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Subject: Response to the Consultation Paper on Differential Pricing for Data Services

RS Sharma,  
Chairman, TRAI

Dear Sir,

Many thanks for seeking the input of various stakeholders on the issue of differential pricing for data services in India. Your consultation paper is extremely well written, concise and to the point. Please accept my compliments on that - when it came out my initial reaction was "hasn't this been asked before?" but after reading the paper I have completely changed my mind.

As a background, I am a Professor of Computer Science at Columbia University in New York, who has worked on the issue of Network Neutrality for the past 7-8 years. I have also dabbled in entrepreneurship, having co-founded an Internet business in the early days of the web (CricInfo, subsequently acquired by ESPN) and more recently started another company Infinio, which develops software in the area of datacenter storage, where the entire business - from demo to installation to sales is conducted over the Internet. So my views on the issue come from two perspectives - an academic researcher as well as an (Internet) entrepreneur. I have written extensively on the topic, and I have also given my opinions to other regulatory bodies, including the FCC and testified before the parliamentary sub-committee on Net Neutrality, chaired by Shri Anurag Thakur. The definition I have given for Net Neutrality has been adopted by the SaveTheInternet movement in India, amongst others and it is as follows:

**Internet is a platform where (access) ISPs provide no competitive advantage to specific apps/services, either through pricing or Quality of Service.**

This definition establishes that the concept of Net Neutrality is how you treat competition, and not how you treat packets. I have written about this definition in the following blog post if it interests you:

<http://peerunreviewed.blogspot.com/2015/12/what-is-definition-of-net-neutrality.html>

Once we go with this definition (which matches what you say in the consultation paper on the bottom of page 4), then it is clear that *discriminatory* differential pricing is anti-competitive and against Net Neutrality. With that in mind, I provide my answers to your specific questions below:

1. **Question 1:** Should the TSPs be allowed to have differential pricing for data usage for accessing different websites, applications or platforms?  
**Response:** No, as that would be anti-competitive and against Net Neutrality.
2. **Question 2:** If differential pricing for data usage is permitted, what measures should be adopted to ensure that the principles of non-discrimination, transparency, affordable internet access, competition

and market entry and innovation are addressed?

**Response:** The only way differential pricing can be allowed is if remains true to the principles of Net Neutrality, and not distort the market in favor of certain players whom the telcos might 'like' (as you point out on pages 5-6 of the consultation paper). We can have differential pricing for emergency services (make them free, like 911 calls in the US), or for government sites that provide essential (one might even say, basic) information but are provided by a player that is an *established non-profit* and does not compete with private enterprises. Any other form of differential pricing has market distorting effects and should be disallowed.

3. **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?

**Response:** There are many such schemes, some of those you have outlined on page 7 and 8, in sections 19 and 20. Additionally, schemes suggested by the Mozilla foundation and Grameen phone initiative, where a free data pack is provided by the purchase of a phone is a model that can be pursued. A proposal by Nandan Nilekani and Viral Shah, on direct benefit transfer via data packs for citizens is another scheme that seems much more effective in increasing access rather than differential pricing by private enterprises (and it remains faithful to Net Neutrality). I am sure Nandan and Viral have submitted their own response to you detailing the mechanism and benefits of their proposed scheme.

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

**Response:** In my analysis, the most subversive and anti-competitive effect of differential pricing comes with vertical integration. This is the situation where a telco might create a service, zero rate it, and gain an immense competitive advantage over similar (or even better, technically) offerings by non-telco competitors. Examples include zero-rating of telco provided VoIP calling, hurting Skype, Whatsapp etc. or zero-rating of services like Airtel Wynn, hurting services like Saavn or Gaana. Many telcos have announced plans of getting into the services business by introducing their own streaming or messaging products, and those need to be very carefully watched and regulated.

Once again, please accept my appreciation on the thoughtfulness of the consultation paper as well as the opportunity to send responses.

Best regards,



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