Internet And Mobile Association Of India

IAMAI comments to TRAI's Consultation Paper

on

Regulatory Framework for Over-the-top (OTT) services

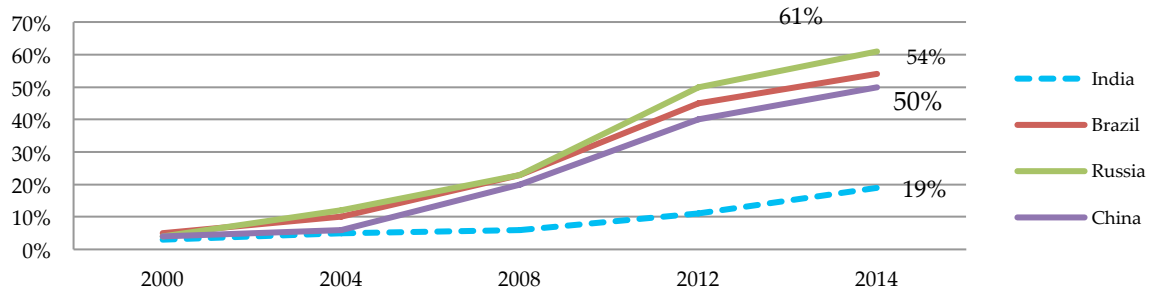
April 2015

Introduction

"Internet is one of the most powerful instruments of the 21st century for increasing transparency in the conduct of the powerful, access to information, and for facilitating active citizen participation in building democratic societies".[1]

The number of Internet users in India reached 302 million[2] in December 2014 from 200 Million in 2013, surpassing the US and reaching the 2nd position globally, preceded only by China. Mobile Internet constitutes around 71% of the total online population and most of the rural population access the Internet from their mobile handsets. This being the case, "wireless access" plays a central role in connectivity. Despite the progress made so far in Internet access, India's massive unconnected population of nearly one billion[3] is a sobering reminder of the colossal task that lies ahead. Bringing this "next billion" online holds tremendous economic and social potential for India. As shown in the table below (Illustration 1) Internet penetration is the lowest in the country compared to its peers. The sector even though is at a burgeoning stage is still years away from other BRIC nations.

Illustration 1- Internet Penetration Rates in BRIC



(Source: India@Digital. bharat - BCG in India)

Internet currently contributes around 3% to GDP. 10% or more of India's GDP growth over the last decade was attributable to the Internet. It is estimated[4] that raising Internet access to developed world levels in India can create 65 million jobs, accelerate GDP growth by 110%, increase per capita income by 29%, and reduce extreme poverty by 28%. It is also vital to note that the Internet revolution has created a new ecosystem; a "digital economy" which includes device manufacturers, app stores, carriers, and all kinds of online services, content and apps. All these elements of the digital economy have sustainable business models and benefit financially from a free and open Internet, which also spurs greater competition and innovation within the Internet ecosystem. This is what spurs economic growth, creates jobs, improves access to education, and increases the affordability of access.

Internet platforms and services are in a nascent stage and despite the relative late entry, the promise for growth enhancement riding on the platform has been substantiated over The past decade. This potential for growth has been noted by a McKinsey Global Institute India specific report in 2012, titled as, "Online and Upcoming: The Internet's Impact on India", which notes that Internet

[1] United Nations, Report of the UN Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and
[2] IAMAI Internet Report 2014
[3] McKinsey & Co., "Offline and Falling Behind: Barriers to Internet Adoption", p.73.
[4] Delloite Report 2014- Value of Connectivity-Economic and Social benefits of Expanding Internet Access

Applications and Platforms have the ability to reach 3.6% of the GDP by this year [2015-16]. This is in the absence of any fresh or additional regulatory framework. A more recent report in 2015 by the Boston Consulting Group and IAMAI, notes that in 2013, internet applications and services actually contributed 3.2% to the national GDP and this would grow to 5% by 2020.

The report in its comments calls for reducing existing burden on online service providers by reforming the Information Technology Act and the Copyright Act rather than any fresh or additional regulation. Any additional regulation will have an adverse impact on the growth of the Internet Applications and Platforms as it will dissuade people to be innovative and creative, which are considerd to be the primay drivers for the sector.

A policy of forbearance on regulation [as has been the case so far] should be continued in order to avoid hampering growth in the sector and ensuring that access to any content on the internet is not blocked or degraded, while at the same time permitting Telecos to avail themselves of fair market opportunities and impetus to reduce congestion and invest in infrastructure.

Before responding to the specific questions raised by the TRAI Consultation Paper ("CP"), we offer a few general observations regarding the potential regulation of net neutrality and Internet apps.

The focus of the following section is to dispel some of the myths that the TRAI has embedded in the Consultation Paper, which is deflecting from the objective of the paper.

1. Dispelling Myths in the Consultation Paper

1.1 OTT: An incorrect term

The TRAI has used the acronym, "OTT" to describe internet platforms and services which is a term emerging from a standard telecom lexicon which reduces them to merely the method through which they are served. Telcos and internet platforms and services play complementary roles in delivering Internet services, content, and applications to end users reliably and affordably.

The "OTT" terminology is inaccurate in as much internet platforms and services, encompass a wide range of services, including VoIP, Instant Messaging, Cloud Services, Internet Television, and Social Networking. On this we submit our objection to the phrase, "OTT". Computer technologists, on the contrary make well accepted distinction between the networks layer (TSP's), and the applications layer (OTT). Hence, to reduce internet platforms and services to a phrase such as OTT is incorrect. Instead of using OTT, this response will use the phrase, "internet platforms and services" which is more appropriate.

1.2 Spectrum Issue

The TRAI paper completely missed out on the most important issue that has led to this whole debate of regulating the internet platforms and services, the highly mismanaged Spectrum licensing in India. The point as mentioned under para 3.2 of the TRAI's CP under 'Challenges posed by OTT service', states that "*The contention of the TSPs is that they have invested in building the infrastructure (capital costs) and incurred other costs associated with operation of the network (cost of spectrum, License Fee, Spectrum Usage Charge etc.) and the OTT players are freely riding on their networks."*

This infact is a misnomer, Telecom Service Providers (TSPs) are already fully compensated by end-user consumers for access to the broader Internet. Telecom Service Providers (TSPs) should not

charge Internet application and content providers in order to reach end-users. Imposing additional charges on Internet services will hamper innovation and consumer choice. We are of the view that if Telecom Service Providers (TSPs) are allowed to charge more for apps based communications, they would soon have, for example, increased pricing for ecommerce or social media. This would set in a new trend, which would be counterproductive to the concept of free and fair access to the internet. It will also truncate the Internet and make innovations skewed

The important issue here is not that internet platforms and services are the free riders but is in fact the heavy cost of spectrum. The TSPs in India have been bearing the burden of expensive spectrum cost is not an issue between TSPs and the content providers but between the TSPs and the Government.

Every single analyst report today suggests that spectrum cost in India is one of the highest in the world[5]. And the latest report from the top credit rating agency say that this heavy spectrum cost is directly proportional to the cost of internet. And this increase in the cost of spectrum is ultimately passed on to the consumers and which makes internet unaffordable to large part of consumers.

The National Telecom Policy (NTP), 2012, which emphasizes on broadband-on-demand and empowering the common man through ICT, by setting such high spectrum price completely averts the vision laid down in it and will be highly *unfavorable to Digital India initiative* such as broadband penetration in 2.5 lakh villages, 100 smart cities, e-kranti etc which would require rational spectrum management.

According to the International Telecommunication Union, ITU, almost 60% of spectrum assigned remains unallocated[6]. The bands such as 2100 MHz, 700 MHz and 2.5GHz were not fully allocated[7] to, and other bands too were partially allocated to the telcos, which leads to a non allocation of nearly 61% of spectrum specified. The restriction in the release of spectrum bands and the increased cost per MHz impact the net licence fees of the government.

As per ITU, the cost of an entry-level broadband plan in India is equivalent to 5.5% of an Indian's per capita income which is high in comparison to a similar plan that accounts for 0.5-0.8 % of per capita income in countries such as Singapore, the US and the UK and even Sri Lanka (2.9%) and Malaysia (3.2%)[8]. This high wireless bandwidth cost is directly proportional to the *exuberant spectrum reserve price per unit* and its low or controlled availability is adding to the supply crunch[9].

The increased demand for, and limited supply of spectrum as controlled by the government to keep spectrum prices high under the guise of maximizing public good is a narrow and short-term policy under the false assumption that it would be maximizing societal welfare. Credit rating agency Fitch also stated the fact that "Heavily priced spectrum will exert pressure on telcos' balance sheets and cash flow, and limit their ability to invest in capex over the medium term"[10]. In other words, expansion will be curbed by spectrum charges.

[5] India's spectrum pricing on an average is 25 times costlier than the Countries viz., US, France, Singapore, Germany, Spain and Sweden, and in quality it is well below), the global average and even APAC average or http://articles.economictimes.indiatimes.com/2012-05-22/news/31814404_1_mhz-band-spectrum-price-india-s-2g

[6] http://www.gsmamobileeconomyindia.com/GSMA_Mobile_Economy_India_Report_2013.pdf

[7] http://www.gsmamobileeconomyindia.com/GSMA_Mobile_Economy_India_Report_2013.pdf

[8] Mumbai Business Line June 2 2015

[9] A period during which the supply of a particular product is lower than the ***demand*** for it, leading to higher prices

[10] http://www.hindustantimes.com/business-news/tech-it-easy-column-spectrum-money-can-aid-net-neutrality-in-india/article1-1331837.aspx

The Telcos issue on lacking sufficient funds to feasibly invest in the infrastructure is due to heavy spectrum cost and not due to internet platforms and services.

These short-term goals of maximizing revenue from a public good for governments seeking means to reduce their budget deficits are actually harmful to society. Such policies will hamper the OFN rollout and the required infrastructure development thereby reducing the sector's massive ability to contribute to GDP growth and employment. This also affects the Net Neutrality leading to blocking and throttling of data services by the TSPs and ISPs as a consequence. Hence, it is the need of the hour to keep the spectrum prices justifiably low, allocate the several unutilized bands to expedite the rural broadband, which would significantly help in faster proliferation of broadband in the country.

Experts have suggested various ways in which a conducive and balanced environment can be created so that the TSPs are able to invest in network infrastructure. Some of the most important ways suggested by a large cross section of industry and experts have been a) lower spectrum cost, b) improved design of auctions, c) easier roll out norms and d) clearer rights of way for TSPs and e) government support for rural expansion of TSPs.

In our considered opinion improved investment in networks is primarily dependent on the Government outlook towards the TSPs rather than on the relationship between TSPs and the internet platforms and services companies. In fact, barking up the internet platforms and services companies on the pretext of better network infrastructure is a very poor suggestion. Since the environment that needs to be balanced is between the government and the TSPs and not that between the TSPs and Internet content and services companies.

1.3 Lack of Regulation:

There is a general misconception that Internet platforms and services are completely unregulated and operate in the absence of legal and regulatory oversight. Internet platform and services companies are already strongly regulated through the powerful and effective IT Act 2000 [as amended in 2008]. It is the most comprehensive Act covering all aspect of Internet platforms and services.

The preamble of the IT Act, 2000 states: "An Act to provide legal recognition for the transactions carried our by means of electronic data interchange and other means of electronic communication, commonly referred to as "Electronic Commerce", which involve the use of alternatives to paper based methods of communication and storage of information , to facilitate electronic filings of documents with the Government agencies and further to amend the Indian Penal Code, Indian Evidence Act, 1872, The Bankers' Books Evidence Act, 1891, and the Reserve Bank of India Act, 1934 and for matters connected therewith or incidental thereto."

Hence, it is a clear statement of parliamentary intent that no further licensing or registration of online services is necessary.

Further Section 2(t) of the Act as amended till date states ""electronic record" means data, record, or data generated, image or sound stored, received or sent in an electronic form or computer generated micro fiche;" This definition has stood the test of time and remains unchanged even though the Act had been amended in other respects in 2008.

In addition, Internet services and platforms are governed by the same set of laws that govern MVAS services. Mobile Value Added Services (MVAS) are services which are similar to Internet services and

platforms but they are offered by arrangements between the Access Provider and the MVAS provider. TRAI has had occasion to consider this during its consultations and recommendations on regulating MVAS services. Stakeholder comments during this process clearly outlined that MVAS services were governed by the existing laws in India. These include Intellectual Property Rights laws, the Information Technology Act, 2000 etc. IAMAI is of the opinion enforcement of laws represents the right balance in regulating Internet services and platforms and any additional requirements is likely to impair growth in the sector. In this scenario it is quite unnecessary to bring forth further regulations for this sector. In our view, it is especially iniquitous to craft a piece of regulation that tries to advantage one industry [TSPs] over another [Internet Content and app services] and such efforts are not in the interest of consumers. The focus of regulation should be directed at the benefit of consumers only – lower cost of access, better consumer experience, etc.

1.4 Cost of licensing has a negative effect:

Extensive legal regulations have always been unprogressive. The cost of extensive legal regulations has recently been analyzed in an India-specific study by the Global Network Initiative.[11] It is clearly articulated in it that regulation made without a clear understanding of new technologies and innovation has a direct economic consequence. The Report states that, "[w]e conclude that online intermediaries can become an important part of India's Internet economy. Their GDP contribution may increase to more than 1.3 per cent by 2015 ($41 billion) – provided that the liability regime is improved".

Growth of social media and apps like Facebook Whatsapp, Skype, Viber have all created communication a lot easier and less expensive and have challenged the telecom players worldwide who missed to see it as an opportunity to create the infrastructure themselves to facilitate such services to its customers. Hence, it is regressive to regulate the Internet Content Providers on the basis of that analogy.

Innovation by some in any field will always threaten the others in any sector concerned unless the others too foresee the opportunity and be the innovators themselves and exploit the market. For instance, the energy efficiency appliances market do not have to enter some revenue sharing agreements with the electricity providing companies, as their products have led to low utility bills or likewise the postal services with the e-mail providers et al.

A license would increase costs which would be to the detriment of users. It would create entry barriers for entrepreneurs and start-ups. Onerous regulations will chase more and more Indians to set up businesses overseas. There are many laws that small Internet and services companies have to follow in India. They also have to maintain large compliance teams. Any system of licensing would hence be to the detriment of the Internet industry as well as consumers.

Additional regulation of Internet Applications and Platforms could cripple tech entrepreneurship and application development. Low barriers to entry allow entrepreneurs and start-ups to design and market innovative products and services for the benefit of Indian consumers. Many such start-ups do not have the necessary capital to apply for regulatory approvals and, as such, a new licensing regime would dramatically reduce this vital innovation.

[11] Global Network Initiative, Closing the Gap: Indian Online Intermediaries and a Liability System Not Yet Fit for Purpose (March 2014) (available at http://www.globalnetworkinitiative.org/content/closing-gap-indian-online-intermediaries-and-liability-system-not-yet-fit-purpose last visited August 20, 2014).

Even otherwise, till date no rationale has been advanced on the basis of evidence demonstrating a need for greater regulation or licensing of the Internet services and platforms Sector. Internationally Value Added Services are not regulated and there is no is no clear evidence for regulatory intervention exists.

Regarding the security concerns for providing communication services, as mentioned earlier, companies providing communications service are under the purview of the IT Act and, under which the content providers do have to comply with various provisions of the IT Act and international treaties in maintaining in responding to law enforcement requests. Hence, there is no need to mandate further on this instead the existing legal provisions should be strictly and correctly implemented.

1.5 Charges of loss by TSP's:

The Top 3 telecom companies who have an aggregate of 62% of the total mobile users in India have had increasing revenues and profits, quarter on quarter which they attribute principally to higher revenues on data usage. Even if TRAI's argues that the Telcos's revenue is hurt due to the data the top CEOs have stated to the contrary.`

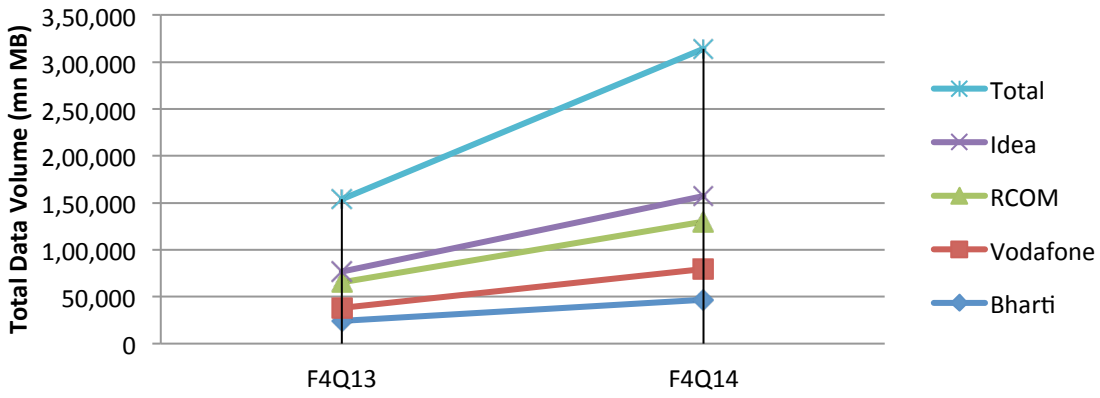
Vittorio Colao, Vodafone's group Chief Executive has stated that, "Growth in India has accelerated again (October-December), driven by data". For the October-December 2014 quarter statement reveals that, "Vodafone's Indian unit outpaced its group counterparts to report 15% organic growth in revenue in the quarter through December, as subscribers used more of its premium data services, even as the basic voice telecom service remained under pressure, like its top rivals". [*Economics Times 6th Feb 2015*]

Himanshu Kapania, Group CEO, Idea Cellular has stated in December 21, 2014 that, "The management indicated that revenue growth could be maintained in high-teens with data adoption as a key catalyst. We believe recent equity issuance and healthy cash generation create sufficient room for participation in spectrum auctions". The October-December 2014 quarter statement for the company reveals that, "Idea Cellular's consolidated net profit for the fiscal third quarter jumped nearly 64%, meeting estimates, as the nation's No. 3 telecom operator posted strong growth in subscriber additions and as higher demand for data offset pressure on its voice services". [Business Today Dec 21, 2014]

The argument that innovations of VoIP and text apps have affected the TSPs financial stability is exaggerated and available data, points to the contrary. Indicators of revenues from regulatory filings, earning calls of telecom companies and public statements clearly indicate that data is driving telecom growth. Data revenue has grown by 85% in the period June 2013-14 and volume growth has been over 100%.

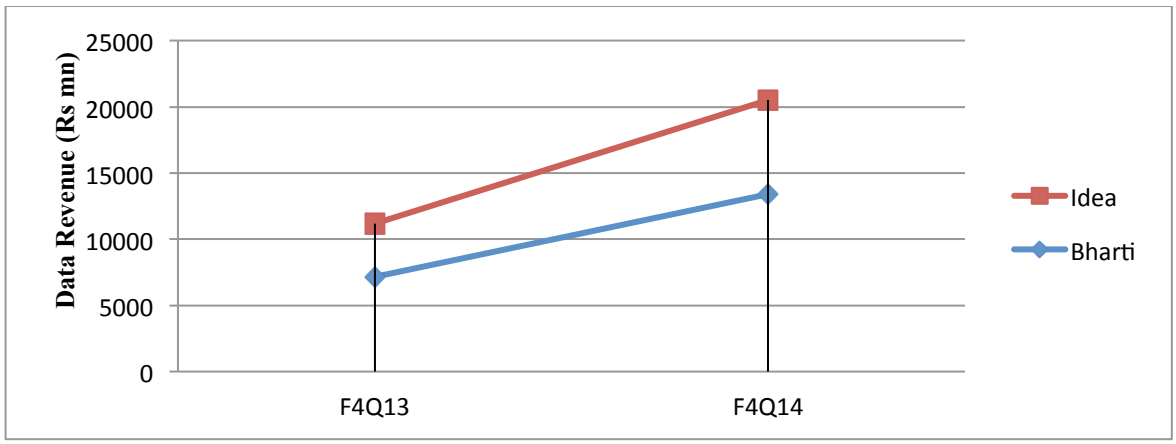
Data is the next growth leg and it is expected that data contribution to be more than double to 23% of overall revenues (vs. 10% currently) in the next two years, by 2016. Data revenues would grow at a 40% CAGR over 2014-18, leading 12.3% increase in industry revenues over the same period. Any form of restriction or discrimination could jeopardize the growth rate significantly.

Illustration -2 ISPs Data Growth (Volume)



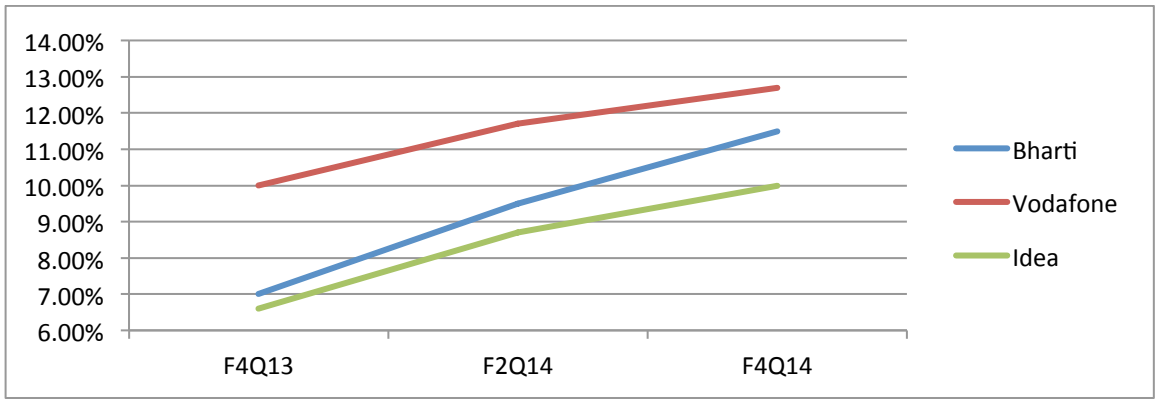
(Source: Morgan Stanley Report "Decoding India's Data Story")

Illustration -3 ISPs Data Growth (Revenue)



(Source: Morgan Stanley Report "Decoding India's Data Story")

Illustration 4 –Data Revenue % of Total Revenue



(Source: Morgan Stanley Report "Decoding India's Data Story")

Net Impact of revenue loss and revenue gain due to data consumption is Positive, which is evident from the following:

Deepak Shenoy, on the Capital Mind Blog : "Indeed, people are using more data than voice, or SMS. But the increased use of data means that by and large, people are paying for that data. Let's not get caught in per message or per call metrics, and look at the overall wallet-share of all users on average. We collated data from TRAI for India as a whole, and we separately got data for SMS revenue per user per month, and similar metrics for data and voice calls.

From Jun 2013 to Sep 2014 – a 15 month period prior to which data revenues were not separately disclosed – we can see that:

i. Average revenues per user have gone up from 111 to 116, a Rs. 5 increase. (per month)
ii. Of that, Call Revenue per user is down by Rs. 3.18 per user per month, and SMS revenues have fallen by 24 paise per month.
iii. But Data revenues are up by Rs. 10.46 per month per user!
iv. This is not cannibalization; this is a new business model!"

Even further financial analysis has also been done which also defies any revenue loss to TSPs due to data traffic.

A Google/A.T. Kearney study arrives at a conclusion that the relationship between internet communication services and TSP's can generate additional cumulative revenues of $8 billion and EBITDA (gross earnings) of $2.9 billion over the next three years.

A study by Nokia titled as the, "India Mobile Broadband Index 2015" notes that towards the end of 2014, there has been a sharp increase in 3G Data Connections and data usage on 3G networks has gone beyond the data consumption of 2G Networks. It concludes by stating that, "*Data traffic growth is reflecting fast in mobile data revenue growth for telecom operators – a sign of healthy growth in Indian telecom industry*."

Also, several Independent financial analysis by several credit rating institutions affirm the same:

A report dated July, 2014 by Care Ratings after surveying the debt outlays of various telecom companies' notes, "With increasing penetration and a gradual fall in price, mobile data will drive up the share of the nonvoice revenue for the telecom operators (Telcos); online video consumption is the likely key driver. CARE Ratings expects share of revenue from non-voice usage to increase to 25-30 % over the next couple of years from the current levels of around 20%. In CARE Ratings' opinion, the increasing data revenue is critical to supplement the traditional voice revenue; this shall provide telecom operators with diversity in growth avenues and better profitability."

A report dated January, 2015 by ICRA a full-service Credit Rating Agency has stated two important things; first, "The growth momentum witnessed in the telecom industry in last few quarters continues to persist. The industry has reported steady improvement in both operational and financial metrics." Second, "[a]s has been stated earlier the data services continue to show upward trend. The number of data subs has shown healthy growth over last few quarters, accompanied by increased data usage."

1.6 Data is cannibalizing ARPUs of TSPs and ISPs:

There is a general perception that VoIP is cheaper than traditional voice calls,which is not true. For e.g. A 60 minute call over IP can consume around 35 MB only for voice and similar duration video call will consume 240 MB of data. Therefore, a voice call of one minute duration over the Internet can cost between 15 paisa to Rs 6 depending on the bandwidth. This effectively adds up to Rs 180 per hour which is three times more than the average call rate for a subscriber.

Hence, the assumption that growth of VOIP is impacting the traditional revenue stream of TSPs is not true on the following grounds:

- VOIP is not cheaper that traditional voice calls and in any case, the telecom operators are free to charge the same rates from consumers who use applications as they charge to non-application users for calls and peer to peer SMS.

- VOIP which has quality issue in India and needs 3G and 4G connectivity which is again at a below average level of adoption. Internet telephony moreover currently accounts for less than 0.035% of total voice minutes of the industry in India which is negligible.

- The argument to disrupt VOIP through regulatory measures will not only be preventing the consumers from the use of innovative technology but also be skewing any further innovation.

Moreover the claims which are premised on a return on investment (ROI) basis are not made out. Respected financial analyst Deepak Shenoy writes in the Capital Mind Blog that[12], "Some people say that this is bad because of their low "Return on Capital Employed". ROCE for Idea and Airtel are around 13% and 16% respectively (Earnings before interest and taxes, divided by Equity+Debt).

But if you use a better term for utilities, which is what telcos are (like power providers or highway toll companies), they are measured on RoE, or Return on Equity. If you take debt, and then you pay back the interest on the debt, how much return are you left with, on your total equity?

For Airtel the RoE is 20% (for India alone) and for Idea, around 20%. This is higher than bank FDs by a considerable margin, and utilities are expected to have RoEs of 15% or whereabouts. Plus their debt costs are coming down, as interest rates fall. (Vodafone's traded short term debt went below 9% a year, lesser than the base rate of most banks!)

If you look worldwide, this is exactly how it works. Verizon has a 10% ROCE, but a 70% ROE, as they have a lot of debt. AT&T too, has only 5% ROCE but 10% ROE. This is how the industry works everywhere else; high debt, and juiced up ROEs."

Hence, these broadly sums up as some of the bare fallacies that bring inconsistency to the objective of the consultation paper. Below are some of the points that TRAI is conflicting with its own policy decisions made in the past and makes the whole approach lopsided.

[12] http://capitalmind.in/2015/04/telecom-companies-are-not-losing-money-to-data-services-the-net-neutrality-debate/

2. TRAI Consultation – Paradoxical and Skewed

2.1 Adding New Regulations Is Inconsistent with TRAI's Findings in Past Proceedings

TRAI's in its past recommendations on similar issues, have always emphasized on a least intrusive and minimal regulatory framework. As a constituent of Internet Services, Internet Applications and Platforms contribute immensely to India's growth and national revenue. This closely aligns with the goals of the TRAI Act and the various iterations of the National Telecom Policy which aim to foster an environment for research and development in India. It is suggested that a conscious policy of forbearance is to be maintained through the absence of onerous licensing or registration requirements.

Following are some of TRAI's past recommendations on similar issues, which have emphasized on a least intrusive and minimal regulatory framework:

2.1.1 TRAI's past recommendations on similar issues

The Authority in the past has had occasion to consider and provide for the principle of non-discriminatory access under the Telecommunication (Broadcasting and Cable Services) Interconnection Regulation 2004. This submission seeks to present that similar considerations exist for extending these principles to Telecoms, especially given the global trend towards ensuring network neutrality. Further, proposals similar to regulating and licensing of Internet services and platforms have been made for MVAS services in the past. The Authority has been analyzing the stakeholder interests, kept a light touch regulation for MVAS and generally exempted them from licensing.

Submissions on the basis of network neutrality and MVAS services are substantiated below.

a. Preventing discrimination by Access Providers

i. On 10.12.2004, TRAI made an interconnection regulation applicable for broadcasting and cable TV sector. The regulation was called the "Telecommunication (Broadcasting and Cable Services) Interconnection Regulation 2004 (13 of 2004)".

ii. There have been eight amendments made to this regulation. The interconnection regulations provide for the basic structure on the matters of interconnection. These regulations cover arrangements among service providers for interconnection and revenue share, for all broadcasting and cable services. The main features of the

regulations are: provision of "must provide" for the broadcasters. Hence an access provider cannot unfairly discriminate between content providers and has a general obligation to carry signals.

iii. Clause 3 of the above-mentioned regulations – though limited to TV Signals and broadcasters in principle – demonstrate the Authorities' commitment to ensuring that network access is not blocked or degraded unfairly. This principle should similarly be extended to Telecos and Cellular Service Providers who carry data on their networks.

b. Experience in regulation MVAS

i. The Authority has had occasions to consider similar issues for the regulation of Value Added Services on mobile in the past on the basis of which it has conducted two public

consultations, issued recommendations and made regulations. At the time of deliberations VAS services represented a high growth area which offered several services beneficial to consumers. The Authority's experience and stakeholder comments on the issue towards ensuring a policy of forbearance from regulation are relevant with the present deliberations on Internet services and platforms.With respect to the regulation of VAS, the Authority, on the first instance circulated a Consultation Paper in 2008.[13]

ii. Acting on the comments received the Authority made recommendations in February, 2009, which *inter alia* stated: *"The Authority preferred least intrusive and minimal regulatory framework and thus no separate category of licence for value added services is envisaged. After second round of consultations, the Authority is also not favouring registration of Value Added Service Providers (VASPs) or content aggregators under the "Other Service Provider (OSP)" category."*

"Content shall be subject to relevant content regulation and compliance of prevailing copyrights including digital management rights and other laws on the subject (para 3.12.2). The content is subjected to content regulation/ guidelines of Ministry of Information and Broadcasting, Information Technology Act, 2000, Cable Television Networks (Regulation) Act, 1995, Indian Copyright Act etc., as amended from time to time. The content regulation shall be as per law in force from time to time. There should be consistency in the treatment of content across all kinds of media including print, digital/multimedia to avoid any discrimination. (para 3.13.3):"

iii. It is pertinent to mention that the Authority when making its recommendations in February, 2009 also in effect extended the principle of network neutrality by recommending that:

"(iii) Telecom access service providers need to provide fair access to their telecom infrastructure to content providers providing Value Added Services through mutual agreement. This shall include:-

(a) Telecom access service provider shall not block access to mobile portals to their consumers who have subscribed GPRS or WAP service (web-enabled services) i.e. there will be no selective blocking of mobile portals or short codes."

2.2 Lack of accuracy and balance in the consultation paper

IAMAI would also like to submit that the consultation paper displays a lack of reflecting all stakeholder interests adequately. This is demonstrated not only through the repeated use of the phrase OTT but the following features, listed in the table below which are issues of concern and cast a doubt as to the process of consultation.

S.No.	Point in TRAI	Nature of Objection
1.	On page 100 of the Consultation Paper in para 6.7 TRAI states "In France, while	The TRAI incorrectly states that Skype is registered as a telecom operator in France; it is not.

[13] TRAI, Consultation Paper on Growth of Value Added Services and Regulatory Issues (May 28, 2008) (available at http://www.trai.gov.in/trai/upload/ConsultationPapers/147/cpaper28may08.pdf last visited Aug. 20, 2014).

	Skype is registered as a telecom operator and meets other obligations …..".	
2.	On page 68 of the Consultation Paper in para 4.15 TRAI states "In **Germany**, VoIP is subject to the same regulatory framework which applies to all other telecom services due to the technology-neutral approach of the Telecommunications Act.".	The TRAI incorrectly states that Germany regulates VoIP; it does not.
3.	Quote from an Article in the Economist to make arguments on Net Neutrality	On page 93 of the Consultation Paper is a purported quote from The Economist's 31 January issue. There were two articles on Net Neutrality in that issue, but the authors of the TRAI paper have cherry-picked pro-telco statements from both, systematically excluded pro-neutrality statements and edited it beyond recognition.
4.	Question No. 8 contains an entire question on the basis of a proposal by ETNO	The consultation paper devotes an entire question for a rejected ETNO proposal which is not a government regulator at all, but the European telecom operators' lobby. Moreover the proposals have been substantively criticised and repeatedly rejected. It is not understood why such a discredited proposal from such an entity has been given such prominence.
5.	Selective citations of foreign legislation	On this there are two points. First, the Consultation Paper fails to mention or make any reference to Brazil's Marco Civil Law. Secondly it cites the Open Internet Order which was issued by the FCC only till last year and does not contain the latest developments.
6.	Form of questions	Several questions are leading questions which are framed in a manner in which the onus is on any stakeholder who does not agree with the arguments made by telecom companies.

2.3 International Experience

The Internet was designed to empower people. Anyone anywhere can create new applications or content and share them with the world. That means anyone can share their opinions freely, and any entrepreneur, big or small, can innovate without having to get permission first. To get online, you need to use an Internet access provider like your telephone company's DSL service. But once you're online, you decide what to do and where to go.

The question is not whether openness is good, but how best to sustain it as technology evolves. We are strong supporters of the open Internet. We believe market solutions -- driven by competition, transparency, and industry norms -- are preferable here. That said, the government can help the market work well by removing barriers to competition and innovation. And where the market demonstrably fails, regulators can act as a backstop.

We believe Internet access providers should be able to engage in reasonable network management, but they shouldn't block or throttle legitimate online services, nor should they sell 'fast lanes' that prioritize particular Internet services' traffic over others.

Ultimately the best way to keep the Internet open is to promote competition and innovation in bigger, faster broadband networks. To that end, policymakers need to focus on removing barriers to

deployment (i.e., make it easy to build physical network infrastructure), open up more access to spectrum, and ensure a sound regulatory environment for device and application innovation (which drives demand for broadband).

2.4 Spectrum Allocation Policy or Telecom License Act do not allow distinguishing its usage:

As per the regulatory bodies, DOT and TRAI, the spectrum allocated does not differentiate between data used by apps or for browsing separately and is ever since, been used, irrespective of data being in form of text or voice or video. In India Internet Telephony is permitted in the following conditions:

a. PC to PC; within or outside India
b. PC / a device / Adapter conforming to standard of any international agencies like- ITU or IETF etc. in India to PSTN/PLMN abroad.
c. Any device / Adapter conforming to standards of International agencies like ITU, IETF etc. connected to ISP node with static IP address to similar device / Adapter; within or outside India.

DOT, in the License Agreement for Provision of Internet Services[14] in *Para 2.2 under Scope of license for Internet Service has stated: "Internet access means use of any device/technology/methodology to provide access to internet including IPTV and all content available without access restriction on Internet including web hosting, web colocation but it does not include service provider's configured Closed User Group Services (VPN). The content for IPTV shall be regulated as per law in force from time to time."*

Hence, there is no policy in force that marks any such difference in the allocation policy of spectrum. Thus, spectrum is allocated for all data (2G/3G/4G) and does not allow distinguishing its usage by the license holders. The current scenario where such a situation arises is not only going to bring down the Internet usage/communication but will also negatively impact the growth of the Internet users and the Internet penetration targets set. Hence, a matter such as this should be out of licensing regulations or revenue/profit sharing models.

Unlike natural resources such as oil, which is finite, government regulation with profit sharing revenue models is important, but with spectrum that is potentially inexhaustible[15], this should not be a case so. Its use today has no bearing on the interests of coming generations, which allows much greater flexibility in managing it. The microcosmic spectrum reuse capabilities of optical fiber and even wireless radiation improve at a rate far faster than any of our macrocosmic machines and minerals. Thus, putting a restriction on a resource (bandwidth) which, due to innovation/technology (Apps), is currently available freely should not be deterred by throttling it.

2.5 Jurisdictional Competence of the TRAI

TRAI's parent statute clearly delineates its functions relating to the Internet. These include facilitating competition and promoting efficiency in telecommunications services, ensuring technical

compatibility and effective interconnection between service providers, and laying down standards of quality of service ("**QoS**").[16] The Consultation paper exceeds TRAI's limited areas of competence by including such matters as cybercrime, child online safety, e-commerce, privacy, and local commercial regulations for taxi services like Uber. These issues are not relevant to the CP's stated purpose of

[14] http://dot.gov.in/sites/default/files/internet-licence-dated%2016-10-2007_0.pdf
[15] ITU- Radio Spectrum Management (ICT Regulation ToolKit 2013)
[16] Section 11, TRAI Act, 1997.

investigating whether additional regulation of telcos and Internet services, apps, and content providers will hinder or advance the economic and social benefits of the Internet for India.[17]

The CP also neglects to acknowledge that Internet apps are already regulated under a distinct legal regime; instead, it categorizes all Internet apps under the misleading and ill-defined term "OTTs". In expanding the scope of the consultation outside TRAI's statutory functions, the CP risks conflating the limited question of network neutrality with much broader questions about regulating the Internet, which is governed by the IT Act, not TRAI.

Conclusion: Network Expansion

Internet has a massive growth capacity as we all are witnessing. India's digital revolution has just started where it surpassed the USA and reached second in the highest internet users category after China in December 2014. India has 302 million internet users and is expected to reach 500 million in next 4- 5 years. A digital population of 500 million could transform India's economy, business landscape, governance and society beyond recognition.

The government's ongoing plan of digitally empowering the country is highly ambitious. The $60 billion digital economy may be placed second in the world in terms of internet users but the absolute penetration is a distant reality. In India with close to a billion[18] unconnected people, only 10% internet users transacting online, only four listed Indian internet companies, negligible presence of broadband, Internet is in 'poor state of business' from the point of view of content and service providers. The country is ranked lowest among the 12 pillars in technological readiness (121st) last year globally.

The country's average internet speed is ranked 2nd lowest in the APAC region. Only 2.8 % of our internet population[19] connect to a speed as per the specified rate by the regulatory body and around 89% connect at less than 256 Kbps which is way below the permissible limit. The average low speed (1.7mbps) [20] in India is less than half the global average (4mbps) and lowest in amongst 14 countries in APAC. With all these issues which already are some of the pertinent challenges that the country has to battle, any type of regressive Regulation will further deteriorate the situation and the natural growth of the internet. It will undermine the Government's Digital India and Make in India plans.

In addition, the internet companies are already strongly regulated through the powerful and effective IT Act 2000 which is the most comprehensive Act covering all aspect of Internet content and services. Therefore there is no need for any more layer of regulation which will have extreme negative repercussions.

The recent contemplation by the Telcos for having a differential pricing for communication services (VOIP and text services) will have an adverse impact on the consumers. To differentiate between different types of Internet based services and to charge the customers twice for data services - once for the generic Internet packs and then for using voice/chat apps over the Internet *leads to duplication* and violation of NN rule [The latest scheme of Bharti Airtel[21],which was later withdrawn[22]]. If such a move takes place, other apps/services including the e-mail services (which overtook postal), the most used Internet service too will come under their sphere. Decisions like this

[17] *See also* NDTV, "TRAI's Draft on OTT Regulations Goes Far Beyond Telecom for No Reason" (April 1st, 2015, available at http://gadgets.ndtv.com/telecom/opinion/trais-draft-on-ott-regulations-goes-far-beyond-telecom-for-no-reason-676895).
[18] McKinsey & Co., "Offline and Falling Behind: Barriers to Internet Adoption", p.73.
[19] http://forbesindia.com/printcontent/35537
[20] http://blogs.wsj.com/indiarealtime/2014/06/30/chart-indias-internet-speed-is-the-slowest-in-asia/
http://gadgets.ndtv.com/internet/news/average-internet-speed-in-india-up-21-percent-to-13mbps-akamai-396427
[21] http://in.reuters.com/article/2014/12/24/bharti-airtel-rates-idINKBN0K20SU20141224
[22] http://articles.economictimes.indiatimes.com/2014-12-30/news/57528969_1_voip-airtel-s-tariff-plan

are against the principles of Net Neutrality that could potentially destroy the natural growth of the Internet and would certainly affect the GOI's ambitious plan to connect rural areas with high-speed Internet networks. There will be many real and perceived impediments to Internet penetration targets if the masses don't get a Neutral, impartial and unbiased access to Internet.

If the government is serious about taking the internet amongst the masses then it should resist any such move by the Internet service providers to charge higher rates for data services or to seek to charge both Internet services and users for provision of the same service. It should be noted that in many parts of the world where Net Neutrality is a law, the Internet penetration is already very deep and hence their dynamics are completely different from India, where the internet penetration is abysmal levels. Therefore rather than a separate law or "fiat" NN should be a part of the QoS of the TSPs – their commitment to their consumers.

3. IAMAI's Broad Submissions

Based on the above observation our overall submission to the authority veers around the following:

a. There should be no legal framework between the Internet content and app services and the Telcos and their relationship should be left to market forces.

b. Internet Content and Services Companies should not be licensed. Any licencing/registration requirement will have extreme negative repercussions, especially with regard to innovations and newer technologies

c. Internet Content and Services companies should not be mandated any revenue share to TSPs. [The consumers already pay for bandwidth and Internet companies also pay for hosting services to one or the other ISPs.]

d. Net Neutrality must be maintained. Net Neutrality comprises the following: a) no blocking b) no discrimination c) no fast and slow lanes from the consumer's perspective. Rather than a separate law or "fiat" NN should be a part of the QoS of the TSPs – their commitment to their consumers.

e. There is no regulatory imbalance between TSPs and ISPs on one hand and Internet content and services companies on the other. The latter follow all the laws of the land and in addition are comprehensively regulated by the IT Act 2000 as amended in 2008.

f. Internet based communication and messaging services should be treated at par with other internet service else it would be fragmenting the internet.

4. Issues for Consultation

Our answers to specific questions raised in the Consultation paper are:

Question 1:

Is it too early to establish a regulatory framework for OTT services, since Internet penetration is still evolving, access speeds are generally low and there is limited coverage of high-speed broadband in the country? Or, should some beginning be made now with a regulatory framework that could be adapted to changes in the future? Please comment with justifications.

To begin with, we have serious objections to the use of the term OTT for Internet content and services providers. Such companies are independent consumer companies who innovate and invest most to draw consumers towards their services. They are dependent on "pipe" owners of various types such as TSPs, ISPs, Cable, Optical Fiber [OF] companies etc.

In India with 1 billion unconnected people[23], only 10% of internet users transacting online[24], only four listed Indian internet companies, negligible presence of broadband, Internet is in 'poor state of business' from the point of view of content and service providers. In addition, such companies are already strongly regulated through the powerful and effective IT Act 2000 [as amended in 2008] in addition to generic legislations covering various aspects including intellectual property rights (Copyright Act, 1957), consumer rights, financial transactions, to illustrate a few. The IT Act is the most comprehensive Act covering all aspect of Internet content and services.

A basic principle of regulation is that regulatory intervention must be made only where there has been a market failure. Indian Telcos have not demonstrated any harm that has occurred to them as a result of carrying Internet apps, services or content to their subscribers. In fact the ever-increasing demand for mobile Internet access generated by Internet apps, services, and content providers has clearly had an appreciable positive effect on Indian telcos' revenues and profits. The complete absence of a market failure forms a conclusive case against regulatory intervention at the present stage.

A compulsory registration or license also creates an entry barrier and increases costs of business. The great utility of the internet has been its ability to provide equal opportunity every class of entrepreneur, whether big or small to build, launch and innovate without having to get permission from the authorities first. Applying traditional regulations of telephone would stifle innovation in new services, and impose barriers to trade for many online services that can be available for free. Here it is important for any Policy framework to support and provide impetus to innovative new products and services and investment in the sector. Support measures for the growth of internet economy – support for start ups, enabling policy framework for new technologies like cloud based services, support for trans border data flows.

In this scenario it is quite unnecessary to bring forth further regulations for this sector. In our view, it is especially iniquitous to craft a piece of regulation that tries to advantage one industry [TSPs] over another [Internet Content and services] and such efforts should are not in the interest of Indian Consumers. The focus of regulation should be directed at the benefit of consumers only – lower cost of access, better consumer experience, etc.

Question 2:

Should the OTT players offering communication services (voice, messaging and video call services) through applications (resident either in the country or outside) be brought under the licensing regime? Please comment with justifications.

No.

In India Internet Telephony is permitted under existing regulations:

a. PC to PC; within or outside India
b. PC / a device / Adapter conforming to standard of any international agencies like- ITU or IETF etc. in India to PSTN/PLMN abroad.
c. Any device / Adapter conforming to standards of International agencies like ITU, IETF etc. connected to ISP node with static IP address to similar device / Adapter; within or outside India.

There is no clear basis for differentiating between Internet platform and services offering

[23] McKinsey & Co., "Offline and Falling Behind: Barriers to Internet Adoption", p.73.
[24] IAMAI-BCG Report 2015

communication services and other Internet platform and services, and therefore a discriminatory regulatory regime / framework created for an artificial bucket may not be appropriate. Here many internet platforms and services offer a distinct blend where even a shopping or a review website may offer some features of a communication service. Hence, mandating any licensing system is likely to lead to preventing new and innovative services from being offered to Indian users.

Additionally, the question of whether communication apps and services should be brought under the licensing regime assumes technological and qualitative parity between Internet and legacy communications services. The two categories of services are different: both from the point of view of consumer perception, and from a technological point of view. There is no justification for bringing Internet apps and services within the telecom licensing regime. Communication services which do operate on the internet layer are served through telecom licensees. These licenses don't mark any difference in the allocation policy of spectrum. Thus, spectrum is allocated for all data (2G/3G/4G) and does not allow distinguishing its usage by the license holders. Hence, the current scenario where such a situation arises is not only going to bring down the Internet usage/communication but will also negatively impact the growth of the Internet users and the Internet penetration targets set. Hence, a matter such as this should be out of licensing regulations or revenue/profit sharing models.

Unlike natural resources such as oil, which is finite, government regulation with profit sharing revenue models is important, but with spectrum that is potentially inexhaustible, this should not be a case so. Its use today has no bearing on the interests of coming generations, which allows much greater flexibility in managing it. The microcosmic spectrum reuse capabilities of optical fiber and even wireless radiation improve at a rate far faster than any of our macrocosmic machines and minerals. Thus, putting a restriction on a resource (bandwidth) which, due to innovation/technology (Apps), is currently available freely should not be deterred by throttling it.

Question 3:

Is the growth of OTT impacting the traditional revenue stream of TSPs? If so, is the increase in data revenues of the TSPs sufficient to compensate for this impact? Please comment with reasons.

We are not very clear on what is meant by "traditional revenue streams". Even if we logically define the so called traditional revenue streams as voice and p2p sms, there is conclusive evidence globally, that such short term dips in core services are more than made up by the increased data revenues from calls and p2p services in the long run. In any case, the telecom operators are free to charge the same rates from consumers who use applications as they charge to non-application users for calls and p2p sms.

Also, the idea that telcos should additionally charge Internet apps, services, and content providers "for use of the TSPs network over and above data charges" suggests, in simple terms, that telcos should be permitted to "double dip". That is, they may charge twice for providing a single service, thereby recovering twice the revenue while the cost remains the same. This would simply be an unauthorized tax on Internet apps imposed by telcos, and should not be permitted.

It is also not true that innovations of VoIP and text apps have affected the TSPs financial stability and available data, points to the contrary. Indicators of revenues from regulatory filings, earning calls of telecom companies and public statements clearly indicate that data is driving telecom growth. Data revenue has grown by 85% in the period June 2013-14 and volume growth has been over 100%.

Data is the next growth leg and it is expected that data contribution to be more than double to 23% of overall revenues (vs. 10% currently) in the next two years, by 2016. Data revenues would grow at

a 40% CAGR over 2014-18, leading 12.3% increase in industry revenues over the same period.

There is no evidence or data to show that the Telcos had financial drop due to OTT communication services. 70% of data is coming from non Text and Non Voice services [40% from gaming and entertainment, 28% is going to social, only 20% from rest]. According to figures, users spend 75% of their time in the top 4 apps that are not Voice or Text. Moreover Internet telephony in India currently accounts for less than 0.035% of total voice minutes of the industry, which makes it very insignificant. So the assertion of TSPs does not hold true.

The following data shows that in case of minor loss in the core voice and p2p SMS, the loss is more than made up by data consumption where the net impact is actually positive. Argument on loss of revenue may be attributable to many other reasons including poor quality of service, stagnant growth of broadband, other infrastructural elements lagging behind.

Deepak Shenoy, on the Capital Mind Blog states: "Indeed, people are using more data than voice, or SMS. But the increased use of data means that by and large, people are paying for that data. Let's not get caught in per message or per call metrics, and look at the overall wallet-share of all users on average. We collated data from TRAI for India as a whole, and we separately got data for SMS revenue per user per month, and similar metrics for data and voice calls.

Illustration:
"From Jun 2013 to Sep 2014 – a 15 month period prior to which data revenues were not separately disclosed – we can see that:

- Average revenues per user have gone up from 111 to 116, a Rs. 5 increase. (per month)
- Of that, Call Revenue per user is down by Rs. 3.18 per user per month, and SMS revenues have fallen by 24 paise per month.
- But Data revenues are up by Rs. 10.46 per month per user!
- This is not cannibalization; this is a new business model!"

This further got substantiated in a recent earnings call where Gopal Vittal, Joint MD and CEO (India and South Asia), for Bharti Airtel has said, " There is still no evidence that suggests that there is cannibalization", when inquired as to whether any data is cannibalizing their voice business. This Gas been confirmed by a two-fold jump in consolidated net profit at Rs 1,436.5 crore in the third quarter of 2014-15 on the back of continued growth in mobile data revenue. [MediaNama February 24, 2015]

Question 4:

Should the OTT players pay for use of the TSPs network over and above data charges paid by consumers? If yes, what pricing options can be adopted? Could such options include prices based on bandwidth consumption? Can prices be used as a means of product/service differentiation? Please comment with justifications.

No.
Firstly, it should be noted that about 99.5% of all Internet interconnection is done with neither (a) payment or (b) contract, on a "Bill and Keep" basis (source: OECD). Also it bears to be considered that, "the request for the data flow usually stems not from the [content provider] but from the Telco or retail Internet access provider's own customer (who "pulls" content, and from whom the ISP is already deriving revenues)" (BEREC, the association of European telecoms regulators) and therefore

the Internet platform and services providers have helped TSPs create a new revenue stream rather than take revenues away from them. It is also noted by the same BEREC paper that, "[t]here is no evidence that operators' network costs are already not fully covered and paid for in the Internet value chain (from [content providers] at one end, to the end users, at the other)".

Secondly, the argument that infrastructure costs are only borne by Telecom Operators and not internet platforms is not true. Internet platforms which form substantial data traffic on networks have a strong incentive to build. And that exist when a neutral network is provided to them as explained in the Analysis Mason Report titled as, "Overview of recent changes in the IP interconnection ecosystem" which states that, "As a result of the volume of traffic that they deliver, and the associated cost of delivering that traffic, content providers have a strong incentive to build out their networks in order to reduce their transit requirements and deliver the traffic directly to the ISP network, if not from within the ISP‟s network. As a result of the increasing monetization of content, providers also have the means to engage in such network build-outs." This is in addition to the infrastructure costs of Internet content and services companies which invest substantial money towards hosting and data charges while pairing their websites.

Finally, any such payment by OTTs for use of TSPs network over and above data charges paid by consumers also has the ability to fragment the internet. Today, anyone can start a new service and make it available to Internet users all over the world, without having to negotiate first with every TSP; this is one of the features of the Internet that has made it a boon to innovation and economic growth. Imposition of additional access charges will stifle innovation (startups) in the country.

Question 5:

Do you agree that imbalances exist in the regulatory environment in the operation of OTT players? If so, what should be the framework to address these issues? How can the prevailing laws and regulations be applied to OTT players (who operate in the virtual world) and compliance enforced? What could be the impact on the economy? Please comment with justifications.

We would like to clarify that there is absolutely no imbalance in the regulatory environment in the operation of internet platform and services.There is a very powerful IT Act which is specifically crafted to regulate internet companies. It may also be reiterated that Internet content and services companies in spite of operating in so called virtual reality are subject to all extant laws of the land and follow them scrupulously. In our view there are many laws that govern the internet and there is no need for more.

In their submission to the Standing Committee on Information Technology in 2013, the Department of Electronics and Information Technology (DeitY) has stated that the "IT Act, 2000 addresses all aspects related to cyber crimes in a comprehensive manner with adequate deterrent provisions. In addition, the National Cyber Security Policy 2013 has provisions to enable development of a dynamic legal framework and its periodic review to address the cyber security challenges arising out of technological developments in cyber space." Hence in the existence of a comprehensive framework, such concerns have already been considered by the highest levels of Government. It may not be appropriate for TRAI to bring the security aspect in its own policy. Not only will it conflict the pronounced intent of the Parliament but it may also bring regulatory uncertainty and discourage investments, innovations and new and better internet products and services to Indian users.

Finally, if there were to be further regulations, we can safely predict that more and more Indians will set up businesses overseas.

Question 6:

How should the security concerns be addressed with regard to OTT players providing communication services? What security conditions such as maintaining data records, logs etc. need to be mandated for such OTT players? And, how can compliance with these conditions be ensured if the applications of such OTT players reside outside the country? Please comment with justifications.

We believe that the security concern with regard to the OTT players providing communications service are adequately addressed by existing laws and regulations.

The security concerns are taken care adequately by the comprehensive statutory regime which addresses them. Provisions for monitoring, take down and blocking are elaborately laid down and followed as per section 69A and other provisions of the IT Act. In addition there are international treaties in place to share information through the due process of law. We believe these should be legally enforced and strengthened. It may be noted that section 69A of the IT Act has been recently upheld by the Supreme Court of India in its recent judgment on the constitutionality of sections 66A, 69A and 79(3)(b).

Companies providing communications service are under the purview of the section 69A of the IT Act which provisions for monitoring, take down and blocking and are followed as per. In addition there are international treaties in place to share information through the due process of law. We believe these should be legally enforced and strengthened.

The retention of sensitive personal information as defined under Section 43A of the Information Technology Act, is provided as per Rule 5(4) of the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information), 2011 which states that any, body corporate shall not retain data for longer than necessary unless mandated by a provision of law. The IT Act separately provides for retention of data in Section 67C. This retention period is then defined for a period of 90 days for the preservation of information and associated records for the purposes of any investigation as per Rule 3(4) of the Information Technology (Intermediary Guidelines) Rules, 2011.

In addition to this independent provisions exist under other laws which are utilized by law enforcement, security agencies and courts to compel the production of such information including Section 91 of the Code of Criminal Procedure, 1973.

The existing legislative and regulatory regime provide for an appropriate framework for lawful access to information as may be required for investigative purposes. Statutes such as the Code of Criminal Procedure, financial legislations such as the Customs Act and the Income Tax Act, and other specialized legislations lay down legal processes for access to relevant information by investigative agencies.

We are strongly of the view that there is no need to mandate further provisions on this aspect - overlapping legislations will only result in delayed enforcement and inconsistency of approach. Instead the existing legal provisions should be strictly and lawfully implemented.

Question 7:

How should the OTT players offering app services ensure security, safety and privacy of the consumer? How should they ensure protection of consumer interest? Please comment with justifications.

We would like to explain that all Internet content and services players which deal with large amount of consumer data have strong systems in place to ensure security, safety and privacy of the consumer. It is in fact the government that tries to comprise that safety and privacy by demanding information from these companies.

Such guarantee of safety, security and privacy is also provided under various laws of the land as well as the IT Act. As mandated by Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information), 2011 every service provider provides a detailed privacy policy that is applicable to all users using their products and services, that explain the type of data that is collected, the nature of use of such data, retention of data and the manner of dealing with it. These policies coupled with reasonable business practices ensure that the security, safety and privacy of users are protected.

We believe that there is no basis for laying down specific legal requirements that will be applicable to certain categories of internet platforms and services. Extant laws in the form of consumer protection laws, financial regulations, competition laws, and the IT Act, cater to different aspects of safeguarding consumer interest. In addition the proposed Privacy legislation is expected to attend to all matters relating to privacy of users, including on the online world.

Question 8:

In what manner can the proposals for a regulatory framework for OTTs in India draw from those of ETNO, referred to in para 4.23 or the best practices summarised in para 4.29? And, what practices should be proscribed by regulatory fiat? Please comment with justifications.

The ETNO is a group of European Telecom Companies, which is at best an industry organisation and there has to be clarity as to how and why a rejected proposal made by it forms the part of an entire question. The Body of European Regulators for Electronic Communications (BEREC) in response to the ETNO proposal stated that, "It is in all our interests to protect the continued development of the open, dynamic and global platform that the Internet provides, which has evolved over time (without regulatory intervention), and helped enable so much innovation at the network endpoints. ETNO's proposal could undermine this and therefore lead to an overall loss of welfare."

The following ETNO proposals are particularly dangerous and would lead to a drastically undermining the growth in the technology sector in India:

- ETNO's proposed "sending party network pays" principle is simply a manifestation of the idea that telcos should be permitted to "double dip" by charging both end users and Internet apps for carrying content.

- ETNO's proposal that telcos should be allowed to agree "end-to-end QoS delivery for sending parties willing to pay a premium" is the same as the idea of a "fast lane" for Internet apps willing to pay a certain fee.

'Access Now' commented on the ETNO proposal stating that, "Ultimately, the ETNO proposal is likely to allow telecom companies to obtain more revenue from content and platform providers, but not to increase internet access, as companies will probably be reluctant to invest in user communities that are less profitable, be they less developed countries or not-for-profit entities. Indeed, violating principles of open internet will definitely represent a significant hurdle for entrepreneurs and/or innovators with less capital or financial resources to sustain their growth. Eventually we must ask

ourselves which values we want to use and manage the internet. If we agree that certain values, such as openness, decentralization, and neutrality have been integral to internet architecture and growth from the start, we must guard against any private interest which threatens to defeat this obvious public gain."

Finally the ETNO proposal which was made before the Conference of European Posts and Telegraphs (CEPT) determined on October 18, 2012 that the ITU is not the appropriate forum to discuss ETNO's proposals.

We hope that this regressive proposal is rejected at the very outset and is not considered further by the TRAI. As stated by the OECD, "This model appears to resurrect the legacy [telecoms] pricing methods of the past, and to apply them to the Internet."

Question 9:

What are your views on net-neutrality in the Indian context? How should the various principles discussed in para 5.47 be dealt with? Please comment with justifications.

Net Neutrality principally governs the relationship between TSPs, ISPs and their consumers. We believe the consumers should be given unfettered access to content and services once they have subscribed to data services. "Unfettered" in this case would mean a) no blocking b) no discrimination, c) no throttling d) no fast and slow lanes from the consumer's perspective.

World over there are certain common principles around open Internet policy to ensure adherence to the above principles. These are:

- *No anticompetitive behavior by access providers;*
- *No blocking or degradation of Lawful Internet content;*
- *Transparency of information relevant to users and other stakeholders*

We believe that rather than a separate law or "fiat" this should be a part of the QoS of the TSPs – their commitment to their consumers.

Any rules should also recognize the constitutionally protected right of freedom of contract, allowing players to transact in a pro-competitive manner that is on non-exclusive and non-discriminatory terms. Consumer interest in access to internet and information should be of primary concern and be the overriding factor. Regulators should therefore provide telcos and Internet apps sufficient flexibility to enter into innovative business arrangements to promote Internet connectivity, as long as such arrangements are consistent with the net neutrality principles given above. Such arrangements to promote access are also aligned with the connectivity goals outlined in the National Telecom Policy 2012.

Question 10:

What forms of discrimination or traffic management practices are reasonable and consistent with a pragmatic approach? What should or can be permitted? Please comment with justifications.

Network management should be considered reasonable if it is primarily justified for legitimate technical and engineering purposes. This may include ensuring network security and integrity, addressing traffic unwanted by end users, or alleviating congestion without regard to source, destination, or content, are categorically reasonable. However, network management cannot be justified if simply for other business purposes.

Question 11:

Should the TSPs be mandated to publish various traffic management techniques used for different OTT applications? Is this a sufficient condition to ensure transparency and a fair regulatory regime?

Anything to ensure transparency and full disclosure should be supported. This includes - users knowing how their telecoms services are affected by traffic management, and publishing operator traffic management policies is established best practice in developed countries. A robust mechanism should be created for responding to user complaints.

Question 12:

How should the conducive and balanced environment be created such that TSPs are able to invest in network infrastructure and CAPs are able to innovate and grow? Who should bear the network up-gradation costs? Please comment with justifications.

Experts have suggested various ways in which a conducive and balanced environment can be created so that the TSPs are able to invest in network infrastructure. Some of the most important ways suggested by a large cross section of industry and experts has been a) lower spectrum cost, b) improved design of auctions, c) easier roll out norms and d) clearer rights of way for TSPs and e) government support for rural expansion of TSPs.

In our considered opinion improved investment in networks is primarily dependent on the Government outlook towards the TSPs rather than on the relationship between TSPs and the Internet content and services companies. Gopal Vittal, Joint MD and CEO (India and South Asia), for Bharti Airtel has said on a recent earnings call that, "There is still no evidence that suggests that there is cannibalization," when inquired as to whether any data is cannibalizing their voice business. This has been confirmed by a two-fold jump in consolidated net profit at Rs 1,436.5 crore in the third quarter of 2014-15 on the back of continued growth in mobile data revenue.[MediaNama Feb 24 2015]

In fact, regulating the Internet content and service companies on the pretext of better network infrastructure is a very poor suggestion. Since the environment that needs to be balanced is between the government and the TSPs and not that between the TSPs and Internet content and services companies.

To encourage further investment in infrastructure (by both content and access providers), removing unnecessary regulation will help.

Proposals on spectrum may include the following:

a. **Lowering Spectrum Costs by Reforming Auctions**: Spectrum auctions are primarily seen as a means of raising government revenue. But this "revenue" is actually capital that service providers are prevented from using to deploy infrastructure. Auctions should instead be designed to maximize service and deployment, not revenue. Spectrum allocations should be determined based on how efficiently bidders will utilize the spectrum. Bids should be evaluated based on commitment to speed of deployment, infrastructure investment, and provision of free basic services. As a result, resources will be more efficiently invested in infrastructure needed to expand access, and consumers will enjoy lower prices.
b. **Liberalizing spectrum for mobile access**: Mobile broadband requires sufficient high-quality spectrum. The government must plan to allocate sufficient spectrum to meet fast-growing demand for mobile broadband, including through spectrum sharing, trading and pooling.

Proposals on infrastructure may include the following:

a. **Reducing Barriers to Deployment**: Connectivity depends on the availability of infrastructure. The government must play a key role both in reducing barriers to infrastructure deployment, and in creating incentives for deployment in unconnected areas.
b. **Require Sharing of Passive Infrastructure**: Regarding passive infrastructure such as conduits and towers, policies should adopt a "dig once, build once" philosophy that requires providers installing such infrastructure to determine if others wish to utilize that infrastructure and share in the initial costs of deploying it.
c. **National Optical Fibre Network**: The National Optical Fibre Network (NOFN), which was initially to be deployed to meet the NTP 2012 goal of providing "high-speed and high-quality broadband access to all village panchayats through a combination of technologies by the year 2014" by 2012, has been repeatedly delayed. This project is essential to broadband policy goals, and a strict final deadline must be set for the execution of the project. Additionally, the government must provide incentives to private operators to provide last-mile services from the NOFN, especially in rural and remote areas.

Question 13:

Should TSPs be allowed to implement non-price based discrimination of services? If so, under what circumstances are such practices acceptable? What restrictions, if any, need to be placed so that such measures are not abused? What measures should be adopted to ensure transparency to consumers? Please comment with justifications.

As mentioned earlier, in principle there should be no anticompetitive behavior by access providers, and no blocking or degradation of lawful Internet content. In practice there is always the issue of efficient and optimum management of networks. For example, a chat has to be real time, but emails may be deferred by a few seconds without adversely affecting the customer in any way. This so-called technical discrimination is inherent to better management of networks and should be left to the TSPs to handle. As a matter of policy, they should follow the concept of net neutrality as elaborated in question 9 above.

Question 14:

Is there a justification for allowing differential pricing for data access and OTT communication services? If so, what changes need to be brought about in the present tariff and regulatory framework for telecommunication services in the country? Please comment with justifications.

No, there is no justification for allowing differential pricing for data access and OTT communication services.

Telecom Service Providers (TSPs) are already fully compensated by end-user consumers for access to the broader Internet. Telecom Service Providers (TSPs) should not charge Internet application and content providers in order to reach end-users. Imposing additional charges on Internet services will hamper innovation and consumer choice. We are of the view that if Telecom Service Providers (TSPs) are allowed to charge more for apps based communications, they would soon have, for example, increased pricing for ecommerce or social media. This would set in a new trend, which would be counterproductive to the concept of free and fair access to the internet. It will also truncate the Internet and make innovations skewed.

Therefore, Telecom Service Providers (TSPs) should not be allowed differential pricing for data access and OTT communication services and should not impose additional fees on Internet services

as a requirement for allowing users to access these services. Differential pricing which essentially would mean that Telecom service Providers (TSPs) will use their discretion to differentiate between the services they offer thus leading to double dipping and violation of principles of Net Neutrality i.e. they would be charging customers twice for data services – once for the generic Internet pack and the for using voice/chat applications.

Question 15:

Should OTT communication service players be treated as Bulk User of Telecom Services (BuTS)? How should the framework be structured to prevent any discrimination and protect stakeholder interest? Please comment with justification.

There is no need for granting Bulk User of Telecom status to apps based communications. Such status would force these apps to have a formal relationship with the TSPs just as the bulk SMS service providers currently have, which is not a very healthy relationship. Communications apps would like to continue with their direct relationship with their consumers without the extra non-productive layer of relationship with the TSPs.

Question 16:

What framework should be adopted to encourage India specific OTT apps? Please comment with justifications.

We would urge TRAI to lend further clarity on the scope of the expression, 'India Specific OTT Apps', since the term is capable of multiple interpretations. We reserve our right to further comment on this Question, and without prejudice to the foregoing; we believe that there are a number of initiatives taken by government, public bodies as well as investors to encourage India specific apps. And therefore we believe, the Authority has very limited role to play here. This will to a large degree be taken care by the existing proposals to ensure network neutrality. Hence, we are against creating fast lanes for Indian apps and giving priority to TSP promoted apps. There are sound reasons for this as there is no way to ascertain or determine as to what constitutes an India specific application given the global reach and ubiquitous nature of the internet.

In general, the best policy intervention to encourage the development of India-specific apps, services and content is to foster better connectivity and reliable, affordable Internet access across the board. This would generate demand for local content, which in turn would boost the "network effects" of the Internet and encourage more people to get online, creating a virtuous cycle.

Question 17:

If the OTT communication service players are to be licensed, should they be categorized as ASP or CSP? If so, what should be the framework? Please comment with justifications.

There is no justification of licensing Internet content and services companies. They are already licensed and registered to undertake business under various provisions of law. Such companies are already strongly regulated through the powerful and effective IT Act 2000 [as amended in 2008]. It is the most comprehensive Act covering all aspect of Internet content and services including the security concerns, adequately and comprehensively. This Act states in its preamble that it regulates all aspects of online commerce and services. Hence, it is a clear statement of parliamentary intent that no licensing or registration of online services is necessary.

Question 18:

Is there a need to regulate subscription charges for OTT communication services? Please comment with justifications.

Subscription charges to Apps based communications services should not be regulated. They should be at par with any other data services. As stated in earlier answers, Telecom Service Providers (TSPs) should not be allowed differential pricing for data access and OTT communication services and should not impose additional fees on internet services as a requirement for allowing users to access these services.

Having a differential pricing for communication services will have an adverse impact on the consumers and digital economy. This leads to division of internet and violation of network neutrality. If such a move takes place then very soon other app services including social media and e-commerce too will come under the ambit giving rise to a new trend which would be counterproductive to the concept of free and fair access to the internet.

A basic principle of regulation is that regulatory intervention must be made only where there has been a market failure. Indian Telcos have not demonstrated any harm that has occurred to them as a result of carrying Internet apps, services or content to their subscribers. In fact the ever-increasing demand for mobile Internet access generated by Internet apps, services, and content providers has clearly had an appreciable positive effect on Indian telcos' revenues and profits. The complete absence of a market failure forms a conclusive case against regulatory intervention at the present stage.

A compulsory registration or license also creates an entry barrier and increases costs of business. The great utility of the internet has been its ability to provide equal opportunity every class of entrepreneur, whether big or small to build, launch and innovate without having to get permission from the authorities first. Applying traditional regulations of telephone would stifle innovation in new services, and impose barriers to trade for many online services that can be available for free. Here it is important for any Policy framework to support and provide impetus to innovative new products and services and investment in the sector. Support measures for the growth of internet economy – support for start ups, enabling policy framework for new technologies like cloud based services, support for trans-border data flows.

In this scenario it is quite unnecessary to bring forth further regulations for this sector. In our view, it is especially iniquitous to craft a piece of regulation that tries to advantage one industry [TSPs] over another [Internet Content and services] and such efforts should are not in the interest of Indian Consumers. The focus of regulation should be directed at the benefit of consumers only – lower cost of access, better consumer experience, etc.

Question 19:

What steps should be taken by the Government for regulation of non-communication OTT players? Please comment with justifications.

A general misconception has always existed that Internet platforms and services are completely unregulated and operate in the absence of legal and regulatory oversight. These companies are strongly regulated through the powerful and effective IT Act 2000. It is the most comprehensive Act covering all aspect of Internet platforms and services. In addition most of them follow their own community based best practices to provide better safety, security and privacy to consumers. This Act states in its preamble it regulates all aspects of online commerce and services. Hence, it is a clear

statement of parliamentary intent that no licensing or registration of online services is necessary.

Internet services and platforms are governed by the same set of laws that govern MVAS services. Mobile Value Added Services (MVAS) are services which are similar to Internet services and platforms but they are offered by arrangements between the Access Provider and the MVAS provider. TRAI has had occasion to consider this during its consultations and recommendations on regulating MVAS services. Stakeholder comments during this process clearly outlined that MVAS services were governed by the existing laws in India. These include Intellectual Property Rights laws, the Information Technology Act, 2000 etc. Under such circumstances, to bring in more regulation would be counterproductive to innovation and investments in this sector. In our view, it is especially iniquitous to craft a piece of regulation that tries to advantage one industry [TSPs] over another [Internet Content and app services] and such efforts should be nipped at the bud. The focus of regulation should be directed at the benefit of consumers only – lower cost of access, better consumer experience, etc.

Question 20:

Are there any other issues that have a bearing on the subject discussed?

The TRAI, which is tasked with holding any consultation, should approach a background paper paper in terms, which are neutral and help bring all stakeholders to express an informed opinion. To a large degree this is missing from the consultation paper. This instant paper shows a heavy predisposition towards the interests of TSPs and largely ignores the interests of internet users. It also does not give due weightage to internet platforms and services which have contributed tremendously to the Indian economy and provide employment to lakhs of people.

The TRAI must conduct this consultation with the object of not only maintaining the character of the Internet as a vibrant and open medium but also furthering it. This requires not increasing any entry barriers or additional regulations on internet platforms and services and secondly to bring in an accountable process for ensuring network neutrality by TSPs as outlined in this paper.

In conclusion we would like to submit that despite the progress made so far in Internet access, India's massive unconnected population of nearly one billion[25] is a sobering reminder of the colossal task that lies ahead. Bringing this "next billion" online holds tremendous economic and social potential for India. 10% or more of India's GDP growth over the last decade was attributable to the Internet.[26] It is estimated that raising Internet access to developed world levels in India can create 65 million jobs, accelerate GDP growth by 110%, increase per capita income by 29%, and decrease extreme poverty by 28%.[27]

It is also vitally important to note that the Internet revolution has created a new ecosystem; a "digital economy" which includes device manufacturers, app stores, carriers, and all kinds of online services, content and apps. All these elements of the digital economy have sustainable business models and benefit financially from a free and open Internet, which also spurs greater competition and innovation within the Internet ecosystem, leading to economic growth, job creation, improved access to education, and increased affordability of access.

National policy also recognizes the potential of connectivity. The National Telecom Policy, 2012 sets

[25] McKinsey & Co., "Offline and Falling Behind: Barriers to Internet Adoption", p.73.
[26] McKinsey & Co., id., p.13
[27] Deloitte, "Value of Connectivity: Economic and Social Benefits of Expanding Internet Access", p.17.

goals of "providing affordable and reliable broadband-on-demand by the year 2015" and "achieving 175 million broadband connections by the year 2017 and 600 million by the year 2020 at minimum 2 Mbps download speed…"[28] The centerpiece of the central government's "Digital India" mission is establishing connectivity to all those who are unconnected. By contrast, the focus of the CP appears to be on how to protect and increase the revenues of telcos,[29] even though this is not always aligned with the interest of consumers. In view of the imperative need to connect almost 1 billion people in India, TRAI's guiding principle in contemplating any Internet-related policy must be the promotion of high quality, affordable Internet access to everybody in India.

[28] National Telecom Policy 2012, §III(3), p.5 (available at http://www.dot.gov.in/sites/default/files/NTP-06.06.2012-final.pdf).

[29] See e.g. TRAI CP, §4 (p.5): "The characteristics of OTT services are such that TSPs realize revenues solely from the increased data usage of the internet-connected customers for various applications...the TSPs do not realize any other revenues, be it for carriage or bandwidth. They are also not involved in planning, selling, or enabling OTT apps."