Respected Sir,

I am a faculty at IIT-Bombay and one of my research interest is network economics. Please find below my response to to Pre- Consultation Paper on Net Neutrality dated 30/05/2016. The same is attached in a pdf file.

Q1) 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?

A1) 'Non-discriminatory access to all legal content irrespective of its origin' should be the core principle of net neutrality. To ensure principles of net neutrality, telecom/internet service providers (TSPs) should be prevented from selective throttling, blocking of traffic, and giving preferential treatment to some content providers.

Q2) 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?

A2) For optimal utilization of network resources, TSPs should be allowed to perform traffic management. Whatever traffic management policies TSP adapt should be made public and TRAI should approve the same as long as the process is non-invasive, non-discriminatory, and unambiguous.

As noted in the consultation paper, Internet access in India is predominately wireless. In wireless networks bad channel conditions can degrade quality of service. TSPs can exploit this to throttle content from rival service providers and blame the poor service quality on channel conditions. To prevent this, TSPs should be forced to provide a certain minimum speed guarantees on their cellular networks for all content.

Q3) What should be India's policy and/or regulatory approach in dealing with issues relating to net neutrality? Please comment with justifications.

A3) India should strictly prevent TSPs from giving preferential treatment to content providers (CPs) or from CPs buying preferential treatment from TSPs (banning differential pricing was a right decision!). Many big CPs in India are foreign companies with deep pockets, whereas many Indian CPs are new startups and are growing fast. If preferential treatment is allowed, big foreign companies (like Amazon, Uber) can make agreement with TSPs for preferential treatment leading to their rival Indian startups (like Flipkart, Ola) loose market share and suffer losses.

Q4) 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.

A4) Social media is very active in India and lots of information/misinformation spread very fast on it. Authorized agencies, possibly CBI or RAW, should be allowed to monitor traffic in social networks for any anti-social or anti-national activities.

Q5) What precautions must be taken with respect to the activities of TSPs and content providers to maintain customer privacy? Please comment with justification.

A5) While the TSPs should be allowed to manage traffic on their networks, they should be strictly prohibited from monitoring user content and maintain user privacy. CPs should be prohibited from gathering personal information of users and their activities unless they take users' consent in doing so.

Q6) What further issues should be considered for a comprehensive policy framework for defining the relationship between TSPs and OTT content providers?

A6) TRAI should consider implementing 'One Service One Policy' (OSOP) for all services, so that 1) services of telecommunication OTT and telecom companies 2) e-commence OTT services and offline brick-and-mortar companies are all governed by the same rules and all of them maintain same standards.

Best Regards,

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