Shri U.K. Srivastava  
Pr. Advisor (NSL)  
Telecom Regulatory Authority of India  
Mahanagar Doorsanchar Bhawan,  
Jawahar Lal Nehru Marg (Old Minto Road)  
New Delhi – 110 002

Subject: Comments to TRAI’s consultation paper on ‘Review of network related Quality of Service standards for Cellular Mobile Telephone Service’

Dear Sir,

At the outset Sistema Shyam TeleServices Limited (SSTL) welcomes the opportunity given by the Telecom Regulatory Authority of India (TRAI) to comment on its consultation paper on “Review of network related Quality of Service standards for Cellular Mobile Telephone Service”.

With reference to above please find attached our comments and point wise response on the said consultation paper.

We do hope that the authority will consider our views and comments while finalizing the guidelines in this regard.

Thanking You.

Yours sincerely,

For Sistema Shyam TeleServices Limited

Neera Sharma  
Chief Legal & Regulatory Officer

Sistema Shyam TeleServices Limited
Corp.Office : 334, Udyog Vihar, Phase-IV, Gurgaon - 122001, Tel: 0124-4812500, Fax: 0124-4812825.
Regd.Office: 3, MTS Tower, Amrapali Circle, Vaishali Nagar, Jaipur - 302021. CIN: U64201RJ1995PLC017779, Tel: 0141-5100343, Fax: 0141-5100390, Email: customercare@mtsindia.in, Web: www.mtsindia.in
Sistema Shyam TeleServices Limited (SSTL) welcomes the opportunity extended by TRAI to comment on its consultation paper on “Review of network related Quality of Service standards for Cellular Mobile Telephone Service”.

Quality of service is a factor of competition in the mobile market. Because of this, operators continuously strive to improve quality and adapt it to their business strategy.

The implementation of mobile number portability has facilitated customer migration from one operator to another. This makes it essential for mobile operators to invest in the quality of their services to keep customers satisfied and sustain growth. It is important to promote transparency in quality of service to facilitate user decision making rather than regulating the QoS.

The competitive markets with low regulation have more capacity to provide the quality of service that customers expect. The regulatory actions designed to improve quality of service in mobile communications must focus on being efficient and promoting the right incentives for mobile operators to adequately sustain and direct their investments. The regulatory framework must facilitate all types of agreements for active and passive infrastructure sharing and allow the use of public spaces and buildings.

There is no case to adopt financial disincentive approach, instead it is essential to work together to solve quality problems effectively.

Our specific comment on the issues raised in the consultation paper is as below:

Q1. In case QoS is mandated at a sub-service area level, which option (LDCA-wise or District Headquarter/ city/ town-wise or BTS-wise) you would recommend? Please comment with justifications.

QoS KPIs need to be monitored taking into account a large sample size i.e. at LSA level in order to check overall performance of the network. The
performance of network across a service area shall vary because of following reasons:

i) **Different geographical terrain and clutter across network** – We know that the terrain and clutter is not uniform across the network coverage geography. The QoS may be different in a hilly terrain when compared to that in plains. Similarly, at times, the network perception and QoS may also be different in dense clutter compared to that in open rural areas.

ii) **Coverage restriction at LSA & international border (Call drop, voice quality, CSSR)** – As part of regulatory compliance, the service coverage needs to be restricted to the Licensed Service Area itself. In order to comply to the regulatory norms, different techniques are used at the network level to limit the coverage leading to possible increase in call drops, degradation in voice quality and reduction in CSSR in these regions. Hence, the QoS KPIs will be very different in this region than in other areas/towns in the LSA.

iii) **Non blanket coverage in the LSA** – Most of the LSAs (except Metros) are composed of big cities, small towns and villages in general. Network is planned & installed by targeting an intended area of coverage. This target area may be a city, town, village, highway or a rail route. It is known that every BTS coverage is limited to certain distance based on the geography or terrain and coverage fades & eventually dies out if the BTS is standalone. The customer moving from these covered areas to non-covered areas is very likely to experience poor network since every part of the LSA cannot be covered fully.

iv) **Other issues like Power availability / law & Order** – Site performance gets impacted due to non-availability of power and site access is difficult in case of law & order problems. Delay in restoration of site has direct impact on outage and indirect impact on KPIs like SDCCH/TCH blocking, CSSR, TCH drop and voice quality of the neighboring sites.
Hence the performance in each zone/city/Village will be different. It is not possible to have different set of benchmarks for each of these areas in a service area to check the performance. We need to have benchmark at service area Level and at cell level to identify the worst performing cells for making action plan to improve network on daily basis.

Q2: How should the call drop rate calculated – either at the Licensed service area level calculated during TCBH, or calculated during the Cell Bouncing Busy Hour (CBBH) at BTS level should be the benchmark? Please give your views on each parameter, with justification.

The call drop should be calculated at LSA level during TCBH as it gives a complete picture of network during that hour. During this period, maximum traffic is handled by core network elements and more than 50% of cells are handling their maximum traffic.

Every cell has a different BBH hence monitoring the Call drop for BBH will not be possible and also would not give a correct picture of the network. We are already monitoring and analyzing Individual cell performance through QoS KPIs (% of cell having call drop more than 3% in BBH and %worst effected BTS due to outage).

Q3: How should the benchmark for the parameters be revised? Should it be licensed service area wise or district wise or BTS-wise or a combination? In such cases what should be the benchmarks? How should the benchmarks be measured? Please give your views on each parameter, with justification.

The benchmarks should be combination of LSA network level or at BTS level. The intent is to identify the worst BTS for further improvement in network performance and overall performance because it varies with uncontrollable factors which are highlighted in response to Q1. Hence there is no need to have other level monitoring because our objective is to improve the individual BTS performance that are performing below par.
Q4: How could the network parameters be technology agnostic? What are the parameters and benchmarks that are required to be defined? Please give your views with justifications.

The KPIs that are directly perceived by the customer can be technology agnostic like network availability, call set up success rate, drop rate, data speed. Barring network availability, the benchmarks should be kept different for different services like voice & Data and on technology deployed. For example; 3G network and 4G network cannot have same data throughput benchmark.

Q5: Do you think it is essential to mandate the TSPs to set the RLT parameter? If so what should be the criteria to set the value and the value that needs to be set. Please comment with justifications.

We wish to submit that RLT parameter is not available in CDMA network.

Q6: Do you think it will be appropriate to calculate call drop rate through CDR Meta data analysis? If so, what should be the benchmarks for such call drop rates calculated? Please comment with justifications.

The consultation paper itself states that calls getting terminated within 30 seconds not necessarily mean that they were dropped calls. In CDMA switch it is not possible to identify whether call drop has happened due to network related issue or device related issue. It is not possible for CDMA network to link CDR meta data to RF call drop so it is not appropriate to have benchmark for the same.

Q7: Do you think calculation of customer satisfaction index will help in QoE of the consumer? If so elaborate the methodology of the calculation of such indexes. What are the latent variable that need to be defined and how are they to be calculated? Please comment with justifications.

QoE is not a metric by itself and it is very subjective by nature. Experiences are actively constructed and developed by people interacting with the environment through a subjective process. While interacting with the environment, people experience sensations, perceptions and opinions. From user's perspective, various attributes of
the service such as cost, reliability, availability, usability, utility and fidelity have importance in determining experience in mobile networks. Therefore we believe that calculation of customer satisfaction index will not help in QoE of the consumer and the parameters and indices suggested by the Authority in the Consultation Paper cannot be used to decisively conclude upon QoS offered by TSPs.

Q8: What are your views on introducing a graded financial disincentives based on performance and what should be such quantum of financial disincentives for various parameters? Please comment with justifications.

SSTL's endeavor is to provide best services to it's customer. SSTL is doing its best to meet the benchmark and taking every possible step to provide best quality to its customer. We are of the view that imposing penalty for not meeting QoS benchmark will not help in improving performance. We are not in favor for imposition of penalty in first place. Instead of this a joint action plan/strategy needs to be worked out which can help in improving customer satisfaction. Even if TRAI wants to keep penalty then steep increase in the amount would not serve the purpose. The suggested penalty slab is too steep & harsh and it does not consider any improvement made over previous performance. Also, the Authority is well aware that TSPs today operates under lot of constraints which are at times beyond their direct control.

Thus we have following submission to make:-

i) There should not be any penalty at all. However, if the same cannot be done away with then the penalty for the first instance of not meeting the benchmark for any specific parameter may remain same as per current provision i.e. INR 50,000 per instance.

ii) Additional penalties for 2nd & 3rd consecutive default should not be imposed if improvement in performance is observed over previous quarters. However, if the performance short-fall is observed for 4th successive time then penalty may be imposed irrespective of improvements registered.
iii) Penalty may be imposed when a joint action plan is made and TSP refuses to work towards improvement. In most of the situations, things are beyond controls of TSP and they need Government agencies support to move forward.