

To,

1. **Shri R.S. Sharma**  
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The Centre for Policy Research, founded in 1973 under the Indian Council of Social Science Research grants, is an independent not-for-profit think-tank that conducts policy research on a range of areas including urban development, energy, governance, and international relations. In the light of the technological transformation underway in each of these areas, and the exponential increase in, and unquestioned need for, regulatory and policy interventions in technology domains, CPR has recently launched a Technology and Society Initiative focusing on these issues. Ananth Padmanabhan, a legal and tech policy researcher, is leading this initiative, and the present response has been prepared by Ananth in collaboration with Meghna Bal, another lawyer and tech policy consultant. We also organised a closed-door stakeholder discussion on 7<sup>th</sup> December, 2018 under Chatham House Rules which saw diverse views on this subject from platform representatives, telecom consultants, academic centres and other think tanks. We have incorporated some of these ideas to provide more inclusivity to our research.

### Submission

We appreciate TRAI's decision to open up its process on the regulation of OTTs for public comments. It is becoming increasingly clear that some measure of regulation of Over-the-top (OTT) services is necessary. These services are becoming increasingly pervasive in all aspects of human existence, and have given rise to some pressing policy concerns. However, we deem it pertinent to question the basis for the current consultation because the mandate of regulating Over-the-top (OTT) services lies with the Ministry of Electronics and Information Technology (MEITY). Additionally, we do not agree that regulating OTTs, in the context of their alleged competitive impact on telecom service providers (TSPs), is warranted.

In brief, the present response contends that the concept of regulatory arbitrage does not apply when the technologies under comparison are different in the way they carry out functionalities, even if the functionalities may be the same from the point of view of the end user. The essence of technological disruption lies in new technologies performing earlier tasks in a more efficient or less costly manner. Therefore, unless the business model is expressly created with the intent to override regulations, rather than address cost or inefficiency concerns, arbitrage is a difficult finding to arrive at. As the gist of our response to Queries 1 and 2 demonstrate, with most OTTs the functionalities are much more advanced than mere replacement of what TSPs offer. The reason for this is because only such advanced and diverse functionalities can probably help OTTs survive a world where their growth is hugely dependent on network effects rather than direct revenue from their offerings.

Additionally, OTTs perform these functionalities in ways that are technically different from TSPs. Our specific responses follow below.

**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.**

From a techno-functional standpoint, no OTT communications service provider may be regarded as the same or similar to TSP voice telephony and messaging services.

Communications OTTs offer a bundled set of services that are inextricably linked. While telephony or messaging may be major components, there are certain elements such as graphics and audio recording or image or document transfer that are unique to different communications OTTs and form an inherent part of the overall service provided by them. The wide variety of communications OTTs available today serves as evidence of the importance of these seemingly ancillary aspects of communications OTTs to the end-consumer. TSP voice and messaging services, on the other hand, are standalone services with no add-on functionalities.

Another critical difference between OTT communications services and TSP communications services is the handling of user data. OTT communication entails breaking data up into “parcels,” which are then transmitted across the Internet and collated at their final destination. These packets generally intermingle with all other types of data packets traveling through the network. TSP voice telephony services, however, dedicate a certain amount of network bandwidth to voice telephony services when a call is made, even if no data is being transmitted. As such, the voice data does not mix with any other data during the call.

There is also a technical difference between OTT messaging and TSP messaging services. While there is no character limit with an OTT message, there is a limit on the number of characters in the TSP message due to device and network constraints.

**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.**

Substitutability is both an incomplete and an incorrect metric when assessing the applicability of regulatory/licensing norms to OTT service providers.

It is incomplete because even when there is substitutability between services, it does not necessarily establish the need for regulation or licensing unless there are any clear, identified harms that must be addressed through such interventions. If one technology substitutes another but in a safer way, for instance, the former must be promoted while the latter regulated. If one substitutes another but works in a completely different technical manner, the technical differences will determine how regulatory norms or licensing norms must be framed. In short, substitutability by itself offers

precious little and therefore, one must look elsewhere, to other metrics, factors or aspects, to determine the need for regulation and “regulability”<sup>1</sup> of the technology / sector.

Specifically, the question of regulation and regulability should be informed by four key considerations:

1. The innate characteristics (physical/technical/operational) of the product/service for which regulation is being posited;
2. The capacity of the institutions tasked with enforcing the regulation to adequately carry out their mandate;
3. Whether the intended regulation embodies the democratic ideals set forth in a country’s national charter or Constitution in letter and spirit;
4. Whether the modality of regulation is the most effective form of intervention to address the specific issue being considered.

There are **two important perspectives** that also **establish that OTT communications services do not factually serve as effective substitutes for TSP voice telephony and messaging**. These perspectives render the substitutability point moot in the specific instance:

#### *Substitutability from the Perspective of Consumers*

In response to a draft report on OTT services issued by the European communications regulator (BEREC), the European Consumer Organization (BEUC), noted that OTT communications services and TSP voice telephony and messaging “do not easily overlap” in the minds of consumers. A summary of the parameters used by BEUC for comparative analysis follows<sup>2</sup>:

- a. **Connectivity:** OTT voice telephony and messaging applications are dependent on the existence of an internet connection, whereas TSP voice telephony and messaging are not. This point holds true for India as well, where a majority do not yet have cheap or fast access to the internet.
- b. **Equipment:** OTT services generally require the purchase of smartphones that are costlier than basic mobile phone variants. TSP voice telephony and messaging services, on the other hand, may operate on all mobile phones. BEUC also notes that the operation of smartphones requires the acquisition of an additional skillset for the user, as these devices are generally more complicated to use. Thus, the declining cost of smartphones may be a moot consideration.
- c. **Functionality:** In addition to the functionality argument made above (please see response to Question 1), it must also be noted that OTTs enable group communications services

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<sup>1</sup> See <https://cs.stanford.edu/people/eroberts/cs181/projects/2010-11/CodeAndRegulation/sec1.html>

<sup>2</sup> BUREAU EUROPEEN DES UNIONS DE CONSOMMATEURS (BEUC), “BEREC Draft Report on OTT Services: BEUC Response to the Public Consultation” (BEUC, November 2015), [https://www.beuc.eu/publications/beuc-x-2015-115\\_gbe\\_berec\\_draft\\_report\\_on\\_ott\\_services\\_0.pdf](https://www.beuc.eu/publications/beuc-x-2015-115_gbe_berec_draft_report_on_ott_services_0.pdf).

(engaging with several users at the same time), a functionality that is either difficult or altogether impossible with TSP messaging services.

- d. **Interoperability:** OTT communications do not offer service interoperability, that is, a user on a particular OTT platform cannot communicate with a user on another OTT platform. However, with TSP voice and messaging, service provider interoperability is assured. OTTs do, however, provide for synchronous device usage, which allows users to communicate using different devices such as a phone, tablet, or laptop. TSPs do not offer device synchronicity because of the hardware requirement of a SIM card, which can only be in one device at a given point in time.

#### *Substitutability from the Perspective of the Competition Regulator*

Competition is the primary rationale for regulating telecommunications.<sup>3</sup> Telecommunications operations generally entail heavy fixed costs, reliance on economies of scale in the provision of services, and high barriers to entry.<sup>4</sup> The combination of these factors tends to encourage monopolistic propensities in the sector.

Though the Indian telecom sector witnessed a rise in competition after liberalisation in 1990, regulation surrounding it was mindful of the monopolistic tendency within the industry. This may be evinced by the powers accorded to TRAI under Telecom Regulatory Authority Act, 1997, which include introducing measures to facilitate competition.

The mandate of regulating competition issues in the country's markets, however, now lies with the Competition Commission of India after the enactment of the Competition Act in 2002. The long title of the Competition Act, 2002 declares that the Competition Act oversees the promotion and sustenance of competition in India.<sup>5</sup> The Act's purview even includes matters that may be remotely connected to any competition-related issue.

In a recent ruling<sup>6</sup>, the Telecom Disputes and Settlement Appellate Tribunal (TDSAT) settled the matter of which body – CCI or TRAI – had the authority to decide on competition matters in telecommunications. The TDSAT observed that as per S. 60 of the Competition Act, 2002, the Competition Act shall have an overriding effect on any law whose provisions may be inconsistent with its own.<sup>7</sup> As such, TDSAT ruled that TRAI “cannot assume or create for itself a quasi-judicial role in a competition regime of its own creation”.<sup>8</sup> Therefore, when considering the matter of substitutability of services and competition in the telecommunications sector and the Internet, it is

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<sup>3</sup> Nicholas Economides, “Telecommunications Regulation: An Introduction” (The Networks, Electronic Commerce, and Telecommunications Institute, August 2004), <https://poseidon01.ssrn.com/delivery.php?ID=479004100026076006090020122123105090056069085080028027023073018081090007007098070105004042026057051007117118097080109116012040017035051049100065031086101042011020087120090021064102072115073006085099111110071124116028114100100112000018022126&EXT=pdf>.

<sup>4</sup> Jonathan E. Nuechterlein and Philip J. Weiser, *Digital Crossroads: Telecommunications Law and Policy in the Internet Age*, Second (Cambridge, Massachusetts and London, England: MIT Press, 2013).

<sup>5</sup> “The Competition Act” (2002).

<sup>6</sup> Justice Shiva Kirti Singh, *Bharti Airtel Ltd. & Anr. Vs. Telecom Regulatory Authority of India & Anr.*, Telecommunication Appeal No. 1 of 2018 (TDSAT December 13, 2018).

<sup>7</sup> Ibid

<sup>8</sup> Ibid

imperative that the methodology deployed by the telecom regulator aligns with that used by the competition regulator.

#### *CCI Methodology for Relevant Market Definition*

In *All India Online Vendors Association Vs. Flipkart India Private Limited*<sup>9</sup>, the CCI set about factoring considerations to decide the relevant market for online marketplaces. In the case, a consortium of merchants who sell to e-commerce marketplaces such as Flipkart and Amazon, alleged that Flipkart was abusing its dominant position in the Indian e-commerce space by discriminating between sellers on its platform. The CCI acknowledged the relative nascence of online retail in India. It noted that many e-tailers resorted to opening physical outlets to allow customers inspect their purchases and have a holistic shopping experience. Concomitantly, the CCI added that offline retailers had started establishing an online presence, either through an e-commerce marketplace or a standalone online venture.

Notably, the CCI went on to observe that though the distinction between online and offline retailers is barely discernible to the end-consumer, online market places ameliorate conditions for buyers as well as sellers. Sellers are spared high overhead costs of setting up and maintaining a physical retail outlet. Buyers, on the other hand, save time, money and effort as they fulfil their purchasing needs from the convenience of their home. The CCI went onto to state that even if the market construct was restricted to the online space, there was enough evidence to establish that no single player enjoyed a position of dominance in the market.

The CCI also distinguishes between online retailers and online marketplace platforms. The CCI notes that while the former is owned by a particular entity selling its own wares on the platform, the latter acts as a marketplace where many buyers and sellers may interact. Further, unlike online retailers, online marketplaces are generally prone to network effects.

In *Shri Vinod Kumar Gupta vs. Whatsapp Inc*<sup>10</sup>, the CCI used a market characteristics approach to delineate the differences between the instant messaging application, Whatsapp, and traditional telecommunications services. The CCI observed that instant communication applications like Whatsapp could not be equated with traditional electronic communication services such as texting and voice telephony as provided by TSPs. First, the former depends on the internet and provide several additional functionalities. Illustratively, instant communication applications allow you to see when your contacts are online or if they are typing you a message. Additionally, instant communication applications generally only operate on smartphones, and now some feature phones, whereas traditional telecommunications services may operate on all mobile phones. Third, instant communication applications are not interoperable whereas traditional communications services are. The CCI determined that the relevant product market for instant communications applications was “*the market for instant messaging services using consumer communication apps through smartphones*”.<sup>11</sup>

<sup>9</sup> All India Online Vendors Association Vs. Flipkart India Private Limited (Competition Commission of India November 6, 2018), <https://www.cci.gov.in/sites/default/files/20-of-2018.pdf>.

<sup>10</sup> Shri Vinod Kumar Gupta vs. Whatsapp Inc (Competition Commission of India June 1, 2017), <https://www.cci.gov.in/sites/default/files/26%282%29%20Order%20in%20Case%20No.%2099%20of%202016.pdf>.

<sup>11</sup> Ibid

As experts have noted, the CCI's methodology centres around the inherent attributes of a given product and its market.<sup>12</sup> Specifically, the methodology allows the CCI to delve into a deep assessment of the product, its inherent attributes, and how these attributes necessarily shape the contours of the market as a whole. As such, the CCI's market attribute-centric methodology may serve as a better criteria for comparison than substitutability, as the former presents a more complete rubric for assessment. The CCI's market characteristics methodology factors several important considerations beyond functionality such as:

1. The unique constraints of the market – eg. the requirement for the internet to operate OTTs
2. The unique sub-functionalities of products – eg. indications that contacts are “typing” or are online
3. The differences in service modality – eg. OTTs generally only operate on smartphones

Additionally, it is also important to note that the CCI has taken the view of nodal sectoral regulatory authorities into consideration. For instance, in the *Flipkart* case cited above, the CCI referred to the Guidelines for Foreign Direct Investment on e-commerce that prohibit FDI in an inventory-based online business. The FDI Policy was issued by the Ministry of Commerce and Industry, the nodal ministry for e-commerce in India.

With this context in mind, we recommend the following:

1. TRAI consult with CCI when considering competition issues in the telecommunications sector<sup>13</sup>
2. TRAI continue its work on understanding the nuances of OTTs intrinsically, rather in comparison with other technologies. In this regard, the specific harms and concerns raised by OTTs deserve evaluation divorced from the context of how they are impacting the revenues of TSPs through their substitutability.

**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.**

The absence of OTT regulation is not impacting the infusion of investments in telecom networks in India. Rather, there seems to be a global consensus that the heightened consumer demand for faster broadband, largely propelled by OTT applications, may drive greater investment in the underlying telecommunications networks.<sup>14</sup>

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<sup>12</sup> Vivan Sharan and Mohit Kalawatia, “TRAI OTT Consultation Paper: Need To Level Regulatory Playing Field, Give More Teeth To CCI,” *Firstpost*, December 6, 2018, <https://www.firstpost.com/tech/news-analysis/trai-ott-consultation-paper-need-to-level-regulatory-playing-field-give-more-teeth-to-cci-5678141.html>.

<sup>13</sup> Ibid

<sup>14</sup> Working Party on Communication Infrastructures and Services Policy, “Digital Convergence and Beyond: Innovation, Investment, And Competition in Communication Policy and Regulation for the 21st Century,” Background report for Ministerial Panel 2.1 (OECD, 2016), [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/ICCP/CISP\(2015\)2/FINAL&docLanguage=E](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/ICCP/CISP(2015)2/FINAL&docLanguage=E).

In a recent report, the OECD mentions how the European Commission's Digital Agenda (Digital Agenda) propounds that innovations like OTTs stimulate a virtuous cycle that drives greater demands for faster broadband.<sup>15</sup> The demand for faster internet services leads to greater investment in the network. And the resultantly higher bandwidth stimulates further innovation in digital services. The Digital Agenda goes on to commit to establishing policies that allow for maximal innovation both at the edges and the core of the network to help drive this virtuous cycle and propel economic prosperity in the region.<sup>16</sup>

The OECD report further mentions that the sentiment in the Digital Agenda is being echoed globally. The United States Federal Communications Commission (FCC) stated in its 2015 Open Internet Order that innovations in digital services and products are driving consumer demand, which entails "greater investment in broadband infrastructure".<sup>17</sup> Other countries like New Zealand and Australia, have invested heavily in broadband facilities to stimulate private investment in the sector.<sup>18</sup> Canada recently made it compulsory for service providers to deploy fibre-optic cables to consumer homes with a view to increase consumer choice in broadband facilities.<sup>19</sup> The objective of this mandate is to encourage competition and innovation in the sector, and consequently, drive windfalls for infrastructure investments and consumers.<sup>20</sup>

The Indian telecommunications sector, too, is an ostensible beneficiary of greater consumer demand for data. The Reserve Bank of India's Annual Report on FDI Flows to India revealed that Communications Services received FDI inflows of USD 8.8 billion, the highest of any industry in the country.<sup>21</sup> RBI data also indicates steady growth in telecom FDI, with a sevenfold increase in investment in the sector between 2013 and 2018.<sup>22</sup> Additionally, one Indian TSP reported that a Singaporean Telecommunications Company made one of its largest investments outside Singapore with them.<sup>23</sup> Additionally, the same TSP also reported a 13 percent increase in Capex\* in FY 2017-18.<sup>24</sup>

The OECD's findings suggest that an innovation-centric policy – one that encourages innovation both within as well as at the edge of the network – is pivotal to harnessing the full extent of socio-economic benefits of broadband networks.<sup>25</sup>

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<sup>15</sup> Ibid, See Supra note 6.

<sup>16</sup> European Commission, "Digital Agenda for Europe: Key Initiatives," May 19, 2010, [http://europa.eu/rapid/press-release\\_MEMO-10-200\\_en.htm?locale=en](http://europa.eu/rapid/press-release_MEMO-10-200_en.htm?locale=en).

<sup>17</sup> Protecting and Promoting the Open Internet, No. 14–28 (United States Federal Communications Commission February 26, 2015). <https://docs.fcc.gov/public/attachments/FCC-15-24A1.pdf>

<sup>18</sup> Ibid, Supra note 6 and 7.

<sup>19</sup> Ibid.

<sup>20</sup> Ibid

<sup>21</sup> "Annual Report of the RBI for the Year 2017-2018" (Reserve Bank of India, August 29, 2018), <https://rbi.org.in/Scripts/AnnualReportPublications.aspx?id=1249>.

<sup>22</sup> Ibid

<sup>23</sup> "Integrated Report and Annual Accounts - 2017-18" (Bharti Airtel, 2018), [https://s3-ap-southeast-1.amazonaws.com/bsy/portal/images/Annual-report-2017-18\\_324BCC06D8C6765F2F6C750DD9CD8C63.pdf](https://s3-ap-southeast-1.amazonaws.com/bsy/portal/images/Annual-report-2017-18_324BCC06D8C6765F2F6C750DD9CD8C63.pdf).

<sup>24</sup> Ibid

<sup>25</sup> Ibid, Supra note 6,7,10, and 11.

It is, thus, recommended that the regulator consider interventions that prompt a rise in innovative activity, at the level of both the telecom network as well as the application service layer.

#### *Burden of Existing Regulation on TSP Infrastructure Investment*

Recent regulatory interventions such as the reduction of interconnection usage charges (IUC) and international termination rates (ITR) may have impacted investor interest in the Indian Telecom sector. Illustratively, one report noted an 11 percent decrease in one TSP's profit after changes in the IUC and the ITR.<sup>26</sup>

Additionally, the current levies on telecom operations may be unduly burdensome. For instance, the cumulative tax amount payable by TSPs is around 33 percent (excluding corporate tax) of their annual earnings.<sup>27</sup> Comparatively, in China it is 22 percent, in the EU it is 20 percent and in the US it is 17 percent.<sup>28</sup>

As such, we recommend the following:

1. TRAI carry out an assessment of the effect of these regulatory interventions on investment in the Telecom sector.
2. TRAI carry out a detailed assessment of the possible windfalls the demand for data and OTT applications has provided to TSPs.

#### **Q. 4. Would inter-operability 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.**

It is uncertain if mandating OTT-OTT interoperability as well as OTT-TSP interoperability would result in any benefit for users or promote competition. As mentioned earlier in our response (please see the response to Question 2), most OTTs require an internet connection and a smartphone to operate. Additionally, it is also important to note that users gravitate to different platforms for assorted functionalities they offer. As such, it is unclear if users would gain any advantage from additional interoperability between these distinct services.

#### **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.**

In the present context, arguments for interception must be balanced against the need to safeguard user rights. And such balancing requires the induction of a framework of safeguards and transparency measures to accompany any policy recommendation that seeks to broaden the scope

<sup>26</sup> Arundhati Sarkar, "Bharti Airtel Profit Falls For Sixth Straight Quarter," *Bloomberg Quint*, January 18, 2018, <https://www.bloombergquint.com/business/bharti-airtel-profit-falls-for-sixth-straight-quarter>.

<sup>27</sup> Hemant Joshi, "Cumulative Levies of 33% for Indian Telcos Putting Operators under Pressure: Deloitte," *The Economic Times*, January 24, 2018, <https://telecom.economictimes.indiatimes.com/news/cumulative-levies-of-33-for-indian-telcos-putting-operators-under-pressure-deloitte/62633690>.

<sup>28</sup> Ibid

of current surveillance measures.<sup>29</sup> Thus, if OTTs are to be subjected to additional interception and monitoring stipulations, there must also be adequate provisions for safeguards supplementing these frameworks.

Thus far there has been a pattern of extending the remit of surveillance without enacting any concomitant safeguards or accountability measures to check any abuse of power. The recently released Draft Personal Data Protection Bill, 2018 (PDP bill) serves as evidence of this. The PDP bill exempts regulatory authorities from its data protection obligations in matters of national security as well as most of its transparency and accountability measures. The only accountability mechanism authorities are beholden to is instituting security safeguards, but even the extent of these is largely up to the entity processing the data.

Any additional interception and monitoring stipulation should necessarily be subjected to a test to assess if they are required to serve the purpose they are enacted for. The International Principles on the Application of Human Rights (Necessary and Proportionate Principles) is an effective rubric in this regard. These principles were the culmination of a two year effort by 40 of the world's leading experts on privacy and security. They contend that interception provisions should necessarily be balanced against human right considerations, as the latter are most likely to be threatened, if there is any abuse of the former.

Among other things, the Necessary and Proportionate Principles advocate for<sup>30</sup>:

- a **competent judicial authority** must make decisions regarding communications surveillance;
- comprehensive **transparency** into the extent and kind of surveillance being carried out. The State has an obligation to make information available on the same;
- **public oversight** through the introduction of “independent oversight mechanisms to ensure transparency and accountability of Communications Surveillance”;
- **maintaining the integrity of communications systems** by refraining from compelling service providers and software or hardware manufacturers to incorporate monitoring or surveillance capabilities into their networks or products; and
- **safeguards against illegitimate access** by “criminalising illegal Communications Surveillance by public or private actors”.

The current interception norms both for OTTs and TSPs are likely to inadequately adhere to most of these criteria. As such, we also strongly recommend a revision of existing norms to ensure compliance with these basic principles for a more robust and secure interception regime. The Report and Recommendations of The US President's Review Group on Intelligence and Communications Technologies would serve as an instructive template in this regard. It provides a set of 46 cogent remedies that cover the gamut of current surveillance concerns.<sup>31</sup>

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<sup>29</sup> See generally, Bruce Schneier, *Data and Goliath: The Hidden Battles to Collect Your Data and Control Your World* (New York and London: W. W. Norton & Company, 2015).

<sup>30</sup> “International Principles On The Application Of Human Rights To Communications Surveillance,” May 2014, [https://necessaryandproportionate.org/files/2016/03/04/en\\_principles\\_2014.pdf](https://necessaryandproportionate.org/files/2016/03/04/en_principles_2014.pdf).

<sup>31</sup> Richard A. Clarke et al., “Liberty And Security in a Changing World: Report and Recommendations of The President's Review Group on Intelligence and Communications Technologies” (Washington D.C.: The United States Government, December 12, 2013), [https://obamawhitehouse.archives.gov/sites/default/files/docs/2013-12-12\\_rg\\_final\\_report.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/2013-12-12_rg_final_report.pdf).

**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.**

It is unclear whether mandating the provision of toll-free emergency services on OTTs will lead to greater consumer welfare. Emergency services on OTTs would be inaccessible to a majority of India's mobile phone subscribers as all require Internet access and most require smartphones to operate.

**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.**

There is no issue of a non-level playing field between OTT service providers and TSPs. Our opinion aligns with the CCI (please see our response to *Question 2*) on this matter.

At the outset, while it is open to TSPs to provide the same services as OTTs, the converse is generally not possible. Illustratively, there are a few TSPs in India who are doing so or have invested in communications OTT applications of their own. Voice telephony and messaging formed a predominant part of TSP business a few years ago. However, now due to advances in technology, these have been relegated to a small sub-set in a wide variety of TSP service offerings. TSPs now offer connectivity plans, internet services, banking services, cybersecurity, mobile phones and other connectivity devices such as dongles, Internet-of-things capabilities for enterprises and government, international toll free services for service providers. TRAI's recalibration of the definition of Adjusted Gross Revenue to include non-core services such as corporate receipts and sale of mobile phones serves as strong evidence of the growing value of these additional services.<sup>32</sup>

Additionally, it may also be noted that the rationale for regulating telecommunications sector and OTTs are quite divergent:

#### *Regulatory rationale for Telecommunications*

Telecommunications regulations is typically underpinned by the following considerations:

1. **The Spectrum Scarcity Doctrine** – The spectrum scarcity doctrine emanates from the notion that radio spectrum is a public good and must be regulated closely. As such, no private entity has a right to exclusively co-opt it. Spectrum regulation was prompted by unwarranted interference between different spectrum frequencies which made it difficult for efficient responses to distress signals, sometimes leading to disastrous consequences.<sup>33</sup> In India, Section 4 of the Indian Telegraph Act, 1885, serves as an embodiment of the

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<sup>32</sup> "License Agreement For Unified License" (Department of Telecommunications, n.d.), [http://dot.gov.in/sites/default/files/Unified%20Licence\\_0.pdf](http://dot.gov.in/sites/default/files/Unified%20Licence_0.pdf).

<sup>33</sup> Jonathan E. Nuechterlein and Philip J. Weiser, *Digital Crossroads: Telecommunications Law and Policy in the Internet Age*, Second (Cambridge, Massachusetts and London, England: MIT Press, 2013).

spectrum scarcity doctrine wherein the exclusive privilege to grant licenses to establish, operate and maintain a telegraph, lies with the Central Government.<sup>34</sup>

The doctrine has come under criticism off late as experts argue that technological advancements have done away the need to manage spectrum closely.<sup>35</sup>

2. **Monopolistic tendency in the telecom industry** (please see response to *Question 2*). As such, interconnection and interoperability are generally mandated by regulation and competition is generally encouraged by regulatory authorities.
3. **Maintaining resiliency in telecommunications networks** as they form a critical component of a nation's infrastructure<sup>36</sup>
4. **Consumer interest** provisions that serve as a counterweight against the TSPs' monopolistic proclivities – as a certain amount of regulation is necessary to safeguard the former from the latter. These provisions ensure the meaningful participation of an end-consumer in the telecommunications market. According to the OECD, this is favourable as it allows the end-consumer to dictate preferences to TSPs. The consumer's ability to do so, in turn, compels TSPs to maintain a minimum threshold of sustained innovation.<sup>37</sup>

#### *Regulatory Rationale for OTTs*

OTTs services are delivered via the internet. As such, the consideration of spectrum scarcity does not arise. Additionally, OTTs are not bound by the geographical constraints of typical TSPs and may offer services in regions beyond the borders of the nations they are headquartered.<sup>38</sup> Thus, several regulatory considerations applicable to TSPs, do not apply to OTTs.

The International Telecommunications Union notes that in the absence of a regulatory framework, the lower regulatory costs for OTTs allows for the generation of greater consumer surplus.<sup>39</sup> A 2017 study by the Broadband India Forum and WIK which showed that communications OTTs were responsible for the creation of USD 98 million in consumer surplus in India substantiates this claim.<sup>40</sup>

While telecommunications regulation may not be applicable to OTTs, there are some concerns about the business models of these entities which merit the institution of regulatory mechanisms:

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<sup>34</sup> "Indian Telegraph Act, 1885," § 4 (1885), <http://www.ijlt.in/pdf/files/Indian-Telegraph-Act-1885.pdf>.

<sup>35</sup> Ibid, Supra 33

<sup>36</sup> "Itu Explainers: Over The Top (Ott) Services" (Global Partners Digital, 2017), <https://www.gp-digital.org/wp-content/uploads/2017/12/itu-ott-2.pdf>.

<sup>37</sup> Patrick Xavier, "Enhancing Competition in Telecommunications: Protecting and Empowering Consumers," Ministerial Background Report (Organisation for Economic Co-operation and Development, 2008), <http://www.oecd.org/internet/consumer/40679279.pdf>.

<sup>38</sup> Ibid, Supra 34

<sup>39</sup> Ibid

<sup>40</sup> René Arnold et al., "The Economic And Societal Value Of Rich Interaction Applications In India" (Broadband India Forum, November 2017), <https://www.broadbandindiaforum.com/files/reports-and-publications/THE%20ECONOMIC%20AND%20SOCIAL%20VALUE%20OF%20RICH%20INTERACTION%20APPLICATIONS%20IN%20INDIA.pdf>.

**Data Protection and Privacy:** OTTs gather lots of data on their customers. Consequently, regulation of these services generally involves instituting strict data protection norms and rules to protect user privacy.

The data protection and privacy concerns are being purposefully addressed by MEITY through the induction of a proposed Data Protection framework.

In this context, we recommend the following:

1. An assessment of the regulatory framework surrounding TSPs in the context of technological advancement and unduly burdensome taxation.

**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 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 do not recommend ascribing extant regulatory/licensing frameworks for telecoms to OTTs.

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