



Response to the Consultation Paper on 'Regulatory Framework for Over-the-Top (OTT) Communication Services' released on November 12, 2018

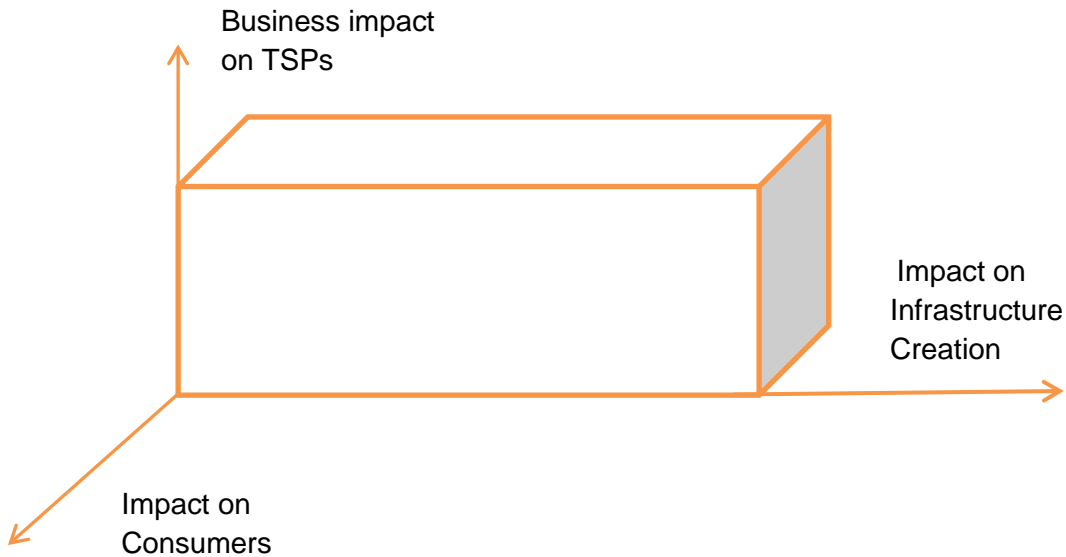
COAI welcomes the opportunity to comment on the TRAI Consultation Paper on Regulatory Framework for Over-the-Top (OTT) Communication Services.

COAI fully supports the Digital India vision of the Government and suggests the adoption of policies and promoting ecosystem which enables fulfilment of this vision. It is important that the Regulatory framework adopted is pro-choice, pro-subscriber, pro-innovation and is hence pro India.

- A. **Contribution of the Telecom Sector:** With more than 1.1 billion subscribers as of October 2018, the Indian Telecom Sector is a key contributor to the Indian economy in terms of consumer benefit, employment, revenue generation and GDP. The sector contributes **6.5%** to India's Gross Domestic Product (GDP). Cumulative FDI inflows into the sector are to the tune of **INR 169,089 crores**. In terms of employment, the sector contributes directly to **22 Lakh** and indirectly to **18 Lakh jobs**. Data usage in India has reached **3.5 million TB per month**. Further, Smartphone penetration has increased significantly in India and has reached around **45%¹ at the end of 2017**. However, despite the above, the estimated total levy on the Indian telecom sector ranges from 29% to 32%.
- B. **Impact of the OTT services on Telecom Industry:** The highly taxed Telecom industry, which has incurred heavy costs in terms of license fee, spectrum, telecom equipment and security apparatus, is on an unequal footing with Over the Top Operators (OTTs) that are offering similar communications services without incurring any Regulatory cost, in the form of License or Spectrum charges; and that too when the existing TSPs have paid a high price for spectrum acquisition.

¹ E&Y-Propelling India to a trillion-dollar digital economy

There is three-fold impact of the OTT services on Telecom Industry:



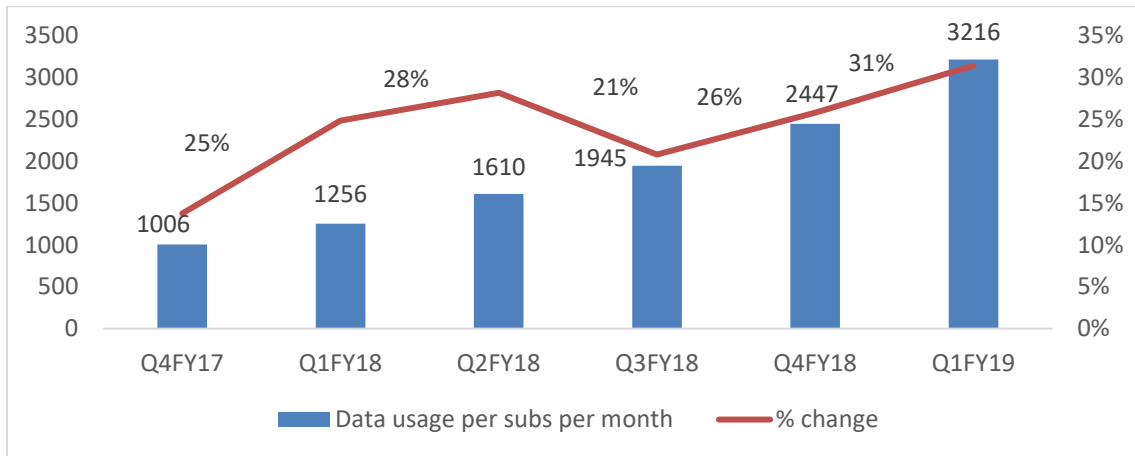
1. **Business impact on TSP's due to Regulatory Imbalances**
2. **Impact on Infrastructure creation**
3. **Impact on the consumers**

1. **Business impact on TSP's due to Regulatory Imbalances:** As stated earlier, TSPs pay multiple levies including regulatory levies, duties and taxes of nearly 32% of the Adjusted Gross Revenues. TSP's also bear the burden of various tax provisions by local and regional authorities, while the OTT communications service provider are not subject to any of the regulatory costs/taxes that are borne by the TSPs. Further, the heavy regulatory oversight often proves to be a limiting and expensive constraint for TSPs. It limits the way TSPs can do business and earn revenues while at the same time adding expenses in the form of compulsory compliances such as QoS compliances, data protection rules, lawful interception laws, non-discrimination pacts, roll-out obligations, services to rural, low-density areas and so on. Compared to this, OTT communications services players face minimal regulatory constraints. As far as service obligations go, they are practically non-existent for OTT communications services players beyond what they promise to their users. One way to lessen the Regulatory imbalance which exists between TSP and OTT players is to urgently reduce/abolish the levies imposed on the TSPs.



2. Impact on TSP's due to Infrastructure Requirements:

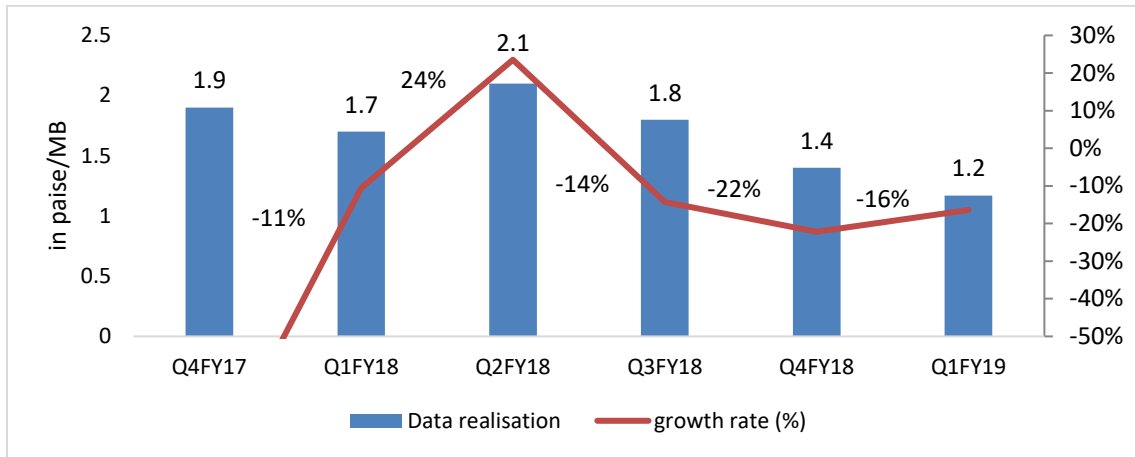
- a. Of late, the data demand in the country has increased manifold due to the surge in popularity of video-content-based OTTs on mobile devices.



Source: TRAI

- b. While revenue growth remains a challenge, data consumption is expected to grow at a high rate due to OTT Services, thus, accelerating demand for investments in networks. It is estimated that TSPs will be required to make significant investments (estimated at USD 100 billion²) over the next 5-7 years on network upgradation (including creating nationwide 5G infrastructure). While new technologies such as cloud, offer some cost savings, these cost savings are **insufficient to cope with the pace and size of investments required to install the required telecommunications and digital infrastructure**. The revenue earned by the operators needs to grow or the taxes/ levies need to be reduced to meet the investments required for the country's telecom networks.

² DoT 5G Steering Committee Report 2018



Source: TRAI

3. **Impact on the Consumers:** We acknowledge that there are various benefits that OTT communication services bring to the consumers which include affordability, rich features and choice. However, OTT players are not bound to provide a certain level of the QoS, Data Protection and Privacy to its customers.

C. Need for equitability between TSPs and OTT services

1. Under the UAS Licence/Unified Licence (Access Service Authorization), granted under the Indian Telegraph Act, the access services³ cover collection, carriage, transmission and delivery of voice and/or non-voice messages over the Licensee's network in the designated service area. The Licensee can also offer Internet Telephony and other internet services, including IPTV, broadband services and triple play, i.e., voice, video and data.
2. On the other hand, OTT Communication Service Providers are able to offer voice, video, and data services without being required to comply with the Indian Telegraph Act to offer the telecom services in India. The anomaly that the same services of voice, video and data being provided by two sets of entities – one licensed and another unlicensed requires to be brought under similar rules applicable to both.
3. One way of achieving similar rule for both is to review the existing licensing and regulatory provisions applicable on TSPs and to minimise the burden on TSP keeping in view the light

³ The Access Service under this authorization covers collection, carriage, transmission and delivery of voice and/or non-voice MESSAGES over Licensee's network in the designated Service Area. The Licensee can also provide Internet Telephony, Internet Services including IPTV, Broadband Services and triple play i.e. voice, video and data. While providing Internet Telephony service, the Licensee may interconnect Internet Telephony network with PSTN/PLMN/GMPCS network. The Licensee may provide access service, which could be on wireline and / or wireless media with full mobility, limited mobility and fixed wireless access.



touch licensing approach. Further, OTT communications services should be subjected to critical compliances viz. Security/ Lawful Interception & Monitoring, Customer Data Privacy and Data Localization.

D. **Approach to resolve the Imbalance between TSPs and OTT Communications Services Providers:**

1. We are of the view that the immediate priority in India, is to roll out broadband networks and significant investments are required to be made by the telecom service providers on the spectrum, network infrastructure, IT infrastructure and development of platforms & services.
2. Thus, we believe that the investments made by the telecom industry must be safeguarded and encouraged and there is a need to boost the financial viability of Industry to meet the growth expectations enshrined in the NDCP 2018. This can be done by the Government by removing the Regulatory Imbalance and facilitating the collaboration through new business models between OTT Services Providers and TSPs.

3. We suggest following approach's that may be taken by the Government in this regard:

a. Players providing OTT communications services should be licenced by introducing the OTT Communication Authorization under the Unified License.

- i. UCC Regulations of TRAI should be equally applicable to the OTT players.
- ii. Data Privacy and Protection laws of the land should be equally applicable to the OTT players.
- iii. **Data Localization** – OTT communication providers should be mandated to follow various rules and laws of the land as prescribed by DoT/TRAI, MeitY, Govt. agencies, about Data Protection and Privacy.
- iv. We would hereby like to submit that OTT players should be liable for all the obligation except w.r.t network /infrastructure related obligation such as Roll out of the Network and the Network Quality of the Service (QoS).
- v. **International Examples: There are various Regions/ Countries wherein the Regulatory obligations are placed on the OTT communications services such as by E.U., Indonesia.**



b. Relaxation of the licensing conditions and Regulatory Obligations for the Telecom Operators:

- i. We are of the view that “Same Service Same Rule” principle needs to be adopted between the TSPs and OTT players providing the same services. In case the Government is unable to apply similar obligations to OTT players, then a new set of rules/obligations should be adopted for the TSPs as well.
- ii. The new rules must be driven by clear policy requirements, and be proportionate, open, transparent and non-discriminatory.
- iii. A licensing regime for all communications services should be underpinned by the following key principles:
 - It should be light-touch, to encourage innovation and competition but also future proof
 - Regulation needs to be proportionate, justifying the economic costs entailed for each regulated provider
 - Reduce ex-ante sector-specific rules - it is essential that ex-ante regulatory obligations only be imposed where there is no effective and sustainable competition
 - Outdated regulations/provisions should be removed
 - Valid past principles to be transferred to the entire digital space: this would include principles around pluralism, proportionality, openness non-discrimination, neutrality, public interest, standardization, security, consumer protection, etc.
 - Pure network regulation should be limited to that applicable only to the infrastructure, such as spectrum, roll out and Quality of Service (QoS)

Our issue wise response is as follows:



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.

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.

1. While calls - voice and video, and messaging communication services provided by OTT communication services providers are same as the service provided by TSPs, there are several platforms which provide multiplicity of functionalities which make it difficult to unambiguously segregate communication from non-communication services. Due to the rapid pace at which these services are evolving, the boundary between Electronic Communication Services (ECS) and the content services has become very blurred.
2. World over, the Regulatory Frameworks do not provide clear-cut and uniform guidance on whether specific types of services fall within the ECS definition, the criteria provided being to some extent flexible and leaving its interpretation to National Regulatory Authorities (NRAs). This situation becomes especially relevant to the evolution of OTT services, making the ECS definition more difficult to interpret.
3. As it is unclear to what extent the current ECS definition covers some types of OTT services, different conclusions can be drawn, for example whether specific OTT services are qualified as ECS.
4. In this context, it is important to have in place a definition of ECS which is future proof and lays the correct foundation that determines which services are regulated under the ECN/S Framework.
5. We are of the view that electronic communications services are services which can potentially substitute telecommunications services which include:
 - a. VOIP
 - b. Messaging (includes text, audio and video)



6. We suggest that TRAI may adopt the definition as suggested by E.U. i.e.

“interpersonal communication services' meaning a service that allows direct interactive interpersonal exchange of information via an electronic communications network between a finite number of people, where the persons initiating/participating in the interaction determine its recipients”.

7. Further, since the multiplicity of functionality offered by the various OTT platforms makes it difficult to practically segregate communication from non-communication related OTT services, we are of the view that the test like being followed by EU (draft electronic communication code), as also highlighted in the Consultation Paper, may be applied to determine whether the functionality forms a `substantial' or `ancillary' part of the service/platform,
8. Considering the above, **substitutability** of a service should be one of the primary and important criteria for comparison of regulatory or licensing norms applicable to TSPs and OTT service providers.
9. Thus, Government /Authority should periodically review this definition of the OTT communication services on the case to case basis on the extent of substitutability created by such services.

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.

1. As highlighted in the preamble we would like to submit that the highly taxed Telecom industry, which has invested heavily in license fee, spectrum, telecom equipment and security apparatus, is now on an unequal footing with unregulated **Over the Top (OTTs) players who are offering similar voice, video and data services without incurring any Regulatory cost**, in the form of License fee or Spectrum charge.
2. The Regulatory imbalance between TSP and OTT communications provider is impacting the sustainability of the TSP's.
3. As per our estimates, Industry will require **INR 200,000 crores over the next 3-5 years** for network capacity expansion and technology upgradation. You will appreciate that, unlike developed economies where there are multiple (wireline, cable, satellite, government) networks, in India, the privately installed and operated wireless telecom networks are



dominant. The country needs suitable frameworks to safeguard the investments made so far as well as institute measures to attract investments to continuously upgrade these networks.

4. For a business to generate capital expenditure, the revenue earned by the operators needs to grow or the taxes/ levies need to be reduced to meet the investments required for the country's telecom networks over which the voice, video and data services have to be delivered. **Hence, it is vital to review the taxes/ levies on the operators to ensure that the telecom industry remains financially stable.**

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.

1. Interoperability between OTT services should not be mandated and should be left to market forces.

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.

1. National security and privacy issues are of paramount importance, and it is recommended that no exception should be made for any service provider, including the OTT communication service providers while subjecting them to the rules to meet the national security and privacy norms.
2. Some Content Providers may indulge in the mining of private data from the subscribers' handsets and monetize the same in different ways. With the emergence of highly advanced techniques for data mining and data analytics, extraction of business intelligence through an individual's usage pattern of the internet services and correlation and corroboration of information from multiple sources results in complete compromise of an individual's privacy.
3. The app providers may put the customer's privacy and security at risk by leaving trapdoor open for regular update of their apps / OS. These loopholes in the apps / OS are known to have been exploited for unlawful extraction of personal information of the consumers. Therefore, there is a need to regulate the issue of customer consent for allowing the apps to mine their handset data as well as for auto updates in exchange for using the apps. Some of the above issues are already been taken care under the Justice Srikrishna report "A Free and Fair Digital Economy – Protecting Privacy, Empowering Indians" and the draft Data Protection Bill, however, this issue needs to be seen in context to widely differing treatment accorded between



licensed and unlicensed internet eco-system stakeholders, at present, about security and privacy compliance requirements.

4. Extensive and stringent security conditions are required to be met by the licensed TSPs. These include:
 - a. Setting up Lawful Interception and Monitoring (LIM) systems
 - b. Restriction on switching of domestic calls/messaging from outside the country
 - c. Restriction on sending user information abroad
 - d. Gives the Licensor the right to inspect the sites/network used for extending the service
 - e. Providing necessary facilities for continuous monitoring of the system, not employing any bulk encryption equipment; taking prior evaluation and approval of Licensor for any encryption equipment for specific requirements
 - f. Switching/Routing of voice/messages in a P2P scenario
 - g. Responsibility for ensuring the protection of privacy of communication and confidentiality of subscriber information
 - h. Quality of Service, Unsolicited Commercial communications, Complaint Redressal Mechanism, etc.
5. Regarding Lawful interception and monitoring of content, every TSP is obligated to provide to Licensor & Law Enforcement Agency the following:
 - a. Unencrypted data in a readable format from Telco LI systems
 - b. Ensure Content and IPR are not violated on the content carried on their network
 - c. User Information; IP addresses; Date; Time; Location
 - d. Penal powers with Licensor on any violation – up to INR 50 crores per instance per LSA



6. However, the unregulated internet eco-system stakeholders who use data access channel of the TSPs to reach to the customer with their services, including similar voice and messaging services, are not subject to the security compliance requirements imposed on the TSPs.
7. In case of OTTs, extraction & retrieval of data is not guaranteed if the data resides outside India or outside of operator's direct control. OTT's should have an infrastructure in place to support the TSPs with their existing LI system. OTT's should also conform to set of standards to be complied with defined LI requirements by the TSPs and government sources.
8. There is undoubtedly a need to make sure that these concerns are addressed. Therefore, we would like to propose the following requirements to be met by the OTT service providers:
 - a. Provisioning of LIM
 - b. Compliance with Data Privacy requirements
 - c. Compliance with the security requirements stipulated in the Unified License such as the installation of switching nodes within India, maintenance of all critical and sensitive data within India
 - d. Maintenance of commercial records/Call Detail Record (CDR)/ Exchange Detail Record (EDR)/ IP Detail Record (IPDR)
 - e. Meeting all requirements related to traceability of subscribers
 - f. Procedures for sharing customer details with the Law Enforcement Agencies (LEAs)
 - g. Compliance to the TRAI Act and Directions issued from time to time
 - h. Compliance to Information Technology Act, 2000
 - i. Compliance to the proposed data privacy law
 - j. Compliance to the Companies Act 2013 by way of incorporation within India



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.

1. We are of the view that OTT Communication service providers may be encouraged to facilitate access to emergency number calls using location services; however, they may not be mandated to provide such services.
2. OTT Communication Providers may inform subscribers in clear and unambiguous terms regarding their limitations to provide emergency services.

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.

1. Some of the services that are offered by the OTT players such as messaging/instant messaging and VOIP telephony are perfect substitutes of the services that are being offered by the TSPs.
2. However, in case of such services which are similar, there are several aspects of regulatory treatment of the TSPs vis-à-vis the OTT players, which create a non-level playing field and hamper the former's ability to compete fairly in the marketplace. These regulatory imbalances are summarized below:

List of Regulations for Consideration of Review			
S No	Area of Regulation	Telecom Service Providers	OTTs
1	Spectrum allotment and use	Need to bear costs and adhere to rules	No such costs
2	Licensing	Yes, different licenses and their associated costs including licensing fee	No such licenses or costs
3	Spectrum related charges	Need to bear the costs	No such costs
4	Space related charges	Need to bear the costs	No such costs
5	Bank Guarantees to the Government	Yes	No
6	Proper record keeping including methodology	Required	Required through other acts



7	Interconnection	Yes, required as part of regulatory regime. Requirement to interconnect entails costs.	No such interconnection required as they are 'Over the Top' networks
8	Quality of Service Parameters	Required as part of regulatory regime	No such requirement
9	Obligations under various Telegraph Acts, including various audits	Need to adhere to rules	No such requirement
10	Infrastructure sharing	Need to bear the costs	No such costs
11	Security conditions	Need to adhere to rules	No such requirement
12	Emergency and Public utility services	Need to adhere to rules	No such requirement
13	Monitoring services i.e. Lawful interception and monitoring	Required as a license condition	No such requirement
14	Income Tax Payment	Yes	No

3. To minimise the imbalance, the existing regulatory and licensing conditions imposed on TSPs should be reviewed and minimised keeping in view light touch licensing approach. However, OTT communications services should be subjected to critical compliances viz. Security/ Lawful Interception & Monitoring, Customer Data Privacy and Data Localization.

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.

1. We are of the view that the players providing OTT communications services can be licenced by introducing the OTT Communication Authorization under the Unified License and be subject to following Regulatory compliances:
 - a. Lawful Interception and Monitoring & maintaining CDRs for a finite period
 - b. Data Privacy and Protection laws of the land should be equally applicable.
 - c. Data Localization: OTT communication service providers should be required to host their data in India.



- d. UCC Regulations of TRAI should be equally applicable to licensed and unlicensed entities providing similar services.

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

1. No Comments
