RJIL/TRAI/2017-18/384 August 10th, 2017

To,

Sh. Arvind Kumar,
Advisor (Broadband & Policy Analysis),
Telecom Regulatory Authority of India,
Mahanagar Doorsanchar Bhawan,
Jawaharlal Nehru Marg,
New Delhi - 110002

Subject: Comments on TRAI's Consultation Paper on 'Data Speed under Wireless Broadband Plans' dated 1th June 2017.

Dear Sir,

Please find attached comments of Reliance Jio Infocomm Limited on the issues raised in the Consultation Paper No. 6/2017 dated 01.06.2017 on 'Data Speed under Wireless Broadband Plans'.

Thanking You,

Yours sincerely, For Reliance Jio Infocomm Limited,

Mulbea', Kapoor Singh Guliani Authorised Signatory ONFOCOME LIMITED TO THE PROPERTY OF THE PROPER

Encl.: As above.

RELIANCE JIO INFOCOMM LTD'S COMMENTS ON TRAI'S CONSULTATION PAPER ON "DATA SPEED UNDER WIRELESS BROADBAND PLANS" (Consultation Paper No 6/2017 Dated 1st June, 2017)

General Comments

- 1. At the outset, we thank the Authority for issuing this consultation paper to discuss the measures to ensure transparency and increase consumer awareness on data speeds under wireless broadband plans and to discuss various tools for measuring data speeds.
- 2. There is a paradigm shift in wireless telecommunications from voice centricity to data centricity. The easy availability of smart phones at affordable prices has buoyed the demand for wireless broadband globally and India is no exception. India is not only catching up with the global trends but is poised to lead the world in deployment of Information Communications Technologies (ICTs) through wireless broadband.
- 3. It is commonly believed that wireless broadband is the way to go for broadband penetration in India. India is ranked 15th in global availability¹ of LTE, the primary technology for wireless broadband. As per the data published by Akamai, the average broadband speed in India has increased from 1.7 Mbps during Q1 2014 to 4.9 Mbps during Q1 2017². India is undoubtedly on the path of rapid growth of wireless broadband availability.
- 4. The hyper competition, awareness of data services, content centricity and the enabling regulatory environment have led to the telecom service providers ("TSPs") competing on delivery of best possible wireless broadband services. TSPs have been creating additional capacities and optimising their networks to deliver better user experience.
- 5. We agree that the primary parameters of measuring the efficacy of a broadband connection for general public remains the download speed. However, it is not possible to commit a minimum download speed for a wireless broadband connection, as wireless broadband remains dependent on various external factors impacting the data download speeds. The challenges faced in erecting new towers caused by health misconception perpetrated by alarmist propaganda, delay in ground level RoW permissions despite DoT's RoW policy, constraints on network coverage in basements/ high rise/ tunnels/ indoor coverage, latency on popular websites, type of mobile applications and Operating System installed on the User Device/ handset, number of concurrent active subscribers on a particular cell of eNodeB at any given point of time and the wireless device/ CPE being used, affect the latency, throughput as well as overall user experience. Most of these issues are beyond the control of TSPs, therefore it is not possible for a TSP to commit minimum download speed.
- 6. Even internationally, regulators have found it difficult to measure the minimum or average download speed offered by wireless broadband connections. Most of the study projects on

¹ https://opensignal.com/reports/2017/06/state-of-lte

² https://www.akamai.com/us/en/multimedia/documents/state-of-the-internet/q1-2017-state-of-the-internet-connectivity-executive-summary.pdf

average speed are either carried out in ideal conditions or are being carried out on voluntary basis.

- a. The 2016 report on Measuring Broadband America (MBA) program, commissioned by FCC with both fixed and mobile ISP participants, presents ISP broadband performance as the median of speeds experienced by panellists within a specific service tier. The project measures the download speed as the periodic speed observed at specified whitebox and median of the average speeds of whiteboxes is used to determine the "median download speed" for a particular service tier. A weighted median for each service tier (weighted by subscriber counts for the tiers) is used to determine the overall ISP download speed. Similar methods are used to study upload speed, Latency and packet loss.
- b. On the other hand Ofcom measures the download speed, upload speed and video streaming as three metrics to measure the performance of a fixed-line broadband connection.
- c. The Canadian regulator Canadian Radio-Television and Telecommunications Commission (CRTC) commissioned a voluntary study of the performance of broadband services sold to Canadian consumers in 2015. This included network measurements on Download speed, Upload speed, Latency and Packet loss, as well as Application measurements such as web browsing performance.
- 7. We agree with the Authority's concern for need for transparency on tariffs including data speeds being offered by TSP. Authority's many invaluable initiatives on this like capping of tariff plans, mandatory information through tariff formats on websites, curbs on misleading tariffs, reporting of tariff information, usage notifications to subscribers and mandatory disclosure on the primary technology for data services etc. have led to increase in consumer awareness. Although the regulatory measures are sufficient and no further measures are required, but the Authority may have a relook at the implementation aspect as many TSPs keep on flouting these norms by surreptitiously offering one-to-one tariffs to certain consumers in a discriminatory manner.
- 8. We understand that simplicity is the hallmark of transparency and consumer information and the Authority should keep the consumer information simple. International experience tells us that most progressive regulators have opted for simple codes for consumer information, mostly on voluntary basis:
 - a. The US Regulator FCC enforces an 'Open Internet Transparency Rule' to help consumers make informed choices about broadband services. The rule requires every fixed and mobile broadband Internet access provider to publicly disclose accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services sufficient for consumers to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings.
 - b. The UK regulator Ofcom follows a self-regulatory mechanism under 'The Voluntary Business Broadband Speeds Code of Practice' which aims to provide business customers



purchasing standard business broadband services with transparent and accurate information on their broadband speeds. The code came into force on 30th September 2016. The Code is a voluntary commitment from the Internet Service Providers who are signatories to the Code. They undertake to provide accurate and transparent speed information on standard business broadband services at point of sale, manage business customers' speed-related problems, and allow customers to exit the contract without penalty if speeds fall below a minimum threshold.

- c. The Australian Regulator ACCC, on 7th April 2017, welcomed the Federal Government's announcement that it will fund a new broadband performance monitoring program to provide Australian consumers with accurate and independent information about broadband speeds. The program will help provide consumers with accurate, independent and comparable information about broadband speeds and performance.
- 9. We submit that the concerns like 'Information asymmetry' can be taken care by market forces in hyper competitive Indian market. The public perception, built on actual consumer experience and the 'word of mouth' are the primary drivers. Further improvement in consumer awareness can be achieved by consumer education and adoption of self-care application by subscribers. Consumer education should include the information that the download speeds under wireless broadband is dependent on various variable external factors and thus never static.
- 10. One additional measure can be the availability of all plans on TRAI website and the Authority providing a compare tool/ application to compare the plans by different service providers with all relevant features like primary data technology on offer, theoretical peak download speed etc.
- 11. The inferences drawn in the OECD report mentioned in para 1.9 of the Consultation Paper on download limits do not appear to have any relevance in the current scenario. Broadband subscribers are well versed with the data caps being offered to them (MBs and GBs) and can decide the best way to consume the data by deciding the contents to be downloaded. Also, majority of the smart phones have an interface which can measure the data being used and user may set limits/ warnings once data reaches a particular limit. This is further buttressed by the consumption notifications as mandated by the Direction dated 30th June 2016. Thus the information provided is sufficient to give full clarity and transparency to a wireless broadband subscriber.
- 12. Speedtest is an important and useful tool for subscribers and this should be promoted, however there can be instances of miscommunication and misleading advertisements by service providers using the dubious results of certain commercial speedtest applications. To prevent this, the Authority should mandate, no advertisement to be based on any speedtest results, but for the truly independent speedtest applications such as TRAI's 'MySpeed'. Further, the Authority should leverage the data collected by this application to bring better consumer awareness. The Authority may start publishing technology wise and service area wise average speeds experienced by users of all TSPs along with sample size on monthly and quarterly basis.

13. We submit that it is now universally accepted that the proliferation of broadband in India will be carried out by wireless broadband and considering the fact that the success of major national goals like 'Digital India' depends in the broadband availability, the Authority should continue with its principles of 'Forbearance' and 'Light Touch Regulation' for Wireless Broadband Services. There is huge potential of broadband penetration and growth in Indian market, however there is still a long way to go to achieve goals like *Broadband on Demand* articulated under NTP-2012. Only an enabling regulatory oversight can help achieve this.

14. Conclusion

- 1. The Authority should continue with the light touch regulatory approach for wireless broadband to pave the way for deeper broadband penetration.
- 2. The Authority may launch a comparative tool / application containing all details of a tariff plan, including primary wireless broadband technology available under a plan. All TSP tariffs may be published on TRAI website.
- The Authority should take more steps to improve consumer education and to increase the adoption of self-care applications. Consumers should also be educated that the wireless broadband speeds are dependent on many variables and cannot be static.
- 4. The Authority should bar advertisements on speedtest results but for truly independent applications such as the TRAI 'MySpeed' application. TRAI should also publish the results of 'MySpeed' application periodically.

Issue-wise comments

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

- RJIL submits that the Authority has already prescribed sufficient measures to ensure that
 the service providers communicate the broadband wireless plans in a transparent manner
 to the consumers. The mobile broadband wireless providers are also required to specify
 the data usage limit with the primary technology (3G/4G) in all broadband tariff plans
 offered under fair usage policy.
- 2. Further, the Authority has already mandated compulsory publishing of the tariff plans on the TSP website and the TSPs are required to provide complete details of the tariff plans on offer including clear communication as to whether the data services are being provided under 2G, 3G or 4G technology. TSPs are also required to provide the plan related information on their self-care applications. We understand that there is sufficient disclosure requirement with regards to the tariff plans.



- 3. It has been observed that some of the TSPs are not meeting the disclosure requirements adequately and transparently. The Authority should intervene to ensure full compliance with these disclosure requirements and take strict action against operators who default on such disclosures. The regulations, per se, are adequate.
- 4. Another issue that has been faced by customers with some of the operators is that while they purchase a 4G plan, they end up receiving service on 2G or 3G technology most of the times as the operator does not have sufficient coverage with 4G technology. This should be transparently conveyed to customers.
- 5. We also submit that the only transparent and easily comprehensible mode of describing data quotas in a plan is in the quantity of data downloadable in GBs or MBs. The content providers provide content with varying quality levels leading to the same content being of different size at different quality levels e.g. same video on an application can be of 1 GB size in Ultra High Definition, while it will be of 600 MB in High Definition and 350 MB in normal quality. Therefore, it is not possible to inform the subscribers on how much content can be downloaded in a plan as discussed in para 1.9 of the consultation paper. We submit that the maximum download quota in GBs and MBs with a particular technology remains the only logical measure.
- 6. As the Authority is aware, the hyper competitive telecom market has delivered the lowest tariffs in the world. The consumers have immensely benefitted from the competition amongst TSPs which has led to lowest voice tariffs in the world and as the competition paradigm is changing to data services, the current trend is to compete for most affordable wireless broadband plans. The consumers have the best of both worlds, as with Mobile Number Portability ("MNP"), they are empowered to change service providers if they are not satisfied with the current TSP.
- 7. The TSPs are also aware that a 'positive buzz' and 'word of mouth' publicity for data plans and the speeds can only be done by providing quality service in a transparent manner. The possibility of negative word of mouth publicity itself is prohibitive to non-transparency.
- 8. The speedtest is a commonly available free application offered by many independent application providers, including TRAI's 'MySpeed' application, and the consumers can always measure real-time download speeds thus the TSPs cannot promise wrong speeds and as these application also maintain records of historical data, the consumer are fully aware of the data download speeds they are getting in a broadband wireless plan.
- 9. The subscriber can also access the Telecom Operator's performance on Quality of Service ("QoS") parameters and data download speeds through the 'The Quarterly Performance Indicator Report' and the 'Report on Quality of Service for wireless data services' published by the Authority on its website. We submit that these reports provide crucial information to the consumers that can help them making an informed decision.



- 10. In fact the Indian standards on transparency are much more extensive than required by most global regulators. Internationally, regulators generally follow simplified codes to facilitate transparency for fixed broadband services.
 - a. FCC's 'Open Internet Transparency Rule' requires service descriptions like expected broadband speeds and latency, pricing and charges, network management practices, such as congestion management practices.
 - b. OFCOM mentions that the ISPs (Fixed line) must provide information on Access line download and Access line upload speeds, where a traffic management policy applies, what this means for the customer and how their speeds may be affected.
 - c. Canadian Regulator CRTC, facilitates connection to websites that compare service providers' prices, plans and coverage areas.
- 11. Thus, evidently there is sufficient disclosure and transparency pertaining to the wireless broadband services to help consumers make informed choices. Further, the consumers have various independent modes to collate the information related to download speeds and QoS provided by any TSP to help make informed choices. Therefore we submit that there is no need of further changes in the existing Regulatory regime except for the Authority mandating the service providers to follow these transparently.

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?

Response

- 1. The Authority is well aware that the provision of mobile services is dependent on many factors not always in control of the service providers and it has recognised this while framing the QoS regulations. We submit that this is not different in case of wireless broadband. This dependence on external factors implies that the actual user experience is not always commensurate with the design principles of the service provider network. Thus, even though the TSPs calibrate the network to perform at optimum level with best output of RSCP and Ec/No values, these external factors directly affect the throughput, latency and wireless data download performance.
- 2. We submit that even average speed would tend to skew in areas like low coverage zones such as basements, high rise building clusters, tunnels etc. combined with the variations due to factors like subscriber's device quality, external interference, website behaviour etc. Hence unless technology is available to strike off impact of above, any minimum or average speeds should not be specified.
- 3. Further, the minimum speed required by various applications varies drastically. Popular social media applications like twitter, Instagram, Facebook etc. require low bandwidth, similarly chat applications like WhatsApp, twitter etc. require much lesser bandwidth compared with streaming applications. Thus there will always be a gap between

NFOC

bandwidth delivery capabilities of network versus the bandwidth consumed by the user basis application requirements. Therefore measuring of average speeds in such scenarios may be misleading. The average speed is in fact largely based on the customer access and not on network capability.

- 4. Additionally, the current technological standards do not guarantee minimum/ average download speed.
- 5. Therefore, while it is not possible to commit minimum/ average download speed, the average network performance over a period of time (like a quarter) can be a measurable parameter based on sample analysis. The Authority may combine the various QoS parameters reported over a quarter to arrive at the average network performance. The actual results derived from the data obtained from TRAI MySpeed App [Auto Test] should also be published periodically to give a measure of the network performance to end-users.

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?

Response

A. Transparency in Tariff Plans

- 1. We reiterate our submissions to the Consultation Paper on "Regulatory principles of tariff assessment" dated 17th February 2017. We submit that although the Authority has taken sufficient steps to ensure transparency in tariff plans through various Regulations/ Guidelines/ Tariff Orders, there remain concerns on complete transparency to the consumers with respect to complete disclosures. We reiterate that it is very important that consumers have complete information disclosure relating to specific tariff plans and quality of service which is easy to understand, comprehensible and comparable to help make informed choice.
- 2. We submit that the confusion for consumers is primarily caused by the surreptitious approach of certain service providers, who game the tariff reporting regulations to take undue advantage of customers. These service providers offer special tariff plans to selective customers and many offers are made under the garb of usage and retention. There are special plans made for MNP customers. The modus operandi remains same, the offers are never filed with the Authority and made on one-to-one basis. Further, in complete violation of regulatory framework these offers are communicated to consumers through 10 digit mobile numbers. Such clandestine activities lead to more confusion in the consumer's mind leading to complaints to the Authority. These activities continue despite the Authority's explicit direction on the subject dated 25th May 2017 and these service providers still continue this kind of offers under the shroud of their understanding that segmented offers are not to be reported or published on TRAI website.
- 3. We submit that the aforementioned issue is the only area of concern and besides this various measures already taken by the Authority are sufficient to ensure transparency.



The Authority may consider publishing the most popular tariff plans of each of the operators on its web-site in a standard format for easy access and comprehension of consumers.

4. The Authority is taking major steps in the field of consumer education by means of Consumer Outreach Programmes. These should be supported by training and increased awareness and incentives to use the self-care applications. This will help increase the awareness and bring more transparency.

B. Comparison between plans offered by different service providers.

- 1. We reiterate our submissions to the Consultation Paper on "Regulatory principles of tariff assessment" dated 17th February 2017. We reiterate that the conundrum of numerous tariff plans and the best deal for an individual customer and the data speeds being offered can be best addressed by publishing the tariff details on the TRAI website. The Authority may also provide a compare tool, where a subscriber can compare the plans offered by all service providers for similar MRP, in a particular service area. The disclosure on the data technology being used will help consumers decide the best plan.
- The Authority has already prepared web based and mobile app based tool to provide information to consumers on quality of service. It may consider to provide an interactive web-based price tool or price calculator which can perform calculations based on preferred consumption volumes and circle of operation.

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?

- We submit that the existing regulatory framework, including the QoS benchmarks, is sufficient to ensure fair competition and transparent service offering to the consumers, barring a few interventions required to curb the surreptitious activities by unscrupulous service providers.
- 2. We reiterate that the wireless broadband service can be provided only on 'Best Effort Basis' as there are many interfering factors beyond the control of service providers affecting the data performance to the end users. Therefore there is no case of including any more QoS parameters.
- 3. Further, even though India is increasing the broadband penetration at a rapid pace, there is a long way to go to achieve the national goals of 'Broadband for all' and 'Digital India'. Any new stringent regulations or addition in the existing QoS Regulations may impact growth of broadband and the realisation of national goals.
- 4. Instead, we urge the Authority to help in achieving the national goals by removing certain unnecessary hurdles by coordinating with other Government agencies and paving the way for faster broadband penetration.

5. We reiterate that the Authority should continue with the Light Touch Regulatory Approach for data services. We submit that the Authority should keep minimal or no QoS benchmarks for wireless broadband services till the penetration exceeds 75% of the population on unique user basis.

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

Response

- We submit that as explained in our response to previous questions, the network performance in the wireless domain is dynamic and depends on various external factors beyond the control of the TSPs. The ideal network performance and stable throughputs can only be achieved under controlled environments which do not indicate the real-time consumer experience.
- 2. We have also explained that the processes followed by progressive international regulators are voluntary and fixed broadband centric in nature. Further, even the 'Performance' parameter under Figure I of Sample Broadband Label (International Examples cited by TRAI in the consultation paper) clearly mentions 'Individual Experience May Vary' which clearly implies that even the International operators cannot guarantee minimum/ average download speeds to its consumers.
- However, as submitted, if any discloser is at all required, then as submitted, average
 network performance over a period of time should be used on a voluntary basis,
 alternatively the Authority can publish its assessment of this parameter on TRAI website.

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

- 1. The Authority itself provides one such application and in case the subscribers are looking for a completely unbiased neutral and dependable application then they can always turn towards the 'TRAI MySpeed' application. The Authority already provides comparable disclosures on this application. This application can be made more effective by incorporating the best practices from similar apps by international regulators like FCC and Ofcom. Ofcom broadband and mobile checker app lets consumers check broadband availability and speeds for any UK address and get tips on how to improve internet connection or mobile coverage.
- 2. We submit that there is a plethora of applications providing speedtests. These applications are independent and crowd sourced. The methodology adopted by some of these are non-standard and infact incorrect in some cases. The Authority should ensure that applications/ websites approved by it are only allowed to provide comparable



disclosures about network speeds. Also, any advertisements done by an operator on this basis is reviewed by the Authority as well.

- 3. There is in fact, a strong case for the Authority to intervene and prevent use of misleading advertisements based on such inaccurate results. The Authority should prohibit misleading advertisements by service providers based on the inaccurate, surreptitious and untrustworthy results by the non-standard applications. The only measure, if any, should be the results from truly independent applications like 'TRAI MySpeed' application. Further, claims have been made about some of these applications declaring "official" results. The Authority must take strong action against operators propagating such falsehoods to mislead customers.
- 4. As submitted earlier, the Authority may develop a comparative tool to help consumers compare tariffs depending on his budget/ download limits/ technology etc. This will enable the consumers in making an informed decision prior subscription.

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)?

- We submit that a large number of independent applications and tools are available to measure the end user experience i.e. download speeds experienced by end user on mobile broadband networks. However, as discussed above, the results vary every time the testing is done using these tools for obvious variable factors explained in the preceding comments, irrespective of measurements at device or network node.
- 2. The results derived through such tools may provide different levels of experience irrespective of network coverage of a particular operator at given place and time and may vary during peak and off peak hours. Albeit, the usefulness is in helping the consumer obtain information about the current download speeds at a particular point of time at a particular location.
- 3. The tools discussed by the Authority in Chapter III of the Consultation Paper appear to be useful, however these remain doubts about the methodologies deployed and interference with the network elements and consumer privacy issues as discussed in response to Question No. 8.
- 4. Nonetheless, we submit that any tools deployed for measuring the user experience should measure the performance at network node level instead of device level as TSPs have no control on the user device. Needless to add that, if at all such tools are used, these should provide clear disclaimer/ information to consumers that that the data speeds in wireless environment depend on various variables and some of these variables cannot be controlled by service providers.



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?

- 1. RJIL submits that the device level data can be collected primarily by two type of entities. The applications installed on the user device and the Network service provider.
- 2. The independent applications are installed on the user device with his/her consent and in most cases the applications take consent from the user on the type of data being collected. However, there is an adage that "if you are not paying, you are the product", and there have been cases where the applications have been accused of collecting more than required data and information and monetizing it. The most infamous case being the "The Brightest Flashlight" app case, this flashlight application shared users' precise location and unique device identifier to third parties without disclosing that it did so. This case was brought in Federal Trade Commission ("FTC") in 2013 and settled.
- 3. We submit that the subscribers should be made aware of all the data being collected by the applications transparently and in such case the responsibility of allowing access to the device level information lies with the consumer and there is no legal, security and privacy issue in case the data is shared wilfully. In the interest of privacy, the applications generally list down all the data collected by them transparently as a part of privacy policy or otherwise, and all application should be advised to do so.
- 4. The network service providers can have access to few levels of device level data, in order to optimize the Quality of Service in a particular area. TSPs may aggregate the performance/ user experience and such data may be analysed for optimizing the performance of the wireless broadband service. However, the TSPs are licensees bound to protect the privacy of the consumer data and they are compliant to the security conditions, therefore we do not see any legal/ security issue or breach of individual privacy. Anyways, TSPs do not dip into the user data by itself unless such orders are received through authorised LEAs in compliance with the Indian Telegraph Act 1885.
- 5. The type of information being collected by the measurement tools discussed in the consultation paper does not indicate anything out of the ordinary. The privacy policy available at https://sites.google.com/site/mobiperfdev/privacy does not throw any light on how the activities claimed to be done by the tools in Consultation Paper, for instance identifying the exact point where the network is affected, being able to identify traffic management practices like throttling etc. is actually performed. The proper analysis of the techniques employed by such tools and the actual details of the data being collected would be required to comment on whether they are violating any legal, privacy and security issues. The Authority should refrain from prescribing or promoting any such tools without proper analysis.



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?

Response

- 1. RJIL submits that the Authority has deployed sufficient regulatory measures to help increase awareness and provide full transparency to the subscribers regarding wireless broadband speeds. The most recent action being the initiative to launch 'MySpeed' App which allows the subscribers to check the actual speed of their data connection and report it to TRAI server on a crowd-sourcing model. We request the Authority to publish the results obtained through MySpeed application frequently through various available media for the education of customers.
- 2. The next logical progression is educating the consumers on these measures to deliver the full benefit. We request the Authority to take vigorous steps towards educating the consumers even beyond the scope of Consumer Outreach programmes.
- 3. We also submit that the Authority should strictly enforce the transparency measures by taking strict penal action against the TSPs misleading the consumers by issuing false claims in advertisements and consumer communication.

Q10: Any other issue related to the matter of Consultation.

- RJIL submits that the Authority has taken a step in right direction by white-listing the urls
 pertaining to the MySpeed application and other such speedtest applications for better
 and easy access to the consumers. We submit that similar voluntary actions by service
 providers to provide access to information pertaining to network parameters may be
 encouraged and facilitated.
- 2. The Authority should also mandatorily include a chapter on Speedtest myths and facts in its Customer Outreach programmes to educate the consumers.
- 3. The Authority may also issue a voluntary 'Acceptable data collection and publishing Code' for all speedtest application providers publishing results in India. This should be a voluntary code however, the Authority can encourage the application providers to adopt it by publishing the names of the apps following the code on its website for consumer information.

