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Dear Sir, first of all I'd like to thank TRAI for allowing the people to voice in on the proposed regulatory aspects of delivering broadband and the road map of internet based services in India. I myself, am a developer and an early contributor at few start ups and thus would like to present aspects from both the perspective of a consumer as well as producer of content. Please find comments below

Regarding section 4a(A) and 4a(B). While the declaration of speeds and data limitations provided by service providers is beneficial, it is notsufficient. It would be my personal recommendation that ISPs are also mandated to provide following additional information

- Upload/Download Speed Guarantees: Currently many ISPs while adhering to download speeds provide upload/download ratios ranging from 1:8 to 1:16. This is inherently problematic when as a consumer, I'd like to create or share content across various media platforms. Additionally, this issue is aggrandized in usage of VoIP or conferencing services where neither party can share their video/audio output as a desired or even acceptable rates.
- Latency Guarantees: Currently, sitting from my house in Gurgaon, the latency to servers in Chennai ranges from 80 - 120 ms. This condition is quite appalling when latency to Amazon/Azure hosted Singapore data centers is lower if not at par with data centers located in Mumbai or Chennai in India. Not only does such poor service limit upcoming start ups to host their content outside India, it is not even possible for an Indian company to host a competitive data center locally.
- SLA Guarantees: Currently, ISPs can suffer from any range of downtime during the period of service agreement without any repercussions. This means that reliable internet is seldom if ever available and its near impossible to offer technology based services for critical issues such as medicine and healthcare.
- Compensation on guarantee violation: None of the aforementioned guarantees will hold any meaning if the ISP is not penalized for violations of the above.
- Crowd sourced monitoring: Since it is not always possible to accurately judge the QoS of an ISP from an individual consumer, I'd recommend that TRAI set up infrastructure in place which can use crowd sourced information to accurately judge an ISP based on aforementioned parameters.

Wrt 4(b)
While many ISPs argue that sharing usage information with the customer via SMS is sufficient, I'd very much advise against the same. It is nearly impossible for a end user to reliably prove that a SMS was delivered in time to warn the user of his usage behavior. Also, most ISPs sent a variety of messages about other services and PSAs and segregation of this information from usage information is near impossible using SMS alone. I'd thus recommend that e-mailing this information to the user also be mandated.

Wrt 4(c)
While most of the world is moving towards faster broadband speeds setting a limit of 512Kbps would be regressive. In fact as per Akamai's 2015 rankings, the average broadband speeds across the globe is 5.1Mbit with India ranking only above nations such as Bolivia, Paraguay and Venezuela. India ranks last even amongst the BRICs nation. Also, internet consumption can only grow faster with reasonable speeds and at 512Kbps(64KBps), it not even sufficient to stream a 240p video. I'd thus recommend that the minimum broadband speed be revised to the requirements of atleast a 480p video at 1500Kbps or 1.5Mbps. Furthermore, I recommend that this limit be visited yearly for improvement and be revised upward.

Wrt 4(d)/(e),
While we welcome this move, users should also be able to track this information via an easily and publicly available web site.

Additionally, it be mandated that ISPs do not monitor or store content to track usage behavior unless required by law. Currently, many ISPsnot only track this information for targeted advertising, but also insert malicious content with user requested data. This has been exemplified by two ISPs, namely Airtel and BSNL injecting javascript code into user content.

I hope that you'll take my recommendations into consideration to ensure strong technological success of India in the near future. We have in the last decade seen an explosion among both consumers and producers thanks to the improved accessibility to internet and improvement in infrastructure to handle services better will only abet in a catalyzing this growth further. However, regression or apathy in service quality and performance will only mar the technological capabilities that India has shown in the last decade.