EBG FEDERATION

EBG Federation response To TRAI CP on Data Speeds under Wireless Broadband Plan

EBG Federation (EBG) was Founded as the European Business Group (EBG), in 1997, as a joint initiative of the European Commission and the European Business Community in India and registered/established on 11th March, 2015 as a Section 8 company under the Companies Act 2013 in order to ensure long term stability and clarity on its purpose as a not for profit organization offering support and advocacy for European businesses in India. EBG has come to be recognized by the Indian Government and the European Commission as the industry advocacy group representing the interest of European companies in India.

EBG Federation is supported by the Delegation of the European Union to India and represents the 27 Member States of the European Union, UK as well as accession countries and its partners in European Economic Area (EEA). The EU Ambassador is our Patron. Currently EBGF has Chapters in Delhi, Mumbai, Bangalore and Chennai with approximately 170 companies as Members including a number of companies from the Telecom Sector.

The primary objective of EBGF is to actively support growth in India-EU trade relations, become the most relevant advocate for European business in India and ensure that the needs of European business are well presented to policy and decision makers.

EBG Federation lauds the efforts of the Regulator to ensure Customer Satisfaction and we feel this Consultation will certainly help in further improvement of several transparency measures adopted by operators for the information to customers.

Europe has also had its issues on this subject and The European Commission in October 2015, published three studies on broadband: on speed, price and coverage.

This was the third measurement of a study on broadband performance that covered all EU Member States as well as Norway & Iceland, using the same approach. The project was run by broadband performance testing specialist @SamKnows, which had already conducted similar projects in the UK and the US. It is based on a methodology that uses hardware devices and provides the most accurate and independent results of Internet performance regardless of access technology and home installation.

This methodology has also been used by national regulators in the US, the UK, Brazil and Singapore. This study presented the results of measurements taken from 8,582 measurement devices in October 2014. These devices were spread across 30 countries. A total of 10,418,841,762 measurements were taken across 66,466,182 unique tests.

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The study on broadband prices was conducted in the EU28 and some non-EU countries (European: Norway, Iceland, Switzerland, Liechtenstein, Turkey and the Former Yugoslav Republic of Macedonia and non-European: Japan, Korea, Canada and three states of the USA: California, Colorado and New York). The study analysed the pricing information of about 200 internet service providers and 4,500 residential broadband offers grouped in 32 baskets.

The study on Broadband Coverage analysed thirty-one countries across Europe – the EU 28, plus Norway, Iceland and Switzerland, and the availability of nine broadband technologies (DSL, VDSL, cable modem, DOCSIS 3, FTTP, WiMAX, HSPA, LTE and satellite) across each market, at national and rural levels. These cover overall fixed & wireless broadband availability, fixed broadband availability and next-generation access (NGA) availability.

The European customer will have more broadband rights as from April 2016

Under the recent agreement on the Telecoms Single Market package, as of 30 April 2016, European operators will need to be more transparent. They will have to inform customers of fixed internet access about the minimum, normally available, maximum and advertised internet speeds they can expect to get; in mobile networks, operators will have to inform of the estimated maximum and advertised speed. Operators will also have to explain the remedies consumers have if they do not get the speeds for which they have subscribed. Customers will be able to terminate their contract more easily if promised speeds are not delivered.

National regulators in Europe will make sure that operators meet these new requirements and deal with complaints by users. Current telecoms rules per the European Commission, ensure consumers are informed on what services they subscribe to and what they can do with those communications services. Consumer contracts must specify the minimum service quality levels, as well as on compensation and refunds if these levels are not met.

However, the market conditions and composition of wireline and wireless data services are substantially differ from Indian telecom market which is primarily dominated by wireless data Consumers. The Indian Regulator, TRAI has also carried satisfactory regulatory reforms and specified test measurement methodology for testing the data speed which is being followed scrupulously and performance of the QoS data parameters are being reported by all the operators. For enhanced transparency, the compilation of QoS performance reported may be published by TRAI for the information to the consumers as step towards enhanced transparency

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EBG Federation Responses to Issues for Consultation

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

EBG: The Consultation Paper lists the study done In India by CUTS, Jaipur and IIT Delhi on Quality of Mobile Internet speeds which throws up "Challenges in India" on the issue of transparency of information provided to the customer, much like the @SamKnows studies (mentioned in our preamble) for Europe and America throw up challenges faced on transparency in those countries.

The TRAI has taken a laudable initiative in providing a trusted mechanism for the consumer to know transparently the data speeds on any network through the 'MySpeed' App.

While TSPs are having their own speed testing app for their subscribers, The MySpeed App should be widely publicized benefiting all consumers to make an informed choice.

In addition, for increased transparency TRAI could also consider publishing the QoS performance of all operators for consumers to view and make an informed decision.

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?

EBG : EBG feels that in the GSM/UMTS wireless networks committed speeds would be a challenge. While average speeds for consumers may seem good, but, in case of wireless networks it would not be reflective of the true speeds at a given area or a spot in a large service area. This intent may in itself become misleading to consumers.

Several factors impact the data speed of any network. Like the bearer technology platform (2G/3G/4G), channel allocation mechanism from the available traffic channel leftover after voice usage, radio environment - modulation & coding scheme usage, channel sharing, transmission media sanity, geographical variation in landscape, consumer movements and the type of

handset etc. These parameters make it difficult to provide any committed data speeds in a wireless network, which is quite different in a fixed wire line network where last mile resources are allocated per consumer subscription. TSPs therefore may not find it possible to commit to a specific speed given the various technical, user related and extraneous constraints. These constraints have been recognized and recorded by the respected Authority TRAI and as such have not been refuted.

The Consultation Paper raises the point that the widespread imposition of download limits or caps expressed in Megabytes or Gigabytes does not give consumers a clear understanding of how much content they can actually download.

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Therefore, it might be easier for consumers if charts of one independent study done in the UK in 2012, were followed, where the download speeds of different network technologies were compared as follows:

Generation		Technology	Maximum Download Speed	Typical Download Speed
2G	G	GPRS	0.1Mbit/s	<0.1Mbit/s
	E	EDGE	0.3Mbit/s	0.1Mbit/s
3G	3G	3G (Basic)	0.3Mbit/s	0.1Mbit/s
	H	HSPA	7.2Mbit/s	1.5Mbit/s
	H+	HSPA+	21Mbit/s	4Mbit/s
	H+	DC-HSPA+	42Mbit/s	8Mbit/s
4G	4G	LTE	100Mbit/s	15Mbit/s

The study made note that their above table provides two download speeds: a theoretical maximum (based on the limits of the technology) and a typical download speed (which is more representative of what you'd actually experience). The download speed that you actually get will depend on factors such as your location, whether you are indoors or outdoors and the amount of congestion on your local mast.

2G offers significantly slower download speeds than 3G and 4G technology. *Comparing 3G and 4G to 2G is like comparing a motorway to a country lane.*

Download times for various types of content compare as follows on 4G, 3G and 2G:

Activity	4G Download Time	3G Download Time	2G Download Time
Accessing typical web page	0.1 seconds	0.2 seconds	8 seconds
Sending an e-mail without attachments	<0.1 seconds	<0.1 seconds	0.8 seconds
Downloading high-quality photograph	1 second	4 seconds	3 minutes
Downloading an music track (MP3)	3 seconds	10 seconds	7 minutes
Downloading an application	3 seconds	12 seconds	8 minutes

For this comparison table, they used the average 2G/3G/4G download speeds from the table earlier in this article. These average download speeds are 15Mbit/s (4G LTE), 4Mbit/s (3G HSPA+) and 0.1Mbit/s (2G EDGE). Typical file sizes used in our calculations: 100KB for a webpage, 10KB for a basic e-mail, 2MB for a high-quality photograph, 5MB for a music track and 6.1MB for a typical application download.

An independent source of verified information such as the regulator, TRAI would serve consumer benefit in providing data download speeds of all operators and their performance against the QoS parameters. This information as a reference point would serve the consumer well in deciding which services they could choose.

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?

EBG: The existing framework for transparency of wireless broadband tariff plans is quite comprehensive.

An additional step that could be taken by TRAI could be to publish comparative tariff plans of all operators on its website along with their corresponding QoS performance and download/upload speeds as per the 'MySpeed' App results.

This would provide a trusted and transparent source for the information that all subscribers would be able to access.

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?

EBG: The Authority has taken a laudable initiative with its 'MySpeed' app. This should be widely publicized for the benefit of all subscribers.

Further, publishing the performance of all the operators on each of the QoS parameters would increase the transparency for subscribers/consumers.

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

EBG: The existing mechanism adopted by TSPs to make available required information on wireless broadband speed is working well. Consumers have been informed upfront about the complete details along with the FUP (fair usage policy) in a transparent manner. We respectfully submit that TSPs do not advertise/acquire subscribers on the basis of data speeds.

For new users who are taking or changing a data pack, Broadband Facts/labels are very useful. However, for data subscribers/users using a particular data pack, the disclosure they may have seen when taking their data pack might not be relevant anymore as they would continue to use additional and enhanced services the more they use data services which might cause them to perceive a drop in their "disclosed" data speeds. Hence, it may be useful to add a codicil on service provider websites that from time to time checking of latest disclosures which will improve existing and new customer satisfaction.

In view of above, it is recommended that any additional measure including Broadband labels as suggested in the paper, implementation of the same should be optional for the operators

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

EBG: Mandating such data may not be practical as information flow from service providers may

be on a "best level" basis. TRAI has launched the new updated MySpeed TRAI App (Autotest) on 5th June 2017, which along with its own portal http://www.myspeed.trai.gov.in/ , allows crowdsourced data collected from information so collected to be be viewed in aggregated form on an interactive map-based portal.

It will be to everyone's advantage to have a neutral and impartial portal of TRAI for this information, where privacy and security is assured on Apps downloaded to work with the portal.

Rather, EBG submits that TRAI should not endorse external apps and as suggested it should create awareness on its own MySpeed app – and should transparently share architecture, process, estimation of end result etc to create confidence in TSPs and consumers.

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)?

EBG: The consultation has suggested various tools which are good for measuring actual end user experience.

The measurements should take place at both the end user device as well as the network node, since there are multiple points in the Internet ecosystem which can slow down the speed of data packets, it can get difficult for users to identify the exact reason for their sluggish Internet experience and it will help service providers in the network management.

It may be worthwhile considering an introduction of similar network tools mentioned in the consultation paper by TRAI and linking these with the TRAI portal to work along with MySpeed information to fully inform the users. These Apps could be developed like MySpeed or agreement with M Labs type of companies could be worked out to provide feedback of customer info to the TRAI Portal

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?

EBG: Decentralized Information Collection. Many mobile apps, like websites, use third parties to: Serve ads; Perform analytics; Deliver content. As with websites, when an end-user downloads or uses an app, parties in addition to the app publisher are likely collecting information about that

user. However, because apps are not browser-based, there are no browser cookies available to allow third parties to remember end users across mobile apps in the way that third parties remember website users across large portions of the web. Therefore, in contrast with the website model, mobile app information collection is decentralized and controlled by the app itself in an isolated environment.

To track end users, apps generally use one or more of the following: Hardware IDs; Geolocation; Metadata and information associated with other stored files, including photos, audio files, video and contacts; Information collected and stored in the app itself.

While most of the time Apps are downloaded from an application store on a need based or entertainment based requirement, users rarely check privacy rules as long as the App does the required job.

Crowd sourcing of data performance collected could also be considered as an option to be published regularly on the Regulator's website.

Nonetheless, it will become an issue sooner or later, as it has in other countries such as the EU Countries and USA, and it is better to provide solutions such as the MySpeed App of TRAI where data anonymisation is included already. This application should be widely publicized to the benefit of all subscribers.

As long as the data is collated in an anonymized manner that does not lead to traceability /identification of individual users, there will not be any legal, security, and privacy or data sensitivity issues.

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?

EBG: TRAI may publish technology wise wireless QoS data performance reported by TSPs under a separate section in TRAI website for the information to consumers. For instance, Singapore Regulator IMDA has a separate website having complete information of price and performance of various broadband plans including download throughput, upload throughput, latency etc.

TRAI has been monitoring the performance of data speed offered by various TSPs through wireless data QoS reporting as well as direct feedback received from consumers through its 'MySpeed' App. Thus, it is suggested that the data / information collected basis crowd sourcing should be published on TRAI website regularly for the information to the consumers.

Statutory notices on monthly bills may be included to advise customers to regularly check for updated packages. Websites where packages are advertised/displayed should also clearly display the notice to return regularly to check for updates on "Broadband labels"

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

EBG: None

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