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: Yes it is and in my personal opinion here is no good reason to believe that OTT players need a regulatory framework, and, doing so would result in killing net neutrality. Also, if such a thing is done, it will kill growth of mobile penetration. To say that internet penetration in india is 'evolving' in India is nothing short of a joke because India *just* has internet connectivity. The speeds provided by TSP's and ISP's are simply not enough, and by going after apps, we will do the following things:

1. It will surely give controls to organizations that can pay better and can control the speed of content or ultimately can block it also.

2. Self-regulation is hardly a reality in corporate world or in any commercial world corporations will think of their profits and want policies which will benefit them not the end user.

3. Damage Start-ups who want to innovate and make new apps, since making a framework means all TSP's have a weapon to target literally any company which makes apps

4. We will violate the principle of net neutrality, which has been embraced by the entire world. Recently, even the USA's watchdog FCC has approved a net neutrality policy, and I believe that the only framework we need is one establishing net neutrality in our country.

5. We have already witnessed a case where AirTel, which has a streaming service known as wynk attacked others. Link. I place no trust of mine on either of these corporate entities or future governments, which will only limit content as per their whims. Another violation by another TSP: Link.

6.

In this context, the only framework that I recommend, is to introduce a framework know as: Protection Of Net Neutrality Framerwork. A draft written by me and users from Reddit India has been attached below.

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: The simple answer to this question will be a NO. If we go into specifics, we will find that getting OTT providers outside the country under a licensing system, is having no logic because:

1. Indian law does not apply outside India

2. Indian companies will simply shift base outside India, killing indian revenues. For example, major E-commerce companies like Flipkart and SnapDeal are based outside India because of laws in India that simply do not allow businesses to run properly in a profitable way. Bringing another "licensing regime" (and to think of it, will TSP's issue licenses? So, is TRAI asking if an oligarchy is okay or not?) will simply erode the already thin business opportunities in India.

3. By bringing in India, another set of policy will have to be done by App developers who are often individuals with very less financial backing. This is certainly NOT in line with the Central govt. wishes to promoting ease of doing business in India.

TRAI has not even gone to the depths of explaining what licensing it wants, and what does licensing even mean? Are we the ones to decide who can make an application in India or not? Does TRAI simply want to pull the plug on app development and IT sector in India? This is a dangerous development, to put lightly. Therefore my request to TRAI will be to instead enforce Net Neutrality. Internet is simply a resource like electricity. A more detailed concept has been put in below along with the framework for Net neutrality.

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.

Answer: The growth of OTT is impacting the traditional revenue stream of TSP's in a POSITIVE way. Lets for a second think assume that OTT services were hitting revenues of TSP's hard. Then how can we find such headlines:

1. Bharti Airtel Q4 net profit surges by 89% to Rs 962 crore, meets estimates
2. Vodafone India service revenue up 11.7% in first half of FY15
3. Idea Cellular posts 64 pct profit rise as subscriber numbers grow

These are the top3 TSP's in India. Similar can be said about other TSP's doing business in India. The whole 'perceived loss' argument will then become same as the argument behind the 2G and coal scams. There is no loss due to OTT's. The entire theory is myth and it has been debunked several times over by experts. However, for the layman: growth of OTT = growth of data usage = growth in revenue.

However, as I have said above, the way the TSPs have been marking up data costs is irrational, irregular and that needs to be controlled immediately, or regulated. The rise in no of subscribers + rise in usage OTT apps + rise in data revenue is directly proportional to each other. TSP's are getting paid for Data, therefore to say that OTT is taking away their revenues, while every bit has been paid for, to be honest, is a lie. Why should a consumer pay for the same service twice over?

Say we introduce pricing for OTT services. Then here is what will happen: User will pay:

One for data pack, one for whatsapp pack, one skype pack, and then we will start having a thousand packs and no apps will be used. People will go on and on or will simply move over to WiFi which will then give loss to TSP's. Does that make any business sense at all? I don't think so. But then again this is simple business minding by me.

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 product/service differentiation? Please comment with justifications.

Answer: Trai is being repetitive with this question, which I just answered above. Here is it me saying in bold this time : **NO.**

Telecom operators/ISPs are access services providers, and can control either how much you access, what you access, how fast you access and how much you pay to access content and services on the Internet. It's important for access to knowledge, services and free speech, as well as freedom and ease of doing business online, for this access to be neutral:

- All sites must be equally accessible

- The same access speed at the telco/ISP level for each (independent of telco selection)

- The same data cost for access to each site (per KB/MB). (includes OTT apps)

- No telecom-style licensing of Internet companies (see this and this)

- No gateways (Internet.org, Airtel OneTouch Internet, Data VAS), censorship or selection;

- No speeding up of specific websites (that may or may not pay telcos)

- No "zero rating" or making some sites free over others (and that goes for you too, Wikipedia and twitter).

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.

Answer: Yes there indeed exists an imbalance in the system since TSP's are repeatedly getting away with violation of basic principles of open access to all services as mentioned above. And as I have said, OTT players do not need more regulations, more regulations are just a recipe for a disaster. What we need is a regulation to make sure TSP's are not exploiting customers via exorbitant data prices and uninformed policy changes. Also, to put simply, there will be negative impact on economy if such idiotic policies are put into place. You will simply drive out all "indie developers" and all start ups from our country. I commend TRAI/TSP Legal teams on coming up with such a great idea, really. Can TRAI explain why no action was taken in the following instances?

1. http://www.medianama.com/2014/10/223-zuckerberg-india-internet-org/

2. http://www.medianama.com/2014/11/223-airtel-onetouch-internet/

3. http://www.medianama.com/2014/03/223-uninor-facebook-whatsapp/

4. http://www.medianama.com/2014/11/223-ndtv-com-blocked-on-mtnl-delhi/

5. http://www.medianama.com/2010/04/223-mts-mblaze-net-neutrality-mobile-internet/

6. http://www.medianama.com/2013/07/223-wikipedia-partners-aircel-to-offer-free-access/

7. http://www.medianama.com/2013/07/223-twitter-vodafone-india/

It is simply because we need a regulatory policy to prevent larger companies to encroach on smaller ones. This is the only policy India needs right now when it comes to OTT apps.

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.

Answer: Firstly, Security concerns are all under the purview of the home ministry, therefore it is illogical for TRAI to even come up with such a question. When asked about such things, it pains me to remind TRAI that we already have a policy in place which was drafted after 26/11 terror attack to prevent misuse of OTT voice communication by terror groups. Indian intelligence agencies such as IB and RAW coordinate on a regular basis with other organizations outside india to assess and classify threats, and it has so far worked. Therefore, using "terror" as a scare tactic to break net neutrality is CONDEMNABLE. Most OTT apps have a legal policy on their use, and therefore, it is something which is self-managed. India, has, in instances, blocked internet in areas where terror attacks were imminent or suspected. Therefore it is best of TRAI to not use security as an excuse. Use and purchase of SIM cards is now also monitored, therefore we can verify the identity of each person using internet. If he/she is a threat, such things will automatically be flagged by the IB and information coordination between all stake holders is the key.

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.

Answer: All app developers have a privacy policy as well as run a support email regarding questions. In order to maintain safety, privacy, and security, I recommend the following:

1. Encryption : The internet, like any network, can be monitored by criminals and hackers at any number of points. This is one of the reasons why email and many internet chat programs are not secure. As there are so many ways for unknown persons to monitor your communications, you must take positive steps to protect yourself from these malicious third parties.Encryption is the process of converting information, using principles of mathematics, in such a way that it is readable only by the intended recipient after they have converted the information back. Many kinds of encryption techniques have been developed over the centuries. This process is called encryption and decryption and forms part of the security discipline called cryptography. As far back as 1900 BC the Egyptians utilized non standard hieroglyphs to protect a message; whilst the Greeks in 490 BC used strips of leather wrapped around a specific length and width of staff. This process of disguising a message is called cryptography. Julius Caesar possibly created and used the

world's first substitution cipher. Through shifting each letter a fixed amount, for example 'a' becoming 'e', 'b' becoming 'f' and so on, resulted in unintelligible words and messages. The approach of applying rules to a message and the result of a separate encoded message is called a cipher. The key to unlocking the hidden message was knowing the offset of which to shift the letters; forward to encode and backwards to decode. These ciphers, whilst primitive now, were at the forefront of cryptography at their time but as with any advancement greater technological resources and knowledge can be used both to further a subject but also to work against it. As past ciphers can now be defeated trivially, modern ciphers must also continue to evolve. ***All OTT apps must encrypt data transferred over the internet.***

2. Use of digital certificates: A digital certificate is an electronic credential that can be used to establish the identity of a user, wherever that user may be located. Just like a physical identity document, such as a driving license, a digital certificate must have certain properties in order to be used as a form of identification. In particular, it must: Name the specific account being identified, Be issued by an authority that can revoke the certificate at any time, Be difficult to counterfeit. ***OTT apps should use digital certificates***

3. A privacy policy – All apps must have a privacy policy where they tell us what they do with our data

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.

Answer: It is awesome to note that TRAI lists a majority of laws where net neutrality is upheld, and asks the person answering questions to draw from ETNO? How biased it is, indeed. But anyhow, India should not drive any policy from the EU directly, since the market in EU and india are completely different. India barely has 20% internet penetration whereas the EU has is 100%. Therefore, saying it short, India does not need a regulatory framework to boss over OTT providers. A sample policy is attached with this answer sheet.

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: Net neutrality is the need of the hour in India. Net Neutrality is a founding principle of the Internet which guarantees that telecoms operators remain mere transmitters of information and do not discriminate between different users, their communications or content accessed. It ensures that all users, whatever their resources, access the same and whole network. But this principle is being undermined as operators develop business models that restrict access by

throttling or blocking specific online content, services or applications (protocols, websites, etc.), or their users' freedom to publish information.

In the face of these attempts to undermine the decentralized architecture of the Internet, and the freedom of communication and innovation it represents, lawmakers must guarantee Net Neutrality. Internet access providers must be sanctioned if they discriminate Internet communications, be it according to the source, the recipient, or the nature of the information being transmitted. It this does not happen, we will create an Internet where only users able to pay for privileged access enjoy the network's full capabilities. It should be a must, given that the entire developed world: which includes USA, EU and many many more countries has already passed laws confirming internet as a resource similar to the internet and thus STOPPING any discrimination done by companies over services derived from the internet. A draft net neutrality framework made in tandem with users of reddit India is attached below. I have **personally written a net neutrality draft which I believe TRAI / GoI should enact. ATTACHED BELOW.**

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: Of course, the principle of Net neutrality does not prevent an operator to engage in traffic management practices a consistent and enforceable framework to assess whether traffic management practices are reasonable – i.e. whether they actually seek to protect the freedom of communication of end-users – and when they are not. In the view of many stakeholders, there are two situations in which such practices are legitimate:

Unforeseeable and temporary congestion: When a wireless or land-line network goes through a period of unforeseen congestion (e.g. in the case of equipment failure), network operators are entitled to temporarily implement discriminatory traffic management practices in order to ensure to fluidity of data streams. But every time, operators must be able to prove to the regulatory authority that such congestion of its network was not foreseeable and that it took necessary steps to correct it. If the deployment of very high broadband networks takes longer than expected and operators face a durable saturation of their network, then the available bandwidth should be shared equally between all the subscribers and all service providers, until operators invest to upgrade their infrastructure.

Security threat on the network: In case of an sudden attack or all other event undermining the proper operation of the network, discriminatory practices are also legitimate. But they

should be circumscribed to temporary traffic hazards. Malicious actions aiming at altering the global operation of the network, whether intentional or accidental, should be considered as attacks. Traffic hazards needs to be addressed through temporary measures, either manually – when irregular traffic is detected – or automatically – when such traffic hazards are already well-known. The duration of these measures should not exceed that of the attack. They should be made transparent in order to foster collaboration among the community of network operators and allow for both a sound diagnosis of security threats and for the adoption of the most adequate methods to deal with them.

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: There is no transparency or fair pricing regime in India. Therefore to impose trust on a corporate entity would be to put you face inside a cannon about to fire. I don't trust our TSP's therefore I oppose the traffic management techniques for OTT apps.

TRANSPARENCY WON'T FOSTER NEUTRALITY: transparency does not prevent all the ISPs in a given market to adopt anti-network neutrality practices, and there are many markets where no neutral Internet access is available, particularly in the wireless market. In such cases, competition provides no solution for consumers, who have the right to access a neutral Internet. When for geographical or technical reasons, only one offer is available in a given market (often subsidized), regulators should have already imposed strong requirements of network neutrality. In addition, the record of past policies in fighting market fixing agreements between mobile operators is very weak, which also suggests that the wait-and-see approach is bound to fail. Second, even if neutral Internet access offers were to subsist in the absence of regulation, the transactions costs of switching ISP in a quadruple-play world where fixed Internet, TV, land-line and mobile phone are concentrated in one service remain so high that many users would feel discouraged to do so. Thirdly, while it has profound political and economic implications, traffic management practices remain a technical topic, and average users may not properly understand the implications of their ISP restricting their Internet access.

Question 12: How should a 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: Firstly, TSP's must leave OTT apps alone. They are not eating into their revenues, but are aiding them in growth. What is the need of the hour is, to make their business model viable. People switch over to different forms of communication for the following reason:

- The service is too costly

- A better service is available

- The support side is not good enough

OTT app providers have aced TSP's in these 3 regions, and therefore telecom providers are lagging behind. However, saying that TSP

The stupidest part of the Telco's contention is this

- We invest on the networks and the apps ride on this without paying anything.

This is as stupid as saying that the electricity company invest a lot on the electricity networks and power generation and the fan and light manufacturers get a free ride on it. The people who use fans and lights pay the electricity companies for the electricity, just like the people who use Whatsapp and Skype pay the Telcos for data.

Network neutrality spurs investment infrastructure. Net neutrality is also essential to stimulate growth in network capacities, which is driven by the development of services and applications. This is worth recalling, at a time when some ISPs are seeking to monetize the under-capacity of their infrastructure. In the United Kingdom, British Telecom throttles all peer-to-peer traffic but sells premium subscriptions allowing customers to avoid such discrimination by paying a higher fee . This way, operators are in position to benefit from the scarcity of their network's bandwidth, as consumers are compelled to pay a higher price to communicate certain classes of data in normal conditions. Such practices, which consist in maintaining and managing an artificial scarcity, disincentivise investments in more network capacity, even though the price of bandwidth is rapidly decreasing. They cause a mid-term loss for the overall economy, whose growth depends on the development of an open online infrastructure.

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.

Answer : No, TSPs can't be allowed to discriminate. This question is the same as ones above and is simply reframed. Under no reasonable conditions can be discrimination be allowed. In the absence of net neutrality, the Tata company can pay money legally to the telco to give a faster pipe for its app. If the start-up cannot afford to do this, the start-up gets killed. Normally, this would be OK, because customers would switch to another ISP which provides same speed for all their apps. But 2G/3G is not a real free market because of spectrum allocations. There are very limited players. If something like non-customer friendly like this happened in a free market, then free market takes care of it. i.e. there are 4 shoe companies & all decide that they will only sell only shoes above 2500Rs. Then very soon a new company will come up and sell cheaper shoes. In the telco world, it's not really a free market. There are just 4-5 players anywhere and there is a barrier to a new player entering the market because of the spectrum allocation. Ergo, it's not a free market. They have been given protection from competition by the Govt. So government needs to regulate the telcos. The app space is pretty much a free market, there is no need to regulate them.

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: The only justification for allowing differential pricing for data access and OTT communication services is corporate greed. There is NO JUSTIFICATION in discrimination. This is the same god damn question over and over again in different forms. Non price based discrimination would mean they block the services entirely. So no, this should NOT be allowed in any way. No such practice is justifiable/acceptable. Save for those implemented for security issues or for unforeseen and temporary congestion, Net neutrality violations have an immediate "impact" on fundamental rights, the digital economy and broadband investment.

1. Fundamental rights. Contrary to older traditional means of communications such as radio or television, producing and circulating information on the Internet does not require significant money. Thus, the ability to produce information and knowledge on the Internet is much more equally distributed in society, and results in positive effects on democracy as a whole. Net neutrality ensures that the ability to voice opinions on the Internet does not depend on your financial capacities or social status. It gives people the freedom to express themselves as they wish, and to access the information

they want without risking to be put at disadvantage by the few actors who operate the network. If Net neutrality was abandoned or even durably weakened in India, the control of the new, networked public sphere would be handed out to private actors, who could use discriminatory traffic management as a way of achieving control on the Internet ecosystem. It could turn the Internet into yet another predominantly commercial media.

2. Digital economy and innovation. Net neutrality facilitates innovation and competition, as economic actors take advantage of the level-playing field in communication networks to launch new services. The concept of "innovation without a permit", where new entrants compete fairly with the incumbent giants is at the root of the development of the Internet as we know it. Entrepreneurs of the Internet have become the linchpin of the emergent knowledge economy. Beyond prominent examples of companies that became huge thanks to the possibility to innovate and grow on a neutral Internet such as Google, Skype, eBay, or Twitter, there are thousands of smaller companies and services that represent an even bigger contribution to growth and social welfare. Free/open source software or open contents services such as Wikipedia or WordPress count among the most-used services in the world, and only exist thanks to the neutral and decentralized nature of the Internet. Many other essential parts of the Internet took advantage of an open network, and became widely used all over the world only a few months after being created, because it was relatively cheap to produce and distribute their innovative services.

This is a stretch: To make sure that corporations do not discriminate, random checks should be done by a Govt. entity like pinging the service timely and setting up a portal if necessary to register consumer complaints whenever they see such discrimination like say blocking at night peak time. Many would be spam and useless, but that's that.

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: There is no need for treating OTT as anything. They are just services found on the internet. All that TSP's need to concentrate on is to provide better data packs and suitable tariffs in order to earn money. For example, the data packs in India still start at 50 MB while the world has moved on. TSP's need to innovate to survive. However, when a service provider breaks the neutrality of the network, new entrants become vulnerable to unfair competition, given that their access to the Internet infrastructure can be restricted. Obviously, powerful actors in the telecom industries have an interest in imposing their control over information and communication

networks. They do so by, for instance, banning innovative VOIP applications from mobile telecommunications services. Anti-Net neutrality practices are thus fundamentally anti-competitive and harm consumers as well as economic growth. They discourage innovation and result in rent-seeking behaviors from established players. They put barriers to entry which prevent the emergence of the "next Skype" or "next Google". It follows that an open and equitable access to the communications infrastructure is the foundation of social and economic benefits and needs to be preserved.

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

Answer: Already, there are quite a few number of Indian OTT apps, however, to help them, a "NET NEUTRALITY" framework is a must. There should be no discrimination or favouritism in apps done by TSP's because their company owns the OTT app, that way a conducive competition enabled environment can be created.

Define the principle of network neutrality. First, the specific architectural principles of the Internet should be recognized in the regulatory framework through the definition of the Internet as a public electronic communications network abiding by the principle of Net neutrality. This principle would rule out any discrimination based on the source, destination or actual content of the data transmitted over the network. ISPs would be compelled to respect this principle by giving an equal treatment to all data flows and guaranteeing final users the freedom to 1) send and receive the content, services and applications of their choice; 2) use or run the application and services of their choice; 3) connect to the network and run any program of their choice, as long as they do not harm the network.

Question 17: If the 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: Please DO NOT license OTT players. There is no need for it as of today. Please uphold the principle of net neutrality and leave OTT players alone. It is an obvious breach of Net neutrality is the blocking of certain protocols or applications by IAPs as a way to undermine competition. In some instances, the use of these services is subject to extra fees. The most oft-cited example of such discriminatory practices is that of the voice-over-IP (VOIP) application Skype. Although the blocking of VOIP on wireless networks has been abandoned by a few IAPs in recent months, many of them still engage in this kind of anti-competitive behaviors and will continue to do so in the future for other innovative services in the absence of Net neutrality regulation.

To preserve the attractiveness of Internet access, managed services should also respect specific conditions. In particular, it seems that any managed service should only give access to one specific type of application or a limited package of services (whether these are HD video, videoconferencing, e-Health, etc). Otherwise, one managed service could absorb most of the applications that the Internet has to offer and unfairly compete with this open and neutral communications architecture. In the U.S, law scholar John Palfrey also proposed that regulators should ban managed services that a) could be offered over the public Internet; b) show clear characteristics of anticompetitive motivation; c) draw down bandwidth otherwise allocated for Internet access service; and d) if not handled as a Managed Service, might otherwise result in discriminatory consumer harm" Link

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

Answer: There is NO NEED to regulate any services offered over the internet. Please do not kill the idea of a free and fair internet. All telcos are protected by the govt, and OTT players are not. Therefore to say that TSP's are making losses and thus asking to control OTT players is wrong. A category of anti-Net neutrality practices not actually put in practice but increasingly contemplated by some IAPs is the establishment of "tolls", whereby online service providers would have to pay IAPs in order to benefit from a normal quality of service on their networks. In early-2010, the CEO of Telefonica declared that *"Internet search engines use our Net without paying anything at all, which is good for them but bad for us. It is obvious that this situation must change, our strategy is to change this"*. Link. Such language indicates that some IAPs are considering developing new business models by monetizing online service provider's access to their subscribers, which would profoundly undermine the Internet ecosystem. **Competition alone will not safeguard the Internet's open architecture**. Even though ex ante regulation has allowed for sufficient levels of competition, many of the positive externalities resulting for network neutrality would be lost. In the view of such risks, it would be a great mistake on the part of Indian institutions to adopt a "laissez-faire" policy letting ISPs free to develop new business models based on traffic discrimination.

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

Answer: The govt must enact legislation to establish net neutrality in order to promote business in OTT apps. Even TSP's can offer their own OTT apps and use advertising as a means to generate revenue. There is no need for regulation of OTT players. Both the Internet and managed services should be defined in the regulatory framework and steps taken to **ensure that the**

development of managed services will not occur at the expense of the Internet. According to the French national regulatory authority (Arcep), managed services are acceptable as long as they "respect competition laws and sector- specific regulation, and provided that the managed service does not degrade the quality of Internet access". Such degradation would occur if, for instance, an operator decided to allocate the vast majority of its bandwidth to managed services, thereby depriving the Internet access from sufficient network capacities.

To ensure that managed services will not undermine the attractiveness of Internet access offers, Arcep proposes that the **quality of service requirements** included in the Telecoms Package be construed in the context of the neutral Internet to protect the latter against degradation *"Given the shared social interest in having an Internet connectivity that operates in a satisfactory way for the maximum number of users, it seems necessary to encourage the service to be of satisfactory quality. An ISP's responsibility in this matter is naturally central"*

India Risks Lagging Behind if it Fails to Protect Net Neutrality: "India is at risk of losing its competitive edge when it comes to new, innovative developments". It also notes that India is lagging behind the United States and the EU in the development of innovative services and applications. Yet, if the anti-Net Neutrality provisions currently contained in the Telecoms package were passed, the situation could dangerously aggravate.

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

Answer :

1. Pricing of packs sold by TSP's : the pricing of the plans sold by TSP's is arbitrary and not controlled, therefore it is quite clear that rates across the board remain same and therefore it is hampering the customers experience. Prices are unnecessarily inflated.

2. No net neutrality law : A draft has been attached with this reply.

3. TRAI has not interfered or made a statement on past violations of policies by TSP's. TRAI must respond to such things and enforce policies more effectively.

4. The digital india vision issued by the GoI and what TRAI is proposing to do are complete opposites. There is no explanation on this. (insert link to pic of net neutrality post of GoI on reddit here)

5. TRAI has no plan on upgrading internet speeds and quality in india. India has the worst internet speeds in India, according to this AKAMAI report(Page 25 onwards). Instead of focusing on OTT players, TRAI needs to drive policy in such a way so as to improve

customer experience in India because in the last 10 years we have not improved in this sector, and we rank worse in Asia, even below the growth of countries such as phillipines, Vietnam and china are moving far ahead us.

6. One related key aspect is to recognize that site or domain-wide filtering is an extremely serious measure impacting freedom of information and communication. Obviously, any attempt to mandate such measures without a prior judiciary decision under a fair and equitable trial is in contradiction to fundamental rights. Even judicially ordered filtering raises serious issues as it unavoidably risks to prevent access to other contents than the offending one. As it is also an inefficient measure, it should be discouraged.

7. Create sanctions to punish any illegal violation of network neutrality. A third important component of a regulatory framework aimed at protecting network neutrality is the creation of appropriate sanctions National regulatory authorities must be able to sanction ISPs when they violate Net neutrality rules, for instance through monetary fines (which should be persuasive enough). In the event of very serious and/or deliberate interferences with the freedom of communications of end-users, the judiciary authority should be competent to sanction ISPs .