महानगर टेलीफोन निगम लि०
(भारत सरकार का उद्यम)
Mahanagar Telephone Nigam Ltd.
(A Government of India Enterprise)
CIN: L32101DL1986GOI023501

MTNL/CO/RA/TRAI CP on TMPs/2020
Dated 31.01.2020

To,

The Advisor (QoS)
TRAI, New Delhi

Sub. : TRAI Consultation dated 02.01.2020 on "Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality".

TRAI issued a consultation paper on 02.01.2020 on the aforesaid subject and asked the various stakeholders to comment on the issues involved in the consultation paper. In this reference the following comments are submitted for consideration:

1. MTNL strongly supports the concept of complete Net-Neutrality, and the same has been submitted before TRAI on various previous occasions, when comments were sought by TRAI on the subject Matter. The earlier comments submitted by MTNL may be treated as integral part of the present submissions.

2. The implementation of TMPs even "Reasonable" TMPs should not be allowed except for the following:
   - compliance with other laws
   - preservation of integrity and security
   - congestion management measures

3. Between specific content, applications or services, or specific categories thereof, there should be:
   - no blocking,
   - no slowing down,
   - no alteration,
   - no restriction,
   - no interference with,
   - no degradation, and
   - no discrimination

Practices which do not comply with these seven basic principles, or that otherwise go beyond *"reasonable traffic management"* should be used by ISPs only when they fit into the three specific exceptions mentioned at (2) above.

4. Further, under all these exceptions, the traffic management measure has to be necessary for the achievement of the exception in question and applied *"only for as long as necessary"*.

5. MTNL supports the view of Licensor for granting only advisory role to MSB, as the same is required for it being devoid of any lobbying or influences just like any other commercial association representing only the vested interests of its members.

6. All the powers regarding constitution, appointments of Members, deciding work process/framework should vest with the licensor. Further, constitution and roles of such MSB should be decided in accordance with general interpretation of the term "Advisory" mainly including strategic planning and oversight.

7. To promote fairness in the outcomes of the MSB, there should be adequate strategic representation of telecom PSUs in the MSB.

8. The provision of funds for initial set up of MSB, including infrastructure and expert consultations should be undertaken by the Licensor

ISSUE- WISE COMMENTS

Q. 1. What are the broad types of practices currently deployed by the Access Providers (APs) to manage traffic? Out of these practices, which ones can be considered as reasonable from perspective of Net Neutrality? Whether list of Traffic Management Practices (TMPs) can be prepared in advance or it would be required to update it from time to time? If later is yes, then what framework would be required to be established by Multi-Stakeholder Body to keep it up to date? Please suggest with justification.

MTNL COMMENTS : Broad types of practices currently deployed by the Access Providers (APs) to manage traffic are as follows:

i. The practices that affect the connectivity and reachability of individual applications such as Blocking Ports using transport protocol (TCP or UDP), IP address blocking, DNS manipulation of specific DNS-requests etc.
ii. The practices that impact QoS of individual applications such as prioritization and/or throttling of specific applications.

Out of these practices, the practices that follow the principal of non-discriminatory treatment can be considered reasonable from the perspective of Net Neutrality. The restrictions or interventions by service providers must be proportionate, transient and transparent. Any traffic management practice must only be applied to handle concerned exceptional circumstances and not for any commercial considerations.

Identification of traffic management practices and validation of its reasonableness may be a complex issue and various technical and measurement challenges may be associated with it. Hence, preparing a list of Traffic Management Practices (TMPs) in advance may not be possible. Service Providers may maintain a record of all adopted Practices for traffic management ("Record of TMPs"), in house, and publish in public domain to maintain transparency.

Q.2 Whether impact of TMPs on consumer's experience can be interpreted from its name and short description about it or detailed technical description would be required to interpret it in objective and unambiguous manner? In case of detail technical description, what framework need to be adopted by Multi-Stakeholder Body to document it. Please suggest with justification.

MTNL COMMENTS : For an average consumer interpreting TMPs from a short description would be difficult. In our view, it would be better if Multi-Stakeholder Body conducts a comprehensive assessment and rates the impact of TMPs on consumer's experience. The adopted framework should clarify the impact of the respective TMP(s) not in terms of purely technical jargon, but from the perspective of a technically illiterate customer, to provide him a rightful opportunity, so that on the basis of such description he could make out a reasonable understanding and make the decision accordingly.

Q.3 What set up need to be established to detect violations of Net Neutrality, whether it should be crowd source based, sample field measurements, probe based, audit of processes carried out by access providers or combination of above? How to avoid false positives and false negative while collecting samples and interpreting Net Neutrality violations? Please suggest with justification.

MTNL COMMENTS : Crowd-sourced measurement approach will be preferred to collect data, as setup of a measurement system on large scale may require special arrangements. However, for in-browser or app based crowd-sourced measurement tools, it is hard to have full control over all the factors that impact measurement results. For crowd-sourced measurement approach, more

effective steps will be required to be taken since the conditions at the client side can not be predetermined. Generally, it is unknown whether the client environment fulfills the requirements for an accurate measurement.

To make measurement more accurate monitoring consumer complaints, conducting market surveys, requesting information from ISPs, and technical network monitoring may be done by regulator.

Crowd-sourced Measurements may be performed by collecting samples enough in numbers to detect true positive. To avoid the impact of wireless behaviour of networks, selection of samples for measurement need to be diverse enough to detect violations and samples not attributable to Access Providers actions must be eliminated.

The above, blended with audit of processes implemented by the TSP could be a better combination.

Q.4 What should be the composition, functions, roles and responsibilities of Multi-stakeholder Body considering the decision of DoT that Multistakeholder body shall have an advisory role and formulation of TMPs and Monitoring & Enforcement (M&E) rest with DoT? Please suggest with justification.

MTNL COMMENTS : MTNL supports the view of Licensor for granting only advisory role to MSB, as the same is required for it being devoid of any lobbying or influences just like any other commercial association representing only the vested interests of its members.

All the powers regarding constitution, appointments of Members, deciding work process/framework should vest with the licensor. Further, constitution and roles of such MSB should be decided in accordance with general interpretation of the term "Advisory" mainly including strategic planning and oversight.

The MSB may be constituted with two layer structure. The one including General Members without voting rights (any private person or organization may apply, based on satisfying eligibility conditions decided by the licensor) proposing the issues for consideration of the Consulting body (Members having voting rights) with Chairperson, and same is supported with Secretariat (admin and office work) .

The Consulting Body may comprise of members representing:

• The different categories of TSPs and ISPs

- large and small content providers
- representatives from research, academic and technical community
- civil society organisations
- Consumer representatives

The issues before such consulting body may be decided by the majority rule.

Q.5 Whether entry fee, recurring fee etc for membership need to be uniform for all members or these may be on the basis of different type or category of membership? What may be these categories? What policy may be adopted for initial set up of Multi-stakeholder Body. Please suggest with justification.

MTNL COMMENTS : Comments for Q4 above may be referred. Further, it is proposed that the membership for General Body should be fee based, so as to avoid any non sincere concerns. However the Consulting Body should not be membership based, as the same will be constituted for performing advisory role to support the functions of the Licensor.

Further, it is proposed that arrangement of funds for initial set up including infrastructure and expert consultations should be undertaken by the Licensor.

Furthermore, there may be different types of membership like individual or organization memberships. MSB may require representatives from different domains, sometimes MSB may require some expert advice for resolving any issue or conflict and to carry out wide range of functions. Therefore, members representing different domains and categories may require to have minimum level of expertise in their domain and field, such as members representing TSPs or ISPs may have a proven expertise in the area of telecom or ICT technologies, and/or net neutrality and may have strong understanding of TMPs, challenges associated with TMPs and technical requirements. Member organizations may be expertise or operational in the domain of telecom or ICT technologies, and/or net neutrality. Similarly, other categories may also have eligibility requirements for any individual or organization to become member under the specific category.

Q.6 What mechanism may be prescribed to determine fee and other contributions from its members towards expenditure in a fair and nondiscriminatory manner? Please suggest with justification.

MTNL COMMENTS : The Membership fee for General Body members their rights must depend on organizations size. Consulting Body Membership should
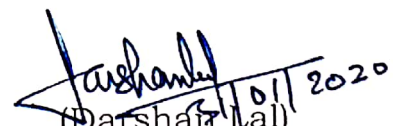
be open to any Service Provider no matter of size. However, Non-Voting General Body Membership should be open to either Medium or Small Sized Enterprises for individuals. General Body membership fee must be deferent for mid-sized and small-sized enterprises.

Q.7 What should be the guiding principles and structure of governance of Multi-stakeholder Body? What may be the roles and responsibilities of persons at different positions such as chairing the organization or working groups, governing the functioning, steering the work etc. Please suggest with justification.

MTNL COMMENTS : The function of MSB should be to apply laid down procedures and working methods for adoption of a constitution which would be the foundation framework and guiding principles for MSB. The roles and responsibilities of persons at different positions may be decided by the Members of MSB under the observation of DOT.

Q.8 Any other issues which is relevant to this subject?

MTNL COMMENTS : The MSB should consider the limitations of the systems implemented by various telecom service providers, while seeking the data/reports for study. The service providers should be provided adequate time for configuration and implementation of standard formats of reports.

(Darshan Lal)
DGM(RA&C)