## महानगर टेलीफोन निगम लि॰

(भारत सरकार का उद्यम) Mahanagar Telephone Nigam Ltd. (A Government of India Enterprise)

CIN: L32101DL1986GOI023501





MTNL/RA/TRAI CP-06/2017 Dated 20.07.2017

To,

The Advisor (B&PA) TRAI, New Delhi

Sub.: Comments on TRAI Consultation Paper dated 01.06.2017 on "Data Speed under Wireless Broadband Plans".

TRAI issued Consultation paper on 01.06.2017 on the aforesaid subject and asked the various stakeholders to comment on the issues involved in the consultation paper. In this reference following comments are submitted for consideration:

## PRELIMINARY SUBMISSIONS:

- The radio resource is a pooled resource, therefore, it is not possible to earmark/dedicate some portion of the resource for customers. RF network is designed on some assumptions for cell coverage, number of simultaneous users, path losses, etc., for data service. But these variables are not accurately controlled in network.
- The data speed at any location depends upon the various factors like, distance from BTS, interference, geography and construction of surrounding area, subscriber is on the move or static, capabilities of device/handset used by subscriber, the applications being used, the technology deployed etc.. Most of these factors are beyond the control of
- RF indoor coverage depends on general link budget with assumption of in-building penetration losses but actual losses depend on design and building material used.
- Since all these factors will be dynamically changing across the network and affect coverage, a customer's experience of data speed across the network is unlikely to be stable. In such practical scenario, prescribing

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आप हमारे साथ हिन्दी में भी पत्राचार कर सकते हैं।

minimum assured data speed is impractical as many uncontrollable variables determine data speed in network. In urban areas, like metro cities owing to high rise buildings with uneven clutter and structures of public places like Malls, cinema halls, hospitals having thick clutter, the signal cannot successfully penetrate in every nook and corner of the buildings.

- 5. Very High dense urban buildings, congested commercial areas of Metro cities, heritage buildings in important commercial area have thick walls and offer high attenuation to electromagnetic signal, resulting in low indoor signal level, effecting QoS. So it is highly challenging to provide 100% coverage. So there will always be some spots where the service provider network would be absent leading to low QoS. Further fading due to users moving inside elevators and other closed areas, will change RF characteristics and could cause call drops.
- 6. Availability of data speed is greatly affected by the traffic patterns and number of customers simultaneously accessing data services. Since it is not possible to predict the traffic pattern as well as customers behavior, therefore, minimum download data speed cannot be prescribed.
- 7. Data speed to a large extent is also dependent on the response from internet/web/application servers.
- 8. Due to various restrictions imposed by local authorities and judicial courts, it is not possible to erect towers at all the desired locations as required in accordance with proper networks planning. On many occasions, service providers are compelled to remove cell site due to EMR issues abruptly and providing even RF coverage is challenging in such situations.
- 9. As per the information available in public domain, "ITU has not provided a clear definition of the data rate, users can expect from 3G equipment or providers. ITU does not actually clearly specify minimum required rates, nor required average rates, nor what modes of the interfaces qualify as 3G, so various data rates are sold as '3G' in the market". Among Japan, US and Singapore wireless Broadband plans does not specify any such minimum download speed.
- 10. The QoS obligations for wireless data services should take into account the different characteristics of mobile networks, which likely to be able to guarantee the same stability of performance, as factors that may hinder the achievement of certain minimum speeds or the stability of the connection are harder to overcome on mobile networks. Receiver sensitivity is one of the key performance measuring parameters for any

mobile handset. The bad receiver sensitivity causes issues like handover failure, call drops & poor voice quality. The better is the handset sensitivity, better will the receiver performance. Since handsets come with varying receiver sensitivity, at the same place, a customer with better receiver sensitivity will not face QoS issues as compared to the customer having mobile with poor receiver sensitivity.

11. The data speed also depends on the equipment technology installed by the operator. Since MTNL has been operating overlaid 2G and 3G networks there is no way to identify the speeds being offered in two networks separately. as the benchmarks shall have to be complied based on CDRs and that shall make reporting difficult as CDR format do not have speed field.

Due to the technical and other reasons mentioned above, it is not possible/advisable to inform the accurate minimum download speed to customers under each tariff plan. Further in the absence of any mechanism to measure download speeds based on CDRs the minimum download speed information may not be provided with tariff plans. Prescribing minimum data speed to customers may lead to more complaints from users as occasional slow data speed due to RF conditions will not be acceptable to user. Further more such provisions in the industry will only lead to confusion in terms of dissatisfaction among subscribers and flooding of un-verifiable/un-resolvable subscriber complaints and thereby causing non-controllable fall of Quality of Service benchmark standards.

## The question-wise comments are as given below:

Question 1: Is the information on wireless broadband speeds currently being made available to consumers is transparent enough for making informed choices?

Question 2: If it is difficult to commit a minimum download speed, then could average speed be specified by the service providers? What should be the parameters for calculating average speed?

MTNL Comments: yes, in the present scenario the customers are being apprised of the average speeds for download and upload of data, which is satisfactory disclosure to the customer regarding the expected QoS level of the TSP. Further the industry being in highly competitive stage, TSPs are under obligation to maintain competitive services to their customers to retain them.

Question 3: What changes can be brought about to the existing framework on wireless broadband tariff plans to encourage better transparency and comparison between plans offered by different service providers?

**MTNL Comments**: In the present scenario the standard tariff plan format prescribed by TRAI is in force. All the tariff plans, including the tariffs for wireless data services are reported to TRAI and are also uploaded on the TSP website in the same format. The availability of tariffs in standard format, in the public domain (TSP website) ensures the transparency and the opportunity for the customer to make well informed suitable choices regarding the service provider and tariff plan.

Question 4: Is there a need to include/delete any of the QoS parameters and/or revise any of the benchmarks currently stipulated in the Regulations?

**MTNL Comments:** The TRAI, vide "The Quarterly QoS report for data services" presently in force, has prescribed the requisite parameter and corresponding benchmark values, to ensure quality data services to the customers. In the present highly competitive Indian telecom market, the referred parameter and benchmarks seems appropriate and balanced, and no revision is suggested in this regard.

Question 5: Should disclosure of average network performance over a period of time or at peak times including through broadband facts/labels be made mandatory?

MTNL Comments: In our view, such action is not required in present context. However, if the regulator finds it appropriate, it may direct for submission of such information by TSPs for its own record/observation purposes. Such information being technical, seems of not much use of customer, should not be directed for publication in public domain.

Question 6: Should standard application/ websites be identified for mandating comparable disclosures about network speeds?

MTNL Comments: The TRAI initiatives for "My Speed" application and website, is commendable and supported, and the same may further be upgraded as per requirements. However, any other third party application or website recommended for this purpose, could not be ruled out for biases/manipulations, thereby creating disputes and causing prejudice to the reputation of affected TSPs.

Question 7: What are the products/technologies that can be used to measure actual end-user experience on mobile broadband networks? At what level should the measurements take place (e.g., on the device, network node)?

**MTNL Comments**: Now a days various types of Apps (android/ IOS/Windows) and website tools are available to measure data speed / actual end-user experience on mobile broadband networks. Further, as the measurement took place at device level as the network node is independent with the hurdles of the network such as interference etc. TSP should be liable to provide the same level of services in every part of its service area and hence, the actual measurement of data is required at the device level.

Question 8: Are there any legal, security, privacy or data sensitivity issues with collecting device level data?

- a) If so, how can these issues be addressed?
- b) Do these issues create a challenge for the adoption of any measurement tools?

**MTNL Comments**: Collecting data from the device is a common practice in the industry and same can be seen whenever the subscriber downloads any App. The same can be addressed by bringing the OTT service providers under the regulatory regime.

As the above issues may also be considerable in case of measurement tools/Apps. Therefore as followed in other applications, the consent of the subscriber can be taken at the time of downloading the app citing the clear requirement of the App.

Further, such measurement Applications/tools should be tested and certified by Regulator for legal, security, privacy or data sensitivity issues.

Question 9: What measures can be taken to increase awareness among consumers about wireless broadband speeds, availability of various technological tools to monitor them and any potential concerns that may arise in the process?

MTNL Comments: The Regulator should recommend the certified list of such tools/websites, and the same may be placed on the website of the Regulator and other TSPs, and the subscribers may raise complaints with respective TSPs. Further, the same may also be discussed in the consumer literacy workshops.

Question 10: Any other issue related to the matter of Consultation.

MTNL Comments: No comments.

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