

Counter-Comments apropos of the TRAI Consultation Paper on Regulatory Framework For Over the Top Services dated March 27, 2015 (No.2/2015) :

At the outset, we would like to affirm and reiterate the comments made in our original response to the TRAI Consultation Paper on Regulatory Framework For Over the Top Services dated March 27, 2015, submitted to the TRAI on April 24, 2015, by e-mail and in hardcopy (hereinafter the “Original Comments”). For the sake of brevity, we have not reproduced / restated each argument and relevant data already presented in our Original Comments and the same may kindly be read as part of the present Counter-Comments.

I – Introductory Comments:

- (a) While there is certainly a need to regulate certain portions of the Internet in public interest, putting in place a licensing regime to regulate online communication providers is impractical, would destroy the value of the Internet to Indian citizens and would arguably fall outside the regulatory purview of the TRAI. The presumption in the Consultation Paper that licensing is the only method of regulating online platforms and services is completely misplaced and would make India an outlier amongst all the countries of the world.
- (b) We believe there is an urgent need to protect and maintain the Open Internet, as is being done in numerous other jurisdictions, including through the use of appropriately framed network neutrality regulation. Any such regulation must ensure, at the least:
- i. No blocking, slowing / “throttling” Internet speeds by TSPs and ISPs on specific forms of Internet traffic, services and applications or any other form of preferential treatment of services, content and platforms by TSPs and ISPs (such as ensuring preferential delivery of certain content), particularly for commercial reasons.
 - ii. A prohibition on discrimination of data packets except in specific, strictly construed and narrowly defined circumstances (which must be based on technical not commercial reasons, must be reasonable, proportionate, necessary and not arbitrary in application, and must be in public interest).
 - iii. No limiting of number of web sites offered under any plan, and a prohibition on zero rating.
 - iv. Regulations requiring that customers be charged by access providers based only on the parameters of usage and quality of access (i.e. bandwidth delivered).
 - v. A prohibition on deep packet inspection by TSPs.
 - vi. Provisions mandating greater transparency in the provision of services to a user, including the disclosure of all traffic management practices, and

preventing false advertising.

vii. Prohibition against any measures taken by a service provider to limit use of any specific hardware / end point devices.

(c) As has been highlighted in numerous submissions, the Internet is already an integral part of today's economy and society. As more and more services, content and applications are made available on the Internet, we are only likely to see the further use and therefore growing importance of this resource. It must however be kept in mind that the primary purpose or imperative of the Internet is not necessarily commercial – but rather to enable free communications and exchange of knowledge. This is why the Internet is often referred to as the greatest innovation of mankind – in that it enables unimaginable social benefits and efficiencies through connecting every person. TRAI must approach any regulation of the Internet keeping this basic principle in mind.

(d) 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 many 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 protestations¹ against for instance the imposition of Fair Usage Policies, these are becoming ubiquitous across the market.

(e) TRAI must therefore 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;

¹ See for instance the Petition Against Airtel's Fair Usage Policy, available at <http://broadbandforum.co/afup/> and Katya Naidu and Shubhashish, "Fair Usage Policies Tick off Broadband Consumers", Business Standard, February 21, 2011, available at http://www.business-standard.com/article/technology/fair-usage-policies-tick-off-broadband-consumers-111022100076_1.html

- 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.
- (f) It must be kept in mind that access providers / TSPs / ISPs are usually a single source of information for consumers, content providers and indeed for TRAI regarding all aspects of the provision of services. Most consumers of Internet services are not in a position to determine whether they are being provided the services they have paid for or whether they are being cheated by their access providers. Ensuring appropriate regulation, including through the imposition of transparency related provisions, is therefore necessary to ensure certainty in the market, ensure informed decision making by users, prevent malpractice by access providers and to create a level playing field for all users and indeed access providers.
- (g) We believe that TRAI is indeed the appropriate authority to take action on the issue of network neutrality (and the same cannot be left to institutions such as the Competition Commission and Consumer forums). While we recognize that the various regulatory authorities may indeed have concurrent jurisdiction over various matters, we note that TRAI is the competent sectoral regulator and network neutrality is squarely an issue related to regulation of unethical practices by access providers. As mentioned previously, TRAI must take the lead in putting place appropriate regulation not only to ensure existing violations of the principle of network neutrality do not continue unchecked, but also ensure that further and more insidious violations are not seen in the market.

In this respect it is worth pointing out that neither the Competition Commission nor the Consumer Forums have the power to issue directions to an entire sector as the TRAI does. These are generally speaking adjudicatory forums where rights *inter se* parties are usually determined, and not a sectoral regulator set up with the specific purpose of ensuring proper growth and regulation of the telecom sector in India.

To be noted that the TRAI is specifically empowered under Section 11 of the TRAI Act, 1997, to inter alia:

- Make (non-binding) recommendations to the government on amongst other issues - terms and conditions of license to a service provider, measures to facilitate competition and promote efficiency in the operation of telecommunication services so as to facilitate growth in such services,

measures for the development of telecommunication technology and any other matter relating to telecommunication industry in general, etc.

- Inquire into and ensure compliance with the terms of the licenses granted by the Government of India
- Regulate revenue sharing agreements between service providers
- Lay down standards for Quality of Service and ensure maintenance thereof (so as to protect consumer interest)
- Notify rates for provision of telecom services

(h) While TRAI must act, as mentioned previously, to regulate access providers, we are also of the opinion that the authority of TRAI to regulate specific types of applications and services on the Internet is questionable. To be kept in mind that the Telegraph Act, 1885, under which licenses are issued by the Government of India itself does not grant the licensor authority to license or regulate specific types of content on a network. The Telegraph Act grants the Government of India the exclusive privilege of establishing, maintaining and operating a telegraph system. The Act further permits the government to grant a license for the same. The license granted is therefore for the purpose of establishing, maintaining or operating a telegraph network. Regulating the content on a network is not covered under the Telegraph Act and as such TRAI's powers, in this respect are also accordingly limited under a combined reading of the Telegraph and TRAI Acts. Regulation of content on a network must therefore require another source of authority; which while the Government may enjoy under the Constitution and other statutory enactments, the TRAI certainly does not.

In the premises, we believe that TRAI does not have the authority to recommend licensing of specific data services on the Internet. It can make recommendations / regulations pertaining to the 'telecom layer' of the network only (which includes the carriage of voice and data by the network, but does not extend to the contents of the voice or data). To reiterate, while TRAI can make recommendations on the carriage of data (or conditions thereof), it cannot regulate the data itself or applications and services derived from this data (or seek to license these applications and services).

While we broadly agree with many comments 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, and are merely being raised as a red herring and to obfuscate matters. Net Neutrality refers specifically to the telecom layer – something squarely within the jurisdiction of TRAI.

II – Responses to Some Specific Issues Raised:

1. 'Same Service, Same Rules' / Difference in regulatory burden between OTT Communication Providers and TSPs:

Most responses from industry have made the point that TRAI should use principles of regulatory neutrality and therefore either decrease the existing regulatory burdens on TSPs or increase the regulatory burden on OTT service providers so as to level the playing field and reduce the opportunity to make profits on account of arbitrage in regulatory regimes.

This is a patently untenable argument given that TSPs and OTT 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 OTT 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. As we have mentioned previously, 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.

Services must not be defined by functionality but based on existing licensing categories – i.e. Basic Services, VAS etc. It may be kept in mind that even presently, voice services are treated differently (from a regulatory perspective) if they are wired line or wireless – therefore clearly, existing classifications of services are not necessarily linked to functionality.

Further, and critically, it is impossible to disaggregate and precisely pigeon hole services in the context of the Internet. The advent of Web 2.0 around the turn of the century has ensured that a majority of online content is interactive in nature. This is what has led to the explosion of Internet usage over the last decade or so. This however means that often services are either converged or extremely difficult to disaggregate and classify based purely on traditional conceptions of function. For instance, any blog, any comments section on a

website or even a document management program such as Google docs can practically be used as a replacement for SMS – in that they all provide the ability to communicate in real time using text. In the context of Web 2.0 the TRAI classification of OTTs into ‘communication’ and ‘non-communication’ makes little practical sense and would merely result in opening Pandora’s box.

a. Application of security conditions and consumer protection:

It is argued that OTT players do not have to follow the security conditions in the licenses granted to TSPs for voice services and therefore there is an inherent security risk. However, this fails to consider that all OTT players ride over a TSPs network and accordingly the Government will have the power and ability to conduct authorized surveillance, block content etc. as required.

It is also important to point out that there is no positive duty cast on TSPs to mediate content – whether for security reasons or otherwise. While they may be required to act, under specific instruction from relevant Government Authorities and / or Courts for instance to block access to certain specific content, they cannot make suo moto decisions on the legality or otherwise of the contents within data packets, and as such there is no reason for permitting practices such as deep packet inspection that could pose threats to civil liberties such as the right to privacy.

It is further argued that consumer protection norms including privacy protections etc., do not apply to such OTT players. This is a patently false argument and it is sufficient to note that all Indian laws will apply equally to all content and services accessible in India using the Internet. Users will therefore be able to utilize consumer forums, regular civil and criminal courts to enforce their rights against online content and service providers.

Licensing will not solve any issues pertaining to consumer protection / privacy etc. given the absence of any holistic laws on this issue in India. While we believe that the consumer protection frameworks do need urgent amendment and strengthening, this is not within the jurisdiction of TRAI to act upon.

b. Purported loss of revenue to government:

It is argued that OTT communication players do not pay any of the levies to the Government that TSPs are required to (whether in the form of share of revenues, contributions to USO, spectrum costs, etc.) and therefore there is a loss of revenue to the government and further that OTT communication players do not contribute towards mandatory infrastructure development.

These arguments are misplaced. As previously noted in the Original Comments (and further explained later on in these Counter Comments), revenues of TSPs are only increasing (on the back *inter alia* of increased data usage) – therefore the revenues of the Government too will increase rather than decrease.

While issues of taxation of Internet based services are indeed problematic and do require solutions – such matters do not fall within the mandate and jurisdiction of TRAI. Implementation of an appropriate tax regime apropos of online providers is essential and the Government must take appropriate steps to ensure the public exchequer is not defrauded of tax due in India by online players. However, this cannot be dealt with by TRAI and certainly not through the imposition of a licensing system.

2. Revenues of telecom companies:

It is argued that TSPs are facing revenue losses due to cannibalization of voice and sms services by OTT communication providers and that the growth of data revenues is insufficient to maintain the profitability of TSPs or meet costs of infrastructure development.

At the outset it is pertinent to note two critical facts – first, that in the various comments from industry published by TRAI, despite virtually every industry player stating that the gains in data revenue are insufficient to compensate for the lost revenue on account of purported cannibalization of voice/sms revenue by over the top players, they have all failed to provide any data to back this up. The comments of the various industry players are replete with bald statements concerning the purported loss of revenues – without any data being used to back this up.

Second, it is pertinent to note the comments of CityCom Networks (Spectranet) which has clearly stated that they believe that data revenues are sufficient to meet investment costs and in this respect also point out that spectrum and so on is bought on the basis of an existing operating environment, so TSPs were aware at the time of purchase of spectrum of relevant market conditions including possibilities of revenue loss on account of drop in sms and voice usage.

In respect of the arguments posited on the loss of revenues, some of the responses received from industry bodies, notably those of Airtel and Vodafone state that the telecom. industry has invested a total sum of 750,000 crores since its inception and that another 500,000 crores will need to be spent in the next 5 years. It is also stated *inter alia* that:

- i. the telco industry is in bad shape with total debt increasing to over INR 300,000 crores in the last financial year.
- ii. That debt to equity ratios have doubled over the last 5 years

- iii. Return on capital investment is about 1%
- iv. TSPs make less money on data usage than voice usage, and therefore as there is a substitution of traditional services by VOIP they would lose about 1200 crores per 1% traffic loss.
- v. BSNL presents data that shows it has lost about 5 million traffic minutes of international calls from November 2014 to February 2015 (though it is unclear whether or why this is seen as being solely on account of over the top communication players acting as substitutes – it could just as well be BSNL's competitors eating into its market share).
- vi. Idea has presented data that purportedly shows that telcos have made losses of about INR 16,800 crores in the FY 2013/14 and that return on investment for even profit making telcos is insufficient to meet cost of funds.
- vii. Idea also argues that as voice revenues form the basis of the service provided by TSPs, only voice pricing reflects investment and other costs and data pricing was based only on incremental costs. A shift in revenue stream towards the data side, will therefore necessitate a shift in data pricing to account for investment costs.

We believe that the aforementioned arguments and data presented by industry bodies are misplaced, misrepresent facts / the state of the industry and must be rejected by the TRAI (for the reasons presented in our Original Comments as well as the factors mentioned hereinafter).

First, it is common knowledge, as shown by the periodic TRAI reports that even voice/sms penetration in India is not even close to 100% of our population. There is a steady increase in subscriber growth across sectors thereby leading to greater revenues and profits for the telecom industry.

Second, if you were to examine the total revenues and profits being made by the telecom industry in India, it does appear as though the industry is in good health and statements concerning their purportedly perilous financial position are somewhat exaggerated.

It may be noted that the industry's revenues reportedly grew by as much as 10.1% across the market in the previous financial year (2014) as compared to an 8.6% growth rate previously.²

Various industry and investor reports also paint a rosy picture of the telecom industry. Notably, a BNP Paribas Securities India report from last year clearly states that EBITDA margins are improving, revenues from data growth are rising

² "TRAI Data Shows Turnaround Happening in the Telecom Sector", The Hindu Business Line, June 10, 2014, available at <http://www.thehindubusinessline.com/features/smartbuy/tech-news/trai-data-show-turnaround-happening-in-telecom-sector/article6101702.ece>

and that while spectrum auctions would reduce profitability temporarily, the telecom industry as a whole was actually in improving health.³

Even looking at companies performance on an individual basis, one sees that not only are some of the telecom companies making massive profits, these are only set to continue to increase in the near future – largely on the back of growth of data services (as well as addition of subscribers).

For instance, Airtel has earned revenues of over 140,000 Crores over the last 2.5 years which equates to a profit of approximately 16,000 crores in the same period.⁴

In Airtels financial report for Jan-March this year, their net profit increased by 30.5% to reach Rs 1255 crore. In the same period last year, they had net profits of Rs 962 crore.⁵

Even looking at annual revenues, Compared to Rs 2773 crore of net profit in the financial year 2013-14, Airtel posted net profit of Rs 5183 crore for the financial year 2014-15, which is an increase of whopping 86.9%.⁶

Similarly Vodafone is also doing exceedingly well and has declared record profits for a couple of years now - backed by growth in its subscriber base, higher call rates and increased data usage.⁷ The company has shown a 11.7 per cent rise in service revenue at INR 20,641.9 crore for the first half of the last financial year ended September 30, on the back of 65.5 per cent jump in data (browsing) revenue to Rs 2,552 crore during the period.⁸ Notably, their last financial results also show that average realisation per minute from voice rose by 5.6 per cent to 49.9 paisa and average revenue per user grew marginally to Rs 202 from Rs 200 in the previous quarter.⁹

3 “TRAI Data Shows Turnaround Happening in the Telecom Sector”, The Hindu Business Line, June 10, 2014, available at <http://www.thehindubusinessline.com/features/smartbuy/tech-news/trai-data-show-turnaround-happening-in-telecom-sector/article6101702.ece>

4 Nikhil Pahwa, “A Response to Airtel’s Justification of Its Net Neutrality Violation”, Medianama, December 27, 2014, available at <http://www.medianama.com/2014/12/223-a-response-to-airtels-statement-justifying-net-neutrality-violation/>

5 Mohul Ghosh, “Airtel, Idea Profits Surge on High Mobile Data Usage. Low Profits Due to OTTs Theory Debunked”, Trak.in, April 29, 2015, available at <http://trak.in/tags/business/2015/04/29/airtel-idea-revenue-growth-profits/>

6 Mohul Ghosh, “Airtel, Idea Profits Surge on High Mobile Data Usage. Low Profits Due to OTTs Theory Debunked”, Trak.in, April 29, 2015, available at <http://trak.in/tags/business/2015/04/29/airtel-idea-revenue-growth-profits/>

7 Business Standard, “Vodafone Posts First FY Profit in India”, May 21, 2014, available at http://www.business-standard.com/article/companies/vodafone-posts-1st-fy-profit-in-india-114052001237_1.html

8 Business Standard, “Vodafone India Service Revenues up 11.7% in First Half of FY 15”, November 12, 2014, available at http://www.business-standard.com/article/companies/vodafone-india-service-revenue-up-11-7-in-first-half-of-fy15-114111101083_1.html

Idea too is doing exceedingly well from a business perspective. Their Profit After Tax was up last FY by over a 100% from the previous year to 1689.3 crores (total income stands at something like 26,179 crore). Notably Idea has paid dividends to shareholders for the last 2 years.¹⁰

If one is to examine any publicly available projections of incomes of TSPs – both internal projections as well as done by various investment groups etc. it is clear that while the revenue mix will indeed change – i.e. a greater proportion of revenues will come from data, the total revenues itself will continue to increase at a good rate due to the massive increase in data revenues.

To sum up, as things stand it appears as though TSPs do have enough operational leeway to ensure adequate infrastructure development. For instance, a CLSA report states “Bharti has forecast cumulative operating cash flow at Rs 94,200 crore during FY14-16, despite a Rs 53,700 crore capex spend and another Rs 6,500 crore (towards) spectrum payments. It will have free cash flows of Rs 28,700 crore”.¹¹

That said, while the issue of high costs of spectrum and so on is may be something that should be considered by the Government at the appropriate time, this issue is not directly at the heart of the net neutrality debate (keep in mind that one does not have to possess or license spectrum in order to be an Internet Service Provider). Further, one wonders why rather than demand reform of how spectrum is dealt with, TSPs want to instead increase revenue streams from other areas at the cost of the consumer. It is also worth noting that a large part of the disquiet in the telecom industry is solely due to the unavailability of adequate spectrum / cancellation of licenses by the Supreme Court and rebidding involved etc., all of which are issues that require attention, but certainly not under the rubric of net neutrality regulation.

It must also be kept in mind that large amounts of debts on the books of TSPs does not per se indicate either that the industry is in bad health or that the business of TSPs is not profitable. Debt has increased not due to a fall in revenues and a failure to meet operating costs etc. but largely due to investment opportunities taken on by TSPs – for instance Airtel’s expansion in Africa. Further, the debt most TSPs are under is far from unserviceable. For instance, Morgan Stanley, in a recent report, has estimated Bharti’s net debt would come down to Rs 40,480

9 Business Standard, “Vodafone India Service Revenues up 11.7% in First Half of FY 15”, November 12, 2014, available at http://www.business-standard.com/article/companies/vodafone-india-service-revenue-up-11-7-in-first-half-of-fy15-11411101083_1.html

10 The Economic Times Idea Cellular Ltd company financials, May 3, 2015, available at <http://economictimes.indiatimes.com/idea-cellular-ltd/profitandlose/companyid-3154.cms>

11 Kalyan Parbat, “Telcos to add Rs 92,000 crore debt; another auction to hit Airtel, Idea and Vodafone Finances severely”, February 15, 2014, available at http://articles.economictimes.indiatimes.com/2014-02-15/news/47358973_1_vodafone-india-mhz-bharti-and-vodafone

crore by FY15. Idea Cellular's net debt is also estimated to be lower at Rs 9,917 crore and RCom's net debt is likely to come down to Rs 32,840 crore by FY15.¹²

Notwithstanding the aforesaid, it is also worrying that TRAI appears to be buying into the argument that it needs to protect the profitability of TSPs or indeed ensure protection of revenue streams that are changing on account of obsolescence of technology. While undoubtedly, TSPs must be able to function appropriately (and accordingly, should expect a reasonable rate of return), it is not the regulators place to ensure massive super profits to these telecom companies, particularly when doing so would mean the regulator act must against its explicit mandate to ensure competition in the telecom sector and protect consumer interest. TRAI has no business attempting to protect revenues of market players on account of obsolescence of technology. It must also be kept in mind, that as noted in the Comments made by Spectranet, each of the TSPs concerned has made a business decision to operate in this field and is well aware of the costs and revenues likely to be associated with operating in the telecom environment. To now seek handouts from the regulator or to ensure that their revenue streams are protected at the cost of innovation, competition, consumer choice, etc. is patently inequitable and must not be permitted.

a. Competition in the telco market:

It is repeatedly stated that the Indian TSP industry is competitive with tremendous choice available to the consumer. This is however patently untrue.

As of July 31, 2014, the DoT has permitted 350 ISPs to operate in India of which 90 are licensed to provide all India services.¹³ Despite the seemingly high number of ISPs, the Telecom Regulatory Authority of India notes that "...top 20 ISPs provide Internet services to 98% subscribers."¹⁴

In practice, consumers have very little to absolutely no choice of service provider. The industry functions as a cartel, with informal arrangements ensuring that competition is not allowed to blossom and consumers have no choice. Switching service providers, particularly in the case of fixed line / broadband, is virtually impossible even in large parts of urban India let alone rural India.

12 Sounak Mitra, "Rising Debt a Worry For Telecom Firms", July 1, 2013, available at http://www.business-standard.com/article/companies/rising-debt-a-worry-for-telecom-firms-113062800864_1.html

13 List of Companies Authorized to Provide ISP Services, available at http://dot.gov.in/sites/default/files/List%20of%20companies%20authorized%20to%20provide%20ISP%20services%20as%20on%2031.07.2014%20%284%29_0.pdf

14 TRAI Consultation Paper dated December 2006, on "Review of Internet Services", p.3

Even in areas where there are notionally more than 1 service provider, for instance it is repeatedly argued that Delhi has over 10 service providers thereby ensuring competition, what is actually seen on the ground is a complete absence of meaningful competition in the market. Residential localities for instance are divided up by service providers so as to reduce their costs of infrastructure provisioning and to ensure a captive market for their services. Switching is impossible in such situations.

Even in terms of measures of market shares and other statistical data it is clear that the TSP industry in India is actually very uncompetitive.

For instance, the top three companies – Bharti Airtel (35 per cent), Vodafone India (28 per cent) and Idea Cellular 28 (per cent) - accounted for 91 per cent of incremental industry revenue in FY14.¹⁵

Data published by TRAI also demonstrates not only the existing monopolization in the telecom. sector but actually shows increasing concentrations.

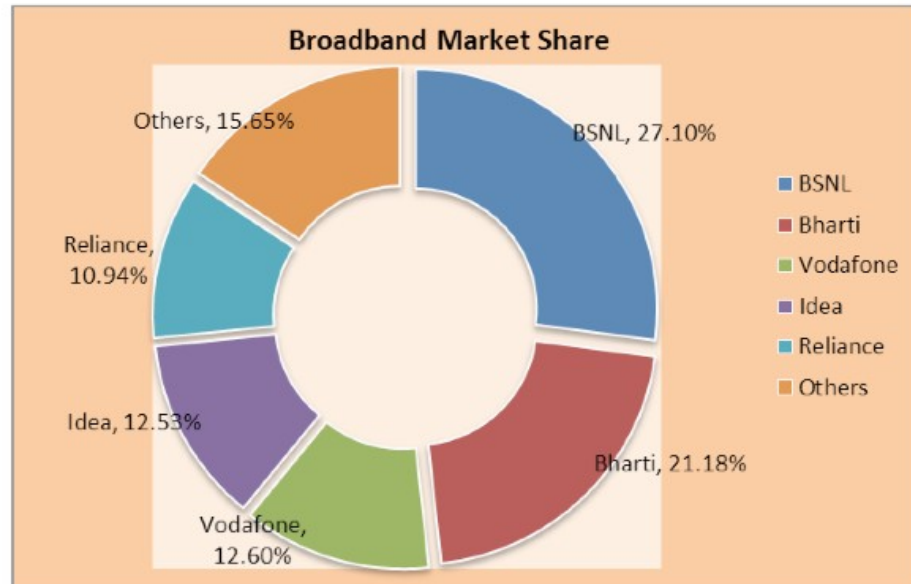
Per TRAI figures of May 2014, the top five broadband service providers constituted 84.35% market share of total broadband subscribers. They are BSNL (17.70 million), Bharti Airtel (13.84 million), Vodafone (8.23 million), Idea (8.19 million) and Reliance Communications Group (7.15 million).¹⁶

The top five Wired Broadband Service providers were BSNL (9.98 million), Bharti Airtel (1.40 million), MTNL (1.13 million), YOU Broadband (0.39 million) and Beam Telecom (0.39 million), while the top five Wireless Broadband Service providers are Bharti Airtel (12.43 million), Reliance Communications Group (7.04 million), BSNL (7.72 million), Idea (8.19 Million) and Vodafone (8.23 million).¹⁷

15 “TRAI Data Shows Turnaround Happening in the Telecom Sector”, The Hindu Business Line, June 10, 2014, available at <http://www.thehindubusinessline.com/features/smartbuy/tech-news/trai-data-show-turnaround-happening-in-telecom-sector/article6101702.ece>

16 TRAI Press Release available at <http://traigov.in/WriteReadData/WhatsNew/Documents/PR-TSD-May,%2014.pdf>

17 TRAI Press Release available at <http://traigov.in/WriteReadData/WhatsNew/Documents/PR-TSD-May,%2014.pdf>

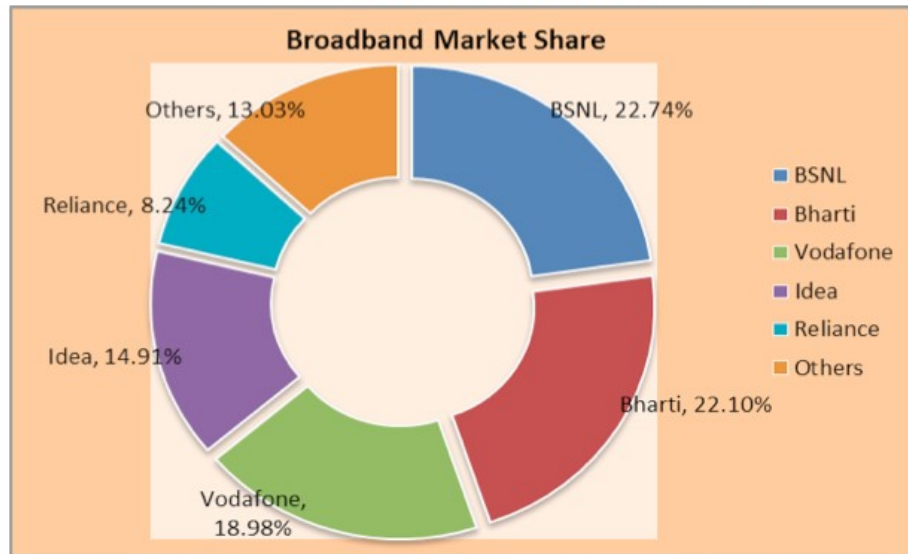


When compared against figures from November 2014, one notices not just that the top players have a huge market share but that this is in fact increasing.

As of November 2014, top five broadband providers constituted 86.97% market share of total broadband subscribers. These service providers were BSNL (18.70 million), Bharti Airtel (18.17 million), Vodafone (15.61 million), Idea Cellular Ltd* (12.26 million) and Reliance Communications Group (6.77 million).

As on 30th November, 2014, the top five Wired Broadband Service providers were BSNL (9.98 million), Bharti Airtel (1.40 million), MTNL (1.13 million), Beam Telecom (0.44 million) and YOU Broadband (0.42 million).

Service Provider-wise Market Share of Broadband (wired+wireless) Services



It may also be worth noting once again that the extent of cartelization and market power (and lack of choice enjoyed by the consumers) has resulted in tremendous anger against certain practices of TSPs such as implementation of discriminatory fair usage policies, mis-selling of products etc. Despite public pressure, such practices are now ubiquitous, demonstrating the lack of actual competition in the market. In a competitive market, consumers would be able to move to a service provider who does not indulge in such practices, but no such choice exists in large parts of India.

It is therefore essential that appropriate net neutrality regulation be put in place so as to ensure leading service providers do not take advantage of their dominant market positions to act against consumer interest.

b. Infrastructure development:

It is argued that OTT communication players do not contribute to infrastructure development and therefore must face some levy or pay some contribution to TSPs.

This argument is misplaced and should be disregarded. As previously noted, the revenues of TSPs are increasing on account of greater use of OTTs by consumers and consequent manifold increase in data revenues. This increase is more than sufficient to ensure adequate infrastructure investment.

If required, an appropriate tax regime may be instituted for relevant online service providers if the Government of India so desires.

Further, it must be kept in mind that the implementation of unrestricted traffic management and other such practices acts as a disincentive to the TSP to invest in infrastructure.

3. Freedom to enter into commercial agreements for preferential access or charging:

a. Zero Rating:

It is argued that zero rating is essential to promote Internet penetration, give consumers choice of offerings, and that this is similar to reversing charges or toll free call lines.

In addition to the argument previously posed in the Original Comments, we respectfully submit that the issue of zero rating, in addition to its distortions of a competitive market, also creates numerous social issues that require the practice to be banned. Zero rating type deals introduce a huge distortion in the architecture of the public Internet; with a version of the 'Internet' put together by the ISPs and its partners being made available for free as against the priced 'public Internet' where all content, applications and services are available on an equal basis. This introduces a perverse private incentive into a public and egalitarian network, and leads to the classical issue of how a series of free and narrow/ immediate self-interest based individual choices may not lead to the best overall collective social choice. Allowing such deals will kill the public Internet as an Open platform.

Permitting zero rating and other such deals, even on purportedly 'open' platforms will exacerbate problems of monopolization / centralization of online services. This will permit big companies (such as for instance, Facebook) to act as a repository of all user data. Presently, given the multiplicity of services on the Internet, data is collected differently by each service provider. Big Internet companies want to ensure that they can become centralized repositories of user data (which they can then monetize). This can be accomplished by ensuring that people can only access content through single platforms – such as that provided by Facebook. Essentially, Facebook will subsidise market access for certain content players, in exchange for user data that their service and content offerings collect. This will therefore increase the market power of big Internet companies and may in fact lead to the creation of private Internets – each associated with a particular service provider.

In this respect, it is also worth questioning whether government services / e-governance programs etc., will be forced to ride on such private platforms. Will the government and citizens be required to share user and other data with private corporations running such platforms, given that most terms and conditions are extremely one-sided (for instance Facebook's Internet.org terms confer a royalty free worldwide license to Facebook to use all information shared on the service).

The use of zero rating and other such options is indicative of a new form of cartelization emerging in the Internet economy – with TSPs and existing Internet monopolies acting so as to ensure all competing providers are kept out of the mainstream market. This poses a threat to the Internet economy in the medium to long term and will lead to TSPs basically carrying a 'bouquet' of websites / applications, thereby reducing the Internet to cable TV and thereby limiting user choice and reducing the potential benefits that the Internet as a public network can offer.

Permitting TSPs to take advantage of the irrational consumer choices made when a product is free at the cost of long and medium term social welfare is not a stance TRAI should subscribe to.

One must also consider the effects such deals will have on increasing the centralization of online services (and consequent social and consumer problems that could be raised such as effects on privacy). For instance, using Internet.org may require one to sign into Facebook thereby permitting Facebook to track your activity on all applications and services offered on the platform.

Various zero rating platforms have stated that they are 'open' and will host any services (that meet certain conditions). Even in such situations however the platform provider can decide what services to host on the platform – thereby skewing the internet economy, limiting consumer choice and ensuring that the Internet is turned largely into a commercial enterprise rather than a space for exchange of knowledge.

Zero rating deals also raise privacy and other concerns. For instance, per Facebook / Internet.org terms and conditions, Facebook will gain a royalty free worldwide license to use any content provided by the user. Further, they will track users through their entire use of the Internet.org platform. This raises serious concerns about privacy, ownership and usage of data – will poor and first time users (whom such platforms largely target) be in a position to either understand or mitigate such concerns?

Further, zero rating deals are incomparable to toll free calling where the same does not form the main service provided but by and large acts as an

ancillary support system to a main service (for instance in establishing customer care helplines and so forth).

b. Price differentiation on a 'reasonable' basis:

It is argued that price differentiation ought to be permitted on the lines of that permitted for voice etc. in terms of the Tariff Order of 1999. However, it is worth pointing out that the said Order does not deal with identical issues as the issue of Net Neutrality. The said Tariff Order is in consonance with the principle of common carriage and we believe a similar analogy in the context of the Internet would be permitting differentiation based only on bandwidth offered/provided, or the usage of data.

4. Traffic Management Practices:

We reiterate our Original Comments apropos of traffic management by TSPs and in particular emphasize that traffic management must never be used for commercial reasons – but only technical. Instances of discrimination of traffic (on account of implementation of traffic management) should be few, far between and, above all, transparent, proportional and non-arbitrary.

As a general rule no discrimination should be permitted on the Internet and any exceptions must be specific and implementation must be carefully monitored. The onus must be on the service provider to justify the need to carry out the specific traffic management practice and, it should be kept in mind that such steps shouldn't interfere with the access, affordability and quality of the services.

TSPs must only be permitted to use specific defined traffic management practices, and that too in defined circumstances, using specific methods. The use of deep packet inspection must be completely banned. What practices to permit and how must be a purely technical judgment based on optimizing network functionality and security.

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

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. 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.

It is also astonishing to note that many TSPs have suggested that there is no need to implement mandatory transparency practices as the consumers will not understand the traffic management practices adopted by TSPs. In fact, this makes it incumbent on TSPs to ensure full and adequate disclosure, in a form understood by the consumer.

Putting in place strong transparency measures is essential to promote development of newer services (by ensuring sufficient information is available to develop new service and application offerings on the Internet) and crucially to ensure adequate consumer protection. Given that Indian consumers are typically not well informed of their rights etc., and further that ISPs are the sole source of information on service provisioning, it is vital that complete disclosure of any practices that affect service provisioning is conducted.

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 (as recognized by TRAI in the Consultation Paper) should fulfill all of the following characteristics: accessibility, understandability, meaningfulness, comparability and accuracy.

5. Enterprise Solutions and Net Neutrality:

Many industry players have argued for enterprise solutions / specialized services to be excluded from the purview of Net Neutrality regulation, which they argue should only apply (for various reasons) to the public Internet.

While we do not per se object to the exclusion of private networks / specialized services from the scope of net neutrality regulation, care must be taken to ensure this exception is not used to defeat the purpose of any net neutrality regulation implemented vis-à-vis the public Internet.

Defining the scope of what constitute specialized services will therefore be critical (and should not be left to the market). Allowing TSPs the ability to declare any specific system/platform a private network – for instance Facebook declaring Internet.org as a private network / specialized service – would permit net neutrality regulations to be evaded easily.

Therefore, it must be ensured that any private networks are actually private networks – and that no portions of the public Internet can be accessed using this method or that this does not end up being a method to avoid regulations applicable to the public internet while providing similar services.

Should such an exception be created, constant vigilance will therefore be required by TRAI to ensure the provision is not taken advantage of and is appropriately adhered to.