

Hike Private Limited's comments on the Consultation Paper on Net Neutrality

We thank the Telecom Regulatory Authority of India for providing stakeholders the opportunity to provide their comments on the Consultation Paper on Net Neutrality.

Please find below our responses with respect to the issues raised in the Consultation Paper:

1. What could be the principles for ensuring nondiscriminatory access to content on the Internet, in the Indian context?

Tim Wu defined the concept of net neutrality as "a network design principle, based on the idea that a maximally useful public information network aspires to treat all content, sites and platforms equally". The underlying idea being that an information network would be more useful if it is less specialized. Additional core principles need to be established to further deal with more nuanced issues regarding Net Neutrality with the premise being- all points in a network should be able to seamlessly connect to all other points, without any discrimination by the TSP on aspects of speed, access or price.

We recommend the following broad principles:

1. **No blocking**. TSPs should not have any discretion with respect to blocking of websites/content or applications. TSPs should block content only if a legal order issued by a court having jurisdiction or relevant government authority mandates the same.

2. **No Speeding/Throttling**. All sites/apps/content should be accessible by the user at the same speed without any preferential speeding up or discriminatory throttling.

3. **No Preferential Access.** There should be no preferential treatment/access provided to any applications, websites or any other content on the Internet.

2. How should "Internet traffic" and providers of "Internet services" be understood in the NN context?

a) Should certain types of specialized services, enterprise solutions, Internet of Things, etc. be excluded from its scope? How should such terms be defined?

b) How should services provided by content delivery networks and direct interconnection arrangements be treated?

Specialized services are necessary for the needs of various enterprises. The defining feature of these services is that they do not terminate on the open/public Internet and are created for catering to specific needs of an enterprise. The net neutrality framework should only be applicable to public Internet and



traffic flowing through the same; therefore specialized services/ managed services/ enterprise solutions should be exempted from the framework.

Internet of Things refers to a system of interrelated computing devices. Considering a liberal interpretation of the same could refer to anything, Internet of Things should not be excluded from the scope.

A content delivery network (CDN) is a system of distributed servers that deliver content to a user based on the geographic locations of the user, the origin of the content and a content delivery server. CDNs help in speeding up the delivery of content to users of a service/application especially of they are present across diverse geographical locations. CDNs could be construed as 'edge' networks as the content is not transmitted through the Internet core. Provision of CDN services is based on commercial arrangements and is governed in accordance with the service level agreements between the content provider and the CDN service provider. CDNs should thus be excluded from the ambit of the Net Neutrality framework and issues regarding the same should be dealt with laws pertaining to unfair trade practices.

3. In the Indian context, which of the following regulatory approaches would be preferable:

a) Defining what constitutes reasonable TMPs (the broad approach), or

b) Identifying a negative list of non-reasonable TMPs (the narrow approach).

Please provide reasons.

Traffic Management Practices should be construed as exception to the Net Neutrality framework and the practices should triggered only in specific scenarios that is in case of congestion in the network. Guiding principles like proportionality, non discrimination should be followed while ensuring that such practices are resorted to only in exceptional circumstances and the implementation should be done in such a fashion that the net neutrality principles are breached in the least possible manner. Further, there should be no commercial arrangements with respect to traffic management practices. The guidelines should be clearly defined so that innovators have a fair sense of the practices that TSPs might follow while ensuring that TSPs do not use the TMP exception in a devious manner. TSPs should instead be encouraged to increase network capacity in case of increase in traffic instead of resorting to TMPs.

4. If a broad regulatory approach, as suggested in Q3, is to be followed:



a) What should be regarded as reasonable TMPs and how should different categories of traffic be objectively defined from a technical point of view for this purpose?

b) Should application-specific discrimination within a category of traffic be viewed more strictly than discrimination between categories?

c) How should preferential treatment of particular content, activated by a user's choice and without any arrangement between a TSP and content provider, be treated?

Traffic management practices should be packet/traffic neutral. Any approach, which is not traffic neutral, would require packet inspection and hence could undermine the usage of encryption practices and secure communications.

An end user's choice to give preferential treatment to certain kinds of data should be permitted by the net neutrality framework. FCC (US) and EU regulations regarding open Internet have recognized the importance of the same. It would be critical to ensure that any such tools developed to give user such choice is transparent enough so that the end user can make an informed decision.

5. If a narrow approach, as suggested in Q3, is to be followed what should be regarded as non-reasonable TMPs?

In our view, a negative list of non-reasonable TMPs would not be the right approach.

6. Should the following be treated as exceptions to any regulations on TMPs?

- a) Emergency situations and services
- b) Restrictions on unlawful content
- c) Maintaining security and integrity of the network
- d) Services that may be notified in public interest by the Government/Authority based on certain criteria; or
- e) Any other services.

a) Emergency situations and services- Exceptions to the net neutrality framework should be restricted to natural disasters declared by National Disaster Management Authority. The exception should be limited to the geographical area affected by the disaster as declared by the NDMA.



b) Restrictions on unlawful content- As discussed earlier such exceptions should be made without granting any discretion to the TSPs and should strictly abide by legal orders by courts having jurisdiction or relevant Government authorities.

c) Maintaining security and integrity of the network- Strict guidelines should be provided defining the scenarios which could be construed as incidents that affect the security/integrity of the network. The TSPs should be required to notify the TRAI before undertaking any such steps and provide an explanation for the steps taken within a defined time frame. Further, such steps should be rescinded within a certain time frame unless continued implementation of such steps is approved by TRAI in exceptional cases.

d) Services that may be notified in public interest by the Government/Authority based on certain criteria- Such exceptions should be carved out provided the term "public interest" is defined in a strict fashion.

7. How should the following practices be defined and what are the tests, thresholds and technical tools than can be adopted to detect their deployment:

a) Blocking

b) Throttling (for example, how can it be established that a particular application is being throttled?); and

c) Preferential treatment (for example, how can it be established that preferential treatment is being provide to a particular application?).

Network diagnostic tools could be prescribed by TRAI as standard Industry tools to monitor the networks. Such tools should help in creation of diagnostic reports for each TSP at predetermined intervals. Network probes should be implemented to monitor networks in real time.

In addition to the aforementioned tools, a forum could be created for users to report any instance of blocking/throttling or preferential treatment. Such reports should be made publicly available after removing any sensitive data regarding the user.

8. Which of the following models of transparency would be preferred in the Indian context:

- a) Disclosures provided directly by a TSP to its consumers;
- b) Disclosures to the regulator
- c) Disclosures to the general public; or
- d) A combination of the above.



Please provide reasons. What should be the mode, trigger and frequency to publish such information?

A combination of all the aforementioned models should be implemented. TSPs should declare to the public at large regarding their TMP practices and instances of blocking/throttling/preferential treatment. This would ensure that users can make an informed decision regarding their choice of TSP. Such declarations should be provided in a user friendly language. Technical details should also be available for the public's perusal.

The TRAI should publish reports of its network diagnostic tools, network probes and submissions made by the TSPs to improve transparency.

9. Please provide comments or suggestions on the Information Disclosure Template at Table 5.1? Should this vary for each category of stakeholders identified above? Please provide reasons for any suggested changes.

No additional comments

- 10. What would be the most effective legal/policy instrument for implementing a NN frame-work in India?
 - a) Which body should be responsible for monitoring and supervision?
 - b) What actions should such body be empowered to take in case of any detected violation?
 - c) If the Authority opts for QoS regulation on this subject, what should be the scope of such regulations?

TRAI should be responsible for monitoring and supervision of the net neutrality framework as the Section 11(b)(v) of the TRAI Act empowers TRAI to lay down the standards for Quality of Service. TRAI should report any abuses of the net neutrality framework to the DoT for necessary action.

11. What could be the challenges in monitoring for violations of any NN framework? Please comment on the following or any other suggested mechanisms that may be used for such monitoring:

a) Disclosures and information from TSPs;

b) Collection of information from users (complaints, user-experience apps, surveys, questionnaires); or

c) Collection of information from third parties and public domain (research studies, news articles, consumer advocacy reports).



a) Disclosures and information from TSPs- Disclosures need to be in an appropriate format and language in accordance with the needs of intended recipient.

b) Collection of information from users (complaints, user-experience apps, surveys, questionnaires)-Determining the authenticity of such complaints, surveys could be difficult. Users should provide additional information regarding their device.

c) Collection of information from third parties and public domain (research studies, news articles, consumer advocacy reports)- Any such information should be corroborated with the information received in the other two mechanisms discussed above.

- 12. Can we consider adopting a collaborative mechanism, with representation from TSPs, content providers, consumer groups and other stakeholders, for managing the operational aspects of any NN framework?
 - a) What should be its design and functions?
 - b) What role should the Authority play in its functioning?

An independent advisory group may be set up consisting of stakeholders like TSPs, Internet based service providers, consumer groups etc. to advise TRAI regarding the Net neutrality framework. The role of the group should be strictly advisory. This would ensure that the net neutrality framework is dynamic in nature and takes into account any advances in technology, changing needs of the users etc. TRAI should have the discretion to accept or reject the recommendation of the advisory group.

13. What mechanisms could be deployed so that the NN policy/regulatory framework may be updated on account of evolution of technology and use cases?

The net neutrality framework should be reviewed frequently and comments of the public should be sought at regular intervals. This coupled with the recommendations of the advisory group would ensure that the net neutrality framework remains updated with technology without stunting innovation.

14. The quality of Internet experienced by a user may also be impacted by factors such as the type of device, browser, operating system being used. How should these aspects be considered in the NN context? Please explain with reasons.

The other factors related to the quality of experienced by the user should be dealt with separately and should not be included in the scope of this discussion.