

**Unlimit / Reg / TRAI / 19-20 / 02  
January 2020**

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

**Subject: Unlimit's response to TRAI's Consultation Paper on "Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality"**


Sir,

Kindly find enclosed herewith Unlimit's response to TRAI's Consultation Paper on "Traffic Management Practices (TMPs) and Multi-Stakeholder Body for Net Neutrality".

It is requested that same may be taken on records.

Thanking you,

**Yours sincerely,**  
**For, Unlimit IoT Pvt Limited.**

  
**Authorised Signatory**

**Juergen Hase - Director**

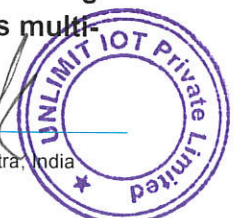
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**Unlimit's Response to the Consultation Paper on  
Traffic Management Practices (TMPs) and  
Multi-Stakeholder Body for Net Neutrality**

**Executive Summary**

- A. Denial of connectivity / non-execution of commercial agreements / delay in provisioning and configuring telecom resources by the TSPs in the garb of TMP measure, while providing the same to TSPs own digital services customers, should be considered a clear violation of the principles of non-discriminatory access to network resources and services.
- B. Provisioning of connectivity on a non-discriminatory basis to the Digital Services Providers (DSP) should be mandatory for the TSPs.
- C. In order to check such anti-competitive practices and ensure adherence to net neutrality principles mandatory audit of processes adopted by access providers for providing services to the DSPs / detailed investigation of any complaints initiated by the DSPs vis-à-vis digital services provided by the TSPs themselves should be carried out on an annual basis.
- D. It is imperative that each of the stakeholder in the digital services eco-system has adequate representation in the multi-stakeholder body instead of limiting it to only government licensed / registered entities.
- E. The Multi-Stakeholders body ideally should comprise the TSPs, ISPs, VNOs, Content Providers, IoT Services Providers, Digital Payments services providers, Security & Trust Services providers, Cloud Services providers, AI / ML engine providers, Data Analysts, Academics, Researchers, civil society organizations, standards organization, representatives of DoT, MeitY, MHA, MoRTH, MoHUA, Agriculture and Health ministries and individual consumer representatives.
- F. The multi-stakeholder body shall function as an industry body that shall have the primary function of ensuring that the technical / commercial actions of any of the digital services eco-system stakeholder firstly, contribute towards enhancing the QoS experience of the end customers of the digital services and secondly, to highlight the anti-competitive practices, of any of the stake holder, that potentially stifles innovation and adoption of digital services.
- G. The primary role of the multi-stakeholder body shall be to advise the government on various requirements of the stakeholders of the digital services eco-system with a view to enhancing customers' experience of services.
- H. The multi-stakeholder body shall be responsible for formulation of audit systems and their regular updating and recommending the adoption of same by DoT for auditing the stakeholders of the digital eco-system.
- I. Any Company or Firm or an association of such companies / firms in India that form part of the digital services eco-system, as listed para 'E' above and also including the device manufacturers, should be permitted to become a member of this multi-stakeholder body.



- J. **The body should have a governing council that shall be elected by all the members of the body. All members of the body shall have equal rights to participate in standing for elections as well as electing the governing council.**
- K. **A nominal uniform joining fee of Rs 15,000/- can be prescribed for any member to join the organization.**
- L. **From sustainability point of view, the annual subscription due from each member may be calculated on a slab system on the basis of its Gross Sales Turnover during the last financial year.**
- M. **The guiding principles and structure of governance of Multi-stakeholder Body, the roles and responsibilities of persons at different positions such as chairing the organisation or working groups, governing the functioning, steering the work etc may be templated on the lines of TSDSI.**

Our specific comments on the issues posed by the Authority are given in the subsequent paragraphs.

### Detailed Response

**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 Practises (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.**

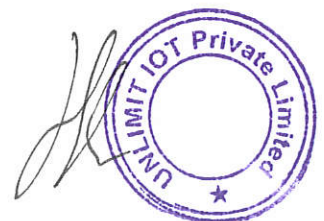
### Our Response

1. The TSPs traditionally have been earning revenues by providing the native services of their network viz, voice, messaging and data bandwidth. However, with the paradigm shift of networks from being voice centric to data centric leading to separation of services from the network, the TSPs are themselves stepping into the Digital Services space by developing their in-house digital services platforms for various digital applications including Connectivity Management. This is practically leading to a situation where the TSPs are in direct competition for the same digital services business as a TSP agnostic Digital Services Provider (DSP). Connectivity being the blood line for digital services, this could potentially have QoS ramifications for the services of the DSP. Though TRAI's Nov 2017 Net Neutrality recommendations prohibit the TSPs from indulging in differential treatment of traffic, but there could be other actions, as described below, that can be / could be taken by these competing TSPs that have the potential of squeezing the blood flow for the services of the DSPs.
  - a. **Complete denial of provisioning of SIMS / subscriptions (IMSI) by the TSPs.**
    - i. Connectivity being the blood line for IoT services, denial of SIMs / Subscriptions would render DSPs out of business.
    - ii. Being in direct competition with the DSPs, the TSPs formulate internal business policies for not supporting competing platforms thereby choking similar / better

- services to Indian consumers. The situation is getting further accentuated with the dwindling number of TSPs providing services in the Indian market.
- iii. Denial of telecom services to the DSPs while providing the same to TSPs own digital services customers, would be a clear violation of the principles of non-discriminatory access to network resources and services. Indulgence of TSPs in such anti-competitive practices, in the garb of TMPs, cannot be discounted.
  - iv. Example. Automotive Indian Standards (AIS 140) was notified by MoRTH in Nov 2016. This standard mandates provisioning of dual subscription embedded SIMs with panic buttons in public transport vehicles. However, implementation of AIS 140 has been lackadaisical not because of dearth of DSPs capable of providing compliant services, but denial of provisioning of subscriptions by the TSPs.
- b. **Delayed provisioning of SIMs / Subscriptions / Configuration of APNs / Other telecom resources.** Attributing lack of inventory or lack of network capacity for denying / delaying provisioning of SIMs / Subscriptions / Configuration of APNs / Other telecom resources for the DSPs, while providing the same to TSPs own digital services customers, would be a clear violation of the principles of non-discriminatory access to network resources and services. Indulgence of TSPs in such anti-competitive practices, in the garb of TMPs, cannot be discounted. Provisioning of telecom resources beyond reasonable delay can have the potential of DSPs faltering in fulfilling their commitments to their customers.
- c. **Non-execution of commercial contracts for bulk connectivity.** Certain DSPs such as IoT services providers need to requisition bulk connectivity from the TSPs for enabling their services. Provisioning of services such as fleet management, health services or connected cars, etc are required to have the assurance of commercial contracts for bulk connectivity to ensure continuity of services in the long term. Non-execution of the commercial contracts / asking for non-viable commercial terms in the contracts, by the TSPs in the garb of lack of inventory or lack of network capacity or as a TMP measure while providing the same to TSPs own digital services customers, would be a clear violation of the principles of non-discriminatory access to network resources and services. Indulgence of TSPs in such anti-competitive practices, in the garb of TMPs, cannot be discounted.

### Our Recommendations

1. **Denial of connectivity / non-execution of commercial agreements / delay in provisioning and configuring telecom resources by the TSPs in the garb of TMP measure, while providing the same to TSPs own digital services customers, should be considered a clear violation of the principles of non-discriminatory access to network resources and services.**
2. **Provisioning of connectivity on a non-discriminatory basis to the Digital Services Providers (DSP) should be mandatory for the TSPs.**



**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.**

**Our Response & Recommendation**

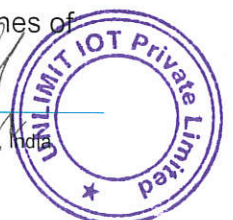
As brought out in our response to Q1, TSPs in the garb of TMP measure have the ability to resort to anti-competitive practices of denying / delaying provisioning of telecom connectivity and associated resources to the DSPs, while providing the same to TSPs own digital services customers. Such practices need to be considered as a clear violation of the principles of non-discriminatory access to network resources and services. It is recommended that **in order to check such anti-competitive practices and ensure adherence to net neutrality principles mandatory audit of processes adopted by access providers for providing services to the DSPs / detailed investigation of any complaints initiated by the DSPs vis-à-vis digital services provided by the TSPs themselves should be carried out on an annual basis.**

**Q.4 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.**

**Our Response**

**1. Composition.**

- a. The aim of every Telecom Network technology post 2G has been to enable development, deployment and availability of services that are delivered by utilizing the network, i.e. over the network. The construct of a digital service has a telecom device and the corresponding telecom connectivity as the base. Service like asset tracking or any smart city application or remote health monitoring, etc. utilise the telecom network for accessing a host of servers such as a GPS tracking server, a Location based server for geo tagging / geo fencing solutions, device management platform, CRM platform, billing platform, security and trust services platforms, AI / ML engines, AR / VR services, multiple Content Data networks (CDN) for promotions and advertisements and even Google maps and update downloads. Even the computational eco-system for the service spans the entire network and includes its edge as well.
- b. Since these services generate a lot of data, the data security, protection and privacy regulations have a direct bearing on their provisioning. Similarly, the policies for block chains, data analytics, data storing and transfer and cloud computing or cloud based services need to be developed in consonance with the aim of enabling digital services.
- c. Additionally, these modern day digital services cut across a wide variety of market and functional sectors from health, to agriculture, to smart cities, to assembly lines of



- various industries, etc, the need for a cross sectoral policy and regulation synergy too assumes significance.
- d. Digital Services therefore, are not standalone by product of a network or a pair of boxes; they are firstly divorced from the network and secondly, are an amalgamation of multiple services, that are sourced from different sources, service providers and vendors. Consequently, any unilateral enforcement of restrictions / controls / constraints / tweaking of network parameters implemented in the telco plane potentially has a direct bearing on the QoS experience of the consumer of digital services. Therefore, **it is imperative that each of the stakeholder in the digital services eco-system has adequate representation in the multi-stakeholder body instead of limiting it to only government licensed / registered entities. The body ideally should comprise the TSPs, ISPs, VNOs, Content Providers, IoT Services Providers, Digital Payments services providers, Security & Trust Services providers, Cloud Services providers, AI / ML engine providers, Data Analysts, Academics, Researchers, civil society organizations, standards organization, representatives of DoT, MeitY, MHA, MoRTH, MoHUA, Agriculture and Health ministries and individual consumer representatives.**
2. **Functions.** The multi-stakeholder body shall function as an industry body that shall have the primary function of ensuring that the technical / commercial actions of any of the digital services eco-system stakeholder
- a. Firstly, contribute towards enhancing the QoS experience of the end customers of the digital services and
- b. Secondly, to highlight the anti-competitive practices, of any of the stake holder, that potentially stifles innovation and adoption of digital services.
3. **Roles and Responsibilities.** In the pure telecom era, government had its PSUs providing the services much before the sector was opened up to the private sector. This ensured that the PSUs shouldered the responsibility of guiding the government in the requirements of telecom services and related areas. However, **in the modern age digital services space, which is all pervasive into humongous functions and domains, it is impossible for the government to have a PSU advising it on the requirements of each and every domain of digital services. Therefore, the primary role of the multi-stakeholder body shall be to advise the government on various requirements of the stakeholders of the digital services eco-system with a view to enhancing customers' experience of services. It shall be responsible for formulation of audit systems and their regular updating and recommending the adoption of same by DoT for auditing the stakeholders of the digital eco-system.**

### Our Recommendations

1. It is imperative that each of the stakeholder in the digital services eco-system has adequate representation in the multi-stakeholder body instead of limiting it to only government licensed / registered entities.
2. The Multi-Stakeholders body ideally should comprise the TSPs, ISPs, VNOs, Content Providers, IoT Services Providers, Digital Payments services providers

Security & Trust Services providers, Cloud Services providers, AI / ML engine providers, Data Analysts, Academics, Researchers, civil society organizations, standards organization, representatives of DoT, MHA, MeitY, MoRTH, MoHUA, Agriculture and Health ministries and individual consumer representatives.

3. The multi-stakeholder body shall function as an industry body that shall have the primary function of ensuring that the technical / commercial actions of any of the digital services eco-system stakeholder firstly, contribute towards enhancing the QoS experience of the end customers of the digital services and secondly, to highlight the anti-competitive practices, of any of the stake holder, that potentially stifles innovation and adoption of digital services.
4. The primary role of the multi-stakeholder body shall be to advise the government on various requirements of the stakeholders of the digital services eco-system with a view to enhancing customers' experience of services.
5. The multi-stakeholder body shall be responsible for formulation of audit systems and their regular updating and recommending the adoption of same by DoT for auditing the stakeholders of the digital eco-system.

**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.**

**Q.6 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.**

### Our Response

1. **Type or Category of Membership.** Any Company or Firm or an association of such companies / firms in India that form part of the digital services eco-system, as listed in our response to Q 3 above and also including the device manufacturers, should be permitted to become a member of this multi-stakeholder body. For ease of management the memberships can be sub-divided into multiple categories of individual, institutional and corporate. Given that India has a vast pool of start-ups participating in development of innovative digital services, it is warranted that the start-ups be given adequate representation through their representative body as an institutional member. In addition, it is also suggested to have an associate membership wherein digital services providing MNCs, having just a liaison office in India should be permitted to acquire associate membership. Such members shall have only observer status in the deliberations of the body.
2. The body should have a governing council that shall be elected by all the members of the body. All members of the body shall have equal rights to participate in standing for elections as well as electing the governing council.



Handwritten signature and circular stamp of Unlimit IoT Private Limited.

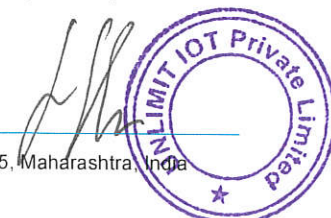
**3. Fee Structure.**

- a. A nominal uniform joining fee of Rs 15,000/- can be prescribed for any member to join the organization.
- b. From sustainability point of view, the annual subscription due from each member may be calculated on a slab system on the basis of its Gross Sales Turnover during the last financial year in the case of existing Member or on the basis of an estimated turnover for such existing members who have not finalised their Gross Sales Turnover figures or for a new member at the following suggested rates:

Gross Sales Turnover	Annual Subscription
Not exceeding Rs 30 lakhs	Rs 5,000/-
Exceeding Rs 30 lakhs but not exceeding Rs 50 lakhs	Rs 8,000/-
Exceeding Rs 50 lakhs but not exceeding Rs 1 crore	Rs 11,000/-
Exceeding Rs 1 crore but not exceeding Rs 5 crores	Rs 15,000/-
Exceeding Rs 5 crores but not exceeding Rs 10 crores	Rs 20,000/-
Exceeding Rs 10 crores but not exceeding Rs 15 crores	Rs 25,000/-
Exceeding Rs 15 crores but not exceeding Rs 25 crores	Rs 30,000/-
Exceeding Rs 25 crores but not exceeding Rs 40 crores	Rs 40,000/-
Exceeding Rs 40 crores but not exceeding Rs 100 crores	Rs 50,000/-
Exceeding Rs 100 crores but not exceeding Rs 250 crores	Rs 65,000/-
Exceeding Rs 250 crores but not exceeding Rs 500 crores	Rs 80,000/-
Exceeding Rs 500 crores but not exceeding Rs 750 crores	Rs 95,000/-
Exceeding Rs 750 crores but not exceeding Rs 1000 crores	Rs 1,10,000/-
Exceeding Rs 1000 crores but not exceeding Rs 2000 crores	Rs 1,30,000/-
Rs 2000 crores and above	Rs 1,50,000/-

**Our Recommendations**

1. **Any Company or Firm or an association of such companies / firms in India that form part of the digital services eco-system, as listed in our response to Q 3 above and also including the device manufacturers, should be permitted to become a member of this multi-stakeholder body.**
2. **The body should have a governing council that shall be elected by all the members of the body. All members of the body shall have equal rights to participate in standing for elections as well as electing the governing council.**





3. A nominal uniform joining fee of Rs 15,000/- can be prescribed for any member to join the organization.
4. From sustainability point of view, the annual subscription due from each member may be calculated on a slab system on the basis of its Gross Sales Turnover during the last financial year.

.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 organisation or working groups, governing the functioning, steering the work etc. Please suggest with justification.

**Our Response and Recommendation**

It is recommended that the guiding principles and structure of governance of Multi-stakeholder Body, the roles and responsibilities of persons at different positions such as chairing the organisation or working groups, governing the functioning, steering the work etc may be templated on the lines of TSDSI.

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

