Link persistent and material actual-vs-declared/contracted performance gaps to proportionate consumer remedies.
- 4. Distinguish coverage, availability, accessibility, usability and performance.
- 5. Measure mobile 4G/5G QoE across throughput, latency, jitter, packet loss, reliability, call quality and indoor/outdoor conditions as appropriate.
- 6. Apply technology-specific QoS/QoE requirements to wireline broadband and 5G FWA.
- 7. Measure installation, repair and appointment commitments for fixed services.
- 8. Recognise persistent material degradation as potential consumer harm, not only complete outage.
- 9. Introduce a mandatory Consumer Service Charter.
- 10. Require evidence-based closed-loop complaint resolution.
- 11. Require RCA/CAP/PAP for recurring or systemic issues.
- 12. Introduce a second-similar-complaint trigger and stronger action for repeated recurrence.
- 13. Create a consumer-confirmed resolution measure and disputed-closure category.
- 14. Publish complaint-ageing and overdue metrics.
- 15. Introduce proportionate daily accruing financial disincentives for unjustified delay, with safeguards.
- 16. Create or strengthen an independent, time-bound telecom dispute-resolution route.
- 17. Provide accessible complaint channels and reasonable assistance for consumers with accessibility needs.
- 18. Provide timely consumer communication during significant outages/material degradation.
- 19. Develop standardised consumer-facing service labels and comparable QoS/QoE information.
- 20. Publish a Consumer Service Performance Index incorporating complaint, resolution, recurrence and consumer-confirmed outcomes.
- 21. Use consumer complaint and QoE data as regulatory intelligence for identifying systemic network/service problems.
- 22. Provide proportionate switching, downgrade or penalty-free exit remedies for qualifying persistent unresolved service deficiencies.

19. Implementation and Safeguards

A workable framework should be phased and evidence-based.

- Phase 1 — standardise definitions, measurement methods, complaint taxonomy and data fields.
- Phase 2 — pilot consumer-confirmed resolution, disputed closure and service-performance reporting.
- Phase 3 — introduce public comparative dashboards and calibrated remedies.
- Phase 4 — review outcomes and refine thresholds, penalties and measurement methods.
- Ensure operator submissions are auditable and subject to data-quality checks.
- Provide a fair process for operators to explain legitimate exceptions and technical constraints.
- Avoid incentives to suppress or reclassify complaints; audit complaint categorisation and closure rates.

The objective is a balanced framework: protect consumers from persistent deficiencies while ensuring operators are not penalised for genuine events or variables beyond reasonable control.

20. Conclusion

Telecom connectivity is essential infrastructure for communication, employment, education, financial services, healthcare, commerce and public services. QoS regulation should therefore measure not only whether a network technically meets a parameter, but whether consumers receive a reliable and usable service and whether problems are genuinely corrected.

“Happy customers are good for business. Better accountability is good for customers, operators and the digital economy.”

A modern consumer-centric framework can create a virtuous cycle: transparent commitments → measurable delivery → credible complaints → root-cause correction → prevention of recurrence → consumer confidence → stronger competition and better service.

The recommendations are submitted for TRAI's consideration, study, stakeholder discussion, pilot evaluation and refinement as appropriate.

21. About the Contributor

Rajendar Reddy

Independent Contributor | Consumer Perspective

Contributing an independent perspective on service quality, accountability, technology, consumer experience and systems improvement.

This document is intended as a constructive policy contribution. It is not a claim that every recommendation is currently part of Indian law or regulation. International practices are cited as comparative evidence and possible design references.

22. Selected Sources

- TRAI — consultation paper and associated regulatory materials forming the primary Indian policy context.
- ACMA — How telcos must handle complaints; updated December 2025.
- ACMA — Guidance for telcos: Complaints monitoring and analysis; updated May 2025.
- ACMA — Telco complaints-handling performance; latest published quarter January-March 2026.
- IMDA — Quality of Service; QoS standards, reporting and financial penalties.
- IMDA — Telecom Service Providers' Consumer Feedback; latest 2026 publication and historical comparative statistics.
- CRTC — Telecom Decision 2026-30 and Telecom Notice of Consultation 2026-31 concerning the independent CCTS.
- Ofcom — service quality and ADR materials concerning broadband commitments, compensation and dispute resolution.
- BEREC — QoS/transparency guidance and European electronic communications framework.
- FCC — Broadband Consumer Label / Broadband Facts consumer fact sheet.

Web research verified in August 2026. International examples are presented as comparative best-practice evidence; the applicable primary instruments should be checked again immediately before formal submission.