Baijayant "Jay" Panda

Member of Parliament (Lok Sabha) Kendrapara, Odisha



Member:

- Consultative Committee for the Ministry of Finance
- Parliamentary Standing Committee on Home Affairs

RO/2017-18/1387 11th April 2017

To,

Shri Asit Kadayan,

Advisor (QoS)

The Telecom Regulatory Authority of India

Subject: Comments on Consultation Paper on Net Neutrality, 4th January, 2017

Dear Shri Kadayan,

Pursuant to the call for comments in Consultation Paper on Net Neutrality, released on the 4th of January, 2017, please find our comments on the same in pages 2 to 11.

Sincerely,

Baijayant "Jay" Panda Member of Parliament

Q.1 What could be the principles for ensuring non-discriminatory access to content on the Internet, in the Indian context?

A.1 With the growing emphasis on digital governance, it is a must that there should ideally be uniform accessibility of internet services by everyone. In addition to mere access, it is equally crucial to ensure that everyone should have access to every part of the internet. This equality of access to content is what makes the Internet unique and beneficial. Unfettered access to all content is vital to inherent egalitarian nature of the internet.

Telecom Service Providers (TSPs) shall mandatorily be required to treat all traffic equally, when providing internet access services. TSPs must ensure that there is no discrimination, restriction or interference, based on the sender, receiver, content accessed and/or distributed, the applications or services used and/or provided, or the computer, computer network, computer resource and/or computer system (as defined under the Information Technology Act).

The guiding principles are suggested as under –

- a. Right to access and distribute information There should be no restriction on access and/or distribution lawful content by all individuals, businesses including consumers as well as content providers. This right originates from the fundamental rights guaranteed under the Indian Constitution, 1950 through Article 19 and 21 therein.
- **b.** Right to create content In furtherance of right mentioned under (a), there should be no unreasonable restriction on creation of lawful content by individuals, businesses including consumers as well as content providers.
- c. Content agnostic approach TSPs should have an obligation to treat all data packets equally and should be prohibited from any form of deep packet inspection. Deep packet inspection shall only be allowed for specified reasons as mandated by law.
- d. No Blocking TSPs should not be allowed to block lawful content selectively except in compliance with judicial/executive orders.



- **e. No Throttling -** TSPs should not be allowed to comparatively slow down / provide fragmented access to selective content with a view to deter access to or make unlawful financial or other gains.
- **f. No Paid Prioritisation** No TSP should be allowed to favour certain content or traffic over another through creation of "fast lanes" in lieu of any consideration (financial or otherwise).
- **g. No Zero rating -** Zero-rating i.e. the practice by which TSPs, mobile network operators and/or ISPs provide "free" access to customers vis-a-vis provider-selected content sources or data services only, should be wholly prohibited.
- h. No unreasonable interference- There must be no discrimination, restriction or interference, on the basis of the sender, receiver, content accessed and/or distributed, the applications or services used and/or provided, or the computer, computer network, computer resource and/or computer system.
- i. Capacity building of networks With a view to ensure compliance with the broad principles of Net Neutrality, it should be necessary for TSPs to concentrate and invest in capacity building.
- j. **Transparency:** Disclosure in case of usage of Traffic Management practices should be made in a fair and transparent manner as prescribed by TRAI.
- Q.2 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.

A.2 The Internet may be defined as a global information system that is (i) logically linked together by a globally unique address, based on Internet Protocol (IP) or its subsequent



enhancements or upgradations; (ii) able to support communications using the Transmission Control Protocol/Internet Protocol (TCP/IP) suite or its subsequent enhancements or upgradations, or other IP compatible protocols. All functional equivalents should also be included in this definition.

'Internet Traffic' would thus mean the flow of data across the internet.

Providers of Internet Services should ideally include those providing the above services to end-users, and Internet related service providers as well. ISPs would thus include the government and licensees in their definition, as well.

a. Specialised Services, Enterprise Solution, Internet of Things etc.

Although specialised services may be excluded from the scope of net neutrality, this should be contingent on the network having the capacity to accommodate them, in addition to not derogating the availability and the quality of internet access for users. In this context, the issues of functional equivalents, what use the services have, and whether the best efforts standard applies must be addressed. However, as the consultation paper points out, the US FCC noted that the point of departure must be whether or not these services are "broadband Internet access services". Additionally the FCC laid down possible identifying characteristics for these services, i.e., "they are not used to reach large parts of the Internet; they are specific application-level services, and not generic platforms; and they use some form of network management to isolate the capacity being used from that used by broadband Internet access services."

Thus, specialised services would cover networks or services not connected to or relating to the Internet, e-surgeries, self-driven cars *et al.* Nevertheless, the TRAI must tread with caution in the manner in which it defines and oversees these services, in the context that a large majority of these are IP based services, and their nature is constantly evolving.

b. Services by Content Delivery Networks and Direct Interconnection Arrangements

Ideally, CDNs having their own content (or content companies having their own CDNs), and peering/interconnection agreements such as that of Netflix with service providers in the USA



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should come under the ambit of net neutrality, wherever possible. Although these concepts are still in their nascent stages, the TRAI ought to consider how it will apply the core principles of net neutrality to these services specific to the Indian context.

- 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.

A.3 Given that TMPs, applications & content change with technological growth, a broad approach might create more scope for manipulation and preferential treatment. It would require constant monitoring and to ascertain any violation without a complaint or suo moto action would be difficut.

Therefore, it is more appropriate to take a narrow approach, identifying a negative list of the TMPs that may not be carried out. This would then make the process of expanding the negative list simpler as well, without needing to overhaul the entire approach every single time there is a change.

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

A.5 There is a need to maintain a balance between consumer's right of access with the service provider's reasonable use of methods to ensure safety, security and efficiency of networks.

With certain exceptions, such as emergencies; the upkeep of legal obligations; security and integrity of network; and in the total breakdown of public order with an imminent law and order threat, the below practices may constitute non-reasonable TMPs:

- 1. Blocking content
- 2. Throttling
- 3. Paid Prioritisation or prioritisation in exchange of any other kind of incentives or benefits.
- 4. Internet Shutdowns
- 5. Application specific discrimination, for e.g., a service provider slowing down a phone app affiliated to another service provider.
- 6. Content specific discrimination.

That said, in the event a mixed approach is adopted, reasonable network management practices that are not application or content specific may be allowed to proceed provided there is strict oversight. A key facilitator of discriminatory TMPs is packet inspection, thus, it must also be brought under the ambit of the framework seeking to protect net neutrality, in the manner in which TRAI deems it appropriate.

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.

- A.6 As mentioned in the answer to Q.4 and 5, there must exist some exceptions on TMP regulation, but they need to be carefully monitored and not be over-broad in nature. That is why, exception (e) i.e. "any other services" should not be allowed to avoid TMP regulations. However, as long as adequate safeguards and evidentiary standards are evolved by the TRAI, after consultation with all the stakeholders, and adhering as much as possible to internationally accepted standards of net neutrality, exceptions (a) to (d) may be allowed. However, the crucial safeguard of justiciability of these exceptions must be in place for them to exist, and they should be reviewable by the judiciary, or by the regulator accompanied by judicial oversight.
- 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:
 - (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?)

A.7 The above mentioned practices should be strictly prohibited. In case of any violation, it should be the obligation of the TSPs to proof that no deliberate violation has taken place.

While considering the veracity of an alleged violation,

- a. Nature and frequency of the violation,
- b. Commercial benefits
- c. Number of persons affected
- d. Whether an sms/e-mail notification has been sent out clearly notifying the reason for the use of a TMP must be considered (as proposed in the answer to Q.8).

- 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?

A.8 A combination of the above would be preferred as the model of transparency in the case of employment of a reasonable TMP or if it is likely to be used.

For disclosures to the consumer, the TSPs must send an SMS and Email notification in an accessible language, and in a timely manner for TMPs that have been employed or are going to be employed.

For disclosures to the regulator (enhanced TRAI referred to in the answer to Q.10), after which the regulator is to periodically release information to the public in an accessible form and in a manner that does not compromise the privacy or commercial interests of service providers. The period and the form in which it is to be released shall be up to the regulator.

Additionally, a Grievance Officer (or Department as the need arises) should be appointed by TSPs to serve as the first point of contact for grievances relating to TMPs/Net Neutrality.

All material changes should be disclosed to the consumers, the general public and the regulator in a timely and prominent manner, where "material changes" are to be understood as changes affecting the choices of current or prospective consumers. Further, any assertions or advertisements by the service provider must be accurate, and be consistent with its disclosures in order to ensure that consumers are sufficiently informed.

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.

A.9 We agree with the format of the Information Disclosure Template, however, for it to be most efficacious, it must have the same legal value as that of a signed affidavit.

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Additionally, it should also be treated as sufficient basis for a *suo moto* investigation, if TRAI finds discrepancies.

However, the manner of disclosure to the general public may be prescribed by the TRAI to be comprehensive and in the local vernacular if required.

- 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?
- **A.10** (a) It is suggested that TRAI should be body in charge for monitoring and supervision. However, it will be prudent to expand the number of members and technical assistance to ensure compliance with the broad principles and obligations of Net Neutrality.
- (b) A broad legislative framework should be considered to recognise net neutrality and the principles therein. The principles identified should be incorporated as clauses in the license conditions to ensure better. TRAI ve of a minimum fine of Rupees One Lakh for each day of violation. For the purpose of determination of quantum of fine, TRAI shall take into consideration the nature of and frequency of violation(s) by TSPs, commercial benefits arising thereof and number of persons affected.
- (c) Quality of Service regulation should specify technical aspects and standard protocol that should be followed by TSPs pursuant to the submissions made herein above.
- 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).
- **A.11** The three suggestions made herein above shall be effective to ensure constant monitoring. However, in case of disclosures by TSPs, such disclosures should be treated at the same level as an affidavit filed before a court of law.
- 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?
- **A.12** The suggestion of a 'collaborative mechanism' as stated in the Consultation paper is unclear with regard to its proposed composition and role. Given the significant discord within the TSP industry, a self regulation mechanism would not be acceptable. However, structured consultations, reviews and inputs from an advisory committee comprising of representation from civil society, businesses and technical experts should be considered along the same lines as the Brazilian Internet Steering Committee or Committee for Digital Economy of OECD.
- 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?
- **A.13** Public consultations may be carried out of specific reference to the Advisory Committee suggested in Answer 12 may be carried out and notified by the TRAI.



- 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.
- **A.14** In India, we have a peculiar situation where our dependence on wireless internet services is greater at the same time, spectrum availability with TSPs is limited, fragmented and non-contiguous. Therefore, in accordance with the principles of Net Neutrality laid down herein above, it is a necessity that TSPs should concentrate on capacity building to ensure better connectivity.

