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Consultation Paper On Regulatory Framework for Over-The-Top (OTT)
communication Services - November 12, 2018

Dear Sir,

(A) I am submitting my comments to the above consultation paper. I request you to read the contents. I have reproduced the questions as they appear in Chapter 6 and answers follow. I am addressing these comments as a Member of the Public and do not represent any OTT or TSP or other stakeholder's interests. My contact details appear at the end.

Chapter 6 - Issues for Consultation

Q.1 Which service(s) when provided by the OTT service provider(s) should be regarded as the same or similar to service(s) being provided by the TSPs. Please list all such OTT services with descriptions comparing it with services being provided by TSPs.

Answer to Q.1

(1.1) I would begin these comments and answer this question by suggesting a definition as it is crucial to define who the "OTT provider" is in the first place, so as to cover, their present operations from all angles. A rough attempted definition could be on the lines of the following, as I do not claim any higher knowledge than TRAI or any of the bodies that have mentioned by TRAI in this paper under discussion where the definition of an OTT provider is still, and remains elusive, and is presented in italics below:-

Suggested Definition of OTT Provider:-

The term "OTT Service Provider" shall mean and include a service provider, who or which engages in providing, either in aggregated or disaggregated form, any or all, of the following namely:-

(a) Information and Communication Technology (ICT) services including electronic communication services and

(b) application services to include short messages, voice call, video call, VoIP services that provide avenues for real time dynamic person-to-person or peer-to-peer telecommunication services to a restricted audience that is finite though large in number and undetermined where that audience is either a “select” or “targeted” audience, electronic mail and any online conversational messaging such as chatting/instant messaging and exchange of such content in any trade, commerce, revenue, finance, economy related transactions such as financial transactions, service, e-commerce platforms, hailing services such as cab/car/taxi/ calling or booking, media services such as gaming, content provision but would generally exclude the activities of broadcasting content either in audio or video form, general websites, content hosting, web-hosting, gaming and other information services and

(c) Content services provisions by way of digital information in form of text, sound, image, animation, music, video, movie, game, or in any combination or part thereof part including data that is provided in streaming form or in a download format form by using the internet access service through telecommunication network or electronic network operation in order to supplement, strengthen, substitute any of the existing telecommunication operations or TSPs, whether or not that gives rise to competition between the OTT and the TSPs,

Nothing in this definition shall preclude the Regulator from deciding whether the said OTT provider is to be covered or not on a case-by-case specific review basis, considering among other factors, such as aggregated nature of the functionalities offered by the OTT provider, their possible separation and isolation by way of disaggregation in order to expose the true nature of the functionality based on the main, predominant and substantial nature of the functionality. The decision of the Regulator in this regard shall be final and binding on the OTT provider.

Q.2 Should substitutability be treated as the primary criterion for comparison of regulatory or licensing norms applicable to TSPs and OTT service providers? Please suggest factors or aspects, with justification, which should be considered to identify and discover the extent of substitutability.

Answer to Q.2

(2.1) It is difficult to state as one function that is undertaken by the “traditional” TSPs today might be dropped by the OTTs due to technology improvements and thus be bypassed or the TSPs themselves might come out of their “traditional” shell and undertake OTT like operations. Roughly text, SMS and voice calls might fall in the substitutability list or the “traditional TSP list”.

(2.2) For a country like India where people connect with each other and send SMS in text form and is convenient, fast and economical, SMS texting must be kept out of the regulatory purview as people text in many languages region wise. If there are elements of MMS, video, animation, sound, music, audio that calls for data support and requirements of a higher payload bandwidth, network speed and other requirements then that might be considered for regulatory mechanism.

Q.3 Whether regulatory or licensing imbalance is impacting infusion of investments in the telecom networks especially required from time to time for network capacity expansions and technology upgradations? If yes, how OTT service providers may participate in infusing investment in the telecom networks? Please justify your answer with reasons.

Answer to Q.3

(3.1) OTTs might well like to ride on the crest of the wave of the infrastructure created by the TSPs. If they continue to “go over the top”, earn revenues, add to the charm of the mobile coverage, provide excitement for the consuming public, and yet remain unaccountable either by licensing or regulation, that could well be demoralising for the TSPs.

(3.2) Many provisions and obligations are foisted upon TSPs such as Telecom Acts, regulations, licensing agreements, conditions of lawful interception meaning no unlawful phone taps or surveillance and in other words proper call interception norms, privacy and security issues, subscriber identification also called as CLIP for landline phone lines, customer acquisition forms, customer grievance redressal systems, time limits adherences, unsolicited commercial oriented communication prevention regulations (UCC) and also the “Do Not Disturb Registry” (DNDR).

(3.3) The TSPs have to provide a circuit switched traffic as per National Standards and engineering norms to enable any other network provider to access this network, the emergency numbers are toll free as per a national numbering plan devised. In addition a merger amalgamation scheme has to be approved and mentioned in the license (This could be said of many bodies corporate which have to provide in its constitutional documents such as MoA/AoA and as per The Companies Act seek High Court’s approvals where prescribed and therefore the TSPs are no exception or in any way specially disadvantaged in this instance)

(3.4) The TSP has therefore to terminally end any commitment and exit “legally” by sending advance notice to the subscriber as well as the authorities besides socially being responsible, call it as Corporate Social Responsibility(CSR) or whatever by providing an access to rural, remote and village areas by means of a fund as well as a universal access levy @ 5%

of its AGR.

(3.5) TRAI regulations also have to be complied with on the fee structure of origin, carriage, termination, billing, metering codes of conduct, grievance redressal systems, UCC, mobile number portability (MNP) where a database maintenance adds to the burden without which porting is difficult to access another network provider when a user opts for same-number-yet-please-port-me-out option. The IT Acts and Regulations are also required to be followed where there are penal consequences for even intermediaries, unlawful interception, sensitive personal data information leakages, encryption technologies deployment and decryption necessities in a lawfully required interception.

(3.6) The financial burdens arise on a one-time non refundable fee, a 8% license fee based on AGR, spectrum charges on allotment, use of the allocated and approved spectrum band and as per spectrum allotment conditions, spectrum tender specifications, allotment orders, and so on.

(3.7) The OTTs do not have such regulatory norms such as interconnection charges, no UCC restrictions, questionable QoS (perhaps they do not need it due to their high bandwidth, speed, less failure rates etc?) and claim end-to-end encryption transmission and acceptance.

(3.8) There is an imbalance and OTT can infuse investment into the telecom sector by way of employment opportunities, infrastructure funding, funds infusion, if only they are made to operate in an ambient and stable industrial environment under a committed transparent policy offered by the GOI with no back re-traced steps, unfulfilled promises or let downs. It should be viable for these OTTs also in all models – management, revenue, business and so on.

(3.9) In case an OTT comes out with a landmark programme that reduces bandwidth, yet ensures richness of content that has never before seen or experienced in the past, would the OTT make hay or will it share that with the TSPs? It is not open source software used for and by individuals for personal use (not for commercial use.) that can be shared with the code for all to deploy, improve, share and engage, though a TSP could use that software after paying license fee for commercial use. The practical implications and business realities would have to be considered herein.

Q.4 Would inter-operability among OTT services and also inter operatability of their services with TSPs services promote competition and benefit the users? What measures may be taken, if any, to promote such competition? Please justify your answer with reasons.

Answer to Q.4

(4.1) Inter operability with TSPs might form part of the licensing conditions

but among OTTs there is the reality of business survival and competition. This is a different equation as compared to a mobile number portability. Any OTT might for example confine himself to Windows phone specific operating system and the rest of the operating systems are shut off such as Android based phones. Rival OTTs would block or operate on each other's platform in such a way that the devices do not work on the other rival's platform.

(4.2) Ideally, inter operability might usher in benefits and healthy competition in the face of properly designed and well thought out regulatory/ fair licensing regime that does not suffocate the OTTs with swamped rules, regulations and a tight licensing Raj norm. It should allow them (OTTs) to operate and consider it worthwhile to do business in a regime that certainly owes adherence to the Nation's laws and jurisdictional parameters, within whose borders, shores or area it operates, as any Nation is well entitled to protect its interests and its Citizens' interests.

Q.5 Are there issues related to lawful interception of OTT communication that are required to be resolved in the interest of national security or any other safeguards that need to be instituted? Should the responsibilities of OTT service providers and TSPs be separated? Please provide suggestions with justification.

Answer to Q.5

(5.1) OTTs have a responsibility definitely in the area of their operations. The Regulator such as TRAI should be empowered to intercept communication in co-operation with other law enforcement agencies, Ministry concerned, if necessary, with the aid of specialized agencies in that field, among others, in the areas in national interest, to prevent local/regional/ law and order issues from cropping up, maintenance of public order and tranquillity, prevention of harmful or seditious material publication and dissemination, material that is likely to instigate disaffection among masses on grounds of religion, etc., religious practices or customs that are seemingly more traditional when compared with modernity and thereby offends some law or the other in modern times, irrespective of its original good faith intendments in following that practice all along for centuries be that under any religious denomination in this Secular Nation, rumour mongering that fans hatred among people, content that is immoral, illegal, or against public policy and not in public interest or injurious to health or well being, extreme unfounded and unproven unconnected with issue allegations on grounds of sensationalism, earning readership, earning TV rating points, earning brownie points by dragging in elected representatives, MPs, Government officials or besmirch the high dignity and majesty of the Judges of any Court in any form or question the wisdom of decided cases or Judgments (excluding fair comments) or promote spurious, dubious or fake products or conduct trail by media and so on.

(5.2) There are also limits on the right to freedom of expression and just because a person gets many “thumbs up” or “likes” on a OTT that does not mean he can go overboard without any control mechanisms to which he or she can be subjected to.

Q.6 Should there be provisions for emergency services to be made accessible via OTT platforms at par with the requirements prescribed for telecom service providers? Please provide suggestions with justification.

Answer to Q.6

(6.1) Yes....OTTs must provide access to a pre-approved number verified list of all local and national emergency numbers, email addresses etc., but such a provision must not make these OTTs come under the scanner if they are otherwise not an OTT in other ways or do not fit the approved OTT definition. It means that if the OTT is connected to a PSTN network under a National Numbering Plan merely for accessing these emergency numbers, a stand and interpretation might be taken that these OTTs have to necessarily come under the regulatory scanner. Now that should really not be the view to be taken by the Telecom regulator or TRAI or any other similar body for the limited purpose of assigning these numbers as access by the OTT to emergency numbers is in the larger public interests. You are no doubt aware that such number access is always to be “toll free numbers” and with no “blackout days” but available and kept connected 24 X 7 on the lines of 911 emergency in the U.S.A.

Q.7 Is there an issue of non-level playing field between OTT providers and TSPs providing same or similar services? In case the answer is yes, should any regulatory or licensing norms be made applicable to OTT service providers to make it a level playing field? List all such regulation(s) and license(s), with justifications.

Answer to Q.7

(7.1) There are at least two ways in which any field could be levelled physically in order to achieve a level playing field. One is to raise the floor level of the existing field... and that requires some additional resources, and the other way of levelling and trying to achieve a level playing field is to bring the level of the field down, a kind of paring away, or taking away.

(7.2) When OTTs are made to descend down to the regulatory/licensing regimen of the TSPs as there is a nagging impression that the TSPs do all the hard work and the OTTs get to cut the cake and eat it too without sweating it out, there is a level down playing field if TSPs are considered are at a lower level. Now this is an unfortunate admission on the status of the TSPs as it impliedly considers OTTs to be on a higher level. That same premise would apply if the role of the TSPs is required to be raised to a higher level

in order to achieve a level playing field and that means that the TSPs are trying to emulate the success stories of the OTTs who are on a higher pedestal and seeking the objectives of a level playing field.

(7.3) This is true to an extent if one were to look at the obligations faced by TSPs dealt with in detail in answer to question 3.

(7.4) The TSPs might venture to re-look and design their own answers to match the OTTs.... here they are raising the bar, if they think, that the OTT's grass is greener. They can achieve this by infusing new technologies that enable them to leverage their existing infrastructure or deploy better optimization skills or they scale up for wider coverage of the spectrum bandwidth, more data speed with added data given at lesser or subsidised costs, or offer better products/applications, install state of the art equipment or just use the existing strength of their infrastructure to implement better synergistic strategies that fit holistically in that line of business, to try and match the OTTs, for the limited purpose of this paper.

(7.5) "Over-The-Top" OTT providers must be convinced with tact not by decrying their potential or technologies outreach but by making them submit to a regulatory and licensing regime and hence give the message....you have had a good time so far...the vacation is over....we will regulate and license to a greater extent henceforth (in areas discussed elsewhere in this paper).

(7.6) The Key OTT challenges are in the way how a licensing regime if suggested paves the way for greater co-operation and not bring in the spectre of the revival of the License Raj that was seen as a bottleneck in the past in many ways. Taxation is an issue and along with Jurisdictional issues is tricky as internet does not recognise geographical borders and taxability would have to be addressed and linked to Jurisdictional aspects also as servers can be located anywhere. In QoS/QoE issues every Government TSPs must endeavour to stretch that extra mile in servicing and QoS/QoE parameters by ensuring customer's delight. Data protection and privacy laws are to be borne in mind besides net neutrality, inter operability, portability and Interconnection issues/charges/ that might impact revenue also.

(7.7) My own personal experience with BSNL would be lessons for similarly placed and similar experience persons. Even during the extreme adverse weather conditions of a destructive high wind speed accompanied with heavy rains cyclonic storm such as *Vardah* and floods deluding all areas in Chennai, both different disasters, BSNL did not blink even once in our area. We were connected in our area when all other networks failed, and yet, with a sense of remorse, I must confess, that their servicing and attending to landline problems (or wire line as is also called) has not been so good under its QoS parameters. I have praised BSNL on this issue and also deplored BSNL on the other servicing parameter in writing to BSNL.

Q.8 In case, any regulation or licensing condition is suggested to made applicable to OTT service providers in response to Q.7 then whether such regulations or licensing conditions are required to be reviewed or redefined in context of OTT services or these may be applicable in the present form itself ? If review or redefinition is suggested then propose or suggest the changes needed with justifications.

Answer to Q.8

(8.1) It is likely for any OTT to achieve dominance on new and improved application or innovation, concept, functionality or technology deployment. There might be issues of unfair trade practices, monopolistic trends and cartelisation deals with a suppliant OTT to corner market penetration shares. There could be abuse and domination of a position even as a result of a FDI GOI approved stake purchase or inward approved foreign investment, crises buy-outs, merger and amalgamation after High Court's approval/ nod. As already discussed in answer to Question No:5 additionally many other laws might have to apply at an earlier stage if harm is to be prevented – Telecom Acts/Rules/Regulations, GOI's policies, Licensing terms, Licensing agreements, The Competition Act, Contract Act, Arbitration and Reconciliation Acts, issues on Jurisdiction, are some that come to mind.

(8.2) We must accept that OTTs are useful in many ways and do not deserve to be criticized but admired. The TSPs can well decide to collaborate with willing OTTs...but to what extent will any OTTs share is the question...The TSPs can develop its own business models and a State Government/Central Govt./TSP must factor in the social responsibility angle by subsidising content be it data in any form. The revenue can be augmented from leased equipment, pay-as-you-operate, advertisement revenue, sponsorships, aids, donations and public-private hand shake ventures, among others. If the DTH operator can provide Video on demand (VoD) then mobile platforms can be improvised by the spectacular brains of this Great Nation to bring "*Sholay*" without splutters or "*Mann Ki Baath*" equally without splutters in a great resolution video format with audio at a cost that is reachable, affordable and watchable. That would be key to an OTT like ambience and a playing field that sees a worthy competitor in the TSPs for the OTTs.

(8.3) Regulations and Licensing might concentrate on crucial issues and it must be generally said that in fields of genetics, technology, telecom, etc, rapid innovations shape the destiny of industry and antiquated laws no longer hold attention, importance or serve any avowed objectives for which they were enacted but are resented on all fronts for economical or other reasons. In such a scenario they are even considered unnecessary, intrusive or white elephants or paper tigers. They are seen as impediments to progress, innovation, growth of economy and bring a sneer on the faces of advanced Nations. Be that as it may, regulations and licensing must not be totally absent or a *laisse faire* accorded to OTTs but these must accommodate many changes within, be dynamic and responsive, flexible, cost effective for India to adopt and be in the interests of the majority of the

populace to bring home data at high speeds, easy access at lesser or heavily subsidised costs - useful content, be it news, entertainment, sports, information, music, general knowledge or education.

Q.9 Are there any other issues that you would like to bring to the attention of the Authority?

Answer to Q.9

(9.1) The issues that require consideration are:-

(9.2) Data Protection Laws:

(9.2.1) Privacy, National Interests' Protection discussed earlier elaborately, location of a storage server in India also if payment is involved and data of this Citizens of this country are collected. Is there only a server outside this country or a "mirrored site" or is there is a server where our law enforcement can gain access.

(9.3) Jurisdiction:

(9.3.1) OTT must adhere to compliance and jurisdiction of Indian Laws with an established office, email address, web site, phone numbers duly updated, designated person to handle grievances, complaints and deal with law enforcement agencies. If the office is in Mumbai, a person in Indore should not be made to travel to Mumbai to redress his grievance as the internet can sort this out easily. Equally the person in Indore should be able to get any Judicial orders/other remedies from, and in Indore itself. The fine print in contracts exclude such convenient jurisdictional seats and that has to be watched as Justice should not only be freely accessible and convenient but not unduly tax or burden (even by travel) the affected under the overwhelming and overpowering pages of documentation that cleverly states...."come to Mumbai" under the Jurisdiction Clause.... this would be at a stage after the OTT has agreed and submitted to the regulatory framework of Indian Laws.

(9.3.2) The issues in jurisdiction spill over and afflict privacy preservation requirement and concerns addressable issues, the difficulty of law enforcement to investigate, access evidence and complete cases, due to any offence, crime, in tax issues, or otherwise in other domains, in a non co-operative or enemy nation status or "unfriendly" country or where there

are no treaties for mutual legal assistance treaties in cyber laws, cyber space, cyber security related matters.

(9.3.3) Data localisation under the Privacy laws are of some importance especially in sensitive personal data information or payments and settlements information where data must be stored locally, or sent out with permission, or with tax levied thereto for export of such data, with adequate actual backed up and up to date data that is not merely “mirrored” on some site outside the shores of this Nation. India must have an equivalent access to any virtual data in its interests such as CLOUD and be signatories to many conventions that are useful to its interests in its war against cyber crime.

(9.3.4) TRAI, I am sure, would press for such clauses and terms, as these would be acting in promoting the larger interests of the general public who also patronize OTTs content, application and offerings in large numbers.

(9.4) OTTs....should they be downgraded by the level playing field process so as to no longer “go-over-the-top” as in OTT and thereby become topless.....or share honours with TSPs...some issues....

(9.4.1) OTTs do send OTPs for authentication and if someone does not use the facility for long there is a OTP that is sought for “refreshing” the OTT’s memory in the interests of the user on one’s mobile phone. Now this same OTP might be used in payment transactions with no trace possibilities, jurisdictional hitches, no address, no- remedy- available- situation.

(9.4.2) Add to this the “Edit” options that are presented say on a map application where it is worthwhile for a, say food joint, to display its contact numbers. So far so good...that could also point to nearby locations where say, Mexican or Chinese cuisine is served...so far so good....overlay that “edit” option for a bank where people might be misguided if they don’t visit the official site and it is a difficult one to digest as “edited” and spurious contact numbers might induce people to part with OTP and sensitive financial information thereby causing loss. Can they not trust an OTT application from a reputed organization?

(9.4.3) A word on “Edit” options usage would be in order. Many users do not zoom in adequately over the map and thus misplace their “location pin” by wrong location pinpointing elsewhere. Wrong locations are presented and a person who relies on this is bound to be going to pay a very heavy taxi fare or be misled totally. It must be confessed that there are many

wonderful OTT map providers that are very accurate and useful with no names mentioned herein. The Geospatial Law is still pending and has to be revived in this dialogue of OTT who are also map provider OTTs offered as a “specialized map application”.

(9.4.4) TRAI is requested to seek/finalise a comprehensive Guidelines Paper on Safety in Banking Transactions in the light of OTT presence and scale/ramp up security parameters for existing TSPs also(despite regulations by RBI that concentrate on bank’s liability, payments and settlements system, time limits adherence for complaints and redressal process)

(9.4.5) In a way, these OTTs also must comply with the directions and regulatory guidelines/instructions/of the RBI as payments and settlements are involved and thereby join the regulatory/licensing bandwagon where payments are involved in all scenarios...unidirectional or bidirectional modes.

(9.4.6) At the tail end, if an amateur radio operator (HAMs) who operates and communicates with other HAMs on a prescribed radio assigned frequency and uses it for various disaster reporting, disaster aversion, warnings, information sharing and useful purposes requires approvals from the Telecom Authorities, Laws of the Land, The GOI and others and be lawfully licensed for HAM operations as the HAM has, and follows, norms such as – no advertisements, commercial and defamatory content, among others, should not an OTT require at least a minimalistic regulation/license/norms regimen?

I thank you for this opportunity,
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