

Comments on the TRAI Consultation Paper on OTT services- January 2019.

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.

VOIP, Internet Messaging, Conferencing, Internet Video and new Internet Services such as Alexa are services / applications that require Internet access. The Regulatory Authorities in various countries refer to some or all of these innovative Internet services as Over the Top Services with the connotation that these applications ride over the top of telecom networks for free, earn revenues by free ride. Nothing is farther from truth. Over The Top services are innovative services or applications that increasingly supercede traditional Telecom and traditional Cable TV services, but these are not services or applications that “ride free” on Telecom networks as the Telecom firms might claim.

The ‘transport’ and ‘transit’ of any Internet packets containing voice, video or text earn revenues for the Telecom networks and/or the Internet Service providers. By the prevailing patterns of Internet usage, it is the user who pays for the data metered for accessing these services. These so called Over the Top services do not ride free, and on the contrary, have expanded chargeable data usage exponentially. A significant proportion of Telecom revenues are earned by way of data usage charges collected from users who connect to the Internet to access the OTT services. The connotation of “free ride” arises from an unseen intent for an additional direct Telecom revenue stream from the OTT service providers.

Traditional phone call revenues have fallen but there is a more than proportionate increase in data revenues by the phone companies and the Internet Services providers. The telecom revenue pattern has changed, to the advantage of Telecom companies. It is the Internet which caused the telecom subscriber base to expand exponentially, from a mere 20 million 20 years ago to 1.2 billion today with about one quarter of a trillion rupees in total telecom revenue. Any argument that OTT hurts telecom or ISP services is misleading. On this count, OTT services ought NOT to be singled out for regulation.

Over the Top services are a small part of the vast Internet. It would be wise to move away from the disproportionate attention on OTTs. The sub-categorization as ‘OTTs’ and the regulatory focus would merely serve to offer more avenues for Telecom and ISP revenues; Telecom revenues ought not to be the concern of the Regulatory authorities. Continued focus on OTT would further pave way for arguments in favour separate revenue lanes for OTT traffic which would hurt the way the Internet works, especially by hurting network neutrality.

(There are some areas where attention to OTT services may be required, for instance Regulatory / Judicial attention to subscription models of OTT services, not necessarily within the framework of Telecom regulation, but by the general consumer protection framework. Such attention may have to independant of how OTT services fare with Telecom sector.)

India's Internet Policy could be framed from a broader perspective, rather than by narrow areas of focus such as OTT. More on this is stated in answer to question 9.

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.

OTT services are Internet applications that are innovations that are several fold richer; These services are not mere substitutes for traditional telecom / traditional cable services. These innovative enrichments have happened due to "Permissionless Innovation".

it would be an erroneous argument to consider OTT services to be in an advantageous position over Telecom firms. The opposite is true. Telecom firms are free to develop and offer OTT services due to the Permissionless environment on the Internet, while the Internet enterprises, big and small, are restrained from offering Telecom services due to the licensing and regulatory environment in the Telecom space. Parity would arise NOT by imposing licensing norms and regulations on OTT service providers, but by removing licencing barriers and streamlining regulations on Telecom services and Internet access infrastructure.

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.

Licensing norms and the overall regulatory framework in the Telecom sector, while achieving the overall regulatory objectives to a considerable degree, have also served to protect the sector as barricaded revenue territory for a few large players; This imbalance prevails unintended. If the regulatory and licencing excesses are removed, there would be a considerable inflow of investments from small and large Internet enterprises for network capacity expansion eventually resulting in near-total geographic coverage, urban and rural. Government's Spectrum policy, already eased for certain wavelengths, could be further altered, both to reduce the burdens of Telecom firms and to allow Community Networks to be created, as successfully as deployed already in various countries. Please see <http://bibliotecadigital.fgv.br/dspace/handle/10438/25696>

The telecom sector in many countries bundle together various different technological advances occurring in the course of the overall climate of technology, gathers the components together to bundle them by fancy names such as 4G and 5G, which become some form of distorted proprietary standards which artificially bloats up the cost of a few new technological advances. If regulatory authorities study this pattern of rather proprietary bundles, it would evident that there is a general artificial bubble on Telecom investments due to the choice of these standards and due to the pattern of rapid succession from one generation bundle to the next; On the contrary, Community Networks being deployed in many countries use open technologies at significantly low investments to offer better quality of Internet services.

Q.4 Would interoperability among OTT services and also interoperability 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.

Interoperability between OTT and TSPs, without artificial commercial stipulations by Telecom companies would enable OTT messaging / voice / video services to send and receive calls from telephones / mobile phones. Removal of operator initiated restrictions or regulatory bottlenecks on OTT communication platforms would have substantial socio-economic benefits for the country.

Interoperability between Telecom companies by way of peering/sharing of tower and other infrastructure would minimise the level of investments required for infrastructure and also would result in minimization of cellular tower radiation hazards which is an issue ignored by the Government's health and telecom authorities. Towers are too many, and dangerously low despite the fact that there are known radiation hazards.

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 justifications.

Both in the case of telecom networks / OTT service providers, Lawful interception, to an essential measure, may have to be directly carried out and controlled by Law and Order agencies, without any form of implicit partnerships or outsourcing arrangements; Interception, where necessary, could be carried out in an accountable manner, without unwittingly granting the ability to the networks/service providers to examine / accumulate and make use of any surveillance data.

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.

Yes. It is technically feasible for Internet communication applications to offer emergency services, to be encouraged as a good practice, not necessarily by regulation. Such capabilities built into these communication networks would enhance the network utility of their networks and value of their own OTT services. Also, such provisions would work far more effectively if Telecom networks remove restraints on interoperability of OTT services with their networks as already suggested in response to Q4.

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.

TSPs operate in an environment protected by the licensing framework and Spectrum Policy, which shuts out new players, local operators and most forms of competition to existing Telecom firms. Communication infrastructure requires more than Government - Telecom (Public-Private) contractual agreements in order to extend the networks for everyone, everywhere, always on, universally and affordably.

There is a myth surrounding Spectrum auctions. Why does the Governments of India and many other countries regard Spectrum revenue as of any significance? Or, why would the Governments consider it easier to regulate spectrum wholesale by restricting eligibility and affordability to 5-7 telecom firms, as in India? Barriers for obtaining Spectrum are too many, including that of reserve prices, bid qualification, required deposits, guarantees, and other forms of stone walls that restrict the availability of Spectrum to the Telecom cartels, in exchange for what amounts to a sum total inflow of a mere 1000 crores (INR) in revenues a year for a few years. The overall bid value is not always fully paid up, there might even be unseen and indirect concessions including possibly policy concessions that grant revenue boons that are not very wrong to be considered as indirect forms of cash-back. Spectrum allocations are made with provisions for the winners to subsequently trade the wavelengths licenced to them, which further makes the fee of what in effect amounts to INR 10 per connection per year commercially insignificant, yet acts as an aggressive barrier for new entrants. The phone companies pay INR 10 to the Government to shut out competition from other potential innovators.

If indeed the revenues are important, the Hon' Minister could examine possible ways of transitioning from the "wholesale" approaches of Spectrum Allocation, find ways of reallocation by Spectrum re-farming and even shift from a Quick Revenue approach to an innovative financial model of Spectrum Co-Investment, or small investments, for wider 'distribution' of Spectrum for possibly even higher, periodical revenues. If Spectrum allocation moves away from its 'wholesale' approach to "Spectrum User's fee" collected from users above a certain class of usage, the Spectrum Revenues could actually exceed the revenues earned by the present model of 'wholesale' auctions. The user's fee could be a part or percentage of the Service Provider's fee collected every month, and automatically be routed to the Spectrum Authority, by using banking and accounting technology the same manner as Google or ebay uses these technologies to collect small sums.

Such an approach would remove the Spectrum barrier for new entrants, especially small networks that could improve Internet access with minimal infrastructural costs both in Urban and Rural zones. Policy Innovations in Spectrum allocation would cause far reaching technological innovations to happen. At the same time, the regulatory objectives can also be equally or better achieved by moving away from a policy of restricted number of actors, by opening up the space for more entrants, big, small and charitable.

New technologies and innovations (such as use of Tethered balloons and other types of aerostats in high altitudes for beaming signals over a relative vast coverage area) have not been adopted as widely as could have been, because of archaic restrictions from building laws or tower height laws that do not adapt to positive changes in technology.

By innovative approaches that distinguish between users who afford communication fees and those who do not, a new Spectrum Policy could take the users beyond operator inflicted service disruptions and keep all users connected for a lifetime at least for basic communications such as voice and short text messages, regardless of their ability to afford periodic payments. Such provisions for liberal data needs to go beyond the 100 MB norm to gigabyte standards.

Such an approach may even be designed as a Zero Sum Game:

1. If Spectrum is fully opened up or re-farmed, Telecom companies may have considerable relief from future spectrum commitments
2. Changes in Spectrum policy would cause the ripple effect of shared Investments in new technology, more infrastructure and new equipments, and even in related spaces such as new submarine cable / satellite equipment to minimise burdens of future investments for individual telecom firms, who find changes in Technology too swift to allow time to recover investments from technology already deployed.
3. The policy could cause the Telecom companies, smaller players and community networks to embrace a new and more generous telecom peering architecture, including the possibility of a new eco-system wherein a telecom company wouldn't actually require its own tower where another telecom company's tower and equipment are already in place.
4. New opportunities would arise from new business models (revenues from re-distribution of spectrum acquired by past auctions, some revenues from sharing towers and equipment, revenues from providing wholesale connectivity, revenues from stratospheric infrastructure (Shared stratospheric infrastructure such as balloons placed in orbit by one company could feed and draw from multiple telecom providers)

If the policy changes so as to allow the required flexibility, it would bring in more players to the business / service of Communication and several disruptive innovations would see light, for the benefit of the greatest common good.

By bringing about necessary innovations in Spectrum Policy, the Government would actually be fostering a new class of investments, beyond Private investments, beyond public-private partnerships - a new class of social enterprise stakeholder investments.

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.

In an unregulated environment, OTT service providers would compete with one another to innovate more; Users may only require an approachable and effective redressal environment to ensure fairness. This input actually favours relaxation of existing licensing conditions and more of deregulation for Telecom service providers. The idea of subjecting OTT services to a

licencing regime would reverse progress. Internet works in a certain way, which ought not to be altered.

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

TRAI's recent regulatory announcements disallowing discriminatory tariffs for data services exemplify some of TRAI's fair regulatory measures. More to be done. A lot more to be done. Historically, TRAI's regulations unwittingly established barriers for potential new entrants, amounting to protection for established telecom companies, rather than due restraints or regulation of the Telecom sector, due to the challenges related to size and the significantly influential position of the Telecom sector which deterred regulatory fairness. One of the regulatory gaps pertain to the inability to understand the patterns of small sum telecom revenues that add up to huge stream of periodic revenues in a setting of perceived infallible standards in services with such exactness that obviate consumer access to the service provider except through make-believe customer support by inhouse or external BPOs that kept the companies at an unapproachable distance, and the near absence of any form of consumer redressal processes for due remedies and fair penalties of any impact. If the Ministry closely examines the intricacies in Telecom revenue pattern, it would become evident that Telecom licencing has so far worked in a manner of granting an interference free permit to collect small sums from a billion users unchallenged. The overtures by Telecom companies for OTT regulation and certain forms of regulatory forays into Internet space are aimed at expanding the scope of revenues by devising patterns to earn larger small sums more frequently.

During 1984 the Government of India opened up the automobile sector by announcing its broadbanding policy to break away from the inertia that resulted from the automobile policy of the era. The policy caused tremendous progress. This Government, with its varied strengths is perhaps addressing several problems that defy solutions, such as interlinking of rivers which is an issue referred here way beyond the scope of this Telecom consultation. The telecom space is a policy space of as much challenges with different layers of complexity. The Government could summon its varied strengths to cause a transformation in this sector on a scale as impactful as that of broadbanding the automobile policy.

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