



Society for

Knowledge Commons

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To,
Shri A Robert J Ravi,
Advisor (TD & QoS),
Telecom Regulatory Authority of India,
Mahanagar Doorsanchar Bhawan,
Jawaharlal Nehru Marg,
New Delhi – 110 002

July 05, 2016

Re: Comments on Pre-Consultation Paper on Net Neutrality dated May 30, 2016

Dear Sir,

We refer to the captioned Pre-Consultation Paper, and enclose herewith our comments thereon. Note that a soft copy of this document has also been emailed to advqos@traf.gov.in.

Yours sincerely,

Rishab Bailey
Director – Legal
Society for Knowledge Commons

Introductory Comments

At the outset, we would like to point out that we have consistently taken the position that TRAI / the DoT must deal with the issue of net neutrality in a holistic way and lay down appropriate high level regulatory principles, based on which individual issues raised from time to time, may then be scrutinised. As stated in our comments to TRAI on the Consultation Paper on Differential Pricing for Data Services (No. 8/2015, hereinafter referred to as the 'Consultation Paper on Differential Pricing') "*a clear definition in India of net neutrality and setting of relevant high level principles would be invaluable in providing certainty to the issue and would reduce arbitrariness that may otherwise occur in addressing violations on a case by case basis.*" In the circumstances, we appreciate that this now appears to be the intent of TRAI in releasing this Pre-consultation Paper.

Given the consultations already conducted on this issue, rather than debating the need for net neutrality regulation – it must be recognized that certain core principles must be followed in the interests of the public. The focus must therefore be on how to contour the proposed regulations to ensure appropriate balancing of all interests.

The concept of net neutrality is a basic principle for a free and open internet – something India has repeatedly endorsed at various international and domestic forums. Out of 3.5 billion internet users, almost a billion create content. In other words, one out of roughly every three and a half users creates as well as consumes content. This is possible as long as both those providing and those receiving content have access to the internet. Once this connection exists, any site anywhere can be accessed by anybody. The internet / telecom service providers (TSPs) – generally the telcos (or the cable TV platforms, as in the US) – cannot and should not be gatekeepers, deciding which service or site will get access to their subscribers.

Content here refers not only to web pages, but also applications and services offered on the internet. Tim Wu, the Columbia law professor who coined the term 'net neutrality', pointed out that it's the absence of gatekeepers for content providers and consumers that makes possible the huge burst of innovation and creativity on the internet. Once there are gatekeepers, monopoly pricing and extraction of monopoly rent inevitably follow – by those who control the broadband internet infrastructure, namely the telecom and cable companies.

Tim Wu was working with Silicon Valley start-ups during the dot.com bubble, when he was sickened by companies selling different methods of blocking or slowing down traffic. In an interview with *The New York Times*, he said: 'The idea that the private sector, the free market, on its own has all the solutions is just a myth... when it's just about money, there are no values.'¹ Wu finally left Silicon Valley, took up a teaching job, and got in touch with his old professor Lawrence Lessig, the founder of Creative Commons. This led to the birth of net neutrality as a regulatory principle of the internet. It is important to note that it is the unprincipled blocking, throttling or speeding up of various kind of content or websites that he encountered in Silicon Valley that led Professor Wu to formulate the principles of net neutrality.

Given the importance of the principle of net neutrality and the need for regulatory certainty, we believe that TRAI has made a good beginning by passing its Regulation of February 8, 2016, pertaining to the issue of differential pricing (the "Regulation"). Many of the basic principles that inform the decision in the said Regulation are also relevant in the broader context of net neutrality, and accordingly we reiterate some of these principles (that TRAI has itself recognised) below. We urge TRAI to ensure that any holistic regulations pertaining to net neutrality do not deviate conceptually from the principles enunciated in the Explanatory Memorandum to the Regulation.

In the said Regulation, TRAI has unequivocally accepted:

- (a) that service providers should have no gatekeeping role whatsoever, as far providing access to content on the public Internet is concerned;
- (b) that content specific regulation of access (by service providers) should not be permitted in view of the adverse economic and social consequences (including stifling innovation, competition and freedom of expression);
- (c) telecom service providers provide merely the facility to transport bits of data (which enable a user to access content on the public Internet), as this enables permission-less innovation and facilitates free choice by the consumer;
- (d) permitting service providers to charge differentially for certain types of content would affect the entire architecture of the Internet in view of the fact that the Internet is a series of interoperable networks and data is not necessarily handled by a sole service provider;
- (e) Service providers should not be permitted to shape the user's Internet experience – knowledge of the Internet and the outlook of users who have access only to a 'walled garden' will be shaped only by the information made available through the service providers selected offerings in that particular 'walled garden'.
- (f) There is no evidence to suggest that poor or marginalised people will have the resources to connect to the full Internet if given a sample view.
- (g) That gatekeeping by service providers will also permit monopolisation of the content side of the Internet through TSPs and big content providers entering into preferential access deals – thereby stifling competition and innovation. Integration (by TSPs with content providers) is also an associated consideration as this may have anticompetitive effects should the TSP chose to differentially rate certain selected content.
- (h) The 'information asymmetry' in the Internet market must be considered while framing any policy.
- (i) There are various negative externalities associated with the practice of differential pricing including causing a reduction in network effects, etc.
- (j) Price-based differentiation would make certain content more attractive to consumers resulting in altering a consumer's online behaviour. While this might not be a major concern in a country where the majority already has Internet access, in a nation like India which is seeking to spread Internet access to the masses, this could result in severe distortion of consumer choice and the way in which users view the Internet.
- (k) Any discrimination or differentiation between cost of accessing different content cannot be arbitrary.

We believe that the issue of accessing the Internet – which is what is at the heart of the net neutrality debate – must be looked at in a holistic perspective. TRAI must focus on improving both quality and penetration of Internet access - this implies focus on infrastructure, cost of access, maintaining appropriate competition etc. TRAI must look to limit TSP practices that impact user privacy and security and ensure transparency in providing services (non arbitrary traffic management etc). There should be a focus on improving the environment for local content / app creation – this entails ensuring limited barriers and low costs of entry to the market (for content providers), and ensuring appropriate competition is maintained (for instance by checking horizontal and vertical integration). There must also be stronger enforcement and outreach mechanisms put in place by TRAI that will ensure scrutiny of consumer complaints, online dispute resolution etc. We believe that in addition to committing to maintaining a free and open Internet by implementing appropriate net neutrality regulations, TRAI must also examine connected issues such as QoS provisions, meeting of roll out and other norms that will spread telecom access, scrutiny of interconnection charges to ensure appropriate competition amongst TSPs, encouraging community

owned access infrastructure, adopt an appropriate white space policy etc.

Responses on Questions

1) What should be regarded as the core principles of net neutrality in the Indian context? What are the key issues that are required to be considered so that the principles of net neutrality are ensured?

We would like to reiterate that the primary purpose or imperative of the Internet is to enable free communications and exchange of knowledge. Commercial activity can take place over the Internet, but should not dictate its essential character. This is how the Internet started and this essential character can be seen from the simple fact that billing is not a part of Internet's communication protocol.

It is this character of the Internet that has led it to being considered as the greatest innovation of humankind – in that it enables unimaginable social benefits and efficiencies through connecting every person. A maximally useful public information network aspires to treat all content, sites and platforms equally and this must form the basis of any regulation. We believe that given the unique nature of the Internet given its dependence on the user (both as a consumer and provider of content) TRAI must approach any regulation of the Internet keeping the Internet user at the core - and accordingly act from a rights based regulatory perspective (the importance of which is recognised by the Department of Telecommunications in its Committee Report on Net Neutrality of May 2015). It must however be remembered that TRAI's remit does not per se extend to content providers on the Internet and any attempts at regulating content providers (for instance through a licensing regime) must be avoided. For the purpose of telecom regulation, anything within a data packet is content. While TRAI may regulate the transmission or carriage of data itself, it cannot look into the content of the data packet. This is the same principle followed everywhere around the world in the telecom sector.

TRAI must act so as to ensure:

- (a) Competition is preserved both in the access provider market as well as in the online market itself, including through protecting unhampered and equitable access to all legal content on the public Internet;
- (b) That it ensures innovation and edge providers / users are adequately protected from discriminatory practices, high costs and other unnecessary barriers to the market;
- (c) Lower costs of access to the consumer and improve quality of access services;
- (d) Encourage infrastructure growth in the country – which necessarily implies ensuring that access providers do not have a free hand to employ traffic management and other practices that encourage them to create and maintain an artificial scarcity of bandwidth.

Accordingly we believe that the following should be recognised as the core principles of Net Neutrality:

1. As recognised in the Report of the Department of Telecommunication of May 2015 (the "DoT Report"), all (legal) content on the Internet should be equally accessible (no blocking or throttling or paid prioritization or any other form of preferential treatment, particularly for commercial reasons). TRAI should ensure that TSPs should not act as impediments in users accessing / creating content or providing a service on the Internet. Accordingly, this requires that principles of non-discriminatory behavior & encouraging competition and openness must be adhered to. Service providers should not be permitted to act as gatekeepers of the Internet – whether in concert with content providers, or otherwise (irrespective of the

ostensible purpose).

2. There must be a prohibition on discrimination of data packets except in specific, strictly construed and narrowly defined circumstances (possible exceptions could be for emergency services, notified public services and for genuine traffic management and security / network management reasons - though the scope of these exceptions must clearly defined – also see response to Question No. 2).
3. Regulations requiring that customers be charged by access providers based only on the parameters of usage and quality of access (i.e. bandwidth delivered).
4. No limiting of number of web sites offered under any plan.
5. Protection of user privacy and a prohibition on deep packet inspection;
6. Greater transparency in the provision of services to a user and preventing false advertising;
7. Prohibition against any measures taken by a service provider to limit use of any specific hardware / end point devices.

Enforcement of net neutrality principles must also be appropriately ensured – including through amending licensing terms of TSPs, and ensuring appropriate auditing and reporting mechanisms are established (in addition to grievance redressal and complaints mechanisms).

2) What are the reasonable traffic management practices that may need to be followed by TSPs while providing Internet access services and in what manner could these be misused? Are there any other current or potential practices in India that may give rise to concerns about net neutrality?

Implementation of traffic management practices (TMPs) should, generally speaking, be in the form of an exception to the general rule of net neutrality as most such TMPs violate the core principles of network neutrality and can lead to unethical practices being followed by service providers. As a general rule no discrimination should be permitted on the Internet.

However, we do recognize that in certain circumstances such practices may be essential to maintain network functionality and ensure a best possible experience for the maximum number of users.

We believe that all instances of traffic management must be specifically regulated by the Government (or TRAI) to ensure complete transparency and avoidance of any illicit behaviour by ISPs.

In the event any traffic management principles are indeed required, the onus must be on the service provider to justify the need to carry out the specific practice. Further, it should be kept in mind that such steps shouldn't interfere with the access, affordability and quality of the services.

In any event, traffic management must not be used for solely commercial reasons or applied arbitrarily (i.e. inconsistently across services and applications). There must be serious network security and performance related concerns that should necessitate the implementation of such practices and such practices must not be implemented as a consequence of private arrangement.

It is commonly accepted, including by the ITU¹ and the EU Commission that there is an incentive by telecom operators to indulge in unnecessary traffic management practices and thereby restrict access to certain types of content.

As noted by the ITU:

“there is a fine line between correctly applying traffic management to ensure a high quality of service and wrongly interfering with Internet traffic to limit applications that threaten the ISP's own

1 Net Neutrality: a regulatory perspective, GSR 2012 discussion paper ,ITU - D, International Telecommunication Union, available at https://www.itu.int/ITU-D/treg/Events/Seminars/GSR/GSR12/documents/GSR12_Webb_NetNeutrality_1.pdf

lines of business. This discrimination could be through:

- *the use of blocking technology to completely prevent access to, or use of, a rival's content or application;*
- *throttling a rival's content or application so that the ISP's own service is more attractive in comparison, or conversely, access-tiering the ISP's own content and not permitting the competitor to acquire equivalent prioritization;*
- *even where access-tiering is offered widely, discrimination may be problematic if the terms on which access-tiering is offered treat CAPs differently to each other, or differently to the ISP's equivalent content or application, and those differences are not objectively justifiable (e.g., for cost of technical reasons); or*
- *dedicating so much capacity (either through access-tiering or prioritization) that the remaining "best efforts" Internet access service is degraded – the so-called "dirt track" issue."*

Keeping this in mind, TRAI needs to ensure that instances of discrimination of traffic should be few, far between and, above all, transparent, proportional and non-arbitrary.

It is often argued that traffic management practices are required given the lack of adequate bandwidth (or the scarcity of bandwidth) and the need to ensure equity between all types of users (some of whom may be heavy bandwidth users).

While it is indeed true that network management reasons may necessitate some forms of traffic management, these should not be an excuse to arbitrarily degrade the quality of service to a user. There must be serious concerns regarding network disruption in order to justify implementation of such practices.

It must be kept in mind that without appropriate regulation of traffic management practices, the access provider will be the sole arbiter of which users and services to impact through such practices. This increases the potential for rent seeking behavior for instance by restricting access to certain content or services and then seeking payments to remove these restrictions. Further, access providers could use such measure to discriminate against competitors by limiting bandwidth available to certain services (say that compete against their own). Access providers could also discriminate against the end users who may utilize heavy bandwidth applications.

It must also be kept in mind that unnecessarily putting in place download limits and so on (under the guise of fair usage policies and the like) would have the effect of adversely affecting the ability of Indian users to access video and other types of new content on the Internet. Education related services and numerous other businesses who rely on the Internet (and need to access large quantities of data) may also face problems due to any restrictions. Unrestricted implementation of traffic management practices under the guise of fair usage policies must be clamped down upon – as it is quality of service to Indian users is generally very poor and giving further reasons to a TSP to permit degradation of connections will only further limit user experience (and consequently inhibit Internet penetration).

One must also keep in mind that the application of many TMPs necessitate the use of Deep Packet Inspection – something the DOT Report is very clear should not be allowed. Permitting the use of DPI for the purpose of implementing TMPs would involve the loss of privacy for Indian citizens and businesses.

While it is not possible to list each and every possible traffic management practice – each must be seen in context and a determination made as to the necessity of implementing such a practice for network security and functionality reasons vs. the costs to users (in the form of restricting consumer choice, limiting the amount of Internet use etc). Traffic management must be restricted to specific instances – for example in the case of fighting spam, denial of service attacks, preventing computer

viruses etc. i.e where activities cause severe and serious network disruption- rather than differentiating between services or applications on the Internet, particularly for commercial or business reasons.

TRAI must look to ensure that competition is protected in the online economy and at the very least it must ensure that traffic management principles are not applied arbitrarily to an application / service or a type of service / application.

All traffic or network management must be reasonable, proportionate and must be used only if tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the Internet access service. No degradation or restriction of specific services should be allowed except in limited circumstances as mentioned previously.

Further, access providers must not be allowed to arbitrarily degrade services to applications that utilize heavy bandwidth such as video sites, torrents etc; or for that matter place arbitrary restrictions on total download limits.

The comments of the EU Council of Ministers Committee on Net Neutrality is instructive in this regard where they mention "exceptions to this principle should be considered with great circumspection and need to be justified by overriding public interests"²

Finally, it is essential that there is an attempt to empower the user through ensuring transparency in the practices followed by ISPs.

As noted by the BEREC in its Guidelines on Net Neutrality and Transparency: Best practices and recommended approaches,³ "transparency regarding net neutrality is a key pre-condition of the end users' ability to choose the quality of the service that best fits their needs and also should reduce the asymmetry of information existing between providers and end users, fostering proactive behaviour by Internet Service Providers (ISPs)...At the same time, we underline that transparency alone is probably not sufficient to achieve net neutrality, since other factors also have to be taken into account...".

The FCC also specifically recognizes that putting in place strong transparency measures is essential to promote development of newer services ("the record supports our conclusions that more specific and detailed disclosures are necessary to ensure that edge providers can "develop, market, and maintain Internet offerings"⁴), ensure consumer protection and in particular protection for "certain user groups who rely on broadband as their primary avenue for communications, such as people with disabilities."⁵

Similarly, a Declaration of the Committee of Ministers on Net Neutrality of the EU Council

2 Declaration of the Committee of Ministers on Network Neutrality, Council of Europe, available at <https://wcd.coe.int/ViewDoc.jsp?id=1678287&Site=CM&BackColorInternet=C3C3C3&BackColorIntranet=EDB021&BackColorLogged=F5D383>

3 BEREC Guidelines on Net Neutrality and Transparency: Best practices and recommended approaches, BoR (11) 44, October 2011, available at http://berec.europa.eu/files/news/consultation_draft_guidelines.pdf

4 The Federal Communications Commission, "Protecting and Promoting and Open Internet", order adopted February 26, 2015, available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0312/FCC-15-24A1.pdf

5 The Federal Communications Commission, "Protecting and Promoting and Open Internet", order adopted February 26, 2015, available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0312/FCC-15-24A1.pdf

recognizes that a “users’ right to access and distribute information online and the development of new tools and services might be adversely affected by non-transparent traffic management, content and services’ discrimination or impeding connectivity of devices.”⁴²

The aforementioned Declaration also clearly spells out the legal framework to be applied for genuine traffic management practices – which we believe should also be considered by TRAI. The Committee of Ministers notes that “Users and service, application or content providers should be able to gauge the impact of network management measures on the enjoyment of fundamental rights and freedoms, in particular the rights to freedom of expression and to impart or receive information regardless of frontiers, as well as the right to respect for private life. Those measures should be proportionate, appropriate and avoid unjustified discrimination; they should be subject to periodic review and not be maintained longer than strictly necessary. Users and service providers should be adequately informed about any network management measures that affect in a significant way access to content, applications or services. As regards procedural safeguards, there should be adequate avenues, respectful of rule of law requirements, to challenge network management decisions and, where appropriate, there should be adequate avenues to seek redress.”

It is essential that customers should be in a position to make an informed choice at the time of contracting with an access provider. Further, all customers must be able to continuously confirm whether they are actually receiving the service they have paid for. Therefore, a fully effective transparency policy should fulfill all of the following characteristics: accessibility, understandability, meaningfulness, comparability and accuracy.

TRAI should ensure the entire system of access provisioning must be as transparent as possible – merely requiring the disclosure of traffic management principles is therefore insufficient.

Users must be able to make informed choices throughout the different stages of a commercial relationship, i.e. before signing the contract, at the point of sale and after signing the contract. The information needed differs depending on these different stages and will need to be generic one time and individual at another stage.

For instance, in the event of implementation of traffic management practices such as degradation of high bandwidth users connections during peak hours – users must be

informed in real time of the degradation that they can expect (assuming of course, that such practices are indeed permitted).

In addition to traffic management practices, TSPs must also disclose performance, and commercial terms of its broadband Internet access services sufficient for consumers to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings. TSPs must disclose all promotional rates, all fees and/or surcharges, and all data caps or data allowances. They must provide specific notification to consumers that a “network practice” is likely to significantly affect their use of the service. As part of quality of service or network performance disclosures, TSPs must also be mandated to include statements regarding packet loss.

Given that it is a common practice in India for ISPs to piggyback on each other’s infrastructure / networks (usually in exchange for payment of a fee), details of such agreements – particularly in so far as they affect performance or conditions of user access, must be disclosed.

To be noted that transparency provisions form a vital part of net neutrality regulation the world over. Legal instruments ranging from Marco Civil (Brazil) to the FCC Order (USA) all contain provisions mandating transparency in the provision of services by TSPs.

3) What should be India's policy and/or regulatory approach in dealing with issues relating to net neutrality? Please comment with justifications.

We believe it is vital that TRAI recognise, confirm and declare that the Internet is a public utility. This will ipso facto determine the regulatory approach to be taken with respect to ensuring that the Internet is kept as an Open and neutral platform.

In accordance with the need to ensure greater connectivity in India – it is essential that TRAI take a pro user stance. This involves TRAI examining a variety of connected though not necessarily similar issues – ranging from ensuring appropriate pricing of data plans (possibly examining the implementation of telescopic rates for data with the lowest tariff slab being free / very cheap), to maintenance of appropriate QoS mechanisms, ensuring no anti-competitive practices etc.

Given that it may be practically impossible for TRAI to consistently pre-approve every market offering made by a TSP, the social costs etc., we believe that the regulatory approach followed in issuing the Regulation (note paragraphs 26 and 27 of the Explanatory Memorandum) – i.e. an ex ante bar on practices that violate net neutrality should be implemented. This will ensure certainty in the market and reduce costs of regulation as well as costs of participation in the marketplace.

Given the various violations of the principle of network neutrality we have already seen in India it is essential that the TRAI act with urgency to ensure that this public utility is not turned into a club good – with access providers acting as toll booth operators and determining how and what content / services users should access. Despite the claims that there is no evidence of market failure, we believe that not only are existing violations of the principle sufficient to enable the TRAI to make an evidence based determination of the harm done to the online environment, but that TRAI must in any case act on an urgent basis to ensure that no further incidents of violation or market failure occur. Further, given the importance of the Internet we believe that TRAI must take proactive measures to ensure competition, innovation and consumer protection in the online space – TRAI cannot afford to and should not take regulatory steps only after the horse has bolted.

In this respect it is worth noting that market forces themselves have not prevented certain unethical practices from being followed. Further public opinion has not always succeeded in changing unethical practices followed by TSPs – which often function as cartels – in adopting anti-consumer practices en masse. It is worth noting that despite constant protestations against for instance the imposition of Fair Usage Policies, these are becoming ubiquitous across the market.

4) What precautions must be taken with respect to the activities of TSPs and content providers to ensure that national security interests are preserved? Please comment with justification.

The activities of all TSPs and content providers must comply with Indian law including under the Information Technology Act (the “IT Act”), the Indian Penal Code etc. Indian law empowers the Government to conduct surveillance on traffic and block certain data (under the Information Technology Act and by exercising its powers under the licenses issued to telecom providers). The Government has extremely strict powers of inspection etc. over TSPs (due to the terms of the licenses) and what is the need of the hour is appropriate enforcement (rather than any new regulations).

The fact that licenses bar the use of bulk encryption must also be noted. The Government or security agencies are also free to utilize existing law such as under the Criminal Procedure Code and relevant court procedures to require information and documents pertaining to an investigation to be produced.

Given that all content providers must necessarily provide their services using a telecom network, the Government of India can legitimately access communications through these points. In the circumstances, we believe there is no requirement for any additional regulation over content providers.

While we recognize that there are security and other legal concerns emanating from content and services made available on the Internet, we believe that appropriate measures taken at the telecom level are more than sufficient (for instance by blocking access to illegal content, monitoring illegal communications and so on under relevant provisions of the Information Technology Act, the Telegraph Act etc., read with the terms of licensing of TSPs).

It may also be noted that addressing multifarious and unnamed security concerns in the context of the Internet is not specifically under the mandate of TRAI – which should concern itself more with network functionality and performance related issues.

As a separate point, it is also worth considering whether the collection by foreign countries of Indian citizens' data en masse (*inter alia* using relationships with MNC content providers such as the Facebook's and Google's of this world) is a 'national security concern'. As noted by numerous academics particularly post the Snowden revelations a few years ago, such data can be used for a variety of offensive and strategic purposes. How Indian citizens data as well as government data is handled must be carefully considered.

5) What precautions must be taken with respect to the activities of TSPs and content providers to maintain customer privacy? Please comment with justification.

We believe that due to the differing roles and functions of TSPs and content providers, the method of regulation must also be slightly different. TSPs fall directly under the mandate of TRAI and given the lack of any specific privacy legislation in this country, it is imperative that TRAI set up a regulatory mechanism that ensures the protection of user data. The Data Protection Rules notified under the IT Act are clearly insufficient to deal in any comprehensive manner with the issue of online privacy, and equally there is a lack of any appropriate response of enforcement mechanism to take service providers to task for breach.

TRAI must take the issue of user privacy seriously – given the increasing reliance on electronic and Internet based applications and services. The quantity of personal information being processed by TSPs is massive – and only set to increase. This can lead to dangers both in terms of unauthorised use / disclosure of the data, but also in terms of practices that actively affect the users Internet experience (for instance in terms of injecting packets into a users data stream to show ads, without consent).

We believe that TRAI must lay down specific guidelines to deal with issues of consumer privacy in generic terms in addition to including specific principles in regulations pertaining to net neutrality when it comes to issues of tampering with a users data, reading a users data etc. Accordingly, the use of deep packet inspection by TSPs (which has been frowned on by the DOT Report) must be prohibited in any net neutrality regulation.

It may be noted that this was one of the main reasons for the Netherlands to pass net neutrality regulation after it emerged various telecom companies such as KPN and Vodafone were indulging in deep packet inspection for the purpose of blocking user access to specific services (such as VoIP).⁶

As far as content providers are concerned, we believe that while there is clearly a need to update

⁶Archibald Preuschat, "KPN Admits to Using Deep Packet Inspection", Tech Europe, May 12, 2011, available at <http://blogs.wsj.com/tech-europe/2011/05/12/kpn-admits-to-using-deep-packet-inspection/> and Colin van Hoek, "Ook Vodafone Blokkeertdiensten", NU.nl, April 23, 2011, available at <http://www.nu.nl/internet/2498984/vodafone-blokkeert-diensten.html>

privacy legislation in India, this falls outside the mandate of TRAI, particularly given that the Government of India is presently seized of a Privacy Bill. We do not believe that TRAI can or should attempt to regulate content providers.

6) What further issues should be considered for a comprehensive policy framework for defining the relationship between TSPs and OTT content providers?

- TRAI must make it clear that TSPs and online communication providers provide entirely different services. TSPs provide not only a voice service, but also and more crucially, provide carrier services whereby they enable access to networks (be they voice or data). TSPs are access service providers while online communication providers are clearly not. It is this element of carriage which is so important and is sought to be protected by putting in place appropriate net neutrality regulation. In this respect we urge TRAI to maintain the categorization of services as presently done in the licensing framework adopted by the Government of India for telecom services. Services are not defined based on functionality but divided into Basic Services, VAS, etc. Services may again be grouped according to the technology stack used – for instance in the case of fixed line and mobile. Over the top players – including communication providers – represent the content of data services and therefore fall outside the purview of the telecom regulator.
- TRAI must ensure that there is appropriate competition in the Internet marketplace and accordingly vertical (and any other) combinations between TSPs and content providers, that aim to skew competition in favour of the combination must be strictly regulated. This is particularly worrying when it comes to the issue of big content providers teaming up with TSPs or indeed TSPs themselves offering content services, and thereafter restricting access to newer or smaller content providers. As such practices will drastically harm innovation as well as the potential for domestic content / application creation.
- Given that on the Internet all users are / can be content providers (as recognised by TRAI in the Explanatory Memorandum to the Regulation), there must otherwise be minimal regulation of this space. Accordingly, we urge TRAI not to raise the spectre of licensing content providers or any other such draconian step.
- While we broadly agree with many comments (see for instance the Dot Report) that suggest principles of neutrality must be applied across the Internet value chain – for instance in ensuring that search engines are largely free from commercial and other extraneous considerations in ranking content – we are firmly of the opinion that such matters are not within the jurisdiction of TRAI to consider or act upon. Net Neutrality refers specifically to the telecom layer – something squarely within the jurisdiction of TRAI.
- Appropriate definition and regulation of enterprise / managed internet solutions (or private networks) – to ensure net neutrality regulations are not evaded.