RJIL/TRAI/2019-20/652
13th February 2020

To,

Shri Asit Kadayan
Advisor (QoS)
Telecom Regulatory Authority of India
Mahanagar Doorsanchar Bhawan
Jawahar Lal Nehru Marg, New Delhi 110002

Subject: Comments on Consultation Paper dated 02.01.2020 on 'Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality'.

Dear Sir,

Please find enclosed comments of Reliance Jio Infocomm Ltd. on the issues raised in the Consultation Paper dated 02nd January 2020 on 'Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality'.

Thanking You,
For **Reliance Jio Infocomm Limited,**

Kapoor Singh Guliani
Authorised Signatory

Enclosure: As above.

Reliance Jio Infocomm Limited's Comments

on

TRAI's Consultation Paper on

"Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality"

1. At the outset we welcome Authority's initiative to solicit feedback and comments on Consultation Paper on "Traffic Management Practices (**'TMPs'**) and Multi-Stakeholder Body (**'MSB'**) for Net Neutrality" (**'CP'**). It has come at an opportune time when India is at an inflection point of its internet revolution and role of TMPs becomes critical in ensuring an efficient network for delivery of quality services to the end consumer.

2. TSPs, to preserve fair access and high quality of experience for their subscribers, need to eliminate congestion through requisite traffic management practices as no amount of capacity expansion can eliminate congestion. We agree that the TMPs should be reasonable; implying that they must be proportionate, transient and transparent. To ensure best interest and support decision making process of the end consumer, internet service providers should disclose their TMPs in public domain in unambiguous terms.

3. We submit that since TSPs are already bound by the Net Neutrality (**'NN'**) regulations and hence the Government and Authority should maintain a light touch regulation for TMPs and allow TSPs to operate their network in an efficient manner.

4. Although we are supportive of regulation for TMPs and the implementation of the same through industry bodies, as originally envisaged by the Authority; we understand and respect DoT's recommendation that the formulation and monitoring of TMPs should be under ambit of DoT. We submit that in addition to its advisory role, the industry body should play an active role in in assisting DoT in its monitoring and enforcement functions. This will establish a strong working relationship between the Government and the industry while the Government retains the decision-making control.

5. We submit that instead of focusing on creating a new body in form of a MSB, as an advisory on TMPs, DoT may consider and consult an industry-led body that already exist or will emerge as the technologies in relation to traffic management develop further. We recommend that industry-developed and monitored codes of conduct and self-regulatory mechanisms, to ensure compliance with the existing regulatory framework, be promoted instead of constituting any new bodies.

Q1. 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.

1. In compliance with NN principles, TSPs/ISPs apply TMPs to handle only exceptional circumstance and not for any commercial considerations. In addition, TMPs are designed to respond to the QoS requirements of the categories of traffic to optimize the overall transmission quality and enhance the user-experience. TSPs/ISPs employ TMPs while ensuring that there is no discriminatory prioritization/throttling of any specific content, applications or services or specific categories thereof.

2. Broad types of TMPs currently deployed by APs include the following, among others:
   a. Measures to optimize overall transmission quality in a permissible and proportionate way.
   b. Safeguarding the security and integrity of its network through restricting connectivity or blocking of traffic to and from specific endpoints among others; eg: blocking of IP addresses from which an actual attack is originating, which are well known sources of attack, which are showing suspicious behavior, where there are clear indications that they are part of bot network, which make use of identity theft filters, etc.
   c. Blocking websites and services as it is required to do so by law or court order.
   d. Preference to network management traffic over the rest of the traffic, which are aimed at properly configuring and securing the network and its equipment by efficiently balancing the load.
   e. Deploying age verification/child protection/parental control tools
   f. Deploying content filtering or making available content filtering tools where appropriate for public Wi-Fi access
   g. Ensuring elements of a consumer's contract can be applied (e.g. data caps, download limits, heavy user policy)
   h. Deploying objectively different technical QoS requirements of specific categories of traffic, viz. latency, jitter, packet loss, and bandwidth.

3. Performance of broadband changes with change in technology deployed and performance of other stakeholders in the digital ecosystem such as content providers, applications, end user environment, etc. The elements of the network ecosystem which can impact the broadband experience of the end user are dynamic in nature. Hence the associated TMPs also need to change to keep pace with the changing ecosystem and must be periodically reviewed to modify the same accordingly.

4. Industry bodies should play an active role in assisting DoT in carrying out its role in maintaining an updated TMP relevant for the TSPs/ISPs. We submit that we are

broadly in agreement with 'Option 3' mentioned under section 2.4, 'Framework for compilation of Traffic Management Practices' although we suggest following modification to the same:

    a. TSPs/ISPs should submit a detailed record of all TMPs adopted and applied by them to the industry body in defined regular intervals, which should be prescribed by DoT.

    b. Industry body should review the record of TMPs submitted by TSPs/ISPs and prepare a 'Repository of Necessary TMPs' and submit the same to DoT for approval.

    c. Upon approval by DoT, industry body should publish this repository so that consumers can better understand the choices of various TSPs/ISPs and take an informed decision while selecting the internet/broadband package.

    d. DoT should also issue directions to TSPs/ISPs in case their TMPs are not reasonable and aligned along the principles of proportionality, transient and transparency.

    e. Additionally, industry body should prepare a disclosure format for TSPs/ISPs to publish their TMP in public domain, which should be approved by DoT. TSPs/ISPs should adopt the approved disclosure format as it will bring uniformity and allow easier access and comparison between available internet service providers for the end user. The disclosure format should be reviewed at regular period, which should be defined by DoT, and modified if need be.

Q2. 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.

1. We believe that the impact of TMPs on consumer experience can be interpreted from its name and short description. Such names and their short description can be standard, as suggested and maintained by the industry body, which may be adopted by all TSPs/ISPs to maintain uniformity for convenience of end consumer. A link may be provided on the same webpage which should take consumer to webpage of industry body, where detailed elaboration of standard names and their short description is provided.

2. While communicating their TMPS, TSPs/ISPs should adhere to good practice principles of traffic management transparency, which should include that the TMPs should be:

    a. Understandable – TSPs/ISPs should use non-technical and clear language that consumers can understand to describe the TMPs.

    b. Appropriate – Information should be available in form of headline information about the TMP, while supplementing this with additional information for consumers who may wish to access more information.

    c. Accessible – TMP information should be easy to find and access.

d. Current – TSPs/ISPs should keep customers up to date about any change in their TMP which can have a significant impact on their usage.

e. Comparable – TSPs/ISPs should publish key information related to TMPs on their website in a standard disclosure format for easy comparison by the consumers.

Q3. 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.

1. We believe that to detect violation of NN principles by the TSP/ISP, while implementing the TMPs, can be suitably done by a reactive regulatory approach, which is based on monitoring upon reporting of a potential incident by a relevant stakeholder, rather than a proactive regulatory approach, which requires continuous monitoring of the quality of the internet by the regulator. A proactive approach will be onerous and burdensome for both the regulator as well as the internet service providers.

2. We submit that the set up for detecting violations of Net Neutrality should be primarily probe based. The incident stating TMPs violated the NN principles should be reported to the industry body, which may admit the same upon the incident meeting the defined incident admission criteria. Incident admission criteria should include a verification step by the industry body itself to avoid admission of frivolous incident reporting. In addition, industry body should continuously monitor consumer complaints and conduct market surveys to assess any violation of NN principles by internet service providers.

3. Upon admission of the incident for probing, the data should be collected at end user level through crowd sourcing in the given geographical location for the given internet service provider through interactive tools available to be downloaded from dedicated websites performing measurements at a specific point in time, or as measurement tools that are downloaded and installed by the end-user for the purpose of on-going monitoring in the background. While probing an admitted incident, industry body should be authorized by DoT to request information from respective TSP/ISP and monitor their technical network.

4. We agree with BEREC Guidelines, which mentions that the measurements should be performed beyond the internet service provider's leg. Hence measurements should be performed at the edge of the network which provides the internet access services, i.e. at the end consumer level. Also, the true impact of the TMPs is faced by the end user and hence it may first be experienced and reported by the same.

5. As rightly identified by Authority, we agree that the actual experience of the consumer may be impacted by multiple factors which may include end user environment, lack of awareness of end users, scheduling of resources by mobile network, etc. The measurement of TMP practices, to verify if they are reasonable, can also be impacted by choice of test methodology, conditions of measurement and assessment of measurements of the TMP along with identification of appropriate thresholds and benchmarks. Hence the process of measurement of TMP practices requires due deliberation and widespread consultation before arriving at any agreed process.

6. Monitoring mechanisms should mitigate, to the extent possible, confounding factors which are internal to the user environment. To ensure that end user environment do not affect the measurement, one option may be that multiple measurements are taken on daily basis and aggregated data for reference.

Q4. What should be the composition, functions, roles and responsibilities of Multi-stakeholder Body considering the decision of DoT that Multi-stakeholder body shall have an advisory role and formulation of TMPs and Monitoring & Enforcement (M&E) rest with DoT? Please suggest with justification.

1. As stated above, we submit that DoT may consider identifying an industry body for providing advisory services rather than forming a new MSB. We submit that the industry body should be a not for profit body and its membership should be open for all the stakeholders likely to be impacted by implementation of TMPs.

2. We understand that DoT has stated its decision that the monitoring and enforcement functions for net neutrality should lie with DoT. We submit that beside the advisory role, industry body should also play an active role in assisting DoT in its monitoring and enforcement functions. This will establish a strong working relationship between the Government and the industry while the Government retains the decision-making control.

3. We submit that the industry body's role can be broadly divided into three parts as described below:

    a. TSP centric: It should be responsible for reviewing the TMPs of the TSPs/ISPs and publishing the 'Repository of Necessary TMPs' upon approval of DoT. It should also prepare formats for TMPs disclosure, which can be provided to TSPs/ISPs for uniformity in TMP disclosure.

    b. Customer centric: It should be handling the complaints or reports submitted by consumers reporting violation of NN principles or other queries or feedback raised by consumers. It should be conducting the probe for verified incidents and submit the report of the same to DoT for final course of action to be pursued based on the findings of the probe. Such industry body, under

authorization from DoT, should be eligible to request records on traffic management measures/practices applied by TSPs/ISPs for probe of alleged incident. Upon confirmation, it should also pursue the corrective measure/penalty as decided by DoT.

c. DoT Centric: It should act as an interface between industry and Government in providing two-way inputs/requirements of the sector in the given domain. It should also act as test bed for DoT to validate its ideas before issuing any directions for the sector.

Q5. Whether entry fee, recurring fee etc. for membership need to be uniform for all members or these may be based on 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.

AND

Q6. What mechanism may be prescribed to determine fee and other contributions from its members towards expenditure in a fair and non-discriminatory manner? Please suggest with justification.

1. Industry body should be a not for profit body and should collect fees (entry and recurring) from its members to meet only its operational expenses. Maintaining the light touch approach, Authority should leave the determination of fees to the governing body of the body. The fees should cover the actual expense of the body and its annual accounts can be used for determination of the same. To ensure that the fees remain within a reasonable range and doesn't keep on increasing based on increase in scope of activities of the industry body, DoT may consider putting a cap on such membership fee which should be uniformly applicable to all the industry bodies registered or planning to get registered with DoT.

2. We suggest that the fee structure should be tiered, allowing for lower fee for smaller companies when compared with significant members. Industry body should also provide required guidance and support to smaller companies in their effort to abide by TMP obligations. We submit that within the significant members, there should not be any membership category allowing differential authority/power to members based on their revenue, type, category, etc. Also, there should not be any fee structure based on any such membership category.

3. Government may identify and recognize an existing not for profit industry body and approve its memorandum and bye-laws. Such recognized industry body should invite major TSPs/ISPs, including those identified by DoT/Authority, to become founding members of the body. Funding of the administrative and monitoring expenditure for

the industry body may be managed by the founding members themselves till additional members join and a membership structure is put in place.

4. It should be given a defined period to develop a TMPs review process, disclosure format and other processes/documents required for carrying out its outlined agenda and operations. Continuing with the light touch approach, DoT should let the industry players become the members and manage the governance of the concerned industry body.

Q7. 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.

1. The governance structure of the industry body should have a transparent and non-discriminatory policy towards its members. It should develop/adopt a constitution containing guiding principles for the conduct of the body and its procedures and working methods should be driven by the same.

2. We suggest that adopting a light touch approach, DoT/Authority may prescribe a minimum governance structure which can be adopted by the industry body. Such minimum governance structure may be in line with the governance requirement for a non-profit organization as per Companies Act and Societies Registration Act.

3. Industry body can have a dual governance structure; a Governing Board and an Executive Committee. Governing Board should be an elected body and function as apex committee for the body. It should be responsible for administration and management of the body with its members holding key portfolios related to the same, viz. President/Chairman, Secretary, Treasurer, etc. Governing Board will be responsible for approving Repository of TMPs, disclosure format, probe reports based on verified incidents, etc.

4. Executive Committee should be the team responsible for day to day execution of strategy/guidelines formed by the Governing Board. It can have a larger membership than the Governing Body to carrying out day to day activities and processes of body, eg: review of TMPs of TSPs/ISPs, conducting probes, preparation of reports, etc.

5. Governing Board can have a varied representation mix from members, end user forum/organization, independent sector advisor and sectoral legal experts; to help develop wider perspective and consider interest of various stakeholders in the sector. Executive Committee can have representation only from the industry body.