

# Response to the Consultation Paper on Regulatory Framework for Over-The-Top (OTT) Communication Services

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By Gurshabad Grover, Nikhil Srinath and Aayush Rathi with inputs from Anubha Sinha and Sai Shakti

The Centre for Internet and Society, India

### **Preliminary**

This submission presents a response by individuals working at the Centre for Internet & Society (CIS) to the Telecom Regulatory Authority of India's "Consultation Paper on Regulatory Framework for Over-The-Top (OTT) Communication Services" (hereinafter "TRAI Consultation Paper") released on November 12, 2018 for comments.

CIS appreciates the continual efforts of Telecom Regulatory Authority of India (TRAI) to have consultations on the regulatory framework that should be applicable to OTT services and Telecom Service Providers (TSPs). CIS is grateful for the opportunity to put forth its views and comments.

Addendum: Please note that this document may differ in certain sections from the submission emailed to TRAI: this document was updated on January 9, 2019 with design and editorial changes to enhance readability. Additionally, the responses to Q5 and Q9 have been updated to be more comprehensive.

#### **Issues for consultation**

Q1. 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.

While there is no internationally-agreed upon definition of OTT services, they are generally understood to be internet applications and services that are accessed "over the top" of networks by end users through their internet connections.<sup>2</sup> There are several challenges in making a clear demarcation of what OTT services fall within the purview of "same or similar to the services provided by TSPs"<sup>3</sup>: while we believe that that functionality plays a significant role in determining regulation,<sup>4</sup> there are several factors that must considered for a comprehensive regulatory framework based on functionality.

First, the GSMA's report on such a regulatory framework acknowledged that "a functionality-based approach recognises that differences in technology may require different regulatory treatment to achieve a common objective." To meet the objectives of enabling

<sup>&</sup>lt;sup>1</sup> "Consultation Paper on Regulatory Framework for Over-The-Top (OTT) Communication Services", Telecom Regulatory Authority of India (2018),

<sup>&</sup>lt;a href="https://trai.gov.in/consultation-paper-regulatory-framework-over-top-ott-communication-services">https://trai.gov.in/consultation-paper-regulatory-framework-over-top-ott-communication-services</a>

<sup>&</sup>lt;sup>2</sup> Also see "White Paper on Smart Regulation for OTT Growth", Asia Internet Coalition (2015) which identified that OTT services "comprise the application layer of the Internet and are distinct from the network layer".

<sup>&</sup>lt;sup>3</sup> 1.3.1, TRAI Consultation Paper (2018), pg. 3.

<sup>&</sup>lt;sup>4</sup> 5.1.3. TRAI Consultation Paper (2018), pg. 33.

<sup>&</sup>lt;sup>5</sup> "A new regulatory framework for the digital ecosystem", GSMA (2016),

<sup>&</sup>lt;a href="https://www.gsma.com/publicpolicy/wp-content/uploads/2016/09/GSMA2016">https://www.gsma.com/publicpolicy/wp-content/uploads/2016/09/GSMA2016</a> Report NewRegulator <a href="https://www.gsma.com/publicpolicy/wp-content/uploads/2016/09/GSMA2016">https://www.gsma.com/publicpolicy/wp-content/uploads

secure communication for millions of Indians and maintaining a competitive and fair market that facilitates such communication, we similarly recommend that categorisation of services should not be agnostic to the underlying technology and infrastructure enabling such services. To determine these technological categories, we recommend adopting a two-layered approach as was also recommended in the joint-CIS response to the 2015 TRAI Consultation Paper on the same subject<sup>6</sup>. Briefly summarised, the first layer is the network layer consisting of the network and infrastructure; and the second layer is the service layer consisting of applications and services. The services in the second layer can further be refined into three categories: (i) services provided over a non-Internet Protocol (IP) based architecture; (ii) specialised services<sup>7</sup> that are provided over an IP based architecture in a closed network including facility-based services; (iii) IP-based services.

So, even for services such as instant messaging and VoIP calls that may be regarded as functionally equivalent to SMS and voice calling respectively, TRAI must adequately consider the technological differences before categorising certain OTT services as the same or similar as communication services offered by TSPs.

Second, as the TRAI Consultation Paper notes, OTT services also offer several features in addition to a number of other features not available in TSP communication services.<sup>8</sup> Applying the proposed European Union test of categorising OTT services as not similar to TSP communication services, i.e. based on whether communication features constitute a "minor ancillary feature that is intrinsically linked to another service", is in our opinion, a difficult test to administer in practice as (i) applications on the service layer can be quickly modified as to show the various additional features as the primary service; and (ii) due to the relatively low cost of switching to other unregulated OTT platforms, such regulation will be quickly rendered inoperative. (We highlight these challenges in the second question)

Third, such a framework will not be agnostic to the difference in the properties of communication services offered by OTT services and traditional TSP services. Even when advocating for regulation based on functionality, the GSM Association's report on the topic noted that "regulatory policy should be designed to achieve [desired objectives such as] protecting privacy promoting universal adoption, providing incentive for investment and innovation [...] in the most efficient way [...]". In this regard, we note that while certain OTT

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<sup>&</sup>lt;sup>6</sup> "Response to TRAI Consultation Paper on Regulatory Framework for Over-the-Top (OTT) Services", Center for Internet and Society (2015),

<sup>&</sup>lt;a href="https://cis-india.org/internet-governance/resources/net-neutrality/2015-03-27">https://cis-india.org/internet-governance/resources/net-neutrality/2015-03-27</a> cis trai-submission regulation-OTTs>

<sup>&</sup>lt;sup>7</sup> See "What are specialised services and how are they relevant to the Regulation?", Body of European Regulators for Electronic Communications,

<sup>&</sup>lt;a href="https://berec.europa.eu/eng/netneutrality/specialised\_services/">https://berec.europa.eu/eng/netneutrality/specialised\_services/</a>

<sup>&</sup>lt;sup>8</sup> See, for instance, "Features, Whatsapp (2018), < <a href="https://www.whatsapp.com/features/">https://www.whatsapp.com/features/</a>; "Signal Messenger Features", Signal (2018),

<sup>&</sup>lt;a href="https://support.signal.org/hc/en-us/sections/360001602792-Signal-Messenger-Features">https://support.signal.org/hc/en-us/sections/360001602792-Signal-Messenger-Features</a>:

A number of rich interactive distinct features such as group messaging, recorded voice messages, and sharing of documents with arbitrary file formats are possible through platforms.

<sup>&</sup>lt;sup>9</sup> 1.3.1, TRAI Consultation Paper (2018), pg. 3.

services that appear to be functionally equivalent to communication services offered by TSPs, popular OTT services offer much great privacy protections in communication.<sup>10</sup>

With all these considerations in mind, it may be argued that the majority of OTT services are not "same or similar to the services provided by TSPs".

Q2. 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.

As elaborated upon in the response to the first question, there exist differences between traditional services such as SMS and voice calling offered by TSPs versus ostensibly substitutable OTT services. These differences may imply that some services may not necessarily be functionally equivalent, which would prevent the practical application of the test of substitutability in certain cases. The pace at which these services are developing and introducing new and innovative features must also be observed in this regard. It is pertinent to note that certain OTT services offer a multitude of services that may be similar or functionally equivalent to the services offered by TSPs on a single platform which has rightly been identified by TRAI as an issue of importance.<sup>11</sup>

For instance, the EU Commission's definition of "interpersonal communication service" excludes aggregated platforms "which enable interpersonal and interactive communication merely as a minor ancillary feature that is intrinsically linked to another service". While this definition does provide certain insight into functional overlaps between OTT sand TSP services, it does not adequately address the issue of multiplicity of functions that OTTs perform. If it were determined that a certain service falls within the ambit of the abovementioned definition, then the service might attempt to redesign itself so that the communication aspect forms only an ancillary part of a much larger aggregated platform. Additionally, given the extremely low cost of switching OTT applications, the application of regulation based on such a definition could spark the movement of users from secure communication platforms to other platforms which escape the definition but offer less secure communication.

It is also imperative to contexualise the cost of enforcement of such regulation. As the AIC White paper identified:

<sup>&</sup>lt;sup>10</sup> See, for instance, "WhatsApp Security", WhatsApp Inc. (2018),

<sup>&</sup>lt;a href="https://www.whatsapp.com/security/">https://www.whatsapp.com/security/</a>; "Technical Information", Signal (2018),

<sup>&</sup>lt;https://signal.org/docs/>

<sup>&</sup>lt;sup>11</sup> 2.2.8. TRAI Consultation Paper (2018), pg. 8.

<sup>&</sup>lt;sup>12</sup> TRAI Consultation Paper (2018), pg. 6. *citing* "Proposal for a Directive of the European Parliament and of the Council Establishing the European Electronic Communications Code", European Commission, <a href="http://eur-lex.europa.eu/resource">http://eur-lex.europa.eu/resource</a>.

"In particular, [...] additional OTT regulation would fragment the global Internet, resulting in irrevocable harm to the Internet's openness and innovation Additionally, the global nature of the Internet means that compliance and enforcement of OTT regulation would be difficult, if not impossible, without significant costs to governments." <sup>13</sup>

Unlike the telecom industry which is inextricably linked to physical infrastructure and local activity, the internet has emerged as a worldwide platform that allows people to access applications developed from the other side of the world. The rise of open source software and ease of entry signifies the extremely competitive and global nature of the OTT service market. Imposing a legacy regulatory framework that is characterized by large barriers of entry and specific local requirements is ill suited to dynamic and emerging OTT services. It also acts as an obstacle to innovation, which in turn affects economic growth and access to services on the internet. In conclusion, in the absence of functional certainty of OTT services, it is recommended that the TRAI reconsider the applicability of substitutability in the comparison of OTT services and communication services provided by TSPs. In this light, TRAI should avoid similar regulatory or licensing norms for TSPs and OTT service providers.

Q3. 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.

We disagree with the proposition that regulatory and licensing imbalance has impacted investments in telecom networks for the purposes of network capacity expansions and upgradation of technology. The free rider/cost sharing argument is based on the idea that all OTT service providers must use operators' networks in order to deliver their services. As TRAI has identified, it is the TSP that will have to make investments into the telecom infrastructure in order to accommodate the increase in demand for data traffic. It is also true that in certain cases an OTT service may explode in popularity which necessitates an upgradation of technology or enhancement of capacity of the network. However, the assumption that OTT providers do not contribute in any way to the expansion of network infrastructure is incorrect.

First, OTT providers also invest directly towards network infrastructure. According to an Analysys Mason report released in December 2018, OTT providers' (communication and otherwise) investment in infrastructure has exceeded USD 75 Billion on average per year

<sup>&</sup>lt;sup>13</sup> "White Paper on Smart Regulation for OTT Growth", Asia Internet Coalition (2015), <<a href="https://www.aicasia.org/wp-content/uploads/2015/10/AIC-White-Paper-on-OTT Final2.pdf">https://www.aicasia.org/wp-content/uploads/2015/10/AIC-White-Paper-on-OTT Final2.pdf</a>>
<sup>14</sup> 3.2.6, TRAI Consultation Paper (2018), pg. 13.

since 2014. This amount is equivalent to around 20% of the total capital investments made by all telecom providers worldwide.<sup>15</sup>

Second, the fact that OTT services also contribute to an operator's growth has been acknowledged by the consultation paper itself. The CIS response to the 2015 TRAI Consultation on the same subject also observed that with regard to the proposition that the growth of OTT services has resulted in reduced incentive for TSPs to roll out network infrastructure, empirical evidence suggested a contrary inference and that TSPs "continued to invest in LTE/UMTS networks on a large scale despite substitution of facility based voice services by internet based services." TSPs earn revenues from the tariffs and fees paid by customers, either based on the speed or amount of data consumed. Subscribers will purchase more expensive and comprehensive plans in order to access an array of OTT services. This revenue increases along with the growth in traffic experienced by the TSP.

OTT services increase the value of the TSPs networks, as they offer content that boosts demand for internet services. As consumers use more bandwidth-intensive OTTs, such as video streaming, cloud services and video conferencing, they pay for higher tiered services, in terms of faster speeds and greater amounts of bandwidth, which operators price at a premium. Therefore, the OTT services on the service layer provide value to the underlying infrastructure of the network layer, without which, there would be limited benefits to be enjoyed from networks interconnecting with the internet. Therefore, it is false to say that the growth of OTT services has negatively impacted infusion of investments in telecom networks.

As noted in the TRAI Consultation Paper, there is an ongoing shift from the traditional voice and communication services offered by TSPs to internet-based interpersonal communication services.<sup>20</sup> As the aforementioned evidence suggests, this does not impact their incentives to roll out infrastructure. In this context, it may be noted that the role of TSPs may concominantly be shifting from as provider of network infrastructure and communication

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<sup>&</sup>lt;sup>15</sup> "Infrastructure Investment by Online Service Providers", Analysys Mason (2018),

<sup>&</sup>lt;a href="http://www.analysysmason.com/contentassets/7f0a13bfc9744806ae8424c4df834ba1/infrastructure-in-vestment-by-online-service-providers---20-dec-2018---web.pdf">http://www.analysysmason.com/contentassets/7f0a13bfc9744806ae8424c4df834ba1/infrastructure-in-vestment-by-online-service-providers---20-dec-2018---web.pdf</a>

<sup>&</sup>lt;sup>16</sup> 3.1 TRAI Consultation Paper (2018), pg.11.

<sup>&</sup>lt;sup>17</sup> "Response to TRAI Consultation Paper on Regulatory Framework for Over-the-Top (OTT) Services", Center for Internet and Society (2015),

<sup>&</sup>lt;a href="https://cis-india.org/internet-governance/resources/net-neutrality/2015-03-27">https://cis-india.org/internet-governance/resources/net-neutrality/2015-03-27</a> cis trai-submission regulation-OTTs>, pg. 7.

<sup>&</sup>lt;sup>18</sup> "White Paper on Smart Regulation for OTT Growth", Asia Internet Coalition (2015),

<sup>&</sup>lt;a href="https://www.aicasia.org/wp-content/uploads/2015/10/AIC-White-Paper-on-OTT\_Final2.pdf">https://www.aicasia.org/wp-content/uploads/2015/10/AIC-White-Paper-on-OTT\_Final2.pdf</a>, pg. 8.

<sup>&</sup>lt;sup>19</sup> "Response to TRAI Consultation Paper on Regulatory Framework for Over-the-Top (OTT) Services", Center for Internet and Society (2015),

<sup>&</sup>lt;a href="https://cis-india.org/internet-governance/resources/net-neutrality/2015-03-27">https://cis-india.org/internet-governance/resources/net-neutrality/2015-03-27</a> cis trai-submission regulation-OTTs>, pg. 8.

<sup>&</sup>lt;sup>20</sup> 3.3, TRAI Consultation Paper (2018), pg.13.

services to primarily as a network infrastructure provider. Developments since 2016 also show that TSPs are aware of these developments, and understand such a shift in their role.<sup>21</sup>

Q4. 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.

As the TRAI consultation paper points out, there is a disparity in regulation of TSPs and OTTs when it comes to interoperability. Termination of voice calls to fixed or mobile networks is highly regulated in nearly all developed countries as a result of perceived network operator market power over the telephone number.<sup>22</sup> In India, TSPs are required to "provide interconnection between the networks of different service provider for carrying circuit switched traffic."<sup>23</sup> On the other hand, there are no obligations for OTT services to be interoperable with each other.

As we point out in the answer to Q1, there are a variety of features offered by OTT services, and these are not necessarily comparable with those offered by similar OTT services. The quick evolution possible at the application layer also enables providers of OTT services to change the software architecture of their products, and the communication protocols and standards their products use. This renders most OTT services un-interoperable in practice.

Even for OTT services which can be technically developed in a way as to enable interoperation, there is a significant cost to interoperability: stymying of innovation and product development.<sup>24</sup> A Specialist Group for Regulatory Issues of the Bundesnetzagentur (Federal Network Agency of Germany) recommended in 2016 against the imposition of regulatory obligations with respect to interoperability and interconnection of OTT-1 services: <sup>25</sup> it recognised that one of the main points that drives competition in the OTT service sector is the high degree of product differentiation, whereas services such as voice telephony and SMS are characterised by a high degree of product homogeneity. Imposing a regulation that mandated interconnection would have a negative impact on the diversity of OTT services.

<sup>&</sup>lt;sup>21</sup> "Jio Turns One: 10 Ways the Indian Telecom Industry Changed After Jio Started Operations", NDTV (2017),

<sup>&</sup>lt;a href="https://gadgets.ndtv.com/telecom/features/jio-10-ways-the-indian-telecom-industry-changed-after-jio-started-operations-1746342">https://gadgets.ndtv.com/telecom/features/jio-10-ways-the-indian-telecom-industry-changed-after-jio-started-operations-1746342</a>

<sup>&</sup>lt;sup>22</sup> "Over-the-Top (OTTs) players: Market dynamics and policy challenges", Directorate General For Internal Policies, European Parliament (2015),

<sup>&</sup>lt;a href="http://www.europarl.europa.eu/RegData/etudes/STUD/2015/569979/IPOL\_STU(2015)569979\_EN.pdf">http://www.europarl.europa.eu/RegData/etudes/STUD/2015/569979/IPOL\_STU(2015)569979\_EN.pdf</a>

<sup>&</sup>lt;sup>23</sup> Cl 27 of the UL and Cl 26 of the UASL as cited in 4.1.7, TRAI Consultation Paper (2018), pg.20.

<sup>&</sup>lt;sup>24</sup> See Reflections: The ecosystem is moving, Moxie Marlinspike, Signal Blog (2016), <a href="https://signal.org/blog/the-ecosystem-is-moving/">https://signal.org/blog/the-ecosystem-is-moving/</a>

<sup>&</sup>lt;sup>25</sup> "Regulatory issues relating to OTT communication services", Specialist Group for Regulatory Issues of the Bundesnetzagentur (2016), pg.8.

Mandating interoperation for OTT services may also not be prove to be as effective as a tool for regulation in the space as it is for TSP communication services, because consumers can access and use multiple OTT communication services at once. A European Parliamentary Research Service report also noted that non-interoperability of OTT services would not be as much of an issue as compared to a standard telephone service, because "it is easy enough for a user to download multiple free apps."<sup>26</sup> Also, from the perspective of a consumer, the idea to establish a level playing field by an interoperability obligation is in conflict with consumers' established social consensus of how they use the seams between different communication channels and services to negotiate their social ties. Removing these seams is likely to confuse or potentially harm consumers.<sup>27</sup> Additionally, different channels of communication may signify urgency or importance, and may even add meaning depending on the situation.<sup>28</sup>

Thus, we do not believe that mandating interoperability is the currently an appropriate course of action in order to enable competition and increase benefits accorded to users. We would like to suggest against imposing such obligations of interoperability with regard to the above considerations. While interoperability might be a practical option at a later stage to counter the dominance of certain players in the OTT services market, at the current moment, we do not see any necessity to mandate interoperability of OTT communication services, especially in the context of comparison with services offered by TSPs.

Q5. 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.

As the TRAI consultation paper points out, there are different obligations on OTT service providers and TSPs vis-a-vis lawful interception of communication. While both TSPs and OTT service providers are governed by Section 69 and Section 69B of the Information Technology Act, 2000 read with the Information Technology (Procedure and Safeguards for Interception, Monitoring and Decryption of Information) Rules, 2009 as well as the Information Technology (Procedure and Safeguards for Monitoring and Collecting Traffic Data or Information) Rules, 2009 in this respect, TSPs are additionally required to comply with the requirements mandated under Section 5 of the Telegraph Act and the Unified Access Services (UAS) License Agreement. The UAS License Agreement *inter alia* obliges TSPs to interconnect their networks

<sup>&</sup>lt;sup>26</sup> "Regulating electronic communications: A level playing field for telecoms and OTTs?", European Parliamentary Research Service (2016), pg. 5.

<sup>&</sup>lt;sup>27</sup> "All Communications Services Are Not Created Equal – Substitution of OTT Communications Services for ECS from a Consumer Perspective", Arnold, René & Schneider, Anna & Hildebrandt, Christian. (2016).

<sup>&</sup>lt;sup>28</sup> Couples' Communication Channels: What, When & Why? In Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems, Cramer, H., & Jacobs, M. L. (2015) (pp. 709-712)

with the Central Monitoring System (CMS) so as to facilitate the interception of communication by governmental authorities in a centralised and automated fashion. The Centre for Internet and Society has previously written about the concerns about the operation of the CMS.<sup>29</sup>

We submit that placing the same burden on OTT service providers will be technically ill-founded as OTT service providers may not be technically capable of honouring a mandate (as it exists in its current form) to physically connect to the CMS owing to a possible absence of local infrastructure, a prerequisite for interconnecting with the CMS.

Moreover, the entirety of the aforementioned legal framework governing surveillance needs to be reassessed in light of the Supreme Court of India recognising the right to privacy as a constitutionally protected right as an intrinsic part of the right to life and personal freedom accorded under Article 21 of the Constitution of India and other freedoms guaranteed under Part III of the Constitution.<sup>30</sup> The Supreme Court further recognised informational privacy as a "facet of the right to privacy"<sup>31</sup>. The legal framework, as it stands, places surveillance measures within the sole domain of the executive with no ex-ante or ex-post parliamentary or judicial oversight. The surveillance law, then, is bereft of adequate accountability and transparency mechanisms and "is not just a gap that is deleterious in practice but, post the judgment of the Supreme Court in Puttaswamy, potentially unconstitutional"<sup>32</sup>.

In conclusion, we submit that regulatory parity between TSPs and OTT service providers cannot be achieved by placing the requirements mandated to be met by TSPs upon OTT service providers. The foremost step would be to urgently initiate reform of the requirements encumbered upon both TSPs and OTT service providers. The specific eccentricities of the manner in which OTT services are developed and operationalised vis-a-vis the functioning of TSPs (as outlined in the response to Q1. above) would then need to be factored in before formulating separate regulations for TSPs and OTT service providers. While that may be a longer drawn process, in the interim, the TRAI can initiate deregulation of the onerous requirements placed upon the TSPs.

<sup>&</sup>lt;sup>29</sup> "India's Central Monitoring System (CMS): Something to Worry About?", Maria Xynou, Centre for Internet and Society (2014),

<sup>&</sup>lt;a href="https://cis-india.org/internet-governance/blog/india-central-monitoring-system-something-to-worry-about">https://cis-india.org/internet-governance/blog/india-central-monitoring-system-something-to-worry-about</a>

<sup>&</sup>lt;sup>30</sup> K.S. Puttaswamy and Ors. v. Union of India and Ors [W.P.(C). No. 494/2012]

<sup>&</sup>lt;sup>31</sup> K.S. Puttaswamy and Ors. v. Union of India and Ors [W.P.(C). No. 494/2012]

<sup>&</sup>lt;sup>32</sup> Committee of Experts under the Chairmanship of Justice B.N.Srikrishna, "A Free and Fair Digital Economy, Protecting Privacy, Empowering Indians",

<sup>&</sup>lt;a href="http://meity.gov.in/writereaddata/files/Data\_Protection\_Committee\_Report.pdf">http://meity.gov.in/writereaddata/files/Data\_Protection\_Committee\_Report.pdf</a>

## Q6. 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.

As the TRAI has rightly identified, there is a disparity between the obligation to make provisions for emergency services between TSPs and OTT service providers.<sup>33</sup> TSPs are required to provide independently or through mutually agreed commercial arrangements with other TSPs all public utility services as well as emergency services whereas no similar obligation exists on OTT service providers. The 2015 CIS response also identified that this issue contained a regulatory imbalance.

It should be first noted that Government bodies and emergency service operators can already join OTT services as normal participants. In the cases wherein this is not possible or is considered insufficient for the purpose, we believe that appropriate regulation can be considered wherein OTT services that reach a certain number of users could be mandated to provide access to emergency services.

The BEREC report on OTT services identified different methods through which a regulation may be applied in this regard,<sup>34</sup> which the TRAI can consider.

However, there are other considerations that must also be made before imposing an obligation to provide access to emergency services. The obligation has cost implications that might affect the free and competitive conditions.<sup>35</sup> For example, in the US, providers of VoIP services between telephones with numbers (such as Vonage) were subjected to the same emergency services obligations as traditional telephone companies. This obliged them to acquire access to the emergency control centres – which, however, was available only from traditional telephony incumbents, who had no motivation to make the access available at a cost based price. This FCC rule therefore had the effect of nearly exterminating this segment of the US VoIP market.<sup>36</sup> The obligation must also consider non-voice communication platforms such as text messaging based OTT services, and determine the willingness of public safety answering staff to support non-voice communication forms. Text communication takes longer than voice communication and also cannot reliably transmit background noises or the state of agitation of the person calling.<sup>37</sup>

<sup>&</sup>lt;sup>33</sup> 4.1.9, TRAI Consultation Paper (2018), pg.20.

<sup>&</sup>lt;sup>34</sup> Report on OTT Services, BEREC (2016), pg. 23.

<sup>&</sup>lt;sup>35</sup> "Regulatory issues relating to OTT communication services", Specialist Group for Regulatory Issues of the Bundesnetzagentur (2016), pg.20.

<sup>&</sup>lt;sup>36</sup> "Over-the-Top (OTTs) players: Market dynamics and policy challenges", Directorate General For Internal Policies, European Parliament (2015),

<sup>&</sup>lt;a href="http://www.europarl.europa.eu/RegData/etudes/STUD/2015/569979/IPOL\_STU(2015)569979\_EN.pdf">http://www.europarl.europa.eu/RegData/etudes/STUD/2015/569979/IPOL\_STU(2015)569979\_EN.pdf</a>, pg. 94.

<sup>&</sup>lt;sup>37</sup> Regulatory issues relating to OTT communication services, Specialist Group for Regulatory Issues of the Bundesnetzagentur (2016), pg. 20.

Therefore, the TRAI must carefully balance considerations of whether imposing the obligation is worth the cost implications and outreach achieved.

Q7. 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.

We understand TRAI's concerns regarding a non-level playing field between OTT providers and TSPs providing similar services. The argument with regard to the level playing field is that OTTs provide the same services as traditional operators, but are not subject to the same licensing and regulatory obligations, including reporting, interconnection, lawful interception, consumer protection and other requirements. According to this argument, such OTTs gain an unfair market advantage because they do not pay regulatory fees or taxes, are not required to provide the same level of service quality and do not incur significant costs related to regulatory compliance.<sup>38</sup>

As pointed in the response to Q.3., the trend of rising internet usage and changing roles of TSPs must be acknowledged. There are also certain other considerations that must be taken into account before imposing any regulation seeking to level the playing field. Firstly, one must note the differential structure of the markets in which TSP services and OTT services operate. TSPs are usually marked by high barriers to entry, whereas internet applications have low barriers to entry and face fierce global competition. Secondly, TSPs offer services on a country-wide basis, while internet applications are global in nature. Any policy decision aimed at establishing a level playing field must instead be aimed at establishing reasonable regulatory parity between the obligations imposed on OTT service providers and TSPs.

However, in order to establish this parity, the TRAI may also consider deregulation. Bahrain's Telecommunications Regulatory Authority (TRA) in 2014 advocated against OTT licensing and regulation in its Study on Policy and Framework for Governing Internet Applications. Among the TRA's conclusions was that, rather than imposing additional regulations on OTTs, it should review existing regulatory obligations placed on network operators and remove those obligations that impede operators' ability to respond appropriately to the competitive challenges they face (e.g., tariff regulation).<sup>39</sup>

Also, it is necessary that both the TSPs service layer and network layer commitments be kept in mind while considering the implementation of deregulation. TSPs offer critical infrastructure that the public must be made to access, which has to be taken into account while making a policy decision. In order to establish a level playing field, reasonable

<sup>&</sup>lt;sup>38</sup> "White Paper on Smart Regulation for OTT Growth", Asia Internet Coalition (2015),

<sup>&</sup>lt;a href="https://www.aicasia.org/wp-content/uploads/2015/10/AIC-White-Paper-on-OTT\_Final2.pdf">https://www.aicasia.org/wp-content/uploads/2015/10/AIC-White-Paper-on-OTT\_Final2.pdf</a>, pg. 5.

<sup>&</sup>lt;sup>39</sup> Policy and Regulatory Framework for Governing Internet Applications, Telecommunications Regulatory Authority (2014)

regulatory parity may be sought to be introduced, by a mix of light regulation on OTT services and certain deregulatory measures concerning TSPs.

Q8. 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.

We agree with the DoT Committee on Net Neutrality's Report which recommended the active encouragement of OTT application services and the removal of obstacles in the way of their expansion and growth. <sup>40</sup> It is also crucial to recall the operational differences between the traditional services offered by TSPs and OTT services as pointed out in the responses to earlier questions. As such, we would like to recommend against simply extending the application of legacy regulation to OTT services. The TRAI must also consider what regulations may be applied to different types of OTT communication services, such as text based and voiced based platforms.

The TRAI may consider making recommendations in certain areas in order to establish reasonable regulatory parity. For instance, the Telecom Commercial Communications Customer Preference Regulations, 2018 provide standards with respect to Unsolicited Customer Communication (UCC). Under the same, only subscribers registered with an access provider for the purpose of sending commercial communications may send UCC.<sup>41</sup> Further, each access provider is required to maintain a Customer Preference Registration Facility(CPRF) that records customer consent and granular preferences with respect to receiving commercial communication.<sup>42</sup> With regard to OTT services, there is currently no regulation with regard to UCC. As the TRAI has identified, OTT services may provide the user with the capability to block or report the sources of UCC.<sup>43</sup> The 2015 CIS response identified UCC and spam as an area that contained a regulatory imbalance between OTT services and TSPs. However, after concluding that the mandate of regulating spam was with the Parliament, it suggested that TRAI only make recommendations in this regard.<sup>44</sup> The TRAI may consider making recommendations aimed at maximizing user control over the communications they receive.

There is a difference in the obligations imposed on TSPs and OTT services with regard to Customer Acquisition forms and user verification. However, once again, the different layers at

<sup>&</sup>lt;sup>40</sup> 3.3.6, TRAI Consultation Paper (2018), pg. 16.

<sup>&</sup>lt;sup>41</sup> Section 3, Telecom Commercial Communications Customer Preference Regulations, 2018.

<sup>&</sup>lt;sup>42</sup> Section 5, Telecom Commercial Communications Customer Preference Regulations, 2018.

<sup>&</sup>lt;sup>43</sup> 4.5, TRAI Consultation Paper (2018), pg.25.

<sup>&</sup>lt;sup>44</sup> Response to TRAI Consultation Paper on Regulatory Framework for Over-the-Top (OTT) Services, Center for Internet and Society (2015), pg. 28.

which these providers operate must be considered. As TSPs also operate at the network layer, it is possible to effectively and adequately verify the bonafides of the customer. However, most service layer platforms offer their services without the means of tying a user's physical identity with their virtual existence. OTT services that bind their users to a network level identification such as a phone number may adequately address these obligations. However, the TRAI must consider if imposing such standards on OTT services is practical considering the means at the disposal of the providers and possible compliance costs.

With respect to Quality of Services (QoS), TSPs are required to meet the standards prescribed by the TRAI and risk financial disincentives in case of non compliance.<sup>47</sup> However, OTT services operate mainly on user feedback, and do not have any prescribed standards of QoS. The TRAI may consider coming up with certain voluntary standards that may be adopted by OTT services with respect to QoS. The TRAI must be mindful that these standards do not impose heavy obligations that heighten the entry barrier to the OTT services market, even if the obligation is merely voluntary.

TSPs are required to maintain certain grievance redressal mechanisms as per the license conditions and the Telecom Consumers Complaint Redressal Regulations, 2012.<sup>48</sup> The license requires TSPs to quickly respond to customer complaints and rectify issues within the mean time to restore. The regulations require TSPs to have a complaint resolution centre that can be accessed on a toll free number, which must resolve complaints within the time frame specified by TRAI. OTT services on the other hand, usually employ means through which the user may report a grievance either through the app or otherwise. The TRAI may consider coming up with a model consumer grievance redressal mechanism that may be adopted by OTT services at a low compliance cost, and which does not significantly affect the competitive nature of the market.

In conclusion, we recommend that any licensing or regulatory conditions sought to be made applicable to OTT services must be redefined in the context of several considerations, such as the different layers at which the services operate and the vastly different nature of TSP and OTT services markets.

#### Q9. Are there any other issues that you would like to bring to the attention of the Authority?

As highlighted in the CIS response to the 2015 TRAI Consultation Paper on the same subject, the framing of issues is an important part of policy development and consultation.<sup>49</sup> We

<sup>&</sup>lt;sup>45</sup> 4.1.5, TRAI Consultation Paper (2018), pg.20.

<sup>&</sup>lt;sup>46</sup> Response to TRAI Consultation Paper on Regulatory Framework for Over-the-Top (OTT) Services, Center for Internet and Society (2015), pg. 31.

<sup>&</sup>lt;sup>47</sup> 4.2.2, TRAI Consultation Paper (2018), pg.22.

<sup>&</sup>lt;sup>48</sup> 4.1.6 and 4.2.2, TRAI Consultation Paper (2018), pg.20 and pg. 22.

<sup>&</sup>lt;sup>49</sup> Response to TRAI Consultation Paper on Regulatory Framework for Over-the-Top (OTT) Services, Center for Internet and Society (2015), pg. 4.

believe that framing questions of regulation of OTT services in direct comparison with the regulation of TSPs can result in unideal conclusions about the nature of regulation that should be applied to the first, given the differences in the nature of such services (as highlighted in the response to the first question).

Additionally, as point out earlier in this response, the role of TSPs may be shifting to one wherein they serve primarily as network providers. In this context, we would also like to stress that protecting the legacy business models of TSPs, or considering regulation only aimed at protecting TSPs revenue streams is not strictly within TRAI's mandate. Regardless, we believe that the telecom market has entered a phase of hyper-competitiveness after 2016, and the revenue streams of TSPs are likely to stabilise and increase in the near future.<sup>50</sup>

Therefore, we recommend that TRAI exercise careful restraint in framing its recommendations regarding the regulation of OTT services.

<sup>&</sup>lt;sup>50</sup> For an analysis of telecom companies' financial statements, see "OTT Regulation: Understanding the economic basis", Internet Freedom Foundation (2018),

<sup>&</sup>lt;a href="https://internetfreedom.in/ott-regulation-understanding-the-economic-basis-savetheinternet-netne-utrality/">https://internetfreedom.in/ott-regulation-understanding-the-economic-basis-savetheinternet-netne-utrality/</a>