Subject: Response to Consultation Paper on Pre- Consultation Paper on Net Neutrality

To,
Shri A. Robert J. Ravi
Advisor (QoS)
TRAI
Sir,
Please find my response below on consultation paper

DoneQuestion 1: What should be regarded as the core principles of net neutrality in the Indian context? What are the key issues that are required to be considered so that the principles of net neutrality are ensured?

Since data will be key to future of billions of Indians going forward irrespective of ARPU which that subscribers may be contributing, it is best to keep concept of net neutrality in simple terms.

Net neutrality is about access to data (which included internet) in a fair and impartial manner without any intended obstruction to customer experience and as per worldwide industry QoS, here it would be availability, speed and accessibility to usage as per customer wish.

Talking about it in an Indian context, we are already facing lower QoS in voice and equal challenge is hovering for data soon. Over that, even telcos starts talking of walled garden approach, throttling of speed, killing competition in disguise of 'free data', it will start denting principles of net neutrality.

While partnerships are welcome to create a strong eco-system through new Apps, business models, same should not be created in order to corner choices of customers. It is important that regulatory keep strong check on how eco-system is developing since data and net neutrality has just started off from roots and require support in order to flourish in favour of customer and not lobbyists.

Question 2: What are the reasonable traffic management practices that may need to be followed by TSPs while providing Internet access services and in what manner could these be misused? Are there any other current or potential practices in India that may give rise to concerns about net neutrality?

Talking in terms of operator technical eco-system, there are network related issued which TSPs face due to new OTT Apps getting added in IT eco-system. Some of these Apps cause network outages also due to excessive data usage in network. TSPs need to put smarter network analytics in place in order to identify such apps and stop/reset them in order to provide enhanced customer experience and data usage.

Traffic management practices however, have scenario beyond the above, wherein TSP may be blocking OTTs merely due to competition it face from them. Providing slower bandwidth speed to competitive OTT is another area of concern.

TSP need to adhere to approved policies when it comes to check what is permitted in terms of content and what is not. This is where TSPs need to play self-regulation hat and act what is in best interest of its subscribers. With Full MNP rolling out soon, customer will be happy to switch to TSP which provide them with more transparent data platform.

While one may mandate TSPs to publish various traffic management techniques used for different OTT applications, Indian consumers are smart enough to find out themselves about smart traffic management techniques which TSP may apply to control competition. However, fair and transparent published techniques will provide better connect with its customers. Instead of competing head-on, TSP today need to partner with OTTs to ensure revenue maximization of their network expenses. Ex, today customer has to take full data plan even for accessing only WhatsApp, why not TSP provide only WhatsApp pack to customer at less cost (or free for particular recharge pack) and still make money.

Question 3: What should be India's policy and/or regulatory approach in dealing with issues relating to net neutrality? Please comment with justifications.

Differential pricing is one area which might become an issue to net neutrality. I would equate differential pricing scenario with our existing road infrastructure in India. Not long ago, state of our roads including national highways was in dismal shape. Obviously, Indians and tourists were not happy with experience driving on roads. Then came concept of Toll roads, wherein highways were widened(read mobile data). Indians were happy to see improvement of road conditions of course at a cost known as Toll. Things were fine till Toll continued but there were many highways which were in bad state despite of Toll been charged. The point is that customer was still charged but getting poor undermaintained highways and roads. Now, govt has asked many such road players to first improve/widen the road condition and then only increase Toll charges.

Same is true with our telecom landscape in India. Opening of wireless industry in India obviously made consumers happy wherein at a little higher cost they could make voice calls and at extra charges access

data on mobile too. However, with time, QoS of wireless services has started getting deteriorated, but consumers are still been charged. Data QoS is in worse shape despite of high 3G service charges wherein many 3G subscribers are mostly latched on EDGE network.

These same subscribers are expected to access data heavy apps over so called dismal 3G data connections not to mention 2G/Edge network. How fair will it be for TSPs to ask an additional cost from subscribers for accessing data applications? There has to be controlled mechanism with defined SLAs for TSPs in case they want to provide differential pricing else TSPs will stream bandwidth for Apps for which they are getting more money and imagine the fate of other platforms been run on data.

Lets face the truth, the reality is TSPs are looking for differential pricing only for Next Gen Apps and not for other Websites or platforms.

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It is also observed that when it comes to customer centric regulations then TSPs

submit their view about their helplessness due to 'technical challenges' but when it comes to areas where they faces competition they have 'all technical solutions' to block/regulate any competition. Lately, poor Indian mobile consumer was told through consultation paper on Mobile Broadband QoS that TSPs can't commit on minimum speed which subscriber can expect after paying high price for 3G pack.

Indian consumers are smart enough to find out themselves about smart traffic management techniques which TSP may apply to control competition. However, fair and transparent published techniques will provide better connect with its customers.

Free Internet is another campaign which is a challenge to net neutrality. Indian wireless industry has grown from Zero to more than 100% mobile density without single free minute (please note there was always minimum amount required to keep SIM active and continue free incoming). With growing Indian economy and mobile been an important catalyst for the same, Indian users including rural areas are more than happy to pay for 'Quality' data services. Supporting fact exists is growth of data usage due to

likes of WhatsApp, etc even in Tier 3 towns, interiors and villages. This also grew without any Free internet.

Today, TSPs are looking to stop Net Neutrality by using concept of 'Free Internet' and then partnering with profit making listed entities who will introduce their business objectives in disguise of free internet by making profits and denying competition a fair chance. This is also expected to impact innovation in Apps eco-system.

We also need today is an environment to enable more 'Make in India' OTT apps. This new Apps ecosystem should be used to provide economic solution to India specific problems be it education, travel, finance and so on. Ex Ola Cabs, Autowale wherein they created an App simply riding over data services which help commuters today with cabs/autos at their door step increasing employment and customer convenience and also increasing data usage of telcos.

For ex, our agricultural industry is so much in dire need to connect farmers with best technology for farming and mobile is only medium to enable them with information. There exists a huge opportunity for TSPs to partner with other industry players and become backbone of data connectivity and also become preferred TSP for the end customer due to differentiating services and therefore not need any differential pricing.

TSPs need to 'partner' rather than 'compete' with anyone and everyone who rides on their network. It is an open field for TSPs to capture huge opportunity since they have much higher edge in terms of network ownership and technical expertise to increase revenue from the Bottom of the Pyramid in India.

Let innovation by Apps create new means for utilizing data for betterment of consumer. Imagine a scenario, TSPs go ahead with heavy investment with 3G and 4G and there are not many appealing Applications for consumer to utilize data for, these data investment of TSPs might be struck by slowdown.

Market forces are strong enough to control the price of services, therefore regulating at this point of time is not recommended especially for fast changing and growing OTT space. New innovation will itself fuel data usage therefore providing ample space for TSPs to play profit with regular data plans. However, regulator need to keep vigilance to ensure no violation of net neutrality happens

Question 4: What precautions must be taken with respect to the activities of TSPs and content providers to ensure that national security interests are preserved? Please comment with justification.

It is important to define security related regulations for net neutrality framework in Indian market. Content provider and OTTs need to adhere to policies like one which was told to Blackberry in order to avoid any challenges in case CPs and OTTs are misused during act of terrorism, etc. Second are is around customer privacy, wherein customer need to be empowered with optional way to share their data with apps.

Data can also turn as two edge sword which can also negatively impact through misuse by anti-national elements.

As part of the framework, Security and Compliance is something which should be addressed on immediate basis. OTT need to be made accountable for data which should be accessible in India based servers and be analyzed at short notice, if needed. Customer information should be secured with right policies which OTT need to adhere to in case they want to operate in Indian market. Effective censorship by authorities and points around them be formulated to ensure right usage of OTTs

Question 5: What precautions must be taken with respect to the activities of TSPs and content providers to maintain customer privacy? Please comment with justification.

This is an interesting question. Concept of net neutrality need to ensure right customer data privacy. Data will provide a platform for TSPs and Content providers to get a Rich customer data which is a gold mine in today's world where monetization is the key. It is possible using big data and analytics to capture financially profitable information from data which users will provide unknowingly as they use 'free internet' kind of concept. Content provider today mandatorily ask customer to accept access to phone information which may not be even required for them in first instance for that particular content or app to function.

Such are potential misuse which might have with customer data. Today, many students and elderly people and rural folks are not even aware what all they consent to while installing an App. It is important to define checks and balances to ensure that TSPs and specially content providers do not take innocent customer of their private information. TSPs today have well defined and audited mechanism for KYC processes since they have matured with them over period of more than a decade now. They have systems as well processes to ensure customer privacy is not leaked to third party or hacked into through their system.

Customer privacy threat is looming more from content providers. With so many companies mushrooming and most of them Mobile App only, imagine so much of customer information lying with

third party, many of them are not using basic encryption process for login, password, profile, etc. There have to well defined rules for content providers before they accept customer information.

Question 6: What further issues should be considered for a comprehensive policy framework for defining the relationship between TSPs and OTT content providers?

The angle of imbalance in today's OTT landscape which need to be captured is 'Voice of Customer'. The very need to issue this consultation paper are high financial stakes of TSPs and OTTs in fast growing data market. While TSPs cry of encroachment by OTTs in their business revenue, OTTs are innovating to monetize data oriented models.

With TSPs having missed the bus in OTT driven space, they are looking at ways to conquer threat to their financial revenues and ignoring the need of their own mobile subscribers. OTTs on other hand, are to some extent leveraging customer data sourced through their OTT apps for generating new revenue models. This has only left consumer in most vulnerable position and thereby there is a need for right framework in place with all stakeholder interest in place.

Coming to impact on economy, OTTs are fast acting as aggregators in Indian market which are bringing consumers close to creator of products and services. Such enablement is expected to positively uplift economic sentiment with customers and suppliers and provide new revenue stream to many young entrepreneurs. OTT driven data access can empower these young companies to discover potential of new commerce channels. After all, why should India have only traditional way of doing business? TSPs need to realize that Net Neutrality will only add on their importance in this whole eco-system.

There is another important point wherein TSP states they are bearing cost of network infrastructure wherein new age content providers are making revenues.

It is observed that when it comes to customer centric regulations then TSPs submit their view about their helplessness due to 'technical challenges' but when it comes to areas where they faces competition they have 'all technical solutions' to block/regulate any competition. Lately, poor Indian mobile consumer was told through consultation paper on Mobile Broadband QoS that TSPs can't commit on minimum speed which subscriber can expect after paying high price for 3G pack.

It will be more surprising to see TSPs stating 'network upgradation' cost as a factor since it is something which is an essential raw material for their business. If a TSP says that it will incur higher network cost if subscribers increases then there is seriously something wrong in how TSP is been run and envisioned.

Stating that data is the future on one hand and on similar context saying that there will be cost of network up gradation due to increase in data subscriber is like saying simply asking for free money.

When TSP made billions due to heavy profit margins due to subsidized spectrum, low operational cost, even then they use to cry about falling tariffs. We all know that even with such lower call rates, operators are still making profits. Today, same story is been repeated for data story, however cry is higher since TSPs today are joined by new innovating applications which are depriving them of higher profit margins. TSPs entered this business knowing very well that network cost is a given to sustain an edge in this business. Today, they cannot dry foul play when they are not getting that extra dollar which was freely lying on the floor.

Here is an example of profits in data. For Rs. X one gets 2GB of mobile data, but typically consumer is using only 600-1GB of that pack. So there is huge 50% margin in terms of MBs for TSPs. There is hardly any loss today for TSPs in data services and with increasing day data usage is going up. Network cost by default is getting recovered through each MB been used.

OTTs will only be an enabler to drive their data usage and hence profits. TSPs need to enable improved customer experience to ensure maximum adoption of GBs by consumer thereby increasing profit margin.

There is a need for Framework to provide closer interaction of OTTs and TSPs for new commerce avenues to mutually gain from new revenue opportunities. This should be tightly controlled by Security and Compliance layer to ensure healthy use of OTT along with effective governance.

From:

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