

Dated 24 April 2015

To,

Dr. Rahul Khullar,
Chairman, Telecom Regulatory Authority of India
Mahanagar Doorsanchar Bhawan,
Jawahar Lal Nehru Marg, (Old Minto Road)
New Delhi – 110002

SUB: Digital Empowerment Foundation (DEF) response to the Consultation on Regulatory Framework for Over-the-top (OTT) Services/ Internet Services and Net Neutrality

Dear Sir,

Digital Empowerment Foundation (DEF) is thankful for providing us the opportunity to submit our views on the consultation paper on the Regulatory Framework for OTT Services, Internet Services and Network Neutrality released on March 27, 2015 by the TRAI (referred to as the “Internet Licensing Paper”). We are signing onto this letter and the supporting submissions on the specific queries listed in the Internet Licensing Paper. Before proceeding to the submissions which we wish to make some general comments on the paper itself.

Any consultation paper is aimed at providing a background to a reader which is neutral and helps them arrive at an informed opinion. This is unfortunately absent from the Internet Licensing Paper. It seems to have been drafted catering exclusively to the interests of the telecom industry. The interests of ordinary internet users should precede any corporate interests or arguments for profit. Also the interests of the technology industry which is giving a high degree of growth to the Indian economy are largely ignored. The Internet Licensing Paper makes broad assumptions and takes statements by the telecom industry without any verification or the demonstration of empirical proof. It further then poses questions on the basis of them. Naturally they are skewed in the favour of telecom companies.

Further, the way the paper is structured is a cause of concern. Experts like us are demanding network neutrality laws to protect against discrimination in traffic data and blocking and double charging on specific internet services. To this the TRAI has posed question on the licensing of such services itself. By doing so, it has adopted an extremely regressive position which is contrary to user interest. The signatories to this, clearly want two things. First, no licensing of Internet Services and second network neutrality regulations to be issued urgently. This is our clear position and of many other supporting organisations and individuals. Further detail on this is provided in answers to the specific queries listed in the Internet Licensing Paper below.

We request that a transparent process with respect to this consultation may be followed to inspire greater confidence and trust. You are requested to publicly publish our response on the TRAI website as has been done in the past when any member of the public has commented. Further the TRAI is requested to issue a specific response to submissions after collating the concerns which arise from them before making any recommendation.

Yours sincerely,



Osama Manzar
Digital Empowerment Foundation

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.

Answer 1: Not required Regulatory Framework

A. RE-FRAMING THE QUESTION

1.1 We put our strong recommendation on re-framing the term “OTT (Over-the-top)” services that is extreme generalization of the wide variety of “Internet platform and services”. It only takes into the account the way it is served to the end user. However, it does not take into the account the various other complexities included which is a great disservice. Therefore, we strongly recommend using the term “Internet platforms and Services”.

B. JUSTIFICATION

1.2 According to IIM Ahmedabad Study 2011-2012 “the per capita income for urban Indian residence is 118750 per year versus rural is 45798 per year” [[Source 1](#)]. Internet usage in rural area stands at 7% less than half of India users are from rural area.

1.3 The average cost of mobile internet access in India is Rs. 860 for post-paid for 8.33 GB and pre-paid Rs. 868 for an average 6.2GB however; it takes into an account the cost of datacard access [[Source 2](#)].

1.4 B & C mobile circles are recording 75% of the mobile data consumption using 2G services [[Source 3](#)]. Apparently, these B & C circles belongs the highest density and severe challenges in socio-economic development.

C. REPLY

1.5 Therefore, it is **NOT REQUIRED** to establish a Regulatory Framework because as mentioned in the Chapter 2 under section 2.9 and 2.13 “the internet is still in evolving stage” and there is first need for providing access to the last mile users with choice and affordability instead of forcing them to choose the carrier without providing transparency on hidden charges.

1.6 The Consultative Paper refers that legal compliances are not applicable to internet platforms. These platforms are similar to MVAS (Mobile Value Added Services) according to TRAI’s Consultation on MVAS dated 21st July, 2011. Many TSPs argued that

no regulation is necessary for internet platform. TRAI 2011 Consultative paper recommended that *“Telecom Service Providers should provide uniform access to their infrastructure to the VAS providers through mutual agreement, and stressed the need to publish charges for VAS and maintain transparency in billing. However, it observed that there was no need for a licence/registration for VAS providers.”* [[Source 4](#)]

1.7 Regulation or licensing to these services will lead to increase the cost of access; hence it will degrade the user experience at the first go. The top 10 apps (such as Facebook; Whatsapp; Facebook messenger; PayTM; YouTube; FlipKart; TrueCaller; HotStar;) are presently providing either through free or freemium model. The only consistent cost to users is data cost. Therefore, if any regulation happens, it will automatically increase Paid¹ or Paidmium² models.

1.8 Since these companies are generating revenue on the basis of advertisements. Therefore, it will affect mobile app startups by enforcing them to either increase the cost of advertisements or increase the access fee. Thus, it will again directly affect end users.

1.9 There is need to establish supporting mechanism for providing uniform access – the factors are trust; confidence; transparency; accountability and qualitative services;

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.

Answer 2: Not required licensing on any form of internet platforms and services

REFRAMING

2.0 The consultative paper presumes internet based communication services and platforms are two different things. Fundamentally both are same thing – many internet services use communication services for driving consumer engagement.

JUSTIFICATION

2.1 The National Telecom Policy 1999 abolished the licensing procedure of POP3 email services which was under the National Telecom Policy 1994. The NTP 1999 identified that there is no need for licenses or additional registration for web based email service providers to proliferate web based email services in India [[Source 5](#)].

REPLY

¹ Paid download with no in-app purchases

² Paid download with in-app purchases

2.2 Therefore, it is **NOT REQUIRED** to have license for internet based communication service providers because of the following reasons:

- a. Internet based communication service providers provide their service using the network provided by telecom operators. The spectrum used by telecom operators to utilize to offer this network on “PIPE” is already licensed. Spectrum can be used for data; voice; and SMS. In-result, the cost of licensing will be borne by end-users. Hence, there is no need for additional licensing.
- b. Most of non-communication services on the internet offer real-time chat or video interaction features for the benefit of customers. If license regime will happen, it will automatically affect these services. Hence first-time user who is still exploring will not be able to bear the cost.
- c. Low-cost model are essential for any kind of innovation or startups who are providing communication services. Any form of regulation or licensing will increase the entry cost, therefore it will also hinder or obstruct startups to establish them in the market. Further licensing will also increase the cost of innovation and it will further discourage startups.

Question 3: Is the growth of Internet/OTT impacting the traditional revenue stream of Telecom operators/Telecom operators? If so, is the increase in data revenues of the Telecom Operators sufficient to compensate for this impact? Please comment with reasons.

Answer 3: The answer to this question is NO the growth of Internet/OTT will not affect the revenue models of Telecom Operators.

REFRAMING

3.1 The Consultative Paper presumes that data revenues fall under the traditional revenue streams category as per the Unified Access License Agreement [[Source 6](#)]. Therefore, it is incorrect to say that increase in data revenue will affect traditional revenue streams.

JUSTIFICATION

3.2 In consideration to data – it is a series of 0’s and 1’s. A telecom network sees all data as a series of 01’s and 1’s. The key advantage of the internet, it does not care what the data is ultimately going to be assembled into – picture; text; voice and message. Therefore, the cost of carrying 1GB of text data and 1 GB of video data on the internet is exactly the same [[Source 7](#)].

3.3 The Hindu Business Line Report states that average 3G subscriber data usage is 688 MB and 216 MB for 2 G subscriber [[Source 8](#)].

3.4 The wholesale price of international connectivity is on average Rs.30000 per month for 2Mbps specifically for small operators. For big operators, the price is much lower. Therefore, for 2Mbps

bandwidth for a month, it converts to around Rs.5-10 per GB. That means telcos need to pay Rs. 5 per GB for net downloads.

However, the profit per GB = Rs. 250 (According to [Source 7](#))

The profit on per MB

$$\frac{250}{1024} = .244 \sim 24 P$$

Therefore profit on 688 MB (3G)

$$0.244 \times 688 = \text{Rs. } 167.9 \text{ per month per GB per subscriber}$$

Similarly for 2G

$$0.244 \times 216 = \text{Rs. } 52.70 \text{ per month per GB per subscriber}$$

According to the COAI website [\[Source 9\]](#), the annual gross revenues of the mobile has risen from Rs 969 Billion in FY 10 to Rs 1351 Billion in FY 13. The year on year growth is presented in the table below.

Gross revenues (In Rs. Billion)	FY10	FY11	FY12	FY13
	969	1022	1185	1351

The CAGR of gross revenue from voice and data services for the Indian telecom industry over the period of FY 10 to FY 13 is 8.66%. Therefore, it is **INCORRECT** to say that the growth of Internet/OTT impacting the traditional revenue stream of Telecom operators

Question 4: Should the Internet/OTT players pay for use of the Telecom Operators 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

Answer 4: The answer to this question is NO as it is already mentioned in Answer 3 that data revenues of Telecom operators is already an upswing.

JUSTIFICATION

4.1 According to Morgan Stanley Report that data revenue is likely to contribute about 23% of telecom operators’ overall revenues over the next two years [\[Source 10\]](#).

4.2 Another study conducted by AT Kearney and Google that telecom operators are expected to earn an additional USD 8 Billion in revenues by 2017. The study also reveals that data revenue will grow at around 70% and new digital VAS streams are expected to grow exponentially [\[Source 11\]](#).

4.3 Forcing internet based services to pay extra for using a particular network will further affect end-users and hamper the digital ecosystem completely.

4.4 Charging extra for certain and specific apps or services will further overburden end-users which leads them not to use the services at all. The point to be considered is that internet depends on interconnectivity and the users being able to have seamless experience – differential pricing will destroy the basic integrity of the Internet.

Question 5: Do you agree that imbalances exist in the regulatory environment in the operation of Internet/OTT players? If so, what should be the framework to address these issues? How can the prevailing laws and regulations be applied to Internet/OTT players (who operate in the virtual world) and compliance enforced? What could be the impact on the economy? Please comment with justifications.

Answer 5: No regulatory imbalances exist in the regulatory environment in the operation of internet platforms and services. Prevalent laws and legal regulations apply equally to Internet platforms and services and even enforcement is implemented, equally, through them. Any imbalances which do exist are due to the nature of the service itself. This is a feature of the market economy.

Question 6: How should the security concerns be addressed with regard to Internet/OTT players providing communication services? What security conditions such as maintaining data records, logs etc. need to be mandated for such Internet/OTT players? And, how can compliance with these conditions be ensured if the applications of such Internet/OTT players reside outside the country? Please comment with justifications.

6.1 The above question does not fall under the legal jurisdiction of the TRAI as laid down by the Telecom Regulatory Authority of India Act, 1997. The questions above fall in the legal ambits of the Telegraph Act, 1885, Information Technology Act, 2000, Information Technology (Procedure and Safeguard for Interception, Monitoring and Decryption of Information) Rules, 2009 and Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011.

6.2 Law enforcement, security agencies and courts have appropriate mechanisms in place to ensure proper logging on personal data/ records by OTT players. Further, Section 91 of the Code of Criminal Procedure, 1973, empower these agencies to compel OTT provider to provide any information as stated in Rule 3(&) of the Information Technology (Intermediary Guidelines) Rules, 2011.

Question 7: How should the Internet/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.

Answer 7: With increasing public knowledge of the implications of breaches of privacy and security of consumer data, internet/OTT app providers are increasingly wary of the negative backlash that they face in case of any such breach.

7.1 Taking this into cognizance, the Government of India has proposed the creation of the Right to Privacy Bill, which covers extra-territoriality of data, data transfers and enforcement mechanisms. Section 43(A) of the Information Technology Act, 2000 has to do with the collection of personal data. Further, any OTT application that collects private data has to follow the rules laid down in the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011.

7.2 It is our opinion that this topic is outside the purview of the TRAI for reasons laid down in our response to Question 6.

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.

Answer 9: India, being a developing country, has population of 1.25 billion that comprise of 243 million internet users and 213 mobile internet users. The Government of India is trying to digitally empower citizens and to provide uniform digital infrastructure to citizens through its [DIGITAL INDIA](#) Programme. Therefore, it needs to be seen as **“ACCESS FOR ALL”** instead of differentiating between two users and destroying the democratic roots.

REPLY

9.1 Net Neutrality is a universal concept where TSP as an access provider has no **RIGHT** to select services, applications and content that consumers want to access. It is consumer/user's **RIGHT** to select services, applications and content that they want to access.

9.2 Net Neutrality, therefore should ensure **UNRESTRAINED** access to content, services and applications once the user is subscribed to data and its services. Once a subscriber has selected a data plan and has paid for it, the TSP **CANNOT** place any restriction from their end that would create discrimination of speed of delivery of similar content from different content providers (barring extraneous circumstances that are beyond the TSPs control: submarine cable breakage, provider-side server issues etc.).

9.3 All content should be treated **EQUALLY** and TSP should not censor/block/slow down/speed up the content on the basis of their **PREFERENCE**.

9.4 India has a very vibrant and large startup economy with over 3100 startups in the country. Software products and services are projected to grow 12-14% in the FY 2015. Startups are usually afflicted with problems of low cash flow that is a feature of the early years. The Government of India has announced Rs. 10 Billion fund to support the start-up environment. Various state governments have gotten behind encouraging more startups in the country through various schemes and bills.

9.5 The internet is a strong force multiplier with regards to increasing publicity of the brand and the reach of the application from an MSME/startup. Under a regime of preferential pricing for data access over TSP networks, it would be next to impossible for these startups to compete against a larger and better entrenched competitor with higher cash flows. This would lead to compromising the vibrant economy that these companies promote and also go against the broader vision of the government at various levels of promoting MSMEs/startups.

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.

Answer 10: The mere mention of the word discrimination in data traffic management practices is an affront to the concepts of network neutrality.

10.1 However, acceptable traffic management techniques should exclude the following (from Figure 5.1 on Page 86 of the consultation paper):

- Blocking Content e.g. spam, illegal website content
- Throttling/ degrading some types of traffic e.g. P2P
- Priority given to some service provider's content or application over others (perhaps for a fee. Potential revenue for ISPs) and
- Blocking rival content or application e.g. rival IPTV services

10.2 All traffic management techniques/ methodologies that can be used by ISPs and TSPs should be based on suitable methodologies recommended by TRAI. Further, any traffic management techniques utilised should be subject to scrutiny by TRAI or a suitably empowered and independent committee as notified by the competent authority. This committee should include representatives from civil society organisations and other network neutrality advocates. Efforts should be taken to ensure there is no conflict of interest.

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?

Answer 11: The answer is yes for the parent question and no for the nested question.

11.1 Under any reasonable network neutrality rules, the publishing of traffic management rules should be mandated. These traffic management techniques should be based on the list of exclusions mentioned in our response to Question 10. However, merely publishing the traffic management techniques used by TSPs will not ensure transparency in the process. A framework of punitive measures and fines should be created and strongly enforced on TSPs that violate the rules of appropriate network traffic management.

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 upgradation costs? Please comment with justifications.

Answer 12: Publically available data from TSPs and other sources show that revenues and profits of these companies have been growing over the past 3 financial years [Source 12]. This has been further highlighted in our responses to questions 1 to 5.

12.1 The current growth of data revenue has been acknowledged by various TSP executives in public press releases. The Morgan Stanley report on Indian telecoms [Source 13] provides some excerpts of such statements:

- “Data is the next growth leg. We expect data contribution to more than double to ~23% of overall revenues (vs. 10% currently) in the next two years. Data revenues should grow at a ~40% CAGR over F14-F18, leading to a 384 bps increase in industry revenues to 12.3% over the period.”
- “Voice and data rates are the lowest for Indian operators as compared to Asian counterparts and the difference between voice rate per minute and data rate per MB is not significant. Thus, the risk of data cannibalizing voice is very low.”

12.2 According to a BBC report [Source 14], mobile subscribers in India have amongst the lowest call quality in the world. This is usually due to the spectrum economy in India. However, this topic is not under the purview of this consultation paper.

Question 13: Should telecom operators 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.

Answer 13: Our answer is no for the parent and all nested questions. Under the principles of net neutrality, any discrimination of services by TSPs should be forbidden. Any discrimination is against the true character of the internet and the guiding principle of treating data equally.

13.1 However, if data traffic management techniques as recommended in our response to Question 11, are implemented, it should be ensured that they are applied to all services and not the data transmitted through a particular service. Any TSP violating this principle should be liable to penalties and fines similar to those in our response to Question 10.

13.2 However, content based discrimination allows deep packet inspection of traffic that allows network operators to intercept consumers’ internet activity. This is detrimental to the rights to privacy for the individual.

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.

Answer 14: There is absolutely no justification for a proposal to allow differential pricing for data and access & OTT Services and is strongly opposed. Any such proposal goes against the principles of network neutrality.

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.

Answer 15: No. This question is again a reframing of previous questions, principally Question Nos. 1, 2, 4, 5, 6, 8, 13 and 14. The responses to these questions may be referenced for justifications. It also not understood why the TRAI is posing the same question repeatedly.

Question 16: What framework should be adopted to encourage India specific OTT apps? Please comment with justifications.

Answer 16: Any regulatory framework for encouraging India specific internet platforms and services requires two regulatory measures:

- First; no additional regulation on internet platforms and services and
- Second; a strong network neutrality law that promotes innovation and preserves lower entry barriers.

16.1 The growth of India specific OTT apps has been due to the neutral nature of internet networks that are being threatened with the repeated infringements of net neutrality by TSPs and ISPs.

A recent article (The Huffington Post India, 2015) collates some statements from successful Indian start-ups in which they are strongly opposed to any proposal to license internet platforms.

Question 17: If the App based/OTT communication service players are to be licensed, should they be categorised as ASP or CSP? If so, what should be the framework? Please comment with justifications.

Answer 17: This proposal threatens the free and open nature of internet communications which are to the benefit of users in India.

Question 18: Is there a need to regulate subscription charges for App based/OTT communication services? Please comment with justifications.

Answer 18: There is no need to regulate subscription charges for app based/ OTT communication services.

18.1 The costs of internet based services have largely remained low in India. The majority of consumers in India are highly price-sensitive. The low subscription cost, coupled with the lowering

costs of mobile handsets in India has caused the growth of these services to be far higher than those in other economies. This also creates a market that regulates itself with regards to price.

18.2 Any attempt to regulate these charges by the Authority would compromise the competition in the market and would raise the costs of subscription.

18.3 This would further harm the interests of users who are coming online for the first time who may not be in a position to pay the high costs.

Question 19: What steps should be taken by the Government for regulation of non-communication App based/OTT players? Please comment with justifications.

Answer 19: No steps should be taken by the Government for any additional regulation of non-communication App based/OTT players. There is no reasonable justification for any interest which can possibly be served by any further regulation. This question is a mere reframing of Question No. 1 and 3. It is not understood why the same question is being rephrased and then being put repeatedly. (MediaNama, 2015)

Question 20: Are there any issues that have a bearing on the subject discussed?

Here are the additional steps that we urge the TRAI to undertake in the interest of the public:

- Due to the absence of any formal regulations on net neutrality, TRAI should issue an order or regulation preventing network neutrality violations by telecom service providers. Some telecom companies have shown scant respect for the issues presently under consideration and despite its questionable legality have rolled out various services which violate network neutrality. Any delay in forming regulations or preventing them in the interim till the process is complete is only likely to consolidate their status. This is not only an affront to the Internet users in India but also to the regulatory powers of the TRAI.
- TRAI is requested to publish all the responses and counter responses to the consultation, including any other additional material, on its website.
- For better public involvement and awareness, open house debates should be held in major Indian cities after the consultation process is over.