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(भारत सरकार का उद्यम)
Mahanagar Telephone Nigam Ltd.
(A Government of India Enterprise)
CIN: L32101DL1986GOI023501

स्वच्छ भारत
एक कदम स्वच्छता की ओर

MTNL/RA/TRAI/ CP-Net Neutrality /2017
Dated 14.03.2017

To,

The Advisor (QoS)
TRAI, New Delhi

Sub. : Comments on TRAI Consultation Paper dated 04.01.2017 on "Net Neutrality".

TRAI issued Consultation paper on 04.01.2017 on the aforesaid subject and asked the various stakeholders to comment on the issues involved in the consultation paper. In this reference following comments are submitted for consideration:

MTNL strongly supports the concept of Net-Neutrality. These comments from MTNL may be considered in continuation with our earlier comments (i) dated 04.07.2016 in response to TRAI Pre- Consultation Paper dated 30.05.2016 on "Net Neutrality" and (ii) dated 24.04.2015 in response to TRAI Consultation Paper on "Regulatory Framework for Over-the-Top(OTT) services".

The question-wise comments are given below:

Q1. What could be the principles for ensuring nondiscriminatory access to content on the Internet, in the Indian context?

MTNL comments:

In our perception, the core principles accepted worldwide and recommended by DoT committee on "Net Neutrality" should be strictly adhered with. The core principles aims for "no discrimination/favor/restriction for any specific content/application in terms of cost and access to subscribers, i.e. no throttling, no blocking, and no-intended prioritization, no restriction". Therefore there should not be any discrimination by TSP on aspects of speed, access or price, in general.

However, in Indian context, the standard concept of Net Neutrality may be circumscribed for "internet traffic" by certain unequivocal conditions that do not breach the core requirements of Net Neutrality as it is commonly understood. These conditions may include the intrinsic need to protect networks from disruptive attacks, the management of the flow of Internet traffic, the need to comply with legal obligations, maintenance of acceptable levels of quality of service (QoS) for some real time services etc.

Q2. How should "Internet traffic" and providers of "Internet services" be understood in the NN context?

(a)Should certain types of specialised 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?

Please provide reasons.

MTNL Comments:

Any legal/authorized content/data traffic which requires Internet connection (wireline or wireless) for its working shall be considered as "Internet traffic" in the NN context, subject to exceptions of (i) closed networks (subject to proper/clear definition) as defined under "Prohibition of Discriminatory Tariffs for Data Services Regulations, 2016" and (ii) data/ content related to telecom services offered without authorization and(iii) locally hosted content in TSP Network .

The "providers of internet services" should be the service providers authorized by way of licensing, to provide "internet services" in respective service areas.

(a) Special services may not be put in the ambit of Internet traffic as the said services may not be of commercial nature, e.g. life saving applications, threat to national security, emergency services etc. ES, M2M & IoT and in which the data does not cross the operators network should also be exceptions. Specialized services should be given a "fast lane" if there is no impact on overall quality of Internet and if this is "necessary".

However, Net neutrality needs clear, enforceable, predictable definition for such specialized services.

Further the Specialized services should be given a "fast lane" if there is no impact on overall quality of Internet and if this is "necessary".

(b) Network Optimization solutions such as interconnection that involves adding capacity through new ports, or caching, or content delivery; network (CDN) services that offer a benefit by reducing the total distance of travel, not only improve the quality of service for those using the solution but also for other users that share the same local network of the TSP. This is because such solutions de-congest the existing access network. Therefore, offering a benefit of improved performance through network optimization solutions (such as faster interconnection, caching, or CDN services) that does not slow down other applications or application providers, rather improves their experience, representing a very distinct issue from paid prioritization. Further it will promote hosting of foreign content in India.

However, the regulator/agencies must keep a watch of such liberty by any service provider for controlling the market in such way being adverse to competition in the industry.

Q.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.

MTNL Comments: In the Indian context, defining what constitutes reasonable TMPs (the broad approach) should be preferred as probability of misusing narrow approach is higher. However such TMP's should be assessed, selected and properly defined by the regulator, and should not be leftover to the discretion/choice of TSP's.

Q.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 users choice and without any arrangement between a TSP and content provider, be treated?

MTNL Comments:

(a) & (b): In this regard, the approach adopted by DoT's committee seems quite logical along with exceptions mentioned in Para 3.5. Emergency services shall only constitute what GOI or the relevant authorities decides from time to time.

(a) Preferential choice of content by user, has no control of the TSP over the transmission of content, hence it should not be contained in the ambit of TMPs.

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

MTNL Comments: Not applicable, in view of comments to Q4 above.

Q.6 Should the following be treated as exceptions to any regulation 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.
Please elaborate.
MTNL Comments: Yes for (a) to (d). However TMP should be well defined to the extent possible for Maintaining security and integrity of the network.

Q.7 How should the following practices be defined and what are the tests, thresholds and technical tools that can be adopted to detect their deployment: [See Chapter 4]
(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 provided to a particular application?).

MTNL Comments:

(a) Blocking: Blocking may be considered as a restriction to access of legally accessible websites/content/ application etc.
(b) Throttling: Bandwidth throttling is the intentional slowing of Internet service by an Internet service provider. However Broadband fair usage policies/plans of ISP should not be seen as bandwidth throttling. MTNL has already provided a tool for testing BB speed on its websites.
(c) No preferential treatment shall be allowed except to emergency services.

Further, the Measurement of throughput, relevant packet network data details can be one measure which can be used to determine whether an application is being blocked or throttled. Application owners normally have software tools on their servers which measures parameters like latency, packet loss, TCP retransmits IP pool wise which gives a good indication whether there is a network issue. Application owners may be required to submit supporting logs along with the complaints.

Q.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?

MTNL Comments: It is suggested that methods of disclosures presently in practice, are sufficient wherein TSPs submit the Pricing and commercials disclosures (tariff plans and Terms & conditions) on its POS and Websites and to regulator (TRAI). Providing a lot of technical details to the customers/general public will not be of any significance to general public, and will lead to confusions among subscribers, and will also increase the cost of disclosures and will the burden TSPs financially.

The practices (out of TMPs defined by Regulator) adopted by TSP's may be disclosed to the customers time to time whenever planned in a suitable manner (SMS broadcast/email etc).

Q.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.

MTNL Comments: In view of comments to Q8 above, except customer specific information, all other performance details & application related parameters mentioned in template, may not be of significance to customers, as it will be too technical for customers and moreover presently MTNL does not support application specific traffic management.

However the details related to above parameters may be submitted to regulator (TRAI).

Q.10 What would be the most effective legal/policy instrument for implementing a NN framework 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?

MTNL Comments: It is suggested that the most effective legal/policy instrument for implementing a NN framework would be to put in place an umbrella regulation on NN, with subsections addressing tariff (incorporating the existing regulations on discriminatory tariff), QoS and related transparency requirements.

(a) TRAI should be responsible for monitoring and supervision for the implementation of NN regulation.

(b) In case of detected NN regulation violation, the Regulation should provide for imposition of financial disincentives for initial instances of violation, and for subsequent violation the Regulator should recommend the licensor for strict action against the violator.

As commented for Q 2 (a) above, in our view, only government defined emergency services shall be prioritized. No other TSO controlled QoS management is required, as customers themselves will prioritize the access of the content/application of their choice in an unrestricted free Internet environment. So NN framework/regulation shall be strictly followed subject to reasonable TMPs.

Q.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).

MTNL Comments: In view of Q8 & Q9 above, the service providers may be required to submit the disclosures in prescribed format. Further, the Regulator may also take cognizance of violation by service provider, observed/reported vide any sources including (b) & (c).

Q.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?

MTNL Comments: The Regulator may constitute an advisory group/committee that may assist TRAI in designing and monitoring the adherence of service providers to NN framework/regulation. The advisory group may accommodate independent industry experts and representation from other suitable stakeholders including PSU service providers, the content provider, and licensor.

However the suggestions of such advisory group/committee should be recommendatory in nature, and the final deciding authority shall be the Regulator. and TSPs should be provided a reasonable opportunity of hearing before reaching the conclusion of NN violation.

Q.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?

MTNL Comments: As the framework on the issue is at introductory stage in Indian context, all the aspects (even considering the best practices adopted in other countries) may not be addressed in initially designed framework. The initial framework may require further amendments to perfectly befit the Indian industry requirements.

Further, as technologies are always evolving/dynamic in nature and not being predictable much in advance, similar are the legal/regulatory requirements which depends on the adopted policies, therefore the framework should also be subject to continuous evaluation on the basis of its compatibility with the latest technological developments/issues.

The above referred committee/advisory group (in Q12) along with the regulator may be assigned responsibility of periodical/on referral, evaluation of the developments on the issue and submit its suggestions to the Regulator, and the Regulator may modify the framework to suit the requirements.

Q.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.

MTNL Comments: Devices etc should not be touched upon in NN context as in other regulations devices owned by customers do not make part of any framework or regulation.

As the different contents may have best compatibility with particular device/browser or O.S. etc. (which may be described by the content provider), the quality of Internet experienced by a user may also be impacted by such factors (e.g. type of device, browser, operating system being used). **However TSP should not be held responsible for the impact of above factors, for being beyond control of TSP.**

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