Annexure A

Idea Response to TRAI Consultation Paper on Data Speed under Wireless Broadband Plans

PREAMBLE:

Indian telecom currently has over a Billion consumers connected on voice telephony, 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.

In fact all the benefits that can come from effective regulation, such as economic and technological growth, increased investment in the sector, cost reduction with improved efficiency, better quality of service, improved customer satisfaction, affordable prices delivering better value for money and improved access and availability of services, have got delivered under the prevailing Light touch regulatory regime of TRAI.

Against that background, we strongly feel that the provisioning and usage of data services through the mobile is still in the developmental phase in our Country. **Enablement from the Government is likely to hold the key to creation of conditions favorable to the enhanced usage of mobile data services to realize the "Digital India" vision of the Hon'ble Prime Minister of India.** Towards that end, if mobile data services are to realize the potential of massively extending internet access in a fast, convenient and affordable manner to those who today lack it (*i.e., the "masses"*), then the operators need to be allowed more time towards understanding the market and building the value proposition and business case without any restrictions / further mandates on QoS.

Thus the Authority should allow the mobile data services to move through their normal evolutionary cycle without any restrictions / mandates on QoS and allow the free-play of market forces to decide the appropriate quality for the service. We believe that such flexibility, if allowed to continue at this stage, will also be consistent with the TRAI's policy of "Light Touch Regulation" that has enabled transform our country into the fastest growing telecom market across the World with one of the best QoS and lowest tariffs.

We also feel that the TRAI needs to keep the following 3 important factors in consideration that have a bearing on why flexibility in this area is important in the Indian telecom market:

1. **Hyper-Competitive market:** It is already well acknowledged that the Indian Telecom sector is amongst the most competitive in the World, and already has amongst one of the lowest tariffs across the World. Thus sufficient competitive pressure exists on each operator to provide high speed experience to the customer who has sufficient choice for his operator. In such a scenario, no telecom operator would risk losing its market share to the competition on account of inferior network QoS / download speeds.

2. **Mobile Number Portability**: Currently there are a multiplicity of service providers / wireless services, and if a customer is not satisfied, they can port to an alternate service provider through MNP. In fact that is the purpose of Regulatory interventions like MNP in which more than 283 million customers have put in their MNP requests until May 2017. With MNP and Full or National MNP, consumers are no more bounded to remain in any network or service area, if they face poor quality of Network. Hence there is no need for specifying any new QoS benchmark / changing network QoS benchmarks. Millions of customers who are opting for MNP every month is the proof that customer has enough choice, if he is not satisfied with the Telcos.

3. **Regulatory Intervention desirable only when market forces are not working efficiently:** Idea Cellular submits that 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.

<u>Finally, the TRAI needs to take note of the following summary submissions:</u>

A. **No wireless network technology practically allows for commitment of minimum download speed or average download speed for wireless broadband services as the same is determined by multiple factors beyond the control of the operators.**

B. **TRAI regulation on QoS for Wireless Data Services is already very stringent and Idea Cellular remains fully compliant to the Network QoS.**

C. **Broadband Speed related issues are generally a localized phenomenon and the speed results vary for different geography within the same LSA. Also results vary for the same slice of geography at different points in time. A localized phenomenon such as this need not warrant a new QoS norm requiring commitment / declaration of download speed.**

D. **Adequate capacities and massive investments are being continuously made by operators to enhance customer broadband experience and TRAI concerns around increasing reports of consumer dissatisfaction are misplaced and invalid.**

E. **Currently there are a multiplicity of service providers / wireless services, and if a customer is not satisfied, they can port to an alternate service provider through MNP.**

F. **Finally, we believe that the use of any products / technologies to measure actual end user experience on mobile broadband networks should be left to the market forces and individual choice of the customers. There is no need to drive it through regulatory mandates.**

In view of the above, we believe and submit that there is no need for TRAI to either mandate the need by TSPs to commit minimum download speed/ average speed, or redefine the QoS parameters & benchmarks or introduce any changes in the existing framework on wirelesss broadband tariff plans offered by various TSPs.

Instead, the TRAI should look at ushering in a facilitating policy framework that aims at removing all possible impediments to the speedy spread of broadband and facilitates the deployment of telecom infrastructure to increase broadband penetration so that the "Digital India" vision of the Hon'ble Prime Minister of India gets realized at the earliest.

We now proceed to respond to the queries raised in the consultation paper.

QUERIES:

Q1**. Is the information on wireless broadband speeds currently being made available to consumers is transparent enough for making informed choices?**

Idea Response:

- Idea Cellular fully agrees that consumer empowerment and protection is a critical element of a well-functioning telecom market. Hence consumers must be empowered to make rational and informed decisions on the wireless broadband plans offered by different TSPs based on prices, data speeds and other relevant QoS.

- However, as situations stand today, the consumers are already being properly informed about various wireless broadband plans available for selecting and making their choices. Proper information is being given around the technology, plan validity, amount /volume of data, fair usage conditions and price.

- It is also pertinent to mention here that the TRAI has time and again revisited the issue of transparency of tariff offers in the past, and it has been a continuous ongoing process from its side keeping in view the changing market dynamics. As a result, the TSPs have long time back aligned there marketing communications and processes to the basic tenets of transparency.

- Moreover, as rightly pointed out by the Authority in its CP, there are a lot of tools and applications available to the consumer to estimate and measure the broadband speed being provided by the operator. Apps such as TRAI's MySpeed app and other similar services allow the user to test and estimate network speeds. Infact, the MySpeed app allows subscribers to check the actual speed of their data connection and also report it to the TRAI server based on a crowd-sourcing model without any intervention from the TSP side.

- We also wish to highlight the various steps taken by TRAI from time to time, in order to ensure transparency and customer awareness regarding data speeds under wireless broadband plans which have already been complied to by all TSPs:

    - Through "**The Standards of Quality of Service for Wireless Data Service Regulations, 2012**'' dated 4th Dec,2012, the Authority mandated every Cellular Mobile Telephone Service (CMTS) provider or Unified Access Service (UAS) provider to report minimum download speed and average throughput (speed) being

provided for each data plan offered by TSPs in the licensed service area. These regulations define and lay down the measurement setup to be used to conduct test calls for measuring successful data transmission download and upload attempts, minimum download speed, average throughput and latency.

- **The compliance reports of benchmarks of each QoS parameter is already being reported quarterly by service providers after carrying out self-testing. The same are already being shared by the TRAI on its website in a transparent and easy to understand format.**

- Further on 31st October 2016, the TRAI issued revised directions on the issue of delivering broadband speeds in a transparent manner and providing adequate information to broadband consumers. As per the same, for wireless broadband services, the TSPs are required to disclose the data usage limit for each plan with specified primary technology (3G/4G) and the speed offered after that limit on its website and in all advertisements. The same is also being complied with by all the TSPs.

- **In view of the above, we thus feel that both the existing TSP practices and TRAI provisions adequately address the need to transparently report wireless broadband speeds for making of informed choices by consumers**.

Q2. 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?

Idea Response:

- In the past, TRAI through its amendments in the "The Standards of Quality of Service for Wireless Data Services (Amendment) Regulations, 2014" dated 24th July 2014 had proposed to mandate specifying of minimum download speed for all tariff offers of the wireless data services and also ensure that the minimum download speed specified in the tariff plans is delivered for not less than 80 per cent of the usage time.

- **However, as highlighted to the authority earlier as well, we wish to reiterate again that it is practically not possible to commit a minimum download speed or even an average download speed for wireless broadband services because the same is determined by multiple factors beyond the control of operators like dynamic radio environment (proximity to BTS location, indoor/outdoor/highrise/basement instances, usage in stationary/mobility environment), subscribers device quality and type, number of subscribers browsing the data services simultaneously, peak/off peak time, external interference, availability of web server / website**

behavior etc. For example under the coverage of single BTS, multiple users will experience varying peak, average & minimum speed, purely because of the above-mentioned dynamics.

- **Further, Technology standards do not specify either minimum download speed or average download speed: GSM, UMTS or LTE do not have a technological concept of minimum or average speed.**

- It also needs to be mentioned here that Provisioning and usage of wireless data services is still in the developmental phase in our Country. In the last 3 or 4 quarters, India has seen huge growth in data users & volumes. As quoted in the CP, mobile data traffic is expected to grow 12 fold between 2015 and 2020 at a CAGR of 63%. Networks are thus getting transformed from continuous investments in broadband networks to equip them to cope with the unprecedented growth in volumes and numbers. Since the networks are still to attain significant maturity, it would be appropriate that the Authority allow the mobile data services to move through their normal evolutionary cycle without any further mandates on QoS and allow the free-play of market forces to decide the appropriate quality for the service.

- Typically in any tariff plan, maximum speed and the speed post fair usage limit is getting declared. The Regulator should not mandate anything such as committing average download speed as the same may lead to disputes and litigation from the consumers because of their non-awareness of how a wireless network behaves.

- **Therefore, there exists no case for including minimum download speed / average speed in the QoS Regulation as its measurement, based on the test environment, and the customer experience in an uncontrolled environment, are likely to be at variance with each other. It is therefore recommended that specifying of this parameter be kept out of the purview of QoS Regulation**

Q3. **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?**

Idea Response:

- As already mentioned, the TRAI has time and again visited the issue of transparency of tariff offers in the past and it has been a continuous ongoing process from its side keeping in view the changing telecom market dynamics. As a result, the basic tenet of transparency has long back been embraced by all the TSPs with a consequent aligning of their entire marketing communications and processes for adherence to this basic philosophy.

- As the situation stands today, we feel that there are no major challenges today for the customers with respect to understanding or choosing wireless broadband tariff plans as they are being properly informed about the relevant parameters of technology, plan validity, amount / volume of data, fair usage conditions and price. Further, the Information to consumers is also being transparently made available through various sources – Retailers, Point of Sale Material (POSM), TSP Apps, SMS, Website, Newspaper Advertisements, etc, - as per TRAI specified formats, thereby offering the customers the flexibility to turn to any of the available media for confirmation, should they have a doubt / apprehension regarding the tariff plan.

- The Authority will recollect that it had issued a direction dated 31st October 2016, to ensure that details pertaining to broadband speeds get delivered to consumers in a transparent manner and adequate information gets provided to them. Through the said Direction, the TRAI asked all TSPs to disclose data usage limit with specified primary technology (3G/4G) and the speed offered after that limit through the medium of their websites and all advertisements.

- **Since the same is being fully complied to by all TSPs already, hence in our view no further changes are required to be done to the existing framework on wireless broadband tariff plans for further transparency and comparison between plans offered by different service providers**.

Q4: Is there a need to include/delete any of the QoS parameters and/or revise any of the benchmarks currently stipulated in the Regulations?

Idea Response:

- **We believe and submit that there is no need for TRAI to either include / delete any of the QoS parameters & / or revise any of the benchmarks stipulated in the Regulations**.

- This is because according to us, "The Standards of Quality of Service for Wireless Data Service Regulations, 2012'' dated 4th Dec, 2012 mandated with the objective of monitoring QoS aspects of cellular wireless telephone services is robust in its current form and adequately addresses the need for protecting the interests of telecom consumers. Further, as mentioned in the consultation paper, all the TSPs are already adhering to these regulations by carrying out self-testing and submitting their reports to the Authority on compliance of benchmark of each Quality of service parameter**.**

- **We feel that the Authority should allow the mobile data services to move through their normal evolutionary cycle without any further restrictions / mandates on QoS and allow the free-play of market forces to decide the appropriate quality for the service. We believe that such flexibility, if allowed to continue at this stage, will also be consistent with the TRAI's policy of "Light Touch Regulation" that has enabled transform our country into the fastest growing telecom market across the World with one of the best QoS and lowest tariffs.**

- **Hence no further changes in the Regulations are required or desirable.**

Q5: Should disclosure of average network performance over a period of time or at peak times including through broadband facts/labels be made mandatory?

Idea Response:

- At the outset, it is submitted that the TSPs are already submitting compliance reports to the TRAI on a quarterly basis against their self-testing (theoretical under test conditions) / capturing of various QoS benchmarks as specified in "**The Standards of Quality of Service for Wireless Data Service Regulations, 2012**''. Further, the TRAI has been regularly publishing such results on its website for access by the telecom consumers and other stakeholders.

- In addition, the TRAI is already operating an Analytics Portal to facilitate users and service providers to explore and resolve various issues in different telecom services. One of these portals, the **TRAI MySpeed Portal** facilitates users to explore the Mobile Data experience of customers across India where users can also submit data by downloading the app on their device and testing their broadband service data speeds. In addition, there are other tools and applications available to the consumer to estimate and measure the broadband speed being provided by the operator.

- Further, it is submitted that the model of consumer broadband labels called "Broadband Facts" (Refer Figure 1, page 24 of the CP) introduced by Federal Communications Commission (FCC), the US Telecom regulatory authority, is not a relevant option in the Indian context as it is not practically possible to furnish the details such as 'Typical' Speed, latency, packet loss for 3G/4G services because of the constraints highlighted in response to Q2 earlier.

- Lastly, the concept of "Peak hours" is useful from a network design perspective only and is used by Network design teams for resource dimensioning of various Network elements. In reality, the peak traffic hour happens to be different for different entities, for example, a BTS, RNC (Radio Network Controller), GGSN (Gateway GPRS Support Node), LSA, etc. Also, the "peak hours" vary for each entity for different days of the week or different weeks of the month based on the generated traffic pattern. Similarly, from a subscriber perspective, network peak hours will be different for different set of consumers in different geographies and will vary from time to time.

- **We believe that in view of the above-listed considerations, there is no case for defining any further disclosures on a mandatory basis other than those already being complied.**

Q6: Should standard application/websites be identified for mandating comparable disclosures about network speeds?

Idea Response:

- It is submitted that network speeds can only be determined using specially designed speed test applications such as the TRAI MySpeed App, etc. However, a perusal of the results available from "TRAI MySpeed App" reveals that test speed results vary for different geographies (town, district) within the same LSA. The results also vary for the same slice of geography over different time (different weeks or months). This despite the fact that the Network dimensions are the same. **This fact itself is a testimony that neither the operator nor the regulator can use these results to arrive at or declare the average speed of the network**, **in which case any comparison between different networks would not be correct**.

- It is also further observed that the speeds within the same network, at the same place, at the same time, with the same device and even with the same testing algorithm being used by different applications are predicted differently by different testing websites / applications. This variance can undoubtedly be attributed to the dynamic behavior of the radio network. **Thus standardizing / trying to bring in objectivity in a scenario where there is unpredictability would be prone to misjudgment, and is best avoided**.

- In addition, it is submitted that there are multiple applications / websites (*facebook, twitter, youtube, whatsapp, snapchat, uber , ola, TOI, cricinfo & many more*) being used by consumers at various times. The popularities of such sites is likely to change over time based on various influencing factors. Further, new applications/websites may get launched subsequently as application developers & users environment dynamically changes. **Hence identifying specific applications / websites based on today's popularity / usage trends may not be an appropriate thing to do**.

- **For the above listed reasons, it is thus best to avoid identifying standard applications / websites for mandating comparable disclosures about network speeds.**

- **The compliance reports of benchmarks of each QoS parameter is already being reported quarterly by service providers after carrying out self-testing. The same are already being shared by the TRAI on its website in a transparent and easy to understand format, and the same can be accessed by customers for comparison purposes.**

Q7. 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)?

Idea Response:

- Currently, the options & means that are widely available and being used by consumers are mobile APPs available on respective Mobile equipment OS (Android, IOS, Windows). To name a few, Ookla, Neq Qual, TRAI MySpeed and a few others.

- As of now, the adoption & usage of specific Apps varies across different geographies based on awareness, popularity or campaigns run by individual developer entities. The measurements from such apps are available to users to check download speed at desired locations and the users can get a fair idea of the range of download speeds he /she can expect at his/her particular location only. However, it is pertinent to mention here that even within a single premises (say apartment, auditorium, office, different floors) different users can experience different values purely because of dynamics related to radio propagation.

- **Such end user experience measurements techniques should be best left to individual user preference and the TRAI should avoid specifying any products / technologies for measurement of end-user experience.**

- It is further submitted that the NW level speeds derived through OSS statistics indicate the node level (BTS) aggregated throughput across service area and can be used as a reference if needed.

Q8. 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?

Idea Response:

- There is no doubt that even though methods and tools mentioned earlier (in response to Q7) can be used to identify the source of slow internet speeds they may lead to privacy and security concerns on account of certain user activity at device or application level being accessed and analyzed.

- The location of the user may also have to be recorded which may result in such information being linked to a particular individual leading to privacy issues. In addition to this, if the measurement tools, designed to identify bottleneck for Internet speed, can get access to sensitive data of a user or proprietary information of businesses then it can result in financial harm to them. Further, these measurement tools, upon getting device level permissions, can also adversely affect the user systems through possible malware attacks.

- TRAI is also aware that currently the legal, security, privacy rules apply differently to the different players in the internet ecosystem. There is a need for these asymmetries to be addressed and application of same rules so that a level playing field gets established.

Q9: 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?

Idea Response:

- As per "**The Standards of Quality of Service for Wireless Data Service Regulations, 2012**'' mandated by TRAI, TSPs are already reporting their compliance to the benchmarks mentioned for different QoS mentioned in the

regulations. In addition to this as per the Authority's directions issued on 31st Oct 2016, the TSPs are already disclosing data usage limit with specified primary technology (3G/4G) and the speed offered post that limit on their website and in all advertisements. Further, TRAI has launched MySpeed app which allows consumers to measure upload/download speeds of their data connection along with its latency and signal strength.

- Further, with the advent of mobile apps, users are continually exchanging videos amongst themselves, playing interactive games – by which it has become very easy to compare the experienced data speed in real time. Also, there are lot of tools and applications available to the customer to estimate and measure the broadband speed provided by the operator

- In addition to this TRAI already has made available MySpeed app to the telecom consumers, which allows them to check the speed of their data connection and also report it to the TRAI server based on a crowd sourcing model. All these above-mentioned measures are instrumental in creating customer awareness regarding data speeds for wireless broadband plans.

- However, for higher levels of awareness among consumers, TRAI may explore the possibility of promoting its MySpeed app more aggressively through different medium such as newspaper ads, internet ads, etc. Further, it may use the Consumer Outreach / Awareness Workshops as forums for promotion of the app and carry out live demonstrations to consumers and other participants in these programs.

Q10: Any other issue related to the matter of Consultation

Idea Response:

We have no other comments to offer.

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