



VIL/PB/RCA/2023/035

December 14, 2023

Advisor (QoS-I)

Telecom Regulatory Authority of India,
Mahanagar Doorsanchar Bhawan,
Jawaharlal Nehru Marg (Old Minto Road),
New Delhi – 110002

Kind Attn: Shri Tejpal Singh

Subject: Comments on the TRAI's Consultation Paper on "Review of Quality-of-Service Standards for Access Services (Wireless and Wireline) and Broadband Services (Wireless and Wireline)" issued on August 18, 2023

Dear Sir,

This is with reference to the above mentioned TRAI's Consultation Paper on "Review of Quality-of-Service Standards for Access Services (Wireless and Wireline) and Broadband Services (Wireless and Wireline)" issued on August 18, 2023.

In this regard, kindly find enclosed herewith VIL comments to the said consultation paper.

We hope our comments will merit your kind consideration please.

Thanking you,
Yours sincerely,

For **Vodafone Idea Limited**

P. Balaji
Chief Regulatory & Corporate Affairs Officer

Enclosed: (Main Comments and Annexure – A)



**VIL Comments to the TRAI’s Consultation Paper on
“Review of Quality-of-Service Standards for Access Services (Wireless and
Wireline) and Broadband Services (Wireless and Wireline)”
dated August 18, 2023**

At the outset, we are thankful to the Authority for giving us this opportunity to provide our comments to the TRAI Consultation Paper on “Review of Quality-of-Service Standards for Access Services (Wireless and Wireline) and Broadband Services (Wireless and Wireline)” dated August 18, 2023.

In this regard, we would like to submit our comments for Authority’s kind consideration, as given below:

Executive Summary

1. The Indian wireless industry, especially the private sector, over the last two decades, has perhaps built the finest and widest services infrastructure which connects lakhs of towns, districts and villages including deep rural interiors and hinterlands across the country. The sector has been a vital driver of the country’s GDP and has contributed directly to the economy over the last decade.
2. Entailing massive investments, this infrastructure is the backbone that delivers high quality voice and data services and has proved its essentiality well during the Covid-19 times. With such huge level of investments, world-class quality of service to the consumers has always been one of our top most priorities.
3. Amount of sites that are rolled out in India are way higher than most developed countries. For Example, macro sites count of a significant operator in USA is around 70-80k where as in India it is more than 2 lakhs.
4. We would like to highlight that the network related complaints have come down from 1.29% of total subscriber for quarter ending June, 2021 to 0.74% of total subscriber for quarter ending June, 2023. VIL is mostly compliant across all parameters in the past few years and have been constantly improvising our services. All this reflects the constant effort being put in by us to provide quality services to our esteemed customers.
5. **MOVING TOWARDS LIGHT TOUCH QOS FRAMEWORK**
 1. With deep and correct understand of market dynamics, TRAI has rightfully adopted forbearance approach for tariffs acknowledging the effective functioning, maturity and competition in the Indian telecom industry. This regulatory forbearance approach aligns with international best practices, reflecting a market-driven approach.



However, in the case of QoS, the authority continues to move towards a harsher regulatory stance. Over the period of time, instead of deregulating QoS norms gradually, TRAI has been further tightening the QoS regulations.

2. Given the sector's maturity, evolving dynamics and MNP, it becomes pertinent for TRAI to consider a similar light touch approach for Quality-of-Service regulations. There is a need to strike a balance between the industry and consumer protection for which a phased transition or a glide path towards deregulation of QoS should be considered.
3. **Therefore, we strongly urge TRAI that:**
 - i. **In the short term, TRAI should consider adopting a light-touch regulatory approach to QoS, involving the measurement and reporting of only a limited set of parameters on a quarterly basis.**
 - ii. **In the long term, the Authority should consider deregulating QoS parameters while continuing to monitor performance through drive tests or a combination of drive tests and third-party surveys.**
4. Both these approaches (in short-term and long-term) would be appropriate towards regulation of QoS that protects the interest of consumers, promotes fair competition and choice, and encourages investments in network infrastructure and services.

6. **DRIVING FACTORS FOR QOS DON'T DEMAND STRINGENT PARAMETERS**

- a. **Competition in the Market:** The penalty for offering inferior network QoS already exists in the form of market dynamics leading to customer port-out through Mobile Number Portability.
- b. **Surveys and Studies:** There have been no surveys, drive tests, studies, global benchmarks provided in the consultation paper which show degradation of quality of service or quality of experience by the consumer.
- c. **Global Benchmarks:** We have not come across any example of a National Regulatory Authority of any other country which is monitoring QoS at a sub-service area level. Also, the number of QoS parameters, monitored by TRAI is far in excess to those monitored by any other regulator in the world with the thresholds being most stringent, when compared to others.
- d. As can be seen from above, the driving factors of QoS do not demand any more stringent QoS norms.

7. POINTS NOT CONSIDERED IN THE CONSULTATION PAPER – TECHNOLOGY RELATED

- a. **Achievability of Parameters:** The proposed parameters are very stringent and unachievable by any TSP. These unachievable parameters will lead to irreversible reputation loss for the industry and may impact the growth story of telecom, for no fault of service providers. With such unachievable parameters, applying financial disincentive itself become unreasonable. TSPs should be encouraged to make such changes and investments in the networks rather than fixing up such parameters which already look unachievable and ultimately discourage them with the financial disincentives. **TRAI, itself, in its explanatory memorandum to one of the Amendments of QoS Regulation stated that the benchmark should be so arrived at that it could be achievable** and also it should force a service provider to invest in infrastructure and improve the service.
- b. **Alignment with practical design criteria:** There are certain criteria which are deeply embedded in a network design and performance, however, have been ignored while arriving at stringent benchmarks. Some of the parameters are so stringent that it eludes design criteria itself.
- c. **Telecom services not yet treated as “Essential Services”** and are exposed to disruptions in the associated ecosystem. Operators face in day to day operations like Access restrictions to cell sites for maintenance / upgrade activities, Intentional switch offs , theft of associated utilities (DG, Fuel, Batteries), deliberate fiber cuts, damage to infrastructure due to infrastructure expansion like roads, highways etc. This isn't factored even today and leads to huge problems. It may become even worse with the stringent parameters proposed.
- d. **EMF norms** for BTS in India, are 10 times more stringent than many developed countries like USA, Canada, Japan and Australia. This necessitates lowering of power levels of BTS which may result in shrinkage of the coverage, most importantly indoor coverage
- e. **Consultation with relevant stakeholders prior to proposing new benchmarks:** We believe that the equipment manufacturers have not been consulted prior to issuance of this draft regulation which incorporates stringent benchmarks.
- f. **Underlying factors not yet resolved:** The TRAI Consultation Paper doesn't recognize the related issues and external factors beyond the control of TSPs such as use of illegal repeaters, interference, fibre cuts, Right of Way, non-availability of sites at various locations in a city environment, abrupt site sealing by Municipal Authorities and rapid action by Resident Welfare Associations on site shut-down.



8. POINTS NOT CONSIDERED IN THE CONSULTATION PAPER – LICENSING RELATED

- a. **Compliance assessment at State-UT level is contrary to Licensing framework:** It is legally as well as technically not possible to measure, report and comply with QoS parameters on a State-UT level basis. There would be complicated scenarios like Haryana state being covered through 3 LSAs i.e. Haryana, Punjab and Delhi. In such scenario, it is not clear as to which LSA would be responsible to achieve the compliance to TRAI's regulation. Hence, provisions of draft Regulation are directly contrary to the license conditions.
- b. **Multiple compliance instances/FD against a QoS parameter in a single LSA:** The TRAI regulation will lead to QoS parameter for one geography being assessed twice for compliance and consequent FD, if any which is against the basic tenet of natural justice wherein one non-compliance cannot be penalized twice. For example in case of Madhya Pradesh (MP) LSA, if a TSP is found non-compliant for a specific parameter in states like MP as well as MP LSA, it is bound to attract double FD, both for the state as well as LSA.

9. POINTS NOT CONSIDERED IN THE CONSULTATION PAPER – EASE OF DOING BUSINESS

- a. **Ease of doing business:** We urge the Authority that instead of leading towards stricter benchmarks and multi-fold increase in compliance requirements and financial disincentives without any supporting evidences/justifications, it should trust the market forces and move in the direction of self-regulation as is being followed in many countries globally.
- b. **Huge increase in Compliance Instances:** All the proposed multiple layers of increase i.e. (i) 22 geographies (22 LSAs) for compliance becoming 58 geographies (22 LSAs + 36 State/UTs), (ii) Quarterly assessment to Monthly assessment (3 times) and (iii) new parameters for compliance/monitoring, will lead to huge multi-fold increase in number of compliance instances as well as reporting requirements. **This would lead to huge increase in compliance instances (9.8 times) and reporting instances (10.5 times) being put on the TSPs, that too without any detailed study or surveys.**
- c. **Huge increase in Financial Disincentive:** The industry should be encouraged to follow QoS norms instead of forcing them through financial disincentive (FD). Despite the proof of industry meeting the benchmarks and reporting, the Consultation Paper proposes to exponentially increase the FD by 5 times on delayed reporting, coupled with increased in compliance instances explained in above point. **With both these, the FD exposure on delayed reporting would increase by 100 times and for compliance on benchmarks by ~11 times.** This is completely uncalled for and without any rationale.

- d. **Wireline Services – Connectivity solutions for Enterprise:** The Wireline related parameters should only apply if a TSP is offering retail wireline connections. An explicit clarification in this regard should be mentioned in the QoS regulation.

10. POINTS NOT CONSIDERED IN THE CONSULTATION PAPER – FACTUAL ANALYSIS OF INFLUENCING FACTORS

- a. **Facts/figures, surveys to find out factors influencing degraded QoE by customers:** In absence of any cogent and detailed study and surveys gauging the consumer experience over a period of 2-3 years, it would be just an assumption that the consumer experience of QoS has got degraded and any change in QoS benchmarks based on such assumption, would be an academic exercise.
- b. **International References on certain parameters:** QoS in telecom, should be prescribed in line with global standards and be improved with tried and tested methodologies being carried out across the globe. However, no such global references or background or justification on reduction of assessment period, moving to QoS compliance on sub-LSA level, introduction of new parameters etc. have been provided in the consultation paper.
- c. **Scientific backing, evidence/study that such parameters will result in enhanced QoS:** The proposed benchmarks in the paper have been revised without ascertaining the extent of change/improvement in consumer experience which could have been only possible through scientific evidences/studies, surveys and examination of technical possibility of implementation.
- d. **Regulatory Impact Analysis:** A systemic approach is required to assess the positive and negative effects of proposed and existing regulations. QoS being such a diverse activity, the Authority should carry out Regulatory Impact Assessment and share the same through consultative process before finalizing such stringent parameters and assessment criteria.

11. 2G/3G SPECIFIC CALL DROP PARAMETER WILL DISADVANTAGE 2G CONSUMERS:

- a. There have been no new technological advancements in 2G and these services are only being extended to public as a social obligation instead of any business interests. 2G being an older and outgoing technology, there are no new technological advancements and no further investments/roll-out can be planned.
- b. Due to many intrinsic factors, if 2G performance is seen in isolation, it will show a comparatively higher call drop value as compared to technology agnostic or 4G stand-alone value. Also, consumers do not correlate call drops with any technology, be it 2G or 4G.

- c. Therefore, the Dropped Call Rate (DCR) parameter should be technology agnostic and it shouldn't be specific to 2G/3G and 4G/5G which can lead to TSP(s) becoming perpetual non-compliant. This is when it is widely recognized that 2G services are mostly for the customers in bottom of the pyramid and is offered by the TSP as a social obligation. Besides huge financial disincentive, another major consequence of this would be withdrawal of 2G services.
- d. Withdrawal of 2G services as a consequence of a regulatory mandate, will cause huge inconvenience to public at large, due to service deniability across the country.

12. CHAPTER – 3, PARAMETER-WISE COMMENTS

- a. **Assessment Period:** The proposal of reduction in assessment period from Quarterly to Monthly will affect all aspects of QoS i.e. compliance, measurement and reporting of QoS norms and create huge burden on TSPs in terms of resources, infrastructure, scaling up of IT systems besides, leaving no opportunity for putting in place any mitigating measures if the performance goes down for a small duration. Therefore, we strongly urge TRAI for adopting a pragmatic approach and not to reduce the assessment period from Quarterly to Monthly.
- b. **Parameter at Cell level:** Any single cell outage does not result into loss of coverage for the user as the user is ensured coverage by other cells in the same BTS or next nearest BTS. Hence, the change of the parameter to 'Cell' level is highly unwarranted and this parameter should be retained at 'BTS' level only.
- c. **Proposed $\leq 1\%$ Benchmark for Accumulated downtime (Cells not available for service):** The reduction from existing 2% to 1%, i.e. increase by 100% is way too harsh and does not consider various factors which are beyond the control of TSPs. Such severe changes in benchmark will lead to TSP(s) being shown as having non-compliant networks whereas presently the networks are compliant. Hence, the change in benchmark of this parameter is highly unwarranted and it should be retained at existing $\leq 2\%$.
- d. **Reporting of significant network outage to the Authority within 24 hrs of start of the outage:** This should be part of reporting requirement and not a QoS parameter. Therefore, we request it to be moved under Regulation 13 of Section VI. Further, for us to report this as a compliance having financial disincentive, adequate time is required. We request TRAI to provide atleast 7 working days to report this network outage information.
- e. **Rent Rebate Technically Infeasible in Cellular Networks:** There would be various scenarios accentuating the technical infeasibility which would also involve potential risks of consumer complaints and lawsuits. Furthermore, such obligation will



discourage the TSPs to provide and extend their services where necessary infrastructure availability is not optimal, inconsistent or not guaranteed. Therefore, the provision related to rent rebate should be dropped in case of cellular networks.

- f. **Proposed \geq 98% Benchmark for Call Set-up Success Rate for Circuit Switched Voice or Session Establishment Success Rate for VoLTE or DRB Accessibility success rate for VoNR:** There has been significant overall improvement in voice and data services which are not just limited to improvement of “Setup success rate”. Initiatives through technological interventions / advancements are practiced across all domains and not aimed at improving any single KPI parameter but overall service level improvements. Hence, we strongly submit that any improvement in KPI should not be rewarded by stricter benchmark and existing benchmark i.e. \geq 95% should be retained.
- g. **Network QoS DCR Spatial Distribution Measure:** We strongly submit that no amount of good optimization practices or investments can take care of aberrations which are not in control of TSPs. We urge the Authority to kindly compute the QoS values by using proposed threshold using the raw data submitted by the TSPs as part of QoS reporting as the proposed values are unachievable. **All the changes proposed (viz. making benchmark stringent, Quarterly to Monthly assessment, technology specific parameter and State/UT level compliance), individually as well as collectively will make TSP non-compliant. Hence, there should be no change in the existing parameters as well as benchmarks. Also, the parameter should be technology agnostic and it shouldn't be specific to 2G/3G and 4G/5G which can lead to TSPs becoming perpetual non-compliant.**
- h. **Messaging: Successful SMS delivery within service provider's network in less than 20 seconds:** Presently, the SMS business is already reducing due to impact of competitive OTT services, which are not being regulated. Further, there is no concern on Person to Person SMS, whereas OTP messages through SMS is already being sent with clear path and least delays. Thus, we don't foresee any rationale as to why TRAI should even consider regulate this. Further, it is very much likely that SMS delivery may exceed 20 seconds period for reasons beyond operator's control like Absent Subscriber (out of coverage / extremely poor coverage), Handset memory full, SMS feature not supported, SMS MT busy, etc. **Hence, there is no reason as to why there should even be a parameter related to SMS delivery at the first place and secondly, it is practically infeasible to measure and assure delivery of reports in 20 seconds because of dynamics involved in various types of SMS.**
- i. **Jitter:** Jitter is a measure for variance in latency and this micro level generally used for dip stick testing / troubleshooting. **This parameter does not serve any purpose especially when we are already including “latency” in QoS parameters and should be removed from the proposed draft regulation.**
- j. **Benchmark of 100% for Resolution of billing/ charging complaints within four weeks:** There are certain scenarios like billing cases which involve international roaming



where it is practically infeasible to resolve such complaints within the proposed timelines. Hence, **we strongly recommend that the benchmark for this parameter should be continued as per existing Regulation (i.e. 98% for 4 weeks & 100% for 6 weeks).**

Detailed Comments

A. BACKGROUND

1. The Indian telecom sector currently serves over a billion consumers, a revolution that has been made possible by a very competitive industry that has built large scale telecom networks through innovative business models, supported by clarity in regulatory framework, large investments by TSPs, ability to attract investment, amongst others. This has spurred innovation and customization of solutions in the market.
2. The Indian wireless industry, especially the private sector, over the last two decades, has built the finest and widest services infrastructure which connects lakhs of towns, districts and villages including deep rural interiors and hinterlands across the country. This infrastructure, entailing massive investments, is the backbone that delivers high quality voice and data services and has proved its essentiality well during the Covid-19 times. The sector is a vital driver of the country's GDP and has contributed directly to the economy over the last decade.
3. Amount of sites that are rolled out in India are way higher than most developed countries. For Example macro sites count of a significant operator in USA is around 70-80k where as in India it is more than 2 lakhs.
4. Further, the TRAI Act as amended, clearly casts the responsibility on TRAI to protect the interests of service providers and consumers alike, so that the orderly growth of the telecom sector is ensured thereby. Suitable attention should also be given to the Hon'ble Supreme Court Judgment dated May 11, 2016 on call drop matter and balance has to be ensured in the interest of service providers and consumers. Extract of the TRAI Act is provided as below:

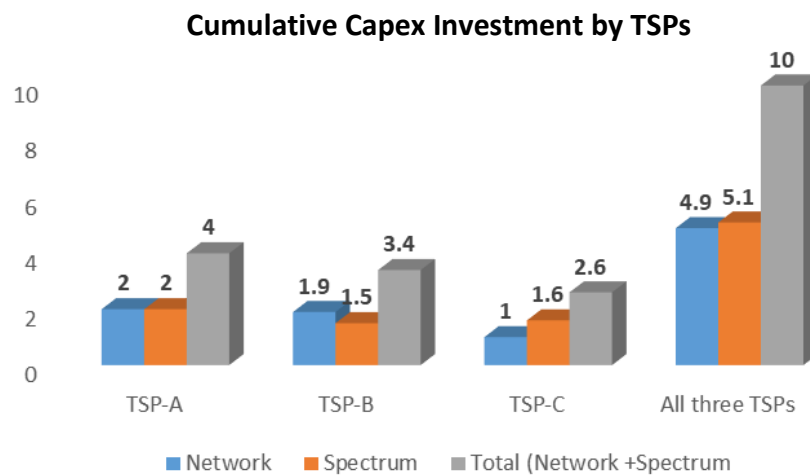
*"Telecom Regulatory Authority of India and the Telecom Disputes Settlement and Appellate Tribunal to regulate the telecommunication services, adjudicate disputes, dispose of appeals and **to protect the interests of service providers and consumers of the telecom sector**, to promote and ensure orderly growth of the telecom sector".*

5. Thus, it is imperative that TRAI, being the regulatory authority of such essential system, issues regulations that spur mobile growth and investments in the sector, interest of TSPs while balancing the need to provide world class services to consumers.

B. MARKET FACTORS AND PRESENT QOS

6. Level of investment by TSPs

- a. Meeting the demand for data while maintaining quality of service, requires large investments by mobile operators to expand capacity. With onset of 5G, the Government and Regulator have set ambitious visions for consumers and businesses to gain access to advanced next generation technologies with enhanced quality of experience and functionalities offered by 5G.
- b. To support extensive network roll-out and to support huge growth in demand of data, it would require massive investments from operators. As per the financial model submitted by VIL (with confidentiality remarks) to TRAI vide our comments to the TRAI's consultation paper on Auction of Spectrum in frequency bands identified for IMT/5G dated 30.11.2021, estimated CAPEX investment from industry over next 10 years would be ~2.6 trillion INR for 5G network deployment and expansion. As per our understanding and calculations from the publicly made available figures by other TSPs, following is the cumulative CAPEX investment including spectrum commitments, done by TSPs:



- c. It needs to be considered that without the huge investments towards acquiring spectrum and deploying network infrastructure with state of the art technology, it would not have been possible for the country to reach an overall tele-density (wireline + wireless) of around 84.69%¹ as of August 31, 2023.
- d. With such huge level of investments, world-class quality of service to the consumers has always been one of our top most priorities. Therefore, as a customer centric operator, we proactively follow best practices in gauging customer feedback and perception, and our networks are designed to provide excellent quality of service and experience.

¹ TRAI's Telecom Subscription Data as on August 31, 2023



7. Competition in the Market

- a. The Indian Telecom sector is amongst the most competitive in the world, and already has one of the lowest tariffs globally. The existence of MVNOs, OTTs in the market also intensifies the hyper-competitiveness in the market.
- b. Further, there are multiple TSPs and if a customer is not satisfied, they have the option to port to an alternate service provider by using MNP. With MNP, consumers are no more restricted to remain in any network or service area, if they face poor quality of network.
- c. In fact that is the purpose of regulatory interventions like MNP in which more than 12 million customers have submitted MNP requests during August, 2023. This is ~1.1% of total wireless subscribers and will be a staggering ~13% on annual basis.
- d. **Thus, consumers have ample choice as regards the selection of their TSP. In such a scenario, no telecom operator would risk losing its market share to its competition because of inferior network QoS and market forces are invariably leading to self-regulation on the aspect of QoS.**
- e. **Regulatory intervention is desirable only when market forces do not themselves lead to redressal of issues for consumers. However, intense competition in the Indian mobile telephony segment already ensures that the service providers offer only the best and most competitive services to the consumers, and make all possible efforts to address issues on a prompt basis to prevent customers from porting out to other service providers.**
- f. **Therefore, there is no need for any regulatory intervention for driving any objective of improvement in quality of service. Instead, TRAI should move towards light-regulation approach on QoS and introduce transparency and publication based QoS framework based on data from TRAI/3rd party apps.**
- g. With this context, we are intrigued that this consultation has come in at a time when competition has evolved to a point where customers already have an easy option of porting out to any service provider of their choice. Therefore, we reiterate that the case for stipulating stringent QoS norms is not called for, in the Indian scenario.

8. Present status of QoS

- a. Complaint numbers: The network related complaints have come down from 1.29% of total subscriber for quarter ending June, 2021 to 0.74% of total subscriber for quarter ending June, 2023.
- b. Compliance to QoS parameters: We are mostly compliant across all parameters in the past few years and have been constantly improvising our services.

- c. The above reflect the constant effort being put in by us to provide quality services to our esteemed customers.

C. DRIVING FACTORS FOR QoS DON'T DEMAND STRINGENT PARAMETERS

- a. **Competition in the Market:** The penalty for offering inferior network QoS already exists in the form of market dynamics leading to customer port-out through Mobile Number Portability.
- b. **Surveys and Studies:** There have been no surveys, drive tests, studies, global benchmarks provided in the consultation paper which show degradation of quality of service or quality of experience by the consumer.
- c. **Global Benchmarks:** We have not come across any example of a National Regulatory Authority of any other country which is monitoring QoS at a sub-service area level. Also, the number of QoS parameters, monitored by TRAI is far in excess to those monitored by any other regulator in the world with the thresholds being most stringent, when compared to others.
- d. As can be seen from above, the driving factors of QoS do not demand any more stringent QoS norms. Infact, **TRAI should move towards light-regulation approach on QoS and introduce transparency and publication based QoS framework based on data from TRAI/3rd party apps.**

D. MOVING TOWARDS LIGHT TOUCH REGULATORY FRAMEWORK ON QOS

- 9. TRAI has demonstrated deep and correct understanding of market dynamics by rightfully adopting a forbearance approach for tariffs acknowledging the effective functioning and maturity of the telecom industry in India. This regulatory forbearance approach aligns with international best practices, reflecting a market-driven approach.
- 10. However, in the case of QoS, the authority continues to move towards a harsher regulatory stance. Over the period of time, instead of deregulating QoS norms gradually, TRAI has been further tightening the QoS regulations.
- 11. Given the sector's maturity, evolving dynamics and MNP, it becomes pertinent for TRAI to consider a similar light touch approach for Quality-of-Service regulations.
- 12. While TRAI's focus on ensuring high-quality service for consumers is commendable, there is an opportunity to re-evaluate the regulatory approach for QoS parameters. There is a



need to strike a balance between the industry and consumer protection for which a phased transition or a glide path towards deregulation of QoS should be considered.

13. Therefore, we strongly urge TRAI that

- a. **In the short term, TRAI should consider adopting a light-touch regulatory approach to QoS, involving the measurement and reporting of only a limited set of parameters on a quarterly basis.**
- b. **In the long term, the Authority should consider deregulating QoS parameters while continuing to monitor performance through drive tests or a combination of drive tests and third-party surveys.**

14. Both these approaches (in short-term and long-term) would be appropriate towards regulation of QoS that protects the interest of consumers, promotes fair competition and choice, and encourages investments in network infrastructure and services.

E. POINTS NOT CONSIDERED IN THE CONSULTATION PAPER – TECHNOLOGY RELATED

15. Achievability of parameters

- a. **It is well experienced by all the stakeholders that planning and setting up of network infrastructure takes years and any changes in such setups are not possible in a short time-frame like 1-2 quarters.**
- b. Considering the same, any such new regulatory mandate which involves measurement of network based parameters need to be tested on the principle of achievability before being issued by the Government.
- c. However, TRAI, in its draft regulation, has proposed parameters which are way too stringent and extend up to measurement of various parameters at various levels like LSA, State-UT, District, etc. which are not backed by any study/surveys, to consider them achievable. Moreover, such parameters should only be amended in case if existing approach is not serving the purpose.
- d. Further, it is submitted that the TSPs should be encouraged to make such changes and investments in the networks rather than fixing up such parameters which already look unachievable and ultimately discouraging them with the financial disincentives.
- e. In addition to the above, we believe that the equipment manufacturers are not being consulted prior to issuance of this draft regulation which incorporates stringent benchmarks which are highly dependent on the equipment being produced by them.

- f. TRAI, itself noted in explanatory memorandum to 5th Amendment of QoS Regulation dated August 18, 2017 that the benchmark should be so arrived at that it could be achievable and also it should force a service provider to invest in infrastructure and improve the service. Extract of the same is given below:

5.4 While designing the benchmarks, it was kept in mind that the benchmark parameters should be achievable - while at the same they should force a service provider to invest resources in improving QoS. Also the QoS parameters and benchmark should be technology agnostic (2G/ 3G/ 4G/ BWA) and should be capable of being measured and reported irrespective of the technology deployed.

16. Alignment with practical design criteria

- a. Infact, TRAI, in its Explanatory Memorandum for the notification on “The Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service (Fifth Amendment) Regulations, 2017 (4 of 2017) dated August 18, 2017 itself stated the design and implementation of cellular networks and the reason behind the gap in QoS experience by the consumer as below:

The problems created as a result of this gap can be better explained by taking a closer look at the design and implementation of cellular networks. A cellular network consists of a large number of BTS, which is the infrastructure through which communication signals are transmitted between the subscriber’s equipment (i.e. mobile phone) and the TSP’s network. In general, each BTS consists of three cells each of which covers a certain number of subscribers within its coverage area. As the users of cellular networks move across several locations, the voice calls being made by them are handed over from one cell to another. This may lead one to assume that a subscriber’s QoE is dependent on the performance of its TSP’s network across the broad geographic area within which a subscriber would typically use its services. However, in reality, a large number of users typically use their mobile phones for making calls from one or two specific locations where they spend most of their time, in addition to a part of the time that may be spent in transit.

- b. TRAI, in this notification, also mentioned that after considering the views of the stakeholders, they felt that following key points should be given due consideration while devising a new framework or approach for assessment:
- a. Licenses are issued on service area basis and infrastructure is created to provide the service at a service area level.
 - b. Operators are facing problems in establishing infrastructure because of false EMF radiation rumours, scarcity of spectrum, Right of Way (RoW), infrastructure related issues, administrative issues, natural calamities, etc.

- c. *TSPs face practical challenges in meeting the benchmarks at each individual cell level for every day, which are beyond their control e.g. various factors like sudden movement of subscribers, any outage, etc.*
- d. *Radio frequency (RF) propagation characteristics introducing uncertainties in the coverage to any user with variations in location and time.*
- e. *Performance assessment of a network should be done after excluding certain cells or certain days but assessment should be representative of most of the part of the network for most of the days.*

- c. **In the case of instant proposed regulation, all these criteria which are deeply embedded in a network design and performance, have been ignored while arriving at stringent benchmarks. Thus, the said proposed QoS framework is not aligned with practical design criteria. Some of the parameters are so stringent that it eludes design criteria more so when these are not controllable under present poor infra conditions.**

17. Telecom services are yet not under “Essential Services”

- a. Telecom infrastructure is exposed to disruptions in the associated ecosystem. Operators face in day to day operations like **Access restrictions to cell sites for maintenance/upgrade activities, Intentional switch offs , theft of associated utilities (DG, Fuel, Batteries), deliberate fiber cuts, damage to infrastructure due to infrastructure expansion like roads, highways etc.**
- b. **This has not at all been considered by TRAI while proposing the draft regulation.**

18. EMF norms

The EMF norms for BTS in India are 10 times more stringent than many developed countries like USA, Canada, Japan and Australia. This necessitates lowering of power levels of BTS which may result in shrinkage of the coverage, most importantly indoor coverage.

19. Different topographies – one size fits all approach followed for QoS in all circles

- a. It is submitted that the TRAI’s contention that TSPs are meeting the QoS parameters because of averaging of the performance across service area does not appear to be a just basis for the need to measure QoS parameters at difference and lower granularity levels.
- b. We feel that “individual ways” of reporting QoS at lower granularity often result in varying and non-conclusive results. In fact, under the circumstances wherein a number of dynamic factors of varying intensity are applicable to the mobile services spread across large geography , averaging of KPIs over larger time (Month) and Geography (Service area) is likely to provide more robust statistical analysis. It is further submitted that within a single service area, there is always a varying mix of



urban, sub urban & rural areas with varying geographies (hills, water bodies, forests, habitation area, building sizes /densities, population density, etc.).

- c. Hence, network KPIs, if monitored at any other granularity than service area level, are bound to vary with respect to varying geographies. Also, the characteristics of different geographies within same service area are varying in nature in terms of Infrastructure (Electricity, Local issues) and operating conditions.
- d. Further, it is seen that various types of inhibiting factors of different magnitude operate across different geographies within the same service area. Some areas (few districts) that have poor electricity supply (capacity & availability) have negatively impacted network operations. Many areas (particularly rooftop sites) have limitations such as non-permissibility to run diesel generator in case of electricity power failure. Accessibility of some BTS sites is a major challenge during odd hours of the day. Law and order issues such as “Naxalite” activity, disturbances on account of “Bandh/Hadtal” and temporary events like huge public gatherings also affect network KPIs.
- e. Such challenges related to infrastructure ecosystem are therefore bound to result in varying QoS at different times in case the QoS parameters are calculated at different and lower granularity like State, LSA, District, etc. Considering all these factors, if we reduce the granularity of QoS monitoring from Service area level to any other lower granularity, some entities (geographies) may have better QoS compared to other, solely because of “operating conditions” and not because of factors controllable by service providers. This would thus imply that laying down different QoS parameters for various types of sub service areas, depending upon the characteristics of the particular sub service area would be difficult to achieve based on a few common sets with same operating conditions.
- f. Further, in addition to monitoring QoS parameters at Service Area level, TRAI has been conducting monthly drive tests of telecom service areas through its auditors. Over and above TRAI is also doing independent drive test in major cities of the country. This ensures verification of QoS at reasonably lower granularity.
- g. Further, we have not come across any example of a National Regulatory Authority of any other country which is monitoring QoS at a sub-service area level. At the same time, it is pertinent to mention here that the number of QoS parameters being monitored by TRAI is far in excess as compared to those monitored by any regulator in the world with the thresholds for respective parameters being most stringent compared to similar markets from the world.

20. Technology specific Call Drop parameter discourages TSPs giving 2G services :

- a. We would also like to bring to your attention on the provision of 2G services across the country. These services are being extended to public as a social obligation.

- b. In this regard, we would like to submit that there have been no new technological advancements in these technologies. Further, 2G being an older and outgoing technology, no further investments or roll-out can be planned.
- c. TRAI in its various white papers has captured the need of capturing service experience of customers (Voice / data) in technology agnostic manner and to that effect has included technology agnostic KPIs in QoS reporting from 2017 onward. However, in this consultation paper, out of all Network QoS parameters, DCR parameter has been split at Technology level, we would like to bring out following points in this respect:
 - i. Voice service offered by Mobile network is on hierarchical network structure where different technologies operating on different spectrum bands work seamlessly among each other.
 - ii. Based on dynamics like radio conditions, User Handset right fit technology and spectrum band is used to provide voice service, starting from highest order Volte (4G) service to 2G service.
 - iii. Also ongoing calls are handled in efficient manner by adopting need based handover of Volte call to lower technology (3G/2G) to improve retain ability of voice calls. In such circumstances Voice call started in higher technology may terminate / drop in lower technology resulting in statistical representation of drop call in lower technology.
 - iv. Hence it is more apt to measure Drop call parameter in a combined way (technology agnostic) to get the right picture from customer experience point of view.
 - v. Lesser adoption of superior Volte service by rural subscribers on account of limitations like handset cost, marginal higher monthly cost etc. results into dependency on legacy 2G/3G networks where neither technological advancements nor investments are happening.
 - vi. Because of lesser uptake of VoLTE especially in rural areas, 2G may be considered as social obligation. If financial disincentives are based at Technology level, then operators who are operating Networks with legacy technology as well are exposed to higher risk of penalty.
 - vii. Further usage of very old & low cost handsets also impacts network KPIs like accessibility and retainability. During our meetings with TRAI, we have highlighted the fact that more than 50% of 2G only handsets are upto 10 years old.



- d. Furthermore, due to more and more roll-out of 4G networks, the 2G cells have a substantial ratio of cells with low traffic volumes. Due to the low volume of traffic handled by these cells, even a few call drops may reflect high call drop rate in those cells. The low usage cells clubbed with the uncontrollable variable factors, may not represent a true picture about a network's performance.
 - e. Therefore, if 2G/3G performance is seen in isolation, it will show a comparatively higher call drop value as compared to technology agnostic or stand-alone 4G value. This has been demonstrated to TRAI during earlier discussions.
 - f. Also, consumers do not correlate call drops with any technology, be it 2G or 4G. Similarly, even today when 5G has been implemented today the voice is going over 4G, and it doesn't invite any additional consumer concern.
 - g. Therefore, the Dropped Call rate parameter should be technology agnostic and it shouldn't be specific to 2G/3G and 4G/5G.
 - h. However, if Dropped Call Rate parameters (Qst, Qtd) benchmark are prescribed separately for 2G/3G and 4G/5G, it will lead to TSPs becoming perpetual non-compliant, for giving 2G services as a social obligation. Besides huge financial disincentive, another major consequence of this would be withdrawal of 2G services.
 - i. It is very much certain that withdrawal of 2G services as a consequence of a regulatory mandate will cause inconvenience to public at large due to service deniability to across the country.
 - j. We once again recommend that the Dropped Call rate parameter should continue to be technology agnostic i.e. performance for all technologies (2G, 3G, 4G, 5G) aggregated together.
- 21. Underlying factors not yet resolved – Fibre cuts, Illegal Repeaters, RoW, Power availability, status of essential services, etc.**
- a. One of the largest investments made by TSPs is in infrastructure, such as the installation of base stations to provide coverage and delivery capacity. But quality of service does not depend solely on the number of antennas installed. Unlike fixed networks, several factors impact network performance.
 - b. We would like to submit that the TRAI Consultation Paper has failed to recognize the related issues and external factors beyond the control of TSPs such as use of illegal repeaters, interference, fibre cuts, Right of Way, non-availability of sites at various locations in a city environment, abrupt site sealing by Municipal Authorities and rabid action by Resident Welfare Associations on site shut-down. The existence of such

factors has already been acknowledged by the TRAI in its “Technical Paper on Call Drop in Cellular Networks” of 2015, as mentioned below:

“In light of the reasons discussed in the Paper, about the increase in call drops, it must be realized that mobile towers do not have an unlimited capacity for handling the current network load. There is an urgent need to increase the number of the towers so as to cater to the demands of a growing subscriber base. At the same time, problems like removal of towers from certain areas by Authorities should be adequately addressed. This problem is particularly evident in urban areas.”

- c. In addition to the above, the Supreme Court Judgement on Call Drop matter, in context to High Court Judgement, stated as below:

The judgment has entirely missed the fact that the technical paper of 13.11.2015 unequivocally states that the causes for call drops are many and are often beyond the control of service providers and attributable to the extent of 36.9% to the consumers themselves.

- d. Authority has also not considered that the actual genesis behind variations in the QoE by customers, lies in Municipality sealing, Right of Way issues, interference issues, disruptions/damage to infrastructure, etc.
- e. Instead, the TRAI should look at ushering in a proper policy framework that facilitates the deployment of telecom infrastructure and aims at removing all possible impediments at the very earliest. Uniform guidelines for RoW applicable on a Pan-India basis, shall be an excellent initiative to improve Network coverage and QoS.

22. The parameters have been made so stringent that many TSPs will become non-compliant on various parameters. This sudden compliant to non-complaint status will lead to reputation loss for the industry and may impact the growth story of telecom.

- a. We would like to highlight that TRAI, in its consultation paper, has acknowledged upon analysis of past few PMRs that all the service providers are having much better performance than the current benchmark in case of some parameters.
- b. We would like to highlight that this is the result of efforts being made by TSPs that there has been significant overall improvement in voice and data services across the country.
- c. We have been practicing initiatives through technological interventions / advancements across all domains (Radio, CS/PS Core, and Transport) and not aiming at improving any single KPI parameter but overall service level improvements. Advancements like voice traffic migration to VoLTE, introduction of Voice over Wi-Fi (VoWi) have improved overall voice experience.

- d. However, making the benchmarks more stringent directly point towards TSPs becoming non-compliant. Moreover, loss of reputation from non-compliant QoS parameters will directly degrade the growth story of the sector, which would be irreversible.
- e. Hence, we strongly submit that as TSPs are in compliance with majority of the parameters and have been working day and night to improve their services, their efforts should not be rewarded by stricter benchmark and hamper their spirit of being consumer centric in nature.

F. POINTS NOT CONSIDERED IN THE CONSULTATION PAPER – LICENSING RELATED

23. Compliance assessment at State-UT level is contrary to Licensing framework

- a. Regulation 13(2) of the proposed Regulation stipulates that the benchmark of each QoS parameters shall be measured, reported and complied at State or Union Territory and License Service area level. Extract of the same is given as follows:

(2) The benchmark of each QoS parameters specified in sub-regulation (1) shall be measured, reported, and complied at State or Union Territory (UT) and License Service Area level, as may be specified by order or direction issued by the Authority time to time:

Provided that the Authority may notify list of districts and QoS parameters for measurement, reporting and compliance of QoS benchmarks based on identification of areas experiencing degraded QoS.

- b. The License provided under Section 4 of Indian Telegraph Act, provides a defined geography viz. License Service Area, on which the Licensing and Regulatory framework apply. There is no legal sanctity for category of multiple LSA licensee or pan-India LSAs licensee.
- c. While the license for access services is divided into 22 LSAs across Pan-India, there are 36 State-UTs across pan-India. This leads to complex scenarios where the state area will comprise of multiple LSAs e.g. Maharashtra State will be a combination of Maharashtra LSA and Mumbai; Haryana State will be a combination of geography of Punjab LSA, Haryana LSA and Delhi LSA; UP state will be a combination of 3 LSAs i.e. UP-East LSA, UP-West LSA and Delhi LSA.
 - ii. In such scenario, it is not clear as to which LSA will be responsible for measurement, reporting and compliance of State-UT level QoS parameters. Further, it is not clear as to how TRAI expects one LSA to ensure QoS parameters over another LSA, even though if the licensed entity is same. Such conditions are fraught with serious legal and licensing implications, extent of which can't be comprehended fully at this stage.



Even in case of National MNP i.e. one LSA to another LSA, within one licensed entity, the consumer has to go through all the KYC norms again.

- iii. In our view, it is legally as well as technically not possible to measure, report and comply with QoS parameters on a State-UT level basis. If TRAI imposes such Regulation, it will be directly contrary to the license conditions.

24. Multiple compliance instances/FD against a QoS parameter in a single LSA

- a. As per the draft regulation, the performance of QoS parameters will be examined both at LSA as well as State/UT level.
- b. This will lead to complications of multiple compliance assessments in one LSA, sample scenarios given below:
 - i. In case of Madhya Pradesh (MP) LSA, if a TSP is found non-compliant for a specific parameter in states like MP as well as MP LSA, it is bound to attract double FD, both for the state as well as LSA.
 - ii. There can also be a case wherein 2 states, found non-compliant, are part of same LSA e.g. If both MP and Chhattisgarh states are non-compliant for a certain parameter, the TSP will be non-compliant for complete MP LSA as well and TRAI will impose FDs on each of such instance.
 - iii. In case of TSP being found non-compliant for a certain parameter in a metro city like Kolkata, such a city is bound to have the propensity to make the whole state of West Bengal non-compliant.
- c. **Hence, the TRAI regulation will lead to QoS parameter for one geography (let's say MP state in first example given above) being assessed twice for compliance and consequent FD, if any. This is against the basic tenet of natural justice wherein one non-compliance cannot be penalized twice.**

G. POINTS NOT CONSIDERED IN THE CONSULTATION PAPER – EASE OF DOING BUSINESS

25. Light-touch Regulatory Framework for QoS – based on Transparency and Publication

- a. We would like to submit that despite improvement in the QoS being experienced in the country, this draft regulation is leading towards stricter benchmarks and multi-fold increase in compliance requirements and financial disincentives without any supporting evidences/justifications.
- b. We believe that it is important to assess the severity of the incident before imposition of compliance and financial penalty. Any concerns or issues that arise in this regard should be examined on merits and imposition of any disincentive should be considered only when it is clearly established without doubt that there is willful conduct for the purpose of non-compliance on the part of the licensee.

- c. Moreover, as there has been improvement in the complaints year on year, basis this achievability of certain parameters should be left to the discretion of TSPs to comply at their own level without any reporting requirements being followed by financial disincentives.
- d. **Hence, TRAI should move towards light-regulation approach on QoS and introduce transparency and publication based QoS framework based on data from TRAI/3rd party apps.**

26. Huge increase in Compliance and Reporting Instances

- a. The parameters in the existing regulation were evaluated basis no. of LSAs (total 22) and on quarterly (4 times a year) frequency. However, as per the draft regulation (Regulation 3(1), 4(1), 6(1), 7(1), 9(1), 10(1) read with Regulation 13(1) and 13(2)), the parameters are proposed to be assessed basis no. of LSAs as well as State/UT (28 States + 8 UTs = 36). Furthermore, the proposed assessment period will directly increase 3 folds as it has been changed from quarterly to monthly.
- b. All these multiple layers of increase will lead to huge multi-fold increase in number of compliance instances as well as reporting requirements. All of this is against the principle of ease of doing business.
- c. Sample illustration related to network based parameters under Regulation 6(1), 7(1), 9(1) and 10(1) of draft Regulation on Pan-India basis, is provided below for reference:

Sample Illustration 1 – Compliance Instances to meet QoS Benchmarks

For Wireless	Existing				Proposed				
	Geographical Unit for QoS parameters measurement (Only LSA)	Number of Benchmarks of Parameters required to be complied with	Periodicity to comply Per year, per each Geographical Unit (LSA)	Total Compliance Instances for meeting Benchmarks of QoS Parameters (Pan-India basis)	Geographical Unit for QoS parameters measurement (LSA + State + UT)	Number of Benchmarks of Parameters required to be complied with	Periodicity to comply Per year, per each Geographical Unit (LSA, State, UT)	Total Compliance Instances for meeting Benchmarks of QoS Parameters (Pan-India basis)	
Voice QoS	22	11	4	968	58	15	12	10440	
Voice QoS-Monitoring parameters report (New addition)	22	0	0	0	58	4	4	928	
Total Voice QoS	22	11	4	968	58	19	16	11368	
Wireless Data QoS	22	7	4	616	58	5	12	3480	
Wireless Data QoS Monitoring (New addition)	22	0	0	0	58	3	4	696	
Total Wireless Data QoS related	22	7	4	616	58	8	16	4176	
Voice + Data QoS Combined Total				1584	Voice + Data QoS Combined Total				15544
Proposed Compliance Instances for Meeting Benchmarks v/s Current Compliance Instances for Meeting Benchmarks								9.8 times increase	

- d. As is evident from above, there is a huge ~10 times increase in instances of reporting requirements being put on the TSPs, that too without any detailed study or surveys.

Sample Illustration 2 – Reporting Instances for QoS Parameters

For Wireless	Existing			Proposed		
	Geographical Unit for QoS parameters measurement (Only LSA)	Reports Per year, per each Geographical Unit (LSA)	Total Instances of Reporting (Pan-India basis)	Geographical Unit for QoS parameters measurement (LSA + State + UT)	Reports Per year, per each Geographical Unit (LSA, State, UT)	Total Instances of Reporting (Pan-India basis)
Voice QoS	22	4	88	58	12	696
Voice QoS-Monitoring parameters report (New addition)	22	0	0	58	4	232
Total Voice QoS	22	4	88	58	16	928
Wireless Data QoS	22	4	88	58	12	696
Wireless Data QoS Monitoring (New addition)	22	0	0	58	4	232
Total Wireless Data QoS related	22	4	88	58	16	928
	Voice + Data QoS Combined TOTAL		176	Voice + Data QoS Combined TOTAL		1856
	New Reporting Instances as multiple of Current Reporting Instances					10.5 times increase

Note: The state-UT wise information is being provided to TRAI, however, the same was sought through a direction and was not part of the QoS Regulation. These were introduced without any public consultation.

- e. As is evident from above, there is a huge 10.5 times increase in instances of reporting requirements being put on the TSPs, that too without any detailed study or surveys.
- f. Considering all above, we strongly urge TRAI to examine the QoS framework afresh and reduce the huge Regulatory burden in terms of number of benchmark and reporting compliances.

27. Huge increase in Exposure to Financial Disincentive

- a. The TSPs have to fulfill the regulatory norms prescribed by the Regulator from time to time. In case of Quality of Services, TRAI prescribed the Regulation in 2006, which was amended from time to time. The amendment are carried out after due consultation and the regulatory norms are prescribed as relevant to a context of time.
- b. VIL has been complying with all QoS parameters, benchmarks and reporting as prescribed by TRAI and there has not been any material breach in performance on the QoS parameters. The reports published by TRAI also indicates that other TSPs have



also been achieving the performance as per benchmark of QoS parameters. This shows that financial disincentives were not required by TRAI to ensure industry achieves the level of performance as was needed by TRAI, as such, there is no failure for which TRAI has to resort to financial disincentive, leave aside making it more stringent.

- c. Despite the proof of industry meeting the benchmarks and reporting, the Consultation Paper **proposes huge increase in the financial disincentive for not complying with various provisions of QoS Regulation.**
- d. The benchmark assessment/reporting in the existing regulation was done basis no. of LSAs (total 22) and on quarterly (4 times a year) frequency. However, as per the draft regulation (Regulation 3(1), 4(1), 6(1), 7(1), 9(1), 10(1) read with Regulation 13(1), 13(2), 15(1) and 16(1)), the benchmark assessment/reporting are proposed to be assessed basis no. of LSAs as well as State/UT (28 States + 8 UTs = 36), at monthly frequency as well as with increased rate of financial disincentives.
- e. All these multiple layers of increase will lead to huge multi-fold increase in exposure to financial disincentives, w.r.t. benchmark compliances as well as reporting requirements. All of this is against the principle of ease of doing business.
- f. Sample illustration related to network based parameters under Regulation 6(1), 7(1), 9(1) and 10(1) of draft Regulation on Pan-India basis, is provided below for reference:

Sample Illustration 3 – FD on Instances of Compliance to Benchmark

For Wireless	Existing						Proposed						
	Geographical Unit for QoS parameters measurement (Only LSA)	Number of Benchmarks of Parameters required to be complied with	Periodicity to comply Per year, per each Geographical Unit (LSA)	Total Compliance Instances for meeting Benchmarks of QoS Parameters (Pan-India basis)	FD Rate for compliance of instances for QoS Parameters	Total FD amount on Compliance of Instances of QoS Parameters	Geographical Unit for QoS parameters measurement (LSA+ State + UT)	Number of Benchmarks of Parameters required to be complied with	Periodicity to comply Per year, per each Geographical Unit (LSA, State, UT)	Total Compliance Instances for meeting Benchmarks of QoS Parameters	FD Rate for compliance of instances for QoS Parameters	Total FD amount on Compliance of Instances of QoS Parameters	
Voice QoS	22	11	4	968	100000	96800000	58	15	12	10440	100000	104400000	
Voice QoS-Monitoring parameters report (New addition)	22	0	0	0	0	0	58	4	4	928	25000	23200000	
Total Voice QoS						96800000						1067200000	
Wireless Data QoS	22	7	4	616	0	0	58	5	12	3480	25000	25000	
Wireless Data QoS Monitoring (New addition)	22	0	0	0	0	0	58	3	4	696	25000	25000	
Total Wireless Data QoS related	22	7	4	616	0	0	58	8	16	4176	50000	50000	
Voice + Data QoS Combined Total				616	Total	96800000	Voice + Data QoS Combined Total				4176	Total	1067250000
										New Compliance Instances for Meeting Benchmarks v/s Current Compliance Instances for Meeting Benchmarks		~11 times increase	

- g. **As is evident from above, the exposure to financial disincentive w.r.t. benchmark compliance would increase by ~11 times.**

Sample Illustration 4 - FD on Instances of Compliance to Reporting

For Wireless	Existing					Proposed				
	Geographical Unit for QoS parameters measurement (Only LSA)	Reports Per year, per each Geographical Unit (LSA)	Total Instances of Reporting (Pan-India basis)	FD Rate (per day) on Delay in Reporting	Total FD amount on Delay in Reporting	Geographical Unit for QoS parameters measurement (LSA + State + UT)	Reports Per year, per each Geographical Unit (LSA, State, UT)	Total Instances of Reporting (Pan-India basis)	FD Rate (per day) on Delay in Reporting	Total FD amount on Delay in Reporting
Voice QoS	22	4	88	5000	440000	58	12	696	25000	17400000
Voice QoS-Monitoring parameters report (New addition)	22	0	0	0	0	58	4	232	25000	5800000
Total Voice QoS					440000					23200000
Wireless Data QoS	22	4	88	0	0	58	12	696	25000	17400000
Wireless Data QoS Monitoring (New addition)	22	0	0	0	0	58	4	232	25000	5800000
Total Wireless Data QoS related					0					23200000
	TOTAL				440000	TOTAL				46400000
	Proposed FD v/s Present FD on Instances of Reporting (per day basis, for Pan India LSA)									105 times increase

- h. **As is evident from above, the exposure to financial disincentive w.r.t. reporting requirements would increase by a staggering ~100 times**
- i. These huge increase in financial disincentives both for benchmark compliance and reporting requirements, is completely uncalled for and is devoid of any rationale.
- j. The industry should be encouraged to follow QoS benchmarks and reporting timely, instead of forcing them through financial disincentive. Further, it is also to be examined if TRAI has power to levy financial disincentive under the TRAI Act 1997.
- k. **Considering all above, we strongly urge TRAI to do away with any Financial Disincentive on benchmarks and reporting of QoS parameters.**

28. Wireline Services – Connectivity solutions for Enterprise:

- a. The QoS regulation and its parameters are prescribed to protect the interests of consumers at large such that they should be able to get a desired level of QoS. However, there are other services like Enterprise connectivity solutions, where these parameters would not be relevant. Further, VIL does not provide retail wireline connections but, provide connectivity solutions to the Enterprise customers.

- b. To keep on providing the QoS report for wireline services requires additional resources but, it doesn't meet any purpose as such, we request TRAI to pragmatically review this requirement and exempt the Wireline services being offered to Enterprise customers, from the purview of QoS regulation. This would support Ease of Doing Business. Similar steps have been taken by TRAI in the past, whereby tariff reporting of plans to Enterprise customers was made as a quarterly report and not as detailed filing within 7 days of launch.
- c. **Therefore, we request that the Wireline related parameters should only apply if a TSP is offering retail wireline connections. An explicit clarification in this regard should be mentioned in the QoS regulation.**

H. POINTS NOT CONSIDERED IN THE CONSULTATION PAPER – FACTUAL ANALYSIS OF INFLUENCING FACTORS

29. Facts/figures, surveys conducted to find out factors influencing degraded QoE by customers

- a. The rationale for regulations in the telecommunication sector has always been closely linked to the objectives of protecting the interests of TSPs, consumers and maintaining an environment of orderly growth in the sector. TRAI has been given the mandate under the TRAI Act, 1997 to lay down the QoS, to ensure the QoS and to conduct the periodic survey of each service provided by the service providers so as to protect the interest of the consumers.
- b. It is submitted that customer satisfaction index will be a very subjective parameter to use and is likely to vary among customers with different usage profiles. It is pertinent to mention here that customer expectations vary from one geography to another and also from time to time, depending on various factors like devices being used, OTT end experience, locations, transit time, maturity of the subscriber in the network, age group, usage pattern, awareness levels, literacy levels, tariff plans etc. Customer satisfaction index conceptually is very dynamic and non-standard when compared with a standard measurement QoS parameters.
- c. TRAI collects the consumer feedback on voice call quality on crowd sourced basis, through its Call Quality mobile app. While VIL score is at top position for various months in past however, there has been issue of compatibility of TRAI's app with the present handsets and OS versions. Due to this, number of feedbacks have been dropping over the past few quarters.
- d. In absence of any cogent and detailed study and surveys gauging the consumer experience over a period of atleast 2-3 years, it would be just an assumption that the consumer experience of QoS has got degraded and any change in QoS benchmarks based on such assumption, would be an academic exercise.

30. International References on certain parameters

- a. It has been observed that TRAI, prior to issuing various consultations, has always been cognizant of global practices being carried out on that matter. Such initiatives have always helped our country to be in line with global standards and follow the best international practices, to every extent possible.
- b. In case of review of QoS, we would like to highlight that no such global references or background or justification on modification of assessment period from quarterly to monthly basis, moving to QoS compliance on sub-LSA level, introduction of new parameters etc. have been provided in the consultation paper.
- c. Hence, we would like to submit that QoS in telecom, being the prime focus of the regulators across the world, should be prescribed in line with global standards and be improved with tried and tested methodologies being carried out across the globe.

31. Scientific backing, evidence/study that such parameters will result in enhanced QoS

- a. The Authority has changed the benchmarks for many technical parameters, however, no scientific justification or calculations have been provided in the paper which justify the extent of change being brought in through draft regulation.
- b. Such revision of the benchmarks are being proposed without ascertaining the extent of the change/improvement in the consumer experience which could have been only possible through scientific evidences/studies, surveys and examination of technical possibility of implementation.

32. Regulatory Impact Analysis

- a. Considering the revised benchmarks and assessment being proposed on monthly basis and at sub-LSA level, a systemic approach was required to assess the positive and negative effects of proposed and existing regulations. It is important to understand that implementation and compliance of the proposed draft regulation involve lot of technical complexities and is almost impossible to achieve.
- b. Moreover, it is essential to always identify all relevant direct and important indirect costs as well as benefits. In this case, it is amply clear that any such cost entailed on the networks and IT systems will be humongous besides technical impossibility in meeting certain parameters. However, the consultation paper does not carry any analysis in this context.
- c. Hence, we submit that QoS being such a diverse activity, the Authority should carry out Regulatory Impact Assessment and share the same through consultative process before finalizing such stringent parameters and assessment criteria.

Chapter-wise Comments

The comments on the Draft Regulation in Chapter-3 have been enclosed as **Annexure – A** in the requisite format (as provided in the consultation paper) for kind consideration of the Authority. We request that the comments as provided in Annexure-A should be read along with the comments provided in this document.

Question-wise comments

Q1. What are the possible reasons for increasing gaps between the QoS reported by the service providers and the QoS experienced by the consumers? How this gap can be bridged?

VIL Comments to Q1

1. While the question is based on an unfounded assumption that there are increasing gaps between the QoS reported by the service providers and the QoS experienced by the consumers, however, there is no detailed data, study, analysis provided which corroborates this as a fact over a period of few years. At the outset, we would like to submit that there is no increasing gap between the QoS reported by the service providers and the QoS experienced by the consumers.
2. It is submitted that customer satisfaction index will be a very subjective parameter to use and is likely to vary among customers with different usage profiles. It is pertinent to mention here that customer expectations vary from one geography to another and also from time to time, depending on various factors like maturity of the subscriber in the network, age group, usage pattern, awareness levels, literacy levels, tariff plans etc.
3. QoS measures network performance matrices in objective manner and is based on technological measurement of various parameters. Whereas QoE is very subjective in nature and can vary from person to person based on understanding/ usage patterns /expectation from services being used. It is very difficult to establish correlation between the two, due to convoluted relationship and mismatched timescale between QoE and QoS. We believe improving system level KPIs will definitely lead to QoE improvement.
4. Customer satisfaction index conceptually is very dynamic and non-standard when compared with a standard measurement QoS parameters. Combining objective parameters of Network QoS derived from system statistics & subjective parameters like customer survey inputs is not likely to yield any concrete usable Index. Thus, monitoring QoS from radio network KPIs like accessibility, retain ability, integrity, etc. is the best available objective way.

5. Considering all above, we urge the Authority to move away from traditional method of QoS compliance based on network information reported by the TSPs. It is high time that TRAI should adopt digital solutions to crowd-source QoS/QoE information from public at large. Such information can be published by TRAI which will encourage TSPs to improve upon their QoS/QoE else stand at risk to lose the consumers through MNP or otherwise. One such mobile application has been launched by TRAI to gauge call quality feedback from consumers though off late that application has not been working properly. We recommend TRAI to launch more such apps (and also rectify the working of call quality app) and examine the QoS/QoE of a TSP through the results shown by such apps and not by existing network based information. Same is also being followed in many countries with matured telecom landscape.

Q2: To support emerging applications and use cases please suggest a transparent framework for measurement and reporting of QoS and QoE especially in 4G & 5G networks considering relevant standards and global best practices.

VII Comments to Q2

1. In our view, it is too early to work on a QoS/QoE related framework for emerging applications and use-cases in 4G and 5G networks.
2. The emerging applications and use-cases are innovative in nature and it would not be a right approach to fix separate QoS frameworks for them. Otherwise this will hamper the innovation and might kill the said emerging applications and use-cases without society getting benefitted out of it.
3. Generally, such applications and use-cases are launched by enterprise customers who are well versed with QoS and QoE. Many a times, these entities demand specific and/or enhanced QoS to support their specific requirements.
4. TRAI had issued a consultation on regulatory sandbox, which can very well take care of special support required by emerging applications and use-cases.
5. Considering all this, it would be a counter-productive activity to have a separate framework for emerging applications and use-cases.

Q3: What should be the QoS parameters and corresponding benchmarks for ultra-reliable low latency communication (uRLLC)), and massive machine type communications (mMTC)?

And

Q4: Will there be any likely adverse impact on existing consumer voice (VoLTE/VoNR) and data services (eMBB) upon rollout of enterprise use cases of uRLLC or mMTC?

And

Q5: If answer to Question-4 is 'No' then please explain how and if the answer is 'Yes' please suggest measures to ensure minimum guaranteed QoS for voice and data service for consumers.

VIL Comments to Q3, Q4 and Q5

1. The implementation of uRLLC & mMTC is still few years away and standards are just been defined. It is yet to see the light of the day commercially and thus, the current consultation paper should exclude defining uRLLC & mMTC for now.
2. It is suggested that in about 3-4 years' time when these services are well established and operators have carried out significant deployment then a consensus shall be built with operators before considering any regulatory mandate.

Q6: To achieve QoS and QoE end-to-end, it is essential that all network segments deliver the minimum level of QoS required by respective service, application or use case. In this context, suggest QoS parameters and corresponding benchmarks for National Long Distance (NLD) and International Long Distance (ILD) segments of the network with supporting global benchmarks.

VIL Comments to Q6

QoS parameters for Voice and data service experience of end user are already well captured in current QoS reporting. Any performance related issues in NLD/ILD segment reflects in current voice and data QoS parameters. Hence, there is no need to go for separate benchmarks for NLD and ILD segments.

Q7: What should be the approach for adoption of 'QoS by Design' framework by the service providers to ensure that new generation wireless networks are planned, implemented and maintained to deliver required level of measurable QoS and QoE ?

VIL Comments to Q7

QoS benchmarks are the core aspect of Network & associated services design in all domains (Radio/Transport/Core/Value added services, etc.). Hence, "QoS by design" is very much adopted approach in rolling out every element of network rollout.



Q8: What measures are required to accelerate the adoption of AI for management of QoE to reduce consumer complaints protectively and to enable near real time reporting of QoS performance to consumers?

VIL Comments to Q8

1. Accelerating AI adoption for quality of experience management requires a strategic and holistic approach that combines data, technology, consumer engagement and continuous improvement in order to reduce the consumer complaints leading to seamless quality of service & experience.
2. We are progressively deploying advanced automation in various areas like Network operations, Customer service that involves AI based tools which help in delivering services in faster and seamless manner and will continue to explore usage of latest tools and techniques that deploy AI.
3. In our view, the regulatory bodies should not mandate adoption of any particular technology and should leave the same to the operators to make a balanced decision in best interest of their consumers as well as associated costs.

xx----- *End of Document* -----xx



ANNEXURE – A

VIL Comments to the TRAI Consultation Paper on “Review of Quality-of-Service Standards for Access Services (Wireless and Wireline) and Broadband Services (Wireless and Wireline)”

CHAPTER 3: DRAFT REGULATION

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
1	1	PRELIMINARY			
2	1	1	Short title, commencement, and application		
3	1	1(2)	They shall come into force with effect from _____	They shall come into force with effect from 5 years of issuance of the new regulation.	<p>At the outset, we request TRAI to consider a similar light touch approach for Quality-of-Service regulations, given the sector's maturity, evolving dynamics, effective competition and MNP. Therefore, we strongly urge TRAI that:</p> <ul style="list-style-type: none">a. In the short term, TRAI should consider adopting a light-touch regulatory approach to QoS, involving the measurement and reporting of only a limited set of parameters on a quarterly basis.b. In the long term, the Authority should consider deregulating QoS parameters



Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					<p>while continuing to monitor performance through drive tests or a combination of drive tests and third-party surveys.</p> <p>The proposed regulation is infeasible to implement and comply with in the present shape. However, if TRAI does not consider material changes in the proposed regulation, we would like to submit as follows:</p> <ol style="list-style-type: none">1. The implementation of this draft Regulation will require radical and massive changes and can't be fully comprehended at this stage.2. On the minimum side, it will require massive augmentation of network elements, network infrastructure and resources, without any assurance of commensurate increase in QoE. On customer services' side also, it will need huge changes and upgradation in our network and IT systems. Further, both network and customer services will require setting up of processes with cross-functional teams.3. These changes will have huge cost implication and will significantly add to the existing financial stress, especially for number three TSP i.e. VIL.



Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					<p>4. Most importantly, such radical changes require substantial time for implementation, post notification of the Regulation.</p> <p>5. Any immediate implementation in few quarters will cause catastrophic impact to network, customer services and would even lead to withdrawal of older technologies like 2G causing service disruption to crores of subscribers. It will also cause sudden irreversible disrepute to the brand, if the quality of service is termed as non-compliant by TRAI.</p> <p>6. While we reiterate that the proposed stringent QOS norms are unachievable, in case TRAI disagrees with our contention and analysis, we urge the TRAI to provide a glide path of at least 5 years from the date of its issuance, for implementation. Such glide path / phase-wise approach is a prudent practice to implement huge changes through policy mandates.</p>

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
4	1	1(3)	<p>These regulations shall apply to all service providers, having-</p> <p>(i) Unified Access Service License</p> <p>(ii) Unified License with authorization for Access Service;</p> <p>(iii) Internet Service Authorisation under any License.</p> <p>Provided that nothing contained in these regulations shall apply to an Internet Service Provider whose total number of subscribers as on last day of the preceding financial year does not exceed ten thousand numbers or as notified by Authority through order or direction.</p>	<p>Submission: Either TRAI should remove the non-level playing field between different set of stakeholders providing communication services, else, it should not put stringent frameworks on TSPs.</p>	<ol style="list-style-type: none"> 1. The TSPs are bound to meet various conditions, as specified by the Licensor regarding quality of service under the UL and specific Regulations/Directions of TRAI. The TSPs also need to report such parameters on regular basis to the Authority. 2. Similarly, there are access licensees providing only internet telephony. This internet telephony service also competes with voice and messaging services provided under cellular networks by access licensees. During TRAI consultation in 2017 on “Internet Telephony”, TRAI had recommended that: <ol style="list-style-type: none"> a. QoS on Internet Telephony may be left to market forces. b. The service provider must inform QoS parameters supported by them for Internet Telephony so that the subscriber can take an informed decision. c. The Authority shall review the decision regarding mandating QoS to Internet Telephony service providers at appropriate time.



Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					<p>3. OTT players also provide communication services which are substitutable to voice, video and SMS services being provided by TSPs, however, no regulatory framework applies to them.</p> <p>4. There is already a substantial non-level playing field in terms of regulatory norms between (a) licensed TSPs providing voice/messaging through cellular networks and licensed TSPs providing voice/messaging through Internet Telephony, (b) licensed TSPs and OTT players.</p> <p>5. The instant proposed QoS regulation further adds upon to the above said non-level playing field in the licensing and regulatory framework by making the QoS norms stringent for only cellular networks providing communication services.</p> <p>6. Therefore, either TRAI should remove the non-level playing field between different set of stakeholders providing communication services, else, it should not put stringent frameworks on TSPs.</p>
5	2	QUALITY OF SERVICE (QoS) PARAMETERS FOR ACCESS SERVICE(WIRELINE)			
6	2	3	Quality of Service Parameters in respect of which compliance reports are to be submitted to the Authority.-		

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
7	2	3(1)(i)	Provision of a service within 7 days of payment of demand note by the applicant Benchmark: 100% Averaged over a period: One Month	1. <u>Exclusion from applicability:</u> This parameter should not apply to connectivity solutions given to enterprise customers under wireline. An explicit clarification to this extent, should be provided by TRAI. 2. <u>Assessment Period:</u> The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	<u>Exclusion from applicability:</u> 1. The QoS regulation and its parameters are prescribed to protect the interests of consumers at large such that they should be able to get a desired level of QoS. However, there are other services like Enterprise connectivity solutions, where these parameters would not be relevant. Further, VIL does not provide retail wireline connections but, provide connectivity solutions to the Enterprise customers. 2. To keep on providing the QoS report for wireline services requires additional resources but, it doesn't meet any purpose as such, we request TRAI to pragmatically review this requirement and exempt the Wireline services being offered to Enterprise customers, from the purview of QoS regulation. This would support Ease of Doing Business. Similar steps have been taken by TRAI in the past, whereby tariff reporting of plans to Enterprise customers was made as a quarterly report and not as detailed filing within 7 days of launch.
8	2	3(1)(ii)	Fault incidences (No. of faults per 100 subscribers per month) Benchmark: ≤ 5 Averaged over a period: One month		
9	2	3(1)(iii)	Fault repair by next working day in Urban areas Benchmark: $\geq 85\%$ Averaged Over a period: One month		
10	2	3(1)(iv)	Fault repair within five days in Urban areas Benchmark: 100% Averaged Over a period: One month		

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
11	2	3(1)(v)	Fault repair by next working day in rural and hilly areas Benchmark: $\geq 75\%$ Averaged Over a period: One month		<p>3. Therefore, we request that the Wireline related parameters should only apply if a TSP is offering retail wireline connections. An explicit clarification in this regard should be mentioned in the QoS regulation.</p> <p><u>Assessment Period:</u></p> <p>4. TRAI has proposed humungous change in the QoS norms, by proposing the reduction in assessment period from Quarterly to Monthly.</p> <p>5. This will affect all aspects of quality of services i.e. compliance, measurement and reporting of QoS norms and create huge burden on TSPs in terms of resources, network infrastructure, scaling up of IT systems besides, leaving no opportunity for putting in place any mitigating measures if the performance goes down for a small duration.</p>
12	2	3(1)(vi)	Fault repair within seven days in rural and hilly areas Benchmark: 100% Averaged Over a period: One month		
13	2	3(1)	Note: Rent Rebate for:(i) Faults pending for >5 days and ≤ 7 days: Rent rebate for 7 days. (ii) Faults pending for >7 days and ≤ 15 days: Rent rebate for 15 days. (iii) Faults pending for >15 days: rent rebate for one month or entire duration of the fault, whichever is higher.		

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
14	2	3(1)(vii)	Mean Time To Repair (MTTR) Benchmark: ≤ 10 hours Averaged over a period: One month		6. In certain parameters, it would be infeasible to comply with the norms as the possibility of error goes very high proportionately, by reducing the data size from quarterly to monthly.
15	2	3(1)(viii)	Metering and billing accuracy – post-paid Benchmark: ≤ 0.1% Averaged over a period: All Bills issued in the month		7. In most of the parameters, even a single instance of lower performance will result into non-compliance and consequent financial disincentive.
16	2	3(1)(ix)	Metering and billing accuracy – pre-paid Benchmark: ≤ 0.1% Averaged over a period: One month		8. Further, Monthly assessment will also not help put in place corrective measures for aberration in network/IT system's performance, as the factors can be beyond the control of TSP and also, practically no system can work with 100% accuracy at all the times.
17	2	3(1)(x)	Resolution of billing/ charging complaints within six weeks Benchmark: 100% Averaged over a period: One month		9. Therefore, we strongly urge TRAI for adopting a pragmatic approach and not to reduce the assessment period from Quarterly to Monthly.

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
18	2	3(1)(xi)	Application of credit/ waiver/ adjustment to customer's account within one week from the date of resolution of complaints Benchmark: 100% Averaged over a period: One month		
19	2	3(1)(xii)	Response time to the customer for assistance		
20	2	3(1)(xii) (a)	Accessibility of call centre/ customer care Benchmark: \geq 95% Averaged over a period: One month	1. Exclusion from applicability: This parameter should not apply to connectivity solutions given to enterprise customers under wireline. An explicit clarification to this extent, should be provided by TRAI.	Exclusion from applicability: 1. The QoS regulation and its parameters are prescribed to protect the interests of consumers at large such that they should be able to get a desired level of QoS. However, there are other services like Enterprise connectivity solutions, where these parameters would not be relevant. Further, VIL does not provide retail wireline connections but, provide connectivity solutions to the Enterprise customers.
21	2	3(1)(xii)(b)	Percentage of calls answered by the operators (voice to voice) within ninety seconds Benchmark: \geq 95% Averaged over a period: One month	2. Assessment Period: The assessment period	

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
22	2	3(1)(xiii)	Termination/ closure of service within seven days Benchmark: 100% Averaged over a period: One month	for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	2. To keep on providing the QoS report for wireline services requires additional resources but, it doesn't meet any purpose as such, we request TRAI to pragmatically review this requirement and exempt the Wireline services being offered to Enterprise customers, from the purview of QoS regulation. This would support Ease of Doing Business. Similar steps have been taken by TRAI in the past, whereby tariff reporting of plans to Enterprise customers was made as a quarterly report and not as detailed filing within 7 days of launch.
23	2	3(1)(xiv)	Refund of deposits within 45 days of closures Benchmark: 100% Averaged over a period: One month		3. Therefore, we request that the Wireline related parameters should only apply if a TSP is offering retail wireline connections. An explicit clarification in this regard should be mentioned in the QoS regulation. <u>Assessment Period:</u> 4. TRAI has proposed humungous change in the QoS norms, by proposing the reduction in assessment period from Quarterly to Monthly.

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					<p>5. This will affect all aspects of quality of services i.e. compliance, measurement and reporting of QoS norms and create huge burden on TSPs in terms of resources, network infrastructure, scaling up of IT systems besides, leaving no opportunity for putting in place any mitigating measures if the performance goes down for a small duration.</p> <p>6. In certain parameters, it would be infeasible to comply with the norms as the possibility of error goes very high proportionately, by reducing the data size from quarterly to monthly.</p> <p>7. In most of the parameters, even a single instance of lower performance will result into non-compliance and consequent financial disincentive.</p> <p>8. Further, Monthly assessment will also not help put in place corrective measures for aberration in network/IT system's performance, as the factors can be beyond the control of TSP and also, practically no system can work with 100% accuracy at all the times.</p>

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					<p>9. Therefore, we strongly urge TRAI for adopting a pragmatic approach and not to reduce the assessment period from Quarterly to Monthly.</p>
24	2	3(2)	<p>The compliance of the parameters specified in sub-regulation (1) shall be reported to the Authority by the service provider.</p>	<p>1. Reporting Period: The reporting period for these QoS parameters (including all parameters) should be retained to Quarterly instead of Monthly.</p>	<p>In the proposed Regulation, TRAI has not specified the frequency of reporting for the parameters mentioned at Regulation 3(1), 6(1) and 9(1). However, in Chapter 4 at point no. 4.c., it has been mentioned that the reporting of these parameters would have to be done on a monthly basis. In this regard, we would like to submit as follows:</p> <ol style="list-style-type: none"> 1. Monthly reporting of all these parameters will put a huge burden on the existing resources, even if any online reporting methodology is adopted. 2. It will increase the reporting requirements tremendously. Further, TRAI has also put in Financial Disincentive on delay in reporting. 3. These will be significantly against the principles of Ease of Doing Business.

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					4. Therefore, reporting and assessment of QoS parameter should not be sought on monthly basis, instead, it should be retained on quarterly basis.
25	2	4	Quality of Service parameters in respect of which compliance is to be monitored by the service provider and reported to the Authority.		
26	2	4(1)	Every service provider providing access service (wireline) shall meet and monitor the benchmarks of following QoS, namely:–		
27	2	4(1)(i)	Registration of demand for new wireline connection irrespective of technical feasibility Benchmark: 100% Average over a period: One Quarter	<u>Exclusion from applicability:</u> This parameter should not apply to connectivity solutions given to enterprise customers under wireline. An explicit clarification to this extent, should be provided by TRAI.	<u>Exclusion from applicability:</u> <ol style="list-style-type: none"> The QoS regulation and its parameters are prescribed to protect the interests of consumers at large such that they should be able to get a desired level of QoS. However, there are other services like Enterprise connectivity solutions, where these parameters would not be relevant. Further, VIL does not provide retail wireline connections but, provide connectivity solutions to the Enterprise customers. To keep on providing the QoS report for wireline services requires additional resources but, it
28	2	4(1)(ii)	Requests for Shift of Telephone Connection to be attended within three days Benchmark: 95% Average over a period: One quarter		

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
29	2	4(1)(iii)(a)	Junctions between local exchanges Benchmark: 0.002 Average over a period: One Quarter		<p>doesn't meet any purpose as such, we request TRAI to pragmatically review this requirement and exempt the Wireline services being offered to Enterprise customers, from the purview of QoS regulation. This would support Ease of Doing Business. Similar steps have been taken by TRAI in the past, whereby tariff reporting of plans to Enterprise customers was made as a quarterly report and not as detailed filing within 7 days of launch.</p> <p>3. Therefore, we request that the Wireline related parameters should only apply if a TSP is offering retail wireline connections. An explicit clarification in this regard should be mentioned in the QoS regulation.</p>
30	2	4(1)(iii)(b)	Outgoing junctions from Trunk Automatic Exchange (TAX) to local exchange Benchmark: 0.005 Average over a period: One Quarter		
31	2	4(1)(iii)(c)	Incoming junctions from local exchange to TAX Benchmark: 0.005 Average over a period: One quarter		
32	2	4(1)(iii)(d)	Incoming or outgoing junctions between TAX Benchmark: 0.005 Average over a period: One Quarter		

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
33	2	4(1)(iv)	Point of Interconnection (POI) Congestion (on individual POI) at LSA level Benchmark: $\leq 0.5\%$ Average over a period: One quarter	Presently, POIs are common for Wireline and Wireless networks between private access service providers. Accordingly, this parameter would not apply separately for wireline and wireless.	Presently, POIs are common for Wireline and Wireless networks between private access service providers. Accordingly, this parameter would not apply separately for wireline and wireless.
34	2	4(2)	The service provider shall monitor the compliance of the parameters and its benchmarks specified under sub-regulation (1) and furnish online quarterly report to the Authority within thirty days of the end of each quarter.	<ol style="list-style-type: none"> <li data-bbox="1037 767 1395 1106">1. <u>Exclusion from applicability:</u> This parameter should not apply to connectivity solutions given to enterprise customers under wireline. An explicit clarification to this extent, should be provided by TRAI. <li data-bbox="1037 1142 1395 1342">2. <u>Parameter:</u> Principally, provisions of additional burden of reporting and any consequent financial disincentive should be removed. 	<p data-bbox="1417 743 1821 772"><u>Exclusion from applicability:</u></p> <ol style="list-style-type: none"> <li data-bbox="1417 810 2103 1129">1. The QoS regulation and its parameters are prescribed to protect the interests of consumers at large such that they should be able to get a desired level of QoS. However, there are other services like Enterprise connectivity solutions, where these parameters would not be relevant. Further, VIL does not provide retail wireline connections but, provide connectivity solutions to the Enterprise customers. <li data-bbox="1417 1177 2103 1385">2. To keep on providing the QoS report for wireline services requires additional resources but, it doesn't meet any purpose as such, we request TRAI to pragmatically review this requirement and exempt the Wireline services being offered to Enterprise customers, from the purview of QoS

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					<p>regulation. This would support Ease of Doing Business. Similar steps have been taken by TRAI in the past, whereby tariff reporting of plans to Enterprise customers was made as a quarterly report and not as detailed filing within 7 days of launch.</p> <p>3. Therefore, we request that the Wireline related parameters should only apply if a TSP is offering retail wireline connections. An explicit clarification in this regard should be mentioned in the QoS regulation.</p> <p><u>Parameter:</u></p> <ol style="list-style-type: none"> 1. These are monitoring KPIs and in the existing regulation, these are not required to be reported. 2. Further, these do not directly influence customer experience. 3. Therefore, principally, provisions of additional burden of reporting and any consequent financial disincentive should be removed.

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
35	3	QUALITY OF SERVICE (QoS) PARAMETERS FOR ACCESS SERVICE (WIRELESS)			
36	3	6	Quality of Service Parameters in respect of which compliance reports are to be submitted to the Authority		
37	3	6(1)	Every service provider providing access service (wireless) shall meet the benchmarks of following QoS parameters, namely:—		
38	3	6(1)(A)	Network Service Quality Parameters:		
39	3	6(1)(A)(i)	Network Availability		
40	3	6(1)(A)(i)(a)	<p>% of commissioned cells for which geospatial service coverage map is available on service provider's website.</p> <p>Benchmark: 100%</p> <p>Method and Assessment Period: On average basis over a period of month.</p>	<p>1. Parameter: The proposed provision 6(1)(A)(i)(a) should be dropped from this regulation.</p> <p>2. Benchmark and Assessment Period: If TRAI does not agree with point no. 1 above, in such case: (a) there should not be any benchmark and (b) assessment period should be left to the discretion of TSPs (atleast once a year).</p>	<p>Parameter:</p> <p>1. This parameter is already part of NIA, 2022 issued by DoT. Extract provided as below:</p> <p><i>To keep the customers informed about 5G roll out, the TSPs shall publish the network deployment map on their website depicting the areas where the services have been launched using 3300 MHz & 26 GHz bands.</i></p> <p>2. It will not be right if a same topic is regulated by both Licensor and TRAI.</p> <p>3. Besides, the technological and geographical environment in India is diverse and changing</p>



Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					<p>rapidly, which will make it impossible to update such coverage map on monthly basis.</p> <p>4. Moreover, instances may arise where a site or cell is technically live in the system but has been forcibly shut down due to local issues or disputes, leading to discrepancies between the map and the actual network status observed by the customer.</p> <p>5. Updating the map on monthly periodicity will entail augmentation of substantial infrastructure and tools leading to huge cost in terms of systems, manpower and efforts.</p> <p>6. We understand globally also, only few countries have the requirement of updating such maps, though, it is to be done on half-yearly/yearly basis.</p> <p>7. Hence, this parameter should not be part of QoS regulation.</p>
41	3	6(1)(A)(i)(b)	Accumulated downtime (Cells not available for service) Benchmark: ≤ 1%	1. <u>Parameter:</u> These parameters should be restricted to BTS level only instead of the	<u>Parameter at Cell level:</u> 1. The proposal of extending the parameter from BTS to a single Cell of the BTS is too stringent. It

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
			Method and Assessment Period: On average basis over a period of month.	proposed cell level benchmark.	should be noted that cellular wireless technology is based on the principles of overlapping coverage through multiple cells.
42	3	6(1)(A)(i)(c)	<p>Worst affected Cells due to downtime (Cells not available for service for more than cumulative 24 hrs. in a month)</p> <p>Benchmark: $\leq 1\%$</p> <p>Method and Assessment Period: On average basis over a period of month.</p>	<p>2. Benchmark: The existing benchmark of $\leq 2\%$ should be retained.</p> <p>3. Assessment Period: The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.</p>	<p>2. In matured networks like ours, BTS densification is carried out to enhance the coverage and capacity of networks. This results into users getting access to multiple cells/BTSs to ensure uninterrupted coverage. Thus, it is important to understand that due to this, any single cell outage does not result into loss of coverage for the user as the user is ensured coverage by other cells in the same BTS or next nearest BTS.</p> <p>3. BTSs available in most locations cater to >1 technology (2G, 3G, 4G). For eg. In case of 2 technologies presence in single location there are at least 6 cells; 2 in each direction. So any single cell going down will not result into coverage loss for the user.</p> <p>4. In addition to multi technology cells in a single cell site location, there are multi frequency band cells in single technology (especially 4G). For eg. At 4G cell site having BTSs operating on 900 MHz + 1800 MHz + 2300 MHz, there will be 9 cells in addition to say 3 cells of 2G. Under such</p>

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					<p>circumstances, single cell going down will not result into “No coverage situation” for user.</p> <p>5. So, technically cells going down can lead to TSPs being shown non-compliant whereas it might not lead to customer facing any degradation in network experience.</p> <p>6. Considering the above, it is clear that in most cell site locations, there will be multiple cells in each BTS location varying from 6 to 15. Hence, ‘Cell’ cannot be considered as a unit for measurement of network availability parameter and ‘BTS level’ granularity should be continued as per prevailing regulation.</p> <p>7. Generally, a cell can go down on more occasions than a BTS due to multiple reasons. This will adversely impact the TSPs’ benchmark performance if measured at a ‘Cell’ level, even though the consumer experience is not impacted. Hence, making the parameter at cell level is certainly going to show TSPs’ network availability as low and non-compliant.</p> <p>8. Therefore, the change of this parameter to ‘Cell’ level is highly unwarranted and this</p>



Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					<p>parameter should be retained at 'BTS' level only.</p> <p><u>Benchmark threshold at 1%:</u></p> <p>9. Moreover, outages are dependent on various factors that are completely beyond TSP's control like Power availability/cuts, fiber cuts, rain fading of MW links, maintenance access issues beyond day light hours, details given below:</p> <ul style="list-style-type: none"> a. In majority of rural areas, electricity is available for less than 12-15 hours. Also, there are rampant power cuts even in suburban areas. b. Continuous DG running is not allowed in urban and semi-urban areas citing noise and disturbance by local community c. Ongoing road expansions and other infra expansion results into rampant fiber cuts despite operators spending heavily in fiber network surveillance d. Restrictions in accessing cell sites for maintenance after evening hours mostly in dense urban and urban areas. e. Mobility restrictions on telecom operations especially after evening hours staff on

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					<p>account of local disturbances, safety concerns.</p> <p>f. Issues of theft (DG, fuel, Batteries, Antenna feeder cable) in some part of geography in most LSAs.</p> <p>g. The response time to restore outages can vary from few hours to few days based on above mentioned points.</p> <p>h. Typically single cell outages are on account of HW failures in most cases and can consume more than 1 day for rectification since most LSAs are covering huge geographies which involves transportation & logistic issues.</p> <p>10. Therefore, this reduction from 2 % to 1 %, i.e. increase by 100% is way too stringent and does not consider above factors which are beyond the control of TSPs.</p> <p>11. It is pertinent to mention that such severe changes will lead to TSP(s) being shown as having non-compliant networks whereas presently the networks are compliant.</p> <p>12. Considering all above, the change in benchmark of this parameter is highly</p>

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					<p>unwarranted and it should be retained at existing \leq 2%.</p> <p><u>Assessment Period:</u></p> <p>13. Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not monthly.</p>
43	3	6(1)(A)(i)(d)	<p>Reporting of significant network outage to the Authority within 24 hrs of start of the outage (Services not available in a district or State for more than 4 hours)</p> <p>Benchmark: 100%</p> <p>Method and Assessment Period: All incidence of significant network outage over a period of month.</p> <p>Note: For significant network outages of > 24 hrs: Proportional rent rebate as per plan charges for affected number of days shall be credited in next bill for post-paid consumers registered</p>	<ol style="list-style-type: none"> <u>Parameter:</u> This should be part of reporting requirement and not a QoS parameter. <u>Reporting Time Period:</u> Sufficient and reasonable time of 1 week should be provided for such reporting. <u>Rent Rebate:</u> The rent rebate provision should be dropped. 	<p><u>Reporting requirement in lieu of QoS parameter:</u></p> <ol style="list-style-type: none"> This clearly appears to be a reporting requirement rather than to be a QoS parameter. Therefore, we request it to be moved under Regulation 13 of Section VI. <p><u>Sufficient Time required for Reporting:</u></p> <ol style="list-style-type: none"> Reporting of major network outages to TRAI during the restoration period or 24 hours from the actual outage taking place, would be an enormous task which would require significant time and effort. We would like to highlight that the TSP's priority during an outage is to restore any such outage



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			<p>in the district. For the pre-paid consumers registered in the district, the validity of their pre-paid accounts as on outages start date shall be increased by equal number of days.</p>		<p>and to provide seamless coverage to its consumers, whereas any reporting requirement would put additional load on the TSPs during the restoration phase.</p> <ol style="list-style-type: none"> 5. The root cause of such major outage and corrective actions taken forms part of the process of the TSPs for any such outage. This generally involves, apart from their key network SPOCs specialized for such incidences, teams investigating the fault, restoration team and other relevant teams to analyze and take corrective measures including financial approvals in case of associated major restoration work. 6. This was discussed by the industry with TRAI earlier and this requirement was informed to the industry only as a reporting that too without any financial disincentive. At that time also, industry had sought atleast two working days. The background for this requirement was that TRAI should be aware of any network outage in case there is any query from competent authority or media. 7. As such, this requirement has no linkage to consumer experience and this should be treated only as a reporting requirement, without FD.



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					<p>8. Moreover, this would result in TSPs being forced to withdraw their services from such areas of high network outage in case of Regulation and compensation being sought by TRAI in the proposed Regulations.</p> <p>9. For us to report this as a QoS parameter/compliance having financial disincentive, adequate time is required. We request TRAI to provide atleast 7 working days to report this network outage information.</p> <p><u>Rent Rebate Technically Infeasible in Mobile Networks:</u></p> <p>10. TSPs put immense effort and work relentlessly to restore network outages in shortest possible time. At times, the issues that lead to such extended downtime are beyond the control of TSPs.</p> <p>11. Such rent rebate could have been theoretically possible in wireline where services are being provided at a fixed location, however, by the very nature of cellular services being mobile, it is next to</p>

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					<p>impossible to find out users impacted by outage.</p> <p>12. Further, it would give rise to complications if a consumer has already used tariff quota within the same day (during which network outage happened).</p> <p>13. It is important to note that even the draft regulation doesn't provide any measurement methodology for calculating such rent rebates.</p> <p>14. There would be various scenarios accentuating the technical infeasibility, some of which are listed below:</p> <ul style="list-style-type: none"> a. Subscriber, not residing in the area, but has visited the area where network outage is experienced. b. Subscriber residing in the area where network outage has happened, but is not present in the area when the outage is experienced. c. Subscriber present in the network outage area only for a short duration instead of complete

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					<p>duration for which the network outage was experienced.</p> <p>d. Subscriber present in the area, but handset is switched off.</p> <p>15. This would also involve potential risks of consumer complaints and lawsuits.</p> <p>16. Furthermore, such obligation will discourage the TSPs to provide and extend their services where necessary infrastructure availability is not optimal, inconsistent or not guaranteed.</p> <p>17. It is important for TRAI to draw a balance between coverage being extended to those challenging areas v/s the network outage.</p> <p>18. Considering all above, the provision related to rent rebate should be dropped in case of cellular networks.</p>
44	3	6(1)(A)(ii)	Voice Connection Establishment (Accessibility)		

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45	3	6(1)(A)(ii)(a)	<p>Call Set-up Success Rate for Circuit Switched Voice or Session Establishment Success Rate for VoLTE or DRB Accessibility success rate for VoNR, as applicable (within licensee's own network).</p> <p>Benchmark: \geq 98%</p> <p>Method and Assessment Period: On average basis over a period of one month</p>	<ol style="list-style-type: none"> Benchmark: There should be no change in the benchmark. It should be retained at \geq95% as per the existing regulation. Assessment Period: The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly. 	<p>Benchmark:</p> <ol style="list-style-type: none"> TRAI, in its consultation paper at para 3.2.2 (iv), has acknowledged upon analysis of past few PMRs that all the service providers are having much better performance than the current benchmark and in most cases, the benchmark of 98% CSSR has been achieved by the TSPs. However, the consultation and draft regulation chooses to discourage and disincentivize improved performance with a more stringent benchmark i.e. 95 % to 98% (steep rise by >200%). We would like to highlight that there has been significant overall improvement in voice and data services which are not just limited to improvement of "Setup success rate". Initiatives through technological interventions / advancements are practiced across all domains (Radio, CS/PS Core, and Transport) and not aimed at improving any single KPI parameter but overall service level improvements. Advancements like voice traffic migration to VoLTE, introduction of Voice over Wi-Fi (VoWi) have improved overall voice experience.

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					<p>5. Hence, we strongly submit that any improvement in KPI should not be rewarded by stricter benchmark.</p> <p><u>Assessment Period:</u></p> <p>6. Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not Monthly.</p>
46	3	6(1)(A)(ii)(b)	SDCCH Congestion / Paging Channel Congestion/RRC Congestion Benchmark: ≤ 1% Method and Assessment Period: On average basis over a period of one month	<u>Assessment Period:</u> The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	<u>Assessment Period:</u> Error! Reference source not found.
47	3	6(1)(A)(ii)(c)	Traffic Channel congestion i.e. TCH, RAB, E-EAB, EN-DC (E-UTRAN New Radio Dual Connectivity for NSA to access 4G and 5G both networks at same time) or DRB (Data Radio Bearer for	<u>Assessment Period:</u> The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	<u>Assessment Period:</u> Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not Monthly.

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			SA) Congestion Benchmark: $\leq 2\%$ Method and Assessment Period: On percentile basis over a period of one month		
48	3	6(1)(A)(iii)	Voice Connection Maintenance (Retainability)		
49	3	6(1)(A)(iii)(a)	Network QoS DCR Spatial Distribution Measure for	<p>1. Parameter: The Dropped Call rate parameter should be technology agnostic and it shouldn't be specific to 2G/3G and 4G/5G.</p> <p>2. Benchmark: The benchmarks should continue as per the existing regulation only.</p> <p>3. Assessment Period: The assessment period for this QoS parameter (including all</p>	<p>Parameter:</p> <p>1. We would also like to bring to your attention on the provision of 2G services across the country. These services are only being extended to public as a social obligation instead of any business interests.</p> <p>2. In this regard, we would like to submit that there have been no new developments in these technologies. Further, 2G being an older and outgoing technology, no further investments or roll-out can be planned.</p> <p>3. Furthermore, due to more and more roll-out of 4G networks, the 2G cells have a substantial ratio of cells with low traffic volumes. Due to the low volume of traffic handled by these cells, even a</p>
50	3	6(1)(A)(iii)(a)(I)	Circuit Switched (2G/3G) network [CS_QSD(92, 92)] Benchmark: $\leq 2\%$ Method and Assessment Period: On percentile basis over a period of one month		
51	3	6(1)(A)(iii)(a)(II)	Packet Switched (4G/5G and beyond) network [PS_QSD(96, 96)] Benchmark: $\leq 2\%$ Method and Assessment		

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
			Period: On percentile basis over a period of one month	parameters) should be retained to Quarterly instead of Monthly.	<p>few call drops may reflect high call drop rate in those cells. The low usage cells clubbed with the uncontrollable variable factors, may not represent a true picture about a network's performance.</p> <p>4. Therefore, if 2G/3G performance is seen in isolation, it will show a comparatively higher call drop value as compared to technology agnostic or stand-alone 4G value. This has been demonstrated to TRAI during earlier discussions.</p> <p>5. Also, consumers do not correlate call drops with any technology, be it 2G or 4G. Similarly, even today when 5G has been implemented today the voice is going over 4G, and it doesn't invite any additional consumer concern.</p> <p>6. Therefore, the Dropped Call rate parameter should be technology agnostic and it shouldn't be specific to 2G/3G and 4G/5G.</p> <p>7. However, if Dropped Call Rate parameters (Qst, Qtd) benchmark are prescribed separately for 2G/3G and 4G/5G, it will lead to TSPs becoming perpetual non-compliant, for giving 2G services as a social obligation. Besides huge financial disincentive, another major consequence of this would be withdrawal of 2G services.</p>
52	3	6(1)(A)(iii)(b)	Network QoS DCR Temporal Distribution Measure for		
53	3	6(1)(A)(iii)(b)(I)	Circuit Switched (2G/ 3G) network [CS_QTD(97, 90)] Benchmark: $\leq 3\%$ Method and Assessment Period: On percentile basis over a period of one month.		
54	3	6(1)(A)(iii)(b)(II)	Packet Switched (4G/5G and beyond) network [PS_QTD(97,96)] Benchmark: $\leq 3\%$ Method and Assessment Period: On percentile basis over a period of one month		

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					<p>8. It is very much certain that withdrawal of 2G services as a consequence of a regulatory mandate will cause huge public outcry in terms of service deniability to customers who are mostly at the bottom of pyramid.</p> <p>9. We once again recommend that the Dropped Call rate parameter should continue to be technology agnostic i.e. performance for all technologies (2G, 3G, 4G, 5G) aggregated together.</p> <p><u>Benchmark:</u></p> <p>10. As per the existing parameter measured at QSD (90,90) assessed at Quarterly level, a cell is declared as defaulting if it crosses bouncing busy hour (BBH) drop value of 2% in 9 days out of 90 days of Quarter.</p> <p>11. Now, as per the proposed regulation, the same measurement is changed from Quarter (90 days) to Month (30 days), along with change in thresholds of QSD from QSD (90,90) to QSD(92,92) for 2G/3G and QSD(96,96) for 4G.</p> <p>12. In this case, the cell will be considered as defaulting if its BBH drop value crosses 2% in</p>



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					<p>more than 2 days out of 30 days for 2G /3G and 1 day out of 30 days for 4G.</p> <p>13. It is to be noted that with these proposed stringent norms, TSPs may be forced to think about deploying BTSs where infrastructure (EB power availability, Fiber reachability, vulnerable to local disturbances) is neither up to the mark, nor support achieving desired QoS levels enforced by TRAI.</p> <p>14. It is submitted that such parameters will act as deterrent to the objective of extending the services in rural areas.</p> <p>15. Further, we would like to bring to your kind attention that while setting QSD, QTD thresholds in earlier regulation (2017), computation / assessment / validation was done for sample service areas. However, the same has not been shared this time.</p> <p>16. In addition to above, it is well known fact that in diverse circumstances (listed below) , a cell crossing BBH drop value of 2 % in 1 out of 30 days is neither in control of TSP nor that</p>

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					<p>single instance is useful in network optimization related actions.</p> <ul style="list-style-type: none"> a. Fiber Cut (Even if protection path is available, retainability of ongoing call is not guaranteed) b. Cell serving a traffic jam condition c. Power outage (especially at locations where DG is not allowed/deployed) d. One odd call drop in a cell handling extremely low volume calls e. Public events / Large gatherings f. Calls generated from cell edge and deep indoors is more vulnerable for failures g. Sudden hardware failures h. Microwave link connecting the BTS fading due to extreme weather (heavy rain ,fog) i. Intermittent interference due to ducting phenomenon j. Interference due to rampant deployment of illegal signal booster/repeater k. Impact on day to day operations due to local disturbances ('hadtal/bandh') <p>17. Hence, we urge the Authority to kindly compute the QoS values by using proposed threshold using the raw data submitted by the TSPs as part of QoS reporting as the proposed values are unachievable.</p>



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					<p>18. According to our assessment, multifold tightening of thresholds (changing assessment period from Quarterly to Monthly, Splitting Qsd/Qtd at technology level and changing percentile thresholds) will lead to VIL being non-compliant.</p> <p>19. We strongly submit that no amount of good optimization practices or investments can take care of above aberrations.</p> <p>20. Globally also, such optimization practices being carried out by TSPs are not aimed at individual experience events like drop / congestion and are aimed at minimizing average experience. The KPI trends and consistency of poor experience events is confirmed before any intervention is done. Thus, QoS evaluation on few odd events does not lead to any corrective/mitigation step from network perspective whereas TRAI's new proposal may show a TSP non-compliant.</p> <p>21. Considering all above, there should be no change in the existing parameters as well as benchmarks.</p> <p><u>Assessment Period:</u></p>

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					22. Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not monthly.
55	3	6(1)(A)(iii)(c)	Connections with good voice quality [Circuit Switched or Voice over LTE (VoLTE) or VoNR as applicable] Benchmark: $\geq 95\%$ Method and Assessment Period: On average basis over a period of one month	Assessment Period: The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	Assessment Period: Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not Monthly.
56	3	6(1)(A)(iii)(d)	DL Packet Drop Rate for Packet Switched Network (4G/5G and beyond) [DLPDR_QSD(96, 96)] Benchmark: $\leq 2\%$ Method and Assessment Period: On percentile basis over a period of one month	1. Parameter: These parameters should not be part of the regulation as the main parameter "DCR" is already included in the regulation.	1. This parameter was introduced as part of QoS regulation parameter with the assumption that it has impact on voice service. 2. Further, there are many technical parameters which are related to voice services and are only for engineering analysis and cannot be directly related to Drop Call Rate.
57	3	6(1)(A)(iii)(e)	UL Packet Drop Rate for Packet Switched Network (4G/5G and beyond) [ULPDR_QSD(96, 96)] Benchmark: $\leq 2\%$	2. Assessment Period: The assessment period for this QoS parameter (including all parameters) should be	3. It is to be noted that in case of mobility, voice calls are dynamically handled by triggering handover to different cell/layer/technology etc. when multiple radio related degradations are reported by mobile including signal

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			Method and Assessment Period: On percentile basis over a period of one month.	retained to Quarterly instead of Monthly.	<p>strength quality, BLER, SINR, Packet drop/loss. Their sub KPIs should not be part of regulation as such.</p> <p>4. Measuring these parameters in "Spatial distribution manner" is only a statistical exercise and does not lead into any meaningful outcomes.</p> <p><u>Assessment Period:</u></p> <p>5. Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not monthly.</p>
58	3	6(1)(A)(iv)	<p>Messaging: Successful SMS delivery within service provider's network in less than 20 seconds. Benchmark: \geq 95%</p> <p>Method and Assessment Period: On percentile basis over a period of one month</p>	<p>1. <u>Parameter:</u> This parameter should be dropped.</p> <p>2. <u>Assessment Period:</u> In case TRAI decides to retain this parameter, the assessment period should be retained to Quarterly instead of Monthly.</p>	<p>1. As per the SMS call flow, if the SMS is not delivered in the first attempt due to reasons like Absent Subscriber (out of coverage / extremely poor coverage), Handset memory full, SMS feature not supported, SMS MT busy, it goes into retry. Hence, it is likely that delivery may exceed 20 seconds period for reasons beyond operator's control.</p> <p>2. There is no prevailing practice of capturing the KPI of "Time taken for SMS delivery". Also, set of KPIs that are delivered by SMSC</p>

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					<p>does not capture this KPI. There are different types of SMSs (P2P, A2P, P2A, I2P) also involving third parties using independent platforms.</p> <p>3. It is practically infeasible to measure and assure delivery of reports in 20 seconds because of dynamics involved in various types of SMS.</p> <p><u>Assessment Period:</u></p> <p>4. Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not monthly.</p>
59	3	6(1)(B)	Customer Service Quality Parameters:		
60	3	6(1)(B)(v)	<p>Metering and billing accuracy- post paid Benchmark: $\leq 0.1\%$ Explanation: Not more than 1 complaint per 1000 customers i.e. 0.1% complaints for bills issued should be raised. Method and Assessment</p>	<p><u>Assessment Period:</u> The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.</p>	<p><u>Assessment Period:</u> Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not Monthly.</p>

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			Period: All Bills issued in the month.		
61	3	6(1)(B)(vi)	Metering and billing accuracy- pre-paid. Benchmark: $\leq 0.1\%$ Explanation: Not more than 1 complaint per 1000 customers i.e. 0.1% complaints for metering, charging, credit, and validity should be raised Method and Assessment Period: One month	Assessment Period: The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	Assessment Period: Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not Monthly.
62	3	6(1)(B)(vii)	Resolution of billing/ charging complaints within four weeks Benchmark: 100% Method and Assessment Period: One month	<ol style="list-style-type: none"> Benchmark: The benchmarks should continue as per the existing regulation only i.e. 98% for 4 weeks and 100% for 6 weeks. Assessment Period: The assessment period for this QoS parameter (including all parameters) should be 	Benchmark Unachievable in Some Cases: <ol style="list-style-type: none"> We would like to submit that we have been following a robust process to meet this parameter and provide enhanced experience to consumer with complaint resolution at the earliest possible, on best effort basis. However, there are certain scenarios where it is practically infeasible to resolve such complaints within the proposed timeline of 4 weeks for 100% cases.

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				retained to Quarterly instead of Monthly.	<p>3. Further, no details have been shared under the consultation paper about any substantial number of consumer feedback requiring a stringent change.</p> <p>4. At present, we are achieving a TAT of 99.99% within 4 weeks. There are minimal cases that spill over beyond 4 weeks.</p> <p>5. Moreover, we have made robust internal processes based on which we are achieving 96% complaint closure within 7-10 days' time which is way lesser than the benchmark under QoS regulation, thereby ensuring customer satisfaction. This performance is achieved irrespective to the type of complaint or state/district/UT etc. to which the customer belongs.</p> <p>6. We have not received any substantial consumer feedback that their complaints are not resolved within reasonable time.</p> <p>7. Please note that in case of billing cases including related to international roaming, there is a</p>



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					<p>dependency on receiving CDRs from other countries. In such cases, TAT tends to spill over beyond 4 weeks for resolution post reconciliation. These are practical scenarios which are impossible to be resolved within 4 weeks.</p> <p>8. In this regard, we would like to draw your attention towards factual analysis i.e.</p> <ul style="list-style-type: none"> a. Out of total 749 complaints received in June, 2023 for Mumbai LSA, one complaint, in case of international roaming, went beyond 4 weeks. b. Out of total 225 complaints received in Jun'23 for AP LSA, 2 complaints related to billing plan were resolved beyond 4 weeks. c. Out of total 237 complaints received in June, 2023 for AP LSA, 3 complaints related to billing plan were resolved beyond 4 weeks. <p>9. Hence, we strongly recommend that the benchmark for this parameter should be continued as per existing Regulation (i.e. 98% for 4 weeks & 100% for 6 weeks).</p>

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					<p><u>Assessment Period:</u></p> <p>10. In case of monthly reporting of this data, there will be huge spill overs (overlapping complaints for multiple months) considering the 4 weeks proposed TAT leading to ambiguity in the reporting mechanism.</p> <p>11. Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not monthly.</p>
63	3	6(1)(B)(viii)	Application of credit/ waiver/ adjustment to customer's account within one week from the date of resolution of complaints. Benchmark: 100% Method and Assessment Period: One month	<u>Assessment Period:</u> The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	<u>Assessment Period:</u> Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not Monthly.
64	3	6(1)(B)(ix)	Response Time to the customer for assistance		

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65	3	6(1)(B)(ix)(a)	Accessibility of call center/ customer care. Benchmark: ≥ 95% Method and Assessment Period: One month	Assessment Period: The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	Assessment Period: Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not Monthly.
66	3	6(1)(B)(ix)(b)	Percentage of calls answered by the operators (voice to voice) within ninety seconds. Benchmark: ≥ 95% Method and Assessment Period: One month	Assessment Period: The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	Assessment Period: Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not Monthly.
67	3	6(1)(B)(x)	Termination/ closure of service within seven days. Benchmark: 100% Method and Assessment Period: One month	Assessment Period: The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	Assessment Period: Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not Monthly.
68	3	6(1)(B)(xi)	Refund of deposits within 45 days after closures. Benchmark: 100% Method and Assessment Period: One month	1. Benchmark: The benchmark should continue as per the existing regulation only i.e. refund of deposits	Parameter: 1. The TSPs have to wait for the bill generation, due date to get over and further adjust the deposits/excess amount, if any to the customer's

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				<p>within 60 days after closures.</p> <p>2. <u>Assessment Period:</u> The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.</p>	<p>account. To complete this process, the existing timeline of 60 days is appropriate.</p> <p>2. While we foresee achieving the TAT of proposed 45 days in scenarios where the customer has provided us with bank /online transfer details, however, in case of refund in the form of physical cheque, the TAT of 60 days is required.</p> <p>3. As per analysis done by our team, 3% of refund gets processed beyond 45 day across all the circle, which can lead to penalty every month in case refund timelines are reduced.</p> <p>4. Therefore, the benchmark should continue as per the existing regulation only i.e. refund of deposits within 60 days after closures.</p> <p><u>Assessment Period:</u></p> <p>5. Kindly refer to our detailed comments at the row with Sr. No. 69, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not monthly.</p>

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69	3	6	<p>Applicable to all parameters where:</p> <p>Method and Assessment Period: One month</p>	<p>Assessment Period: The assessment period for all QoS parameters should be retained to Quarterly instead of Monthly.</p> <p>These comments should be read as part and parcel of each of the comments to the respective parameters.</p>	<ol style="list-style-type: none"> 1. TRAI has proposed humungous change in the QoS norms, by proposing the reduction in assessment period from Quarterly to Monthly. 2. This will affect all aspects of quality of services i.e. compliance, measurement and reporting of QoS norms and create huge burden on TSPs in terms of resources, network infrastructure, scaling up of IT systems besides, leaving no opportunity for putting in place any mitigating measures if the performance goes down for a small duration. 3. In certain parameters, it would be infeasible to comply with the norms as the possibility of error goes very high proportionately, by reducing the data size from quarterly to monthly. 4. In most of the parameters, even a single instance of lower performance will result into non-compliance and consequent financial disincentive. 5. Further, Monthly assessment will also not help put in place corrective measures for aberration in network/IT system's performance, as the factors

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					<p>can be beyond the control of TSP and also, practically no system can work with 100% accuracy at all the times.</p> <p>6. Therefore, we strongly urge TRAI for adopting a pragmatic approach and not to reduce the assessment period from Quarterly to Monthly.</p>
70	3	6(2)	<p>The compliance of the parameters specified in sub-regulation (1) shall be reported to the Authority by the service provider.</p>	<p><u>Reporting Frequency:</u> The reporting and assessment of QoS parameter under regulation 6(1) should be sought only on quarterly basis.</p>	<p><u>Reporting Frequency:</u> In the proposed Regulation, TRAI has not specified the frequency of reporting for the parameters mentioned at Regulation 3(1), 6(1) and 9(1). However, in Chapter 4 at point no. 4.c., it has been mentioned that the reporting of these parameters would have to be done on a monthly basis. In this regard, we would like to submit as follows:</p> <ol style="list-style-type: none"> 1. Monthly reporting of all these parameters will put a huge burden on the existing resources, even if any online reporting methodology is adopted. 2. It will increase the reporting requirements tremendously. Further, TRAI has also put in Financial Disincentive on delay in reporting.

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					<p>3. These will be significantly against the principles of Ease of Doing Business.</p> <p>4. Therefore, reporting and assessment of QoS parameter should be sought only on quarterly basis.</p>
71	3	7	Quality of Service parameter in respect of which compliance is to be monitored by the service provider and reported to the Authority.-		
72	3	7(1)	Every service provider providing access service (wireless) shall meet and monitor the benchmarks of the following QoS parameters, namely:-		
73	3	7(1)(1)	<p>Registration of demand for wireless services in case services cannot be provided due to non-availability of wireless service. Benchmark: 100% Method and Assessment Period: One quarter</p>	<p><u>Parameter:</u> This parameter should be removed from the proposed Regulation.</p>	<p><u>Parameter:</u></p> <ol style="list-style-type: none"> 1. There is no provision to capture such registration in any area which is not serviced by a TSP. Hence, in such areas, no QoS parameters can be captured. 2. The network expansion is carried out by the TSPs based on the techno-commercial feasibility and priority.

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					<p>3. Further, this parameter should not be part of the QoS and should therefore be removed from the proposed Draft QoS Regulations.</p> <p>4. Such requirement should ideally be carried out by TRAI/Government body, if required.</p>
74	3	7(1)(2)	<p>Service Coverage Benchmark:</p> <p>(i) Signal strength at street level shall be as specified in TSTP for rollout obligation issued by the Central Government for respective technology</p> <p>(ii) Signal strength in-vehicle shall be up to 10dBm below the street level signal strength for respective technology</p> <p>(iii) Signal strength for indoor as per applicable standard or as per rollout obligation for respective technology</p> <p>Method and Assessment Period: One quarter</p>	<p>Parameter: This parameter should be dropped from the draft regulation.</p>	<p>1. This parameter is part of the licensing norm.</p> <p>2. It will not be right if a same topic is regulated by both Licensor and TRAI. Hence, this provision should not be part of QoS regulation.</p> <p>3. Any change to the requirement will be akin to indirect change in the license conditions itself.</p> <p>4. Earlier these monitoring parameters were to be only monitored by TSPs without any reporting requirement and financial disincentives.</p> <p>5. However, the draft regulation has made this parameter triple stringent i.e. (a) introduction of reporting requirement, (b) compliance to be achieved as per the benchmark at LSA level and State/UT level, (c) FD on delayed reporting.</p>

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
75	3	7(1)(3)	Point of Interconnection (POI) Congestion for interconnection with circuit switched network(2G/3G) (on individual POI) at LSA level. Benchmark: ≤0.5% Method and Assessment Period: On average basis over one quarter.	<u>Parameter:</u> 1. This parameter should be dropped from the proposed regulation. 2. Bifurcation of parameter based on technologies should be removed from the proposed draft regulation.	<u>Parameter:</u> 1. The POIs for voice calls are technology neutral and do not cater specifically to 2G/3G traffic or 4G/5G traffic. 2. This has been due to organic deployment where additional capacities were created for new player 7-8 years back. 3. IP POIs are still at nascent stage and will increase gradually over next few years since this involves huge CAPEX involvement. 4. Further, if this parameter relates to transmission link monitoring, then we would like to submit that there are thousands of transmission links that contribute transport network in a LSA. Operations and maintenance of these links is routine operational activity and we believe there is no need to include this in regulatory framework.
76	3	7(1)(4)	Point of Interconnection (POI) performance for interconnection between packet switched networks(4G/5G) at LSA level. Benchmark: (i) Latency<30ms (ii) Jitter<20ms (iii) Packet loss<1% Method and Assessment Period: On average basis over one quarter.		
77	3	7(2)	The service provider shall monitor the compliance of	<u>Parameter:</u> Provisions of additional burden of	1. These are monitoring KPIs and in the existing regulation, these are not required to be reported.

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			the parameters and its benchmarks specified under sub-regulation (1) and furnish online quarterly report to the Authority within thirty days of the end of each quarter.	reporting and any consequent financial disincentive should be removed.	<p>2. Further, these do not directly influence customer experience.</p> <p>3. Therefore, provisions of additional burden of reporting and any consequent financial disincentive should be removed.</p>
78	3	7(3)	The service provider shall-		
79	3	7(3)(c)	provide to the Authority or any agency or representative authorized by the Authority, on demand, for verification, the primary data for the records maintained as per clause (b) above.	Only final report should be sought to be maintained. Primary data should not be sought.	The final report can be provided as specified by TRAI, however, primary data submission is not feasible as there are multiple data sources and different formats are used to prepare the final report.
80	4	QUALITY OF SERVICE (QoS) PARAMETERS FOR BROADBAND SERVICE (WIRELINE AND WIRELESS)			
81	4	9	Quality of Service Parameters for which compliance reports are to be submitted to the Authority.-		
82	4	9(1)	Every Service Provider having Internet Service Authorisation and providing broadband service shall meet the benchmarks for the following QoS parameters, namely:-		
83	4	9(1)(1)	Latency Benchmark (Wireless): <100 ms (in 4G and 5G network)	1. <u>Benchmark:</u> We recommend that the	<u>Parameter:</u>

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
			<p>Benchmark (Wireline): < 50ms Method and Assessment Period: On average basis over a period of one month</p>	<p>benchmark for this parameter (wireless) should be reduced in a phase-wise manner over a period of next few years i.e. reduce the threshold from current value of 250 ms to 200 ms and then to 150 ms gradually.</p> <p>2. Assessment Period: The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.</p>	<p>1. Latency is dependent on various entities like CSP network, ISP service provider partner, CDN caching policies, end user application server performance etc. All of these elements are not in control of CSPs. In view of these dynamics, we do not see thresholds are being set by regulators worldwide. Below facts may impact latency variation.</p> <p>a. Decisions outside purview of TSP- It is pertinent to mention here that in many cases the decisions taken by non-licensees like CDN providers also affect the latency. For instance, a content provider's decision to have or not have CDN in a TSPs network will impact the latency.</p> <p>b. Security Measures: Security measures like firewalls, intrusion detection systems, and encryption can introduce processing delays, affecting overall latency.</p> <p>2. The Authority should also consider various operational challenges and factors:</p> <p>a. Backhaul Network Challenges: Achieving higher benchmarks, regardless of deploying</p>



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					<p>advanced packet core networks with LTE, LTE-Advanced, or 5G technology, depends on the quality and capacity of the backhaul network. Challenges such as challenging terrain, Right of Way (RoW) issues, the cost of fiberizing base transceiver stations (BTS), local issues, and more can impact network performance.</p> <p>b. Routing Variations: Depending on route occupancy and network conditions, traffic may take different paths, such as the shortest or longest route. This variation in routing can lead to latency differences.</p> <p>c. Submarine Cable Damage: In the event of damage to submarine cables or major fiber cuts, traffic may be rerouted through alternative paths, resulting in higher observed latency.</p> <p>d. Network Congestion: High numbers of connected users and a vast subscriber base, especially when compared to other nations, can lead to network congestion, resulting in higher observed latency.</p>

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					<p>e. Interference: Wireless networks, in particular, can suffer from interference, leading to latency variations. Interference may arise from physical obstacles, competing wireless signals, or environmental factors.</p> <p>f. Cloud-Based Services: The use of cloud-based services can introduce additional latency, as data needs to travel to and from remote cloud servers. The geographical location of these servers can impact latency.</p> <p>g. Decisions outside purview of TSP- It is pertinent to mention here that in many cases the decisions taken by non-licensees like CDN providers also affect the latency. For instance, a content provider's decision to have or not have CDN in a TSPs network will impact the latency.</p> <p>h. Security Measures: Security measures like firewalls, intrusion detection systems, and encryption can introduce processing delays, affecting overall latency.</p> <p>3. Considering all above, we recommend that the benchmark for this parameter (wireless)</p>

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					<p>should be reduced in a phase-wise manner over a period of next few years i.e. reduce the threshold from current value of 250 ms to 200 ms and then to 150 ms gradually.</p> <p><u>Assessment Period:</u></p> <p>4. Kindly refer to our detailed comments at the row with Sr. No. 88, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not monthly.</p>
84	4	9(1)(2)	<p>Jitter Benchmark (Wireless): < 50ms (in 4G and 5G network) Benchmark (Wireline): < 40 Method and Assessment Period: On average basis over a period of one month</p>	<p><u>Parameter:</u> This parameter should be dropped.</p>	<p>1. Jitter is a measure for variance in latency and this micro level generally used for dip stick testing / troubleshooting. This parameter is not available in standard OSS reports also.</p> <p>2. Hence, we would like to submit that this parameter does not serve any purpose especially when we are already including “latency” in QoS parameters and should be removed from the proposed draft regulation.</p> <p>3. Further, the crowdsourced analytics platforms provide indicative values of parameters like Downlink/ uplink speed, Latency, Jitter along with different experience matrices. TRAI may like to adopt to these platforms or build these</p>



Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					capabilities in TRAI's "My Speed test" application. 4. Hence, we would like to submit that this parameter does not serve any purpose and should be removed from the proposed draft regulation.
85	4	9(1)(3)	PDP context activation success rate for wireless data service. Benchmark (Wireless): $\geq 95\%$ Benchmark (Wireline): - Method and Assessment Period: On average basis over a period of one month	<u>Assessment Period:</u> The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	<u>Assessment Period:</u> Kindly refer to our detailed comments at the row with Sr. No. 88, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not Monthly.
86	4	9(1)(4)	Packet drop rate Benchmark (Wireless): $< 2\%$ Benchmark (Wireline): $\leq 1\%$ Method and Assessment Period: On average basis over a period of one month		
87	4	9(1)(5)	Minimum download and upload speed against the minimum subscribed speed	1. <u>Parameter and Benchmark:</u> Correction needs to be	1. We would like to bring to your notice that presently we are not offering plans with differentiated speeds.

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
			<p>in offered data plans. Benchmark (Wireless): >80% of the minimum speed Benchmark (Wireline): 100% of the minimum speed. Method and Assessment Period: On average basis over a period of one month</p>	<p>made in the language of the parameter so that it is only applicable if different speeds are offered by a TSP under different plans.</p> <p>2. <u>Assessment Period:</u> The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.</p>	<p>2. Plans, being offered to consumers, vary only in terms of data volume that a subscriber gets for a particular recharge plan and there is no speed prescribed in any plan.</p> <p>3. As TSP, we are providing data speed on 'as is, where is' basis and the data speed may vary depending upon various dynamic factors related to technical factors, technology, user device, coverage, etc. This information is provided to consumer under TRAI instructions only and we have reported this to TRAI also as part of reporting requirement under TTO.</p> <p>4. Hence, wordings in the regulation need to be changed. This parameter should apply only in case an operator is offering different speeds under different plans.</p> <p><u>Assessment Period:</u></p> <p>5. Kindly refer to our detailed comments at the row with Sr. No. 88, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not monthly.</p>

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88	4	9	<p>Applicable to all parameters where:</p> <p>Method and Assessment Period: One month</p>	<p>Assessment Period: The assessment period for all QoS parameters should be retained to Quarterly instead of Monthly.</p> <p>These comments should be read as part and parcel of each of the comments to the respective parameters.</p>	<ol style="list-style-type: none"> 1. TRAI has proposed humungous change in the QoS norms, by proposing the reduction in assessment period from Quarterly to Monthly. 2. This will affect all aspects of quality of services i.e. compliance, measurement and reporting of QoS norms and create huge burden on TSPs in terms of resources, network infrastructure, scaling up of IT systems besides, leaving no opportunity for putting in place any mitigating measures if the performance goes down for a small duration. 3. In certain parameters, it would be infeasible to comply with the norms as the possibility of error goes very high proportionately, by reducing the data size from quarterly to monthly. 4. In most of the parameters, even a single instance of lower performance will result into non-compliance and consequent financial disincentive. 5. Further, Monthly assessment will also not help put in place corrective measures for aberration in network/IT system's performance, as the factors

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					<p>can be beyond the control of TSP and also, practically no system can work with 100% accuracy at all the times.</p> <p>6. Therefore, we strongly urge TRAI for adopting a pragmatic approach and not to reduce the assessment period from Quarterly to Monthly.</p>
89	4	9(2)	<p>The compliance of the parameters specified in sub-regulation (1) shall be reported to the Authority by the service provider providing broadband service (wireless).</p>	<p>Reporting Frequency: The reporting and assessment of QoS parameter under regulation 9(1) should be sought only on quarterly basis.</p>	<p>Reporting Frequency: In the proposed Regulation, TRAI has not specified the frequency of reporting for the parameters mentioned at Regulation 3(1), 6(1) and 9(1). However, in Chapter 4 at point no. 4.c., it has been mentioned that the reporting of these parameters would have to be done on a monthly basis. In this regard, we would like to submit as follows:</p> <ol style="list-style-type: none"> 1. Monthly reporting of all these parameters will put a huge burden on the existing resources, even if any online reporting methodology is adopted. 2. It will increase the reporting requirements tremendously. Further, TRAI has also put in Financial Disincentive on delay in reporting.

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					<p>3. These will be significantly against the principles of Ease of Doing Business.</p> <p>4. Therefore, reporting and assessment of QoS parameter should be sought only on quarterly basis.</p>
90	4	9(3)	<p>The compliance of the parameters specified in sub-regulation (1) of regulation 3 and sub-regulation (1) of regulation 9 shall be reported to the Authority by all the service providers providing broadband service (wireline).</p> <p>Explanation: For the purposes of this regulation, 'wireline' shall include all fixed wireless and wireline medium including copper, fibre, cables etc.</p>	<p><u>Exclusion from applicability:</u> This parameter should not apply to connectivity solutions given to enterprise customers under wireline. An explicit clarification to this extent, should be provided by TRAI.</p>	<p><u>Exclusion from applicability:</u></p> <ol style="list-style-type: none"> 1. The QoS regulation and its parameters are prescribed to protect the interests of consumers at large such that they should be able to get a desired level of QoS. However, there are other services like Enterprise connectivity solutions, where these parameters would not be relevant. Further, VIL does not provide retail wireline connections but, provide connectivity solutions to the Enterprise customers. 2. To keep on providing the QoS report for wireline services requires additional resources but, it doesn't meet any purpose as such, we request TRAI to pragmatically review this requirement and exempt the Wireline services being offered to Enterprise customers, from the purview of QoS regulation. This would support Ease of Doing Business. Similar steps have been taken by TRAI

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					<p>in the past, whereby tariff reporting of plans to Enterprise customers was made as a quarterly report and not as detailed filing within 7 days of launch.</p> <p>3. Therefore, we request that the Wireline related parameters should only apply if a TSP is offering retail wireline connections. An explicit clarification in this regard should be mentioned in the QoS regulation.</p>
91	4	9(5)	Every service provider shall, in all its Internet service plans, indicate the minimum download and upload speed available to the consumers.	<p>Parameter: Correction needs to be made in the language of the parameter so that it is only applicable if different speeds are offered by a TSP under different plans.</p>	<p>1. We would like to bring to your notice that presently we are not offering plans with differentiated speeds.</p> <p>2. Plans, being offered to consumers, vary only in terms of data volume that a subscriber gets for a particular recharge plan and there is no speed prescribed in any plan.</p> <p>3. As TSP, we are providing data speed on 'as is, where is' basis and the data speed may vary depending upon various dynamic factors related to technical factors, technology, user device, coverage, etc. This information is provided to consumer under TRAI instructions only and we</p>

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
					<p>have reported this to TRAI also as part of reporting requirement under TTO.</p> <p>4. Hence, wordings in the regulation need to be changed. This parameter should apply only in case an operator is offering different speeds under different plans.</p>
92	4	10	Quality of Service Parameters in respect of which compliance is to be monitored by the service provider and reported to the Authority:		
93	4	10(1)	Every service provider having Internet Service Authorization and providing broadband service shall meet and monitor the benchmark of following QoS parameters, namely:-		
94	4	10(1)(i)	<p>Registration of demand for new wireline broadband connection irrespective of technical feasibility. Benchmark(Wireline): 100% Averaged/measured over a period: One month</p>	<p><u>Exclusion from applicability:</u> This parameter should not apply to wireline operators who are not in the business of giving retail broadband connections to individual subscriber. An explicit clarification to this extent, should be provided by TRAI.</p>	<p><u>Exclusion from applicability:</u></p> <p>1. The QoS regulation and its parameters are prescribed to protect the interests of consumers at large such that they should be able to get a desired level of QoS. However, there are other services like Enterprise connectivity solutions, where these parameters would not be relevant. Further, VIL does not provide retail wireline connections but, provide connectivity solutions to the Enterprise customers.</p>

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					<p>2. To keep on providing the QoS report for wireline services requires additional resources but, it doesn't meet any purpose as such, we request TRAI to pragmatically review this requirement and exempt the Wireline services being offered to Enterprise customers, from the purview of QoS regulation. This would support Ease of Doing Business. Similar steps have been taken by TRAI in the past, whereby tariff reporting of plans to Enterprise customers was made as a quarterly report and not as detailed filing within 7 days of launch.</p> <p>3. Therefore, we request that the Wireline related parameters should only apply if a TSP is offering retail wireline connections. An explicit clarification in this regard should be mentioned in the QoS regulation.</p>
95	4	10(1)(ii)	Successful packet data transmission download attempts Benchmark (Wireless): > 80% Benchmark(Wireline): > 95%	Assessment Period: The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	Assessment Period: Kindly refer to our detailed comments at the row with Sr. No. 98, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not Monthly.

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
			Averaged/ measured over a period: One month		
96	4	10(1)(iii)	Successful packet data transmission upload attempts Benchmark (Wireless): > 75% Benchmark(Wireline): > 90% Averaged/ measured over a period: One month	Assessment Period: The assessment period for this QoS parameter (including all parameters) should be retained to Quarterly instead of Monthly.	Assessment Period: Kindly refer to our detailed comments at the row with Sr. No. 98, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not Monthly.
97	4	10(1)(iv)	Maximum Bandwidth utilization of any Customer serving node to ISP Gateway Node [Intra-network] or Internet Exchange Point Link(s) Benchmark (Wireline and Wireless): < 80% link(s)/route bandwidth utilization during peak hours (TCBH) Averaged/ measured over a period: One month	1. Parameter: This parameter should be dropped. 2. Assessment Period: In case TRAI decides to retain this parameter, the assessment period should be retained to Quarterly instead of Monthly.	Parameter: 1. There are multiple transmission links that are part of delivering data /internet connectivity to user. Maintaining uptime / capacity of each of these links is part of routing Network operations. Maintaining peak hour utilisation < 80% cannot be related to QoS aspect of the users. 2. Hence, being in the purview of network design, this parameter should not be part of the purview of QoS and needs to be omitted. Assessment Period:

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					3. Kindly refer to our detailed comments at the row with Sr. No. 98, thereby providing justification that the assessment period for all QoS parameters should be Quarterly and not monthly.
98	4	10	Applicable to all parameters where: Method and Assessment Period: One month	<p>Assessment Period: The assessment period for all QoS parameters should be retained to Quarterly instead of Monthly.</p> <p>These comments should be read as part and parcel of each of the comments to the respective parameters.</p>	1. TRAI has proposed humungous change in the QoS norms, by proposing the reduction in assessment period from Quarterly to Monthly. 2. This will affect all aspects of quality of services i.e. compliance, measurement and reporting of QoS norms and create huge burden on TSPs in terms of resources, network infrastructure, scaling up of IT systems besides, leaving no opportunity for putting in place any mitigating measures if the performance goes down for a small duration. 3. In certain parameters, it would be infeasible to comply with the norms as the possibility of error goes very high proportionately, by reducing the data size from quarterly to monthly. 4. In most of the parameters, even a single instance of lower performance will result into non-

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					<p>compliance and consequent financial disincentive.</p> <p>5. Further, Monthly assessment will also not help put in place corrective measures for aberration in network/IT system's performance, as the factors can be beyond the control of TSP and also, practically no system can work with 100% accuracy at all the times.</p> <p>6. Therefore, we strongly urge TRAI for adopting a pragmatic approach and not to reduce the assessment period from Quarterly to Monthly.</p>
99	4	10(2)	The service provider shall monitor the compliance of the parameters and its benchmarks specified under sub-regulation (1) and furnish quarterly report to the Authority within thirty days of the end of each quarter.	Parameter: Provisions of additional burden of reporting and any consequent financial disincentive should be removed.	<p>1. These are monitoring KPIs and in the existing regulation, these are not required to be reported.</p> <p>2. Further, these do not directly influence customer experience.</p> <p>3. Therefore, provisions of additional burden of reporting and any consequent financial disincentive should be removed.</p>
100	6	RECORD KEEPING, REPORTING AND PUBLICATION OF QUALITY OF SERVICE PERFORMANCE			

Sl. No.	Chapter/ Section No.	Regulation No. / Clause No.	Proposed provision in Consultation Paper	Suggested modification	Justification / Global references with supporting data points if any.
101	6	12	Record Keeping:		
102	6	12(1)	The service provider shall maintain documented process of online collection and processing of data for each QoS parameter specified by the Authority under regulation 3, regulation 4, regulation 6, regulation 7, regulation 9 and regulation 10, as applicable, and submit to the Authority, within sixty days of notification of these regulations, the documented online process of collection and processing of data of each QoS parameter, indicating the correlation with the primary data which are derived from system counters or codes in Operation and Maintenance Centre or Network Management System or Mobile Switching Centre or telephone exchange, along	Reporting and online access: The regulation should only mandate providing the report (processed data) through online access. The requirement to provide primary/raw data should be dropped.	<ol style="list-style-type: none"> 1. We would like to submit that the various types of reports that are generated for internal monitoring, optimization, statutory reporting are not automated to the extent that they are delivered in “one click”. The preparation of reports involves multiple steps as below: <ol style="list-style-type: none"> a. Manual validation of data output that is fetched from systems. b. Manual filling of "codes" (for QSD/QT working) or cleanup of incorrect/illogical data points c. Manual collation of data in desired data in required formats. d. There is a team size of 8-10 members per service area for data collection, validation and preparation of reports in desired formats. e. LSA level reports are collated manually to generate national reports. 2. It is not realistic to develop a system that will generate reports on “one click”. Reports. TRAI will appreciate the fact that various reports that are submitted by Operators are published by TRAI only after churning the OPCO submitted reports manually after few weeks.

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			with any aggregation, transformation or computations applied including record keeping procedure.		3. The final report can be submitted on the portal as specified by TRAI, however, raw data submission is not feasible as there are multiple data sources and different formats are used to prepare the final report. These multiple data sources and systems cannot be integrated or uploaded on the portal.
103	6	12(2)	Every service provider shall maintain and provide online access complete and accurate records of primary and processed data relating to the compliance of benchmark of each QoS parameters specified in regulation 3, regulation4, regulation 6, regulation 7, regulation 9 and regulation 10, as applicable, in such manner and in such formats as may be directed by the authority, from time to time.		4. Therefore, the regulation should only mandate providing the report (processed data) through online access. The requirement to provide primary/raw data should be dropped.
104	6	13	Reporting.-		
105	6	13(1)	Every service provider shall create secure online system within six months of notification of these regulations for collection of	<u>Reporting and online access:</u> The regulation should only mandate	1. We would like to submit that the various types of reports that are generated for internal monitoring, optimization, statutory reporting are not automated to the extent that they are delivered in

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			<p>primary data, its processing, generation and submission of online compliance reports to the Authority with online access of required supporting primary data in respect of each QoS parameters specified under regulation 3 , regulation 4, regulation 6, regulation 7, regulation 9 and regulation 10 in such manner and format, at such periodic intervals and within such time limit as may be specified by the Authority, from time to time, by an order or direction.</p>	<p>providing the report (processed data) through online access. The requirement to provide primary/raw data should be dropped.</p>	<p>“one click”. The preparation of reports involves multiple steps as below:</p> <ol style="list-style-type: none"> a. Manual validation of data output that is fetched from systems. b. Manual filling of "codes" (for QSD/QTD working) or cleanup of incorrect/illogical data points c. Manual collation of data in desired data in required formats. d. There is a team size of 8-10 members per service area for data collection, validation and preparation of reports in desired formats. e. LSA level reports are collated manually to generate national reports. <ol style="list-style-type: none"> 2. It is not realistic to develop a system that will generate reports on “one click”. Reports. TRAI will appreciate the fact that various reports that are submitted by Operators are published by TRAI only after churning the OPCO submitted reports manually after few weeks. 3. The final report can be submitted on the portal as specified by TRAI, however, raw data submission is not feasible as there are multiple data sources and different formats are used to prepare the final

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					<p>report. These multiple data sources and systems cannot be integrated or uploaded on the portal.</p> <p>4. Therefore, the regulation should only mandate providing the report (processed data) through online access. The requirement to provide primary/raw data should be dropped.</p>
106	6	13(2)	<p>The benchmark of each QoS parameters specified in sub-regulation (1) shall be measured, reported, and complied at State or Union Territory (UT) and License Service Area level, as may be specified by order or direction issued by the Authority time to time: Provided that the Authority may notify list of districts and QoS parameters for measurement, reporting and compliance of QoS benchmarks based on identification of areas experiencing degraded QoS.</p>	<p><u>Parameter:</u> QoS parameters cannot be enforced to be measured, reported and complied on State/UT level. Hence, the provision for state/UT level should be dropped.</p>	<p><u>Compliance assessment at State-UT level is contrary to Licensing framework:</u></p> <p>1. Regulation 13(2) of the proposed Regulation stipulates that the benchmark of each QoS parameters shall be measured, reported and complied at State or Union Territory and License Service area level. Extract of the same is given as follows:</p> <p><i>(2) The benchmark of each QoS parameters specified in sub-regulation (1) shall be measured, reported, and complied at State or Union Territory (UT) and License Service Area level, as may be</i></p>

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					<p><i>specified by order or direction issued by the Authority time to time: Provided that the Authority may notify list of districts and QoS parameters for measurement, reporting and compliance of QoS benchmarks based on identification of areas experiencing degraded QoS.</i></p> <p>2. The License provided under Section 4 of Indian Telegraph Act, provides a defined geography viz License Service Area, on which the Licensing and Regulatory framework apply. There is no legal sanctity for category of multiple LSA licensee or pan-India LSAs licensee.</p> <p>3. While the license for access services is divided into 22 LSAs across Pan-India, there are 36 State-UTs across pan-India. This leads to complex scenarios where the state area will comprise of two LSAs e.g. Maharashtra State will be a combination of</p>

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					<p>Maharashtra LSA and Mumbai; Haryana State will be a combination of geography of Punjab LSA, Haryana LSA and Delhi LSA.</p> <p>4. In such scenario, it is not clear as to which LSA will be responsible for measurement, reporting and compliance of State-UT level QoS parameters. Further, it is not clear as to how one LSA can be expected to ensure QoS parameters over another LSA, even though if the licensed entity is same. Such conditions are fraught with serious legal and licensing implications, extent of which can't be comprehended fully at this stage. Even in case of National MNP i.e. one LSA to another LSA, within one licensed entity, the consumer has to go through all the KYC norms again.</p> <p>5. In our view, it is legally as well as technically not possible to measure, report and comply with QoS parameters on a State-UT level basis. If TRAI imposes such Regulation, it will be directly contrary to the license conditions.</p>

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					<p><u>Multiple compliance instances/FD against a QoS parameter in a single LSA</u></p> <p>6. As per the draft regulation, the performance of QoS parameters will be examined both at LSA as well as State/UT level.</p> <p>7. This will lead to complications of multiple compliance assessments in one LSA, sample scenarios given below:</p> <ul style="list-style-type: none"> a. In case of Madhya Pradesh (MP) LSA, if a TSP is found non-compliant for a specific parameter in states like MP as well as MP LSA, it is bound to attract double FD, both for the state as well as LSA. b. There can also be a case wherein 2 states, found non-compliant, are part of same LSA e.g. If both MP and Chhattisgarh states are non-compliant for a certain parameter, the TSP will be non-

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					<p>compliant for complete MP LSA as well and TRAI will impose FDs on each of such instance.</p> <p>c. In case of TSP being found non-compliant for a certain parameter in a metro city like Kolkata, such a city is bound to have the propensity to make the whole state of West Bengal non-compliant.</p> <p>8. Hence, the TRAI regulation will lead to QoS parameter for one geography (let's say MP state in first example given above) being assessed twice for compliance and consequent FD, if any. This is against the basic tenet of natural justice wherein one non-compliance cannot be penalized twice.</p> <p>9. We recommend that the QoS should continue to be mandated at Service Area level only since licensing is based on Service Area level. Within a single service area, there is varying mix of urban, sub urban & rural areas with varying geographies (hills, water</p>

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					<p>bodies, forests, habitation area, building sizes /densities, population density etc.).</p> <p>10. It is well established that the characteristics of different geographies within same service area are varying in nature in terms of Infrastructure (Electricity, Local issues) and operating conditions.</p> <p>11. Further, it is seen that various types of inhibiting factors of different magnitude operate across different geographies within the same service area.</p> <p>12. Hence, network KPIs if monitored at any other granularity than service area level, are bound to vary with respect to varying geographies.</p> <p><u>Existing Information on State/UT level:</u></p> <p>13. TRAI had earlier sought certain information to be provided on State/UT level without any compliance associated with it. At that time also, we, as well as other TSPs, highlighted the challenges and complications including licensing</p>

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					<p>framework and technical issues in providing such information.</p> <p>14. However, TRAI insisted for the same and the information was provided on a best effort basis, but with an understanding that no compliance can be associated with such State/UT level.</p>
107	6	14	Publication.-		
108	6	14(3)	Every service provider providing access service (wireless) shall publish on its website the geospatial service coverage maps indicating the street level and indoor coverage, as applicable, in cities and towns, highways, rail routes where voice or broadband data services are available.	<p>Parameter: This parameter should not be part of QoS regulation.</p>	<p>1. This parameter is already part of NIA, 2022 issued by DoT. Extract provided as below:</p> <p><i>To keep the customers informed about 5G roll out, the TSPs shall publish the network deployment map on their website depicting the areas where the services have been launched using 3300 MHz & 26 GHz bands.</i></p> <p>2. It will not be right if a same topic is regulated by both Licensor and TRAI.</p> <p>3. Hence, this provision should not be part of QoS regulation.</p> <p>4. Besides, the technological and geographical environment in India is diverse and changing</p>

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					<p>rapidly, which will make it impossible to update such coverage map on monthly basis.</p> <p>5. Updating the map on monthly periodicity will entail augmentation of substantial infrastructure and tools leading to huge cost in terms of systems, manpower and efforts.</p> <p>6. We understand globally also, only few countries have the requirement of updating such maps, though, it is to be done on half-yearly/yearly basis.</p>
109	7	CONSEQUENCES FOR FAILURE TO COMPLY WITH THE REGULATIONS			
110	7	15	Consequences for the failure of service providers to meet the benchmark of Quality-of-Service Parameters:		
111	7	15(1)	<p>If a service provider fails to meet the benchmark of QoS parameters specified under sub-regulation (1) of regulation 3 or sub-regulation (1) of regulation 6 or sub-regulation (1) of regulation 9, it shall, without prejudice to the terms and conditions of its licence, or the Act or rules or</p>	<p>1. There should be no change in FDs and existing provisions should continue.</p> <p>2. Further FDs should only be imposed with QoS parameter's assessment on quarterly basis.</p>	<p>1. It is recommended to avoid any increase in the financial disincentives.</p> <p>2. The monthly periodicity is bound to lead to higher FDs as amounts have been raised drastically and stringent assessment period and benchmarks have been proposed in various QoS parameters.</p>

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			<p>regulations or orders made, or directions issued, thereunder, be liable to pay an amount, by way of financial disincentive, not exceeding rupees one lakh per benchmark for the first contravention as the Authority may, by order, direct:</p> <p>Provided that if the service provider fails to meet the benchmark of the same parameter consecutively in two or more subsequent months, he shall be liable to pay, by way of financial disincentives, an amount not exceeding rupees one lakh fifty thousand for the second consecutive contravention and not exceeding rupees three lakhs for each consecutive contravention occurring thereafter, Provided further that no order for payment of any amount by way of financial</p>		<p>3. The probability of receiving a FD has been multiplied to 3 times from 4 times a year i.e. quarterly to 12 times a year, if assessed monthly.</p> <p>4. 3rd Contravention of NC increased from 2lacs to 3lacs</p>

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			<p>disincentive shall be made by the Authority unless the service provider has been given a reasonable opportunity of representing against the contravention of the regulation observed by the Authority.</p> <p>Explanation: If a service provider providing both access service (wireline) and broadband service (wireline) fails to meet the benchmark of the same QoS parameters specified under sub-regulation (1) of regulation 3 for both the services, it shall be liable to pay the financial disincentive, as specified in this regulation, for each service separately.</p>		
112	7	16	Consequences for failure of the service providers to submit compliance reports:		

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113	7	16(1)	<p>If a service provider contravenes the provisions of regulation 13, it shall, without prejudice to the terms and conditions of its licence, or the provisions of the Act or rules or regulations or orders made, or, directions issued, thereunder, be liable to pay an amount, by way of financial disincentive, not exceeding rupees twenty five thousand per report for every day during which the default continues, subject to the maximum amount of rupees seven lakh fifty thousand, as the Authority may, by order, direct:</p> <p>Provided that no order for payment of any amount by way of financial disincentive shall be made by the Authority unless the service provider has been given a reasonable opportunity of</p>	It is recommended to avoid any increase in the financial disincentives.	There could be an instance where there could be a delay due to various uncontrollable factors like system down or upgradation etc. Failure of report submission within timeline has been increased by 5 times per day 5k to 25K. This is huge increase considering there is no present failure in TSPs reporting the QoS reports.

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			representing against the contravention of the regulation observed by the Authority.		
114	7	17	Consequences for the failure of the service providers to pay financial disincentive within the stipulated time:		
115	7	17(1)	<p>If a service provider fails to make payment of financial disincentive under regulation 15 or regulation 16 within the stipulated period, it shall be liable to pay interest at a rate which will be 2% above the one year Marginal Cost of Lending Rate (MCLR) of State Bank of India existing as on the beginning of the Financial Year (namely 1st April) in which last day of the stipulated period falls. The interest shall be compounded annually.</p> <p>Explanation: For the purposes of this regulation,</p>	We request TRAI to drop this provision	<ol style="list-style-type: none"> 1. This provision is very harsh and is against the right of TSPs to seek review and remedy of TRAI's orders. 2. Further, Financial disincentives should not be looked at from the prism of revenue enhancement but, it should provide all reasonable opportunities to TSPs to adhere to norms.

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			a part of the month shall be reckoned as a full month for the purpose of calculation of interest and a month shall be reckoned as an English calendar month.		
116	8	19	Repeal and Saving.-		
117	8	19(1)	The Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service Regulations, 2009 (7 of 2009) and the Standards of Quality of Service for Wireless Data Services Regulations, 2012 (26 of 2012), Quality of Service of Broadband Service Regulations 2006 (11 of 2006) and the directions issued thereunder are hereby repealed.	<ol style="list-style-type: none"> 1. The proposed draft regulation should not be implemented. 2. In case TRAI decides to go ahead with such stringent regulation, the present regulation should continue till the implementation date of any new regulation. 	<ol style="list-style-type: none"> 1. Please refer to our comments to regulation 1(2) of draft Regulation given above. 2. While we reiterate that the proposed stringent QoS norms are unachievable and TRAI should consider adopting light touch regulation of QoS, in case TRAI disagrees with our contention and analysis, we urge the TRAI to provide a glide path of at least 5 years from the date of its issuance, for implementation. Such glide path / phase-wise approach is a prudent practice to implement huge changes through policy mandates. 3. Accordingly, the present regulation should continue till the implementation date of any new regulation.