Response to TRAI's Consultation Paper on Differential Pricing for Data Services

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Question 1: Should the TSPs be allowed to have differential pricing for data usage for accessing different websites, applications or platforms?

No. TSPs should not be allowed to have differential pricing for data usage for accessing different websites, applications or platforms.

However, the industry is now mature to allow TSPs to offer differential pricing based on *Quality of Service* (QoS) of the channel, enabling TSPs to charge differentially for providing specific network capabilities based on user requirements.

Currently, QoS in India has been defined on the parameters of speed/bandwidth/data connection type and/or download limits prescribed by Fair Usage Policies (FUP). But TSPs should be allowed to experiment with other parameters like packet drop rates, priority packet error rates etc. in order to meet specific user requirements and in turn get paid differentially for providing such specialised services. For example, in LTE standards, there are several QoS class levels targeted for different types of traffic.[2] Parameters like packet delay budget, packet error loss rate help to differentiate the type of QoS, and the corresponding pricing.

There can be other such parameters which can be included to provide the desired quality of experience to the user based on the type of application being used compared to the current default best effort type of transport quality, which is typically used for all generic internet applications like email, browsing, etc. Different fees can be charged for each channel type based on user requirements.

The consultation paper correctly identifies that "the criteria for determining a valid classification for the purpose of differential tariff, has been undergoing change from time to time depending upon the sector's growth, technological advancement and the emerging and changing regulatory concerns." In line with this approach, it is time to allow a wider definition of QoS, based on user experience, to be considered as a valid criteria for differential pricing.

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[1] The Takshashila Institution is an independent think tank on strategic affairs and public policy contributing towards building the intellectual foundations of an India that has global interests. To contact us about the research write to scholars@takshashila.org.in or visit takshashila.org.in

[2] Policy and Charging Control Architecture V12.10.0, page 44, September 2015, 3GPP.org

Question 2: If differential pricing for data usage is permitted, what measures should be adopted to ensure that the principles of nondiscrimination, transparency, affordable internet access, competition and market entry and innovation are addressed?

Differential Pricing by TSPs based on transport channel QoS provided to the end-user to access the internet is fair, non-discriminatory and not anti-competitive. This measure has the potential to promote innovative services, where applications have a choice of which channel to use based on application requirements and associated charges (voice, video, real-time gaming etc). This also encourages competition amongst content providers and also amongst TSPs on how the different channel choices can be taken advantage of to provide a service of varying quality of experience.

This form of differential pricing based on QoS will not impact the choice of the end user on what content in the internet can be accessed, and that all content providers or OTT players will have equal chance to reach end users. Hence, this approach is non-discriminatory.

On the other hand, differential pricing on the basis of data usage for accessing different websites, applications or platforms violates the principles highlighted above.

It violates the nondiscrimination principle as follows: a specific set of OTT players being given preferential access through lower pricing rates (which could even be as low as being free) goes against the basis of net neutrality, wherein, it will impact user-choices and also make it harder for new players (OTT or content providers) to gain entry into the market. This point aligns with what is mentioned in Ch.2 point 12 and 14 in the consultation paper too.

It violates the transparency principle as follows: during any data access, there could be other unrelated background traffic which can consume bandwidth and will be charged without the user being aware of it or there could be website links or application services which the user may access thinking it to be under the subsidised rate when it is not.

It violates principles of competition and market entry as one OTT can act as a gatekeeper to disallow competing OTTs from getting preferential access.

Question 3. Are there alternative methods/technologies/business models, other than differentiated tariff plans, available to achieve the objective of providing free internet access to the consumers? If yes, please suggest/describe these methods/technologies/ business models. Also, describe the potential benefits and disadvantages associated with such methods/technologies/business models?

First and foremost, providing *free* internet access is a very limited way of looking at the problem of universal internet access. Instead, we should look at this challenge in three ways:

First, given that less than three in ten Indians has access to internet services[3], it should be a national priority to increase internet penetration. There is a correlation between quality internet access and economic growth rate. India's development needs our economy to leapfrog into the information age: for this we need reliable, affordable services. So when thinking about differential pricing at this stage, the government must give the highest priority to ensuring the maximum number of people take up to the internet in the shortest duration possible. This objective should not be reduced to the problem of making internet free. Instead, low prices should come as a result of market forces and competition.

Second, given that India's IT industry is an engine for growth and development, we must ensure that it remains globally competitive. The industry is worth more than 100 billion dollars and employs more than 10 million people[4]. There are thousands of startups in the country. Our IT policy should not create more hurdles for entrepreneurs and ensure that they have the best possible start to build world-class companies. Without preserving the internet as a neutral platform, the risk that startups will face even greater "unfair disadvantages" against established firms is higher.

Third, it is in the public interest for the telecom and mobile service provider industry is healthy and competitive. In the past decade, the regulators pursued the goal of forcing the telecom providers to lower user tariffs. While India has one of the lowest costs of telecom services in the world, the service quality is patchy. Calls drop frequently. Internet service often is of lower speed and suffers outages. All this is because TSPs are cutting costs in these areas. There are few lucrative or premium services left where they can increase their profitability. The only protection they enjoy is through licensing — the government limits the competition they face.

When deciding what to do about internet penetration, any policy must keep all the three considerations in mind, and optimise them simultaneously. This can be achieved through the following methods:

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[3] The Indian Telecom Services Performance Indicators, June 2015, TRAI

[4] Employment, Department of Electronics & Information Technology, Government of India

One, the government should open up the telecom service market to greater competition, perhaps by issuing unlimited licenses. The current debate calls for the government to review the entire licensing regime and consider full liberalisation of the telecom industry.

Two, allow differential pricing based on QoS of the transport channel and in parallel encourage OTTs to give back credits to the user depending on the cost of the transport channel used. For example, if a channel with lowest QoS is used (like best effort channel), the cost to the user will be low. And, if a higher QoS channel optimised for video call is used, the charge to the end-user can be more. The choice of the channel and corresponding QoS requirement will be based on user requirements, and TRAI can regulate the QoS classes created. In doing so, the TSPs or OTT content or application service provider can have schemes to provide credits back to the end-user (points or other means) which the user can use to compensate for the additional costs incurred in using the higher QoS transport channel. This will help meet the objective of increased internet penetration. Alternatively, the cost borne by the user could also be reimbursed in some other manner like coupons, or direct money transfers, etc by the content provider, irrespective of whether the website was accessed or not (this is the same point as mentioned under section Alternative Models in Ch. 2 of the TRAI paper).

Third, TRAI may consider utilising the Department of Telecom's Universal Service Obligation (USO) Fund with the specific focus of getting more Indians online. Companies can contribute to this fund, which can solely be reserved for the purpose of getting most number of Indians online in the shortest period of time. USO funds can be used to incentivise TSPs to reach out to otherwise economically unviable geographies, with tights defined coverage targets and deadlines to accompany the disbursals.

Question 4: Is there any other issue that should be considered in the present consultation on differential pricing for data services?

The point that needs to be appreciated is that getting the developing world online does not require methods that are different from how the developed countries got there. Hundreds of millions of people around the world became Internet subscribers not because of government schemes, but because they could afford it. They could afford it because market forces — competition — drove prices down to levels that made an Internet connection affordable. Unless government policies get in the way, there is no reason why the same forces will not reduce prices further to make the service affordable to ever more people, with lower disposable incomes.

Splitting the internet into a walled garden using differential tariffs based on data usage for accessing different websites, applications or platforms is not a method to get there. TRAI's success in transforming India from a low teledensity country to a moderately high teledensity one serves as a good example. This happened not due to "no-frills services for poor and developing country users" but by ensuring that market competition is allowed to take its course. There is no reason why mobile Internet services will not become as popular as mobile phone services as long as there is adequate competition.

The other issues that should be considered in the present consultation are:

1. Is whether there is sufficient competition in its current policy framework. Should it be licensing more telecom operators?
2. Has the government made enough spectrum available so that mobile operators can lower prices and ensure adequate service quality?
3. Are there bottlenecks in the hands of monopolists that raise the costs of service?