Response to TRAI questionnaire on 'Regulatory framework for Over The Top (OTT) Services

By, IT for Change, Bangalore India

(IT for Change is an NGO in Special Consultative Status with the UN, and a part of the Multi-stakeholder Advisory committee of India Internet Governance Forum as well as represented on some other committees of various government.)

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.

Our first response it that circumstances have indeed changed considerably with data-centric communication flows. Therefore, it is best to look at the situation anew, from a different perspective centred on current and emergent data-centric reality, rather than simply extend or extrapolate traditional telecom thinking and regulatory frameworks. For instance, use of the term OTT services is neither very clear nor common, and a rather telecom centric way of looking at the Internet, which in fact is redefining so many sectors, including the telecom sector. Indeed, Internet is becoming central to so many new social activities, organization and institutions, that it would no doubt be needed to be regulated in public interest. However, Internet and Internet services must not just be seen in relation to the underlying telecom infrastructure as the OTT term and the general tenor of the consultation paper seems to do. We need to address the totality of the current data-centric or Internet-centric scenario to device new thinking, paradigms and regulatory practices. It is appreciated that TRIA has a telecom mandate, and institutions do have jurisdictional as well as paradigmatic constraints, and also inertia with regard to frameworks and vocabulary. However, in our view, with India standing at a very important historical cusp, with Internet possibly a means for transformational positive social and economic shifts, what is required for the TRAI is to make bold departures and look at Internet-related issues differently, and not necessarily in a telecom-centric manner. So, yes, Internet and Internet services need regulation, but that requires a different kind of approach and thinking which we suggest TRAI should independently initiate. It should not be a byproduct of, or a sideshow to, a consultation that seems largely focused on (1) claimed depletion of revenues of telecos as competing Internet services become popular, and (2) imbalance between regulation over telecom services and Internet services. This is a very roundabout, and in our view an inappropriate, way to approach the issue of regulating the Internet in public interest. Net neutrality and its impact on telecom revenue, along with the issue of regulation of interconnection, is a set of very important issues that should be deliberated upon and decided independently, and these we think are and should be the main foci of the current consultations.

In sum, we do think that new kinds of regulatory thinking and practice with regard to the Internet and Internet services, especially those that are emerging as monopolies in their respective segments, are

urgently needed. We think TRAI should initiate an independent process for that, employing different points of departure than done in this current paper. The current consultation and its outcomes should focus on three closely connected issues – net neutrality, interconnection regulation, and revenue models and sustainability of telecom business in the new data-centric environment, which can include discussing possible revenue sharing between telecoms and Internet services. However, it may not be quite appropriate to treat the larger issue of regulation of Internet services in the shadow of this more focused set of issues, and making the former somewhat secondary or even instrumental to contestations about these other issues.

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, a licensing regime for such services is inappropriate. One, unlike the mature field of telecom services, such Internet based services are in a strong flux of innovation and disruption, with new kinds of services evolving continuously. Any prior licensing will simply kill this field. Further, it is difficult to identify what kind of communication services will be licensed and which not, since various kinds of communication services – from text, to audio to video – are now increasingly embedded even in normal websites and applications. Licensing will simply foreclose all new possibilities and innovations in this area. Indeed, we know that if Internet services were licensed when they first came around, we would not have the Internet as we know it. Nobody, we think, will like to be in that kind of a siltation.

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.

Major disruptions are underway in this sector, and of course growth of OTT or Internet services is impacting traditional revenue streams of TSPs. Whether the corresponding increase in data revenues is enough to offset these losses is a difficult question to answer. With all communication going data-centric, TSPs will of course need to earn enough from data revenues to survive. There is no other option. So, the question is better put as; what kind of data revenue models for TSPs are most appropriate (and sufficient) in the current and emergent scenario, in the best public interest. It is important and necessary to have a full-fledged debate on this issue. As to why any revenue streams that distort the basic egalitarian model of the Internet, represented as the net neutrality principle, are inappropriate will be discussed in response to subsequent questions.

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.

Here we come to the heart of the matter of net neutrality. OTT services should pay a fair cost to TSPs for carrying data in 'uplinking' to the Internet, whether as normal charges that any customer pays for such 'uplinking', or as per charging methods for Content Delivery Networks or as paid peering at peering points, as appropriate. It is important to regulate interconnection regimes in public interest so

that costs of data carriage is fairly divided among all uses, and market muscle is not able to determine interconnection/ transit charges as often does in the current system to completely non-transparent interconnection systems based simply on market power based ad-hoc relationships. Any fair allocation of costs should however be allowed to have no bearing on quality of transit, which should be the same for all content once on the public Internet system.

The above is on the 'up-linking' side for OTTs, which is basically an issue of interconnection regimes. What we are clear is that on the 'down-linking' or consumer-facing side, there should be no model that allows OTT players to pay extra to either improve the quality of their services relative to other services, or to offer some services on differential cost models to the customer (subsidized or on zero cost). It is here, on the consumer side, that the net neutrality question really comes in. Differentiating Internet services at the consumer end whether on quality or on the basis of cost to the customer, is neither simply an issue of consumer choice nor of just providing an alternative with respect to who pays for data costs of certain services. Such differentiation is a much deeper issue of causing a fundamental distortion in the Internet's architecture, which directly degrades the Internet's overall social potential.

It may be difficult to appreciate the real significance of the net neutrality principle without understanding the distortion that any violation of net neutrality (including zero rating) causes to the basic egalitarian nature of the Internet, and its hoped for egalitarian impact on our emerging social system that are mutating on the back of the digital context and opportunity. It is important to go beyond just issues of fair allocation of costs of laying telecom infrastructure and consumers right to free choice. The moment service differentiation is allowed on the consumer side, it becomes a distortion that travels and ripples out rapidly as a drop of poison does in a fluid! It begins to distort the basic equality and egalitarianism of the networked digital system, and through it the possibility of a certain degree of egalitarianism that can and should get embedded in the new Internet-mediated social systems, in areas as diverse as media and business and governance, to education, public health and livelihood support. As soon as players begin to build revenue models around discrimination between different streams of data traffic, a fundamental distortion in the architecture of the Internet sets in, which will keep spreading wide and deep through the society's digitally-mediated systems, and rent-seeking based revenue models will keep replicating and amplifying at every level in every sector. This is how the violation of this key egalitarian principle of net neutrality spreads rapidly outwards and has huge negative externalities in terms of overall social cost.

As much as, or even more than, providing the freedom of choice, the Internet inherently provides a certain level of equality of opportunity. This is what makes it such a unique techno-social infrastructure. 'Whether or not to protect and promote this key characteristic of the Internet' is the key social and political choice that we are faced with in considering the question of net neutrality. At times, making such a social choice of fostering equality of opportunity may even come at the cost of certain kinds of efficiencies. The question here therefore is not just of TSP's revenue models, or of free market principles based rights of TSPs and Internet companies to do their business and offer different service models. It is not even just about consumer choice. We can think of how a common schooling system is aimed at ensuring a certain equality of opportunity for all children. Net neutrality similarly fosters an equality of opportunity for all actors and activities that employ the Internet for various purposes. We may have lost the opportunity of a common schooling system, though it works well in many countries like the UK, and our own right to education is humble though limited attempt in that direction. But we

still have a largely net neutral Internet. This is an existing good thing for us to lose or keep! For the state through a regulatory intervention, or simple neglect, to allow the principle of net neutrality to erode amounts to the state intervening to enable less rather than more egalitarianism in our emerging social systems. This is not the mandate of the Indian state to do; the mandate is to intervene on the side of greater egalitarianism. It is important to frame net neutrality first in these higher and more basic socio-political terms before we get into subsidiary issues around the economics of telecom business. (We are not disregarding the latter issue which is indeed very important, and to which we will come back later. This is just to put out what we think should be the state's order of priorities.)

We do not think any forward looking analysis has been done about what would be the social cost of violating net neutrality principles as we move into a scenario of pervasive digital systems, all built on the Internet based interconnectivity between people and machines. Once this principle is violated and the new digital systems get built on an architecture which does not observe net neutrality it will be near impossible to roll back such society-wide structural changes. They would have got too deeply embedded and basic to the new social designs. It is this level of monumental decision that we are facing in dealing with the net neutrality question.

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.

Speaking about a regulatory imbalance may be the wrong way to look at the situation, which as we said earlier, is no doubt greatly changed and requires new thinking and new regulatory practices. It is possible that the nature of the changes is such that it is required to reduce some kinds of regulatory burden on TSPs rather than correspondingly increase it on OTT players. On the other hand, it is also certainly possible that upholding public interest may require new regulations over the OTT players or extending some older ones.

As to the question about what should be the framework to address these issues; one, we think a new and different process should be initiated by TRAI on this specific subject without mixing it with what is largely being considered as a net neutrality related consultation (whether intended as such by TRIA or not). We do think that the new Internet/ digital realities have changed the situation in some fundamental respects. A key change is with regard to how in the earlier times, telecom was a rather specialized service, and attracted the attention of a limited range of experts, with the public engagement being largely of the limited nature that is typical for any important public utility. Today however the Internet is intertwined with practically every aspect of people's lives, and society's institutions, in ways that are qualitatively different from how telecom has been seen, and engaged with.

It is therefore important to begin engaging with Internet issues employing a rights based framework, which include not only negative rights like freedom of expression and privacy, but also positive rights like universal access, and a certain degree of basic 'neutrality' and egalitarianism of the Internet. Brazil's Marco Civil framework, even with its defects, is a good example of a rights based framework for regulation of our communicative space, or generally, the Internet. It will be useful for TRAI to

begin an exercise towards evolving such a framework, which should be presented as something that should underpin the government's proposed Communication Convergence Bill. It is also an opportune time to tap into the enormous groundswell of public interest in Internet regulation issues that has suddenly developedt around the net neutrality issue.

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.

There admittedly exist serious issues and concerns around security with respect to many Internet services. The best way to address them will be through exploring an entirely new approach around society's convergent communication systems, which is becoming Internet-centric. This is not to deny that there is much of worth in the old/ existing approaches that should also be simultaneously considered to provide an appropriate security framework. Such a framework should be (1) human rights based, proceeding from the core concept of human security, and (2) meshed well, and considered together, with other Internet governance issues like privacy, freedom of expression, global nature of the Internet, and so on.

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.

Our response to this is in line with the response to question 6. There certainly are very significant new issues that have arisen in these areas, which should be addressed with some urgency. A composite human rights framework for Internet governance and regulation should be worked out based an extensive consultations. TRAI should begun such a process at the earliest, with appropriate framing of issues, and a framework (human rights based) of approaching them.

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.

It is paradoxical that ENTO wants that OTT service be 'required to pay fair compensation for carried traffic at the interconnection point (4.23 a) but would also like to have no 'regulatory interference' in negotiating inter-connection arrangements (4.23 c). They seem to be both asking for regulatory intervention with regard to the interconnection arrangements and speaking against it!

In any case, we think that OTT services should indeed pay 'fair' charges for transit, but what is fair would then need to be determined employing some larger public interest principles. This calls for regulatory oversight of interconnection regimes to ensure fair allocation of transit costs to all involved players. However, whatever may get considered as fair payments for interconnection, there cannot be any prioritisation of traffic for any party over other traffic, and so we are certainly against the end to

end QoS proposal of ETNO contained in point 4.23 b.

It may be especially interesting to look at appropriate paid peering models for big content providers 'offloading' directly at peering points, because unlike ISPs that do settlement free peering based on a symmetric relationship (including of revenue streams from respective customers) , the relationship between a content provider peering with an ISP is asymmetric. It is important to go into depth of the question of fair interconnection regimes, among different kinds of ISPs as well with CDNs, and also direct peering by content providers, and come up with a model which is fair for all. However, the important issue here is, and we repeat, this cannot translate into any paid prioritisation for any traffic. Once any traffic is on the public Internet, it gets the same treatment as any other.

Interconnection regimes have significant international dimensions, especially with so much more content flowing into developing countries than flowing out. Smaller developing countries still face the burden of having to pay for both up and down connectivity, since the interconnection arrangements are completely based on market power, and are very non-transparent. Unfair inter-connection regimes was a key issue at the World Summit on the Information Society, but it did not get resolved. The ten year review of the World Summit on Information Society towards the end of this year may be a venue to bring up this issue again. The appropriate role of ITU in this area may also be explored.

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.

The principles discussed under 5.47 do not amount to upholding of net neutrality. They are important, but there application without enforcing complete non discrimination in traffic on commercial grounds would still fundamental distort the open nature of the Internet. These principles by themselves will not ensure the objective stated in the first part of para 5.47; to allow "the Internet to serve as a platform for application innovation, free speech and decentralized economic, social, cultural and political interaction". If net neutrality is allowed to be eroded these key soci-political hopes form the Internet will begin to quickly evaporate. In fact, the statement of these principles appears to be a dangerous foil behind which the principle of net neutrality may be allowed to be compromised. We read this section with considerable concern, among many others which seem to tilt towards advising the option of letting go of the net neutrality principle.

Net neutrality should be upheld as a principle of 'no discrimination among Internet applications, content and services based on any commercial considerations', whether in favour of TSP's own offerings or of their partners.. This included complete banning of any arrangements where service providers may partially or fully subsidize the data costs so that the consumers get some services free or subsidized with respect to data costs (zero rating).

We however do not think that net neutrality means that content providers can peer for free with ISPs at interconnection points. That is an aspect of inter connection regime, which should be regulated to ensure fairness to all involved parties, but without any traffic priortisation or degrading, or unfair refusal to carry any traffic, or seeking unfair price for carrying it. Net neutrality basically assures that once traffic enters the public Internet system is cannot be discriminated, positively or negatively, on any commercial grounds. As mentioned, to uphold this principle at any price is key with regard to the

extent to which our emergent digitally-mediated social systems and structures will be egalitarian, which is a key political mandate and priority of the state.

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.

No kind of discrimination should be allowed to be done on any commercial grounds. The moment players are allowed to build revenue models around discrimination between different streams of data traffic a fundamental distortion in the architecture of the Internet sets in, which will keep spreading wide and deep through the society's digitally-mediated systems, and there will rent-seeking based revenue models replicated and amplifying at every level. This is how the violation of this key egalitarian principle of net neutrality spreads rapidly outwards and has huge negative externalities in terms of overall social cost. The term 'pragmatic' should be employed with care here, because we are dealing with a core issue of larger public interest, and not just some arrangements among different business parties. A high social and political imperative cannot be jettisoned on some kind of 'pragmatic' considerations, whatever it may mean. To the extent pragmatic here means ensuring that telco business remain sustainable, there are other means to ensure such an objective which have been discussed earlier. In any case, this objective has to be treated at a rather subsidiary level to the higher socio-political principles and imperative that demands net neutrality.

However, discrimination for traffic management in a manner that is fair to all, and works within clearly articulated principles (TRAI has a role here) is of course fine.

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?

TSPs should be mandated to publish various traffic management techniques. However such transparency alone does not address the key question of net neutrality. In fact, the question is of larger structural implications, and its requirements are not met even from ensuring consumer choice. It is a matter of a larger and very important social choice, about a higher or lesser degree of egalitarianism of our emerging social systems.

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.

This is an important question to ponder upon and address, but at a level subsidiary with regard to the higher principle of ensuring strict net neutrality. Both interconnection regimes and consumer data charges and models must be regulated in a manner that ensures adequate returns on the investments by TSPs (without violating net neutrality). Government should also try to reduce other kinds of upstream cost burdens on TSPs through various means.

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.

No discrimination among Internet services should be allowed to be done by TSPs. No such practice is acceptable under any circumstances. Transparency to consumers is important, but does not replace the imperative of net neutrality.

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, it will be inappropriate to give differential treatment to OTT communication services and other kinds of data access. This violates the net neutrality principle. In any case, as mentioned earlier, with new innovative practices being employed, it is difficult to define what is a OTT communication service and what not.

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.

As mentioned, fair and non-discriminatory regimes should be ensured at interconnection points, if needed through regulation. However, this may be needed to be done looking at things with a fresh mind and not just imposing old telcom based models which may or may not be suitable for the Internet.

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

This is a very important point, and should be a policy objective of the government. This question should be dealt along with other issues of Internet regulation through a separate process that we discussed earlier. Briefly, enforcing competition law, checks against vertical integrations and cross-platform ownership, open standards, data portability, enforcing interoperability among platforms, public sector support for local applications, and such are the measures that one can think of in this area.

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.

It will be inappropriate to license OTT communication services.

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

At this stage it is not required. However, consumer interest vis av vis Internet services is an area that

has to be watched closed. A overall consumer protection framework could be a part of a new rights-based Internet regulatory approach, a process for which has been discussed earlier. What kind of regulatory structures may be required to enforce such a framework is something that has to be decided as a part of such an elaborate process of developing such a framework.

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

The question gets answered in several responses above. TRAI and the government must initiate a new participatory process to develop a rights-based Internet regulatory framework, Brazil's Marco Civil being one such example. A whole range of Internet-related issues will need to be considered in an interconnected manner.

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

We tried to cover everything we could think of in above responses.