VIL/PB/RCA/2023/024

September 01, 2023

Advisor (Networks, Spectrum and Licensing)
Telecom Regulatory Authority of India,
Mahanagar Doorsanchar Bhawan,
Jawaharlal Nehru Marg (Old Minto Road),
New Delhi – 110002

Kind Attn: Shri Akhilesh Kumar Trivedi

Subject: Comments on the TRAI's Consultation Paper on "Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services" dated July 07, 2022

Dear Sir,

Kindly find enclosed herewith comments from Vodafone Idea Limited to the TRAI's Consultation Paper on "Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services" dated July 07, 2022.

We hope our comments will merit your kind consideration please.

Thanking you,

Yours sincerely,

For **Vodafone Idea Limited**

P. Balaji
Chief Regulatory & Corporate Affairs Officer

Enclosed: As stated above

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VIL Comments to the TRAI Consultation Paper on "Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services"

At the outset, we are thankful to the Authority for giving us this opportunity to provide our comments to the TRAI Consultation Paper on "Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services" dated July 07, 2023.

In this regard, we would like to submit our comments for Authority's kind consideration, as given below:

Executive Summary

A. Fair-share Contribution by OTT to TSPs

1. Few OTT players (generally very large OTT players) are generating most of the traffic being handled by data networks of TSPs. **There is a significant arbitrage being enjoyed by large OTT players in terms of huge increase in revenues without any investment in access network infrastructure creation, whereas licensed TSPs don't have significant revenue growth despite massive investment in network infrastructure creation.**

2. There is a need that OTT players should contribute towards investment in network. **A policy framework should be prescribed on 'Fair share' contribution from the large OTT players to TSPs towards the telecom networks. Fair share contribution would address the inequalities between different stakeholders.**

3. There can be two options of principle for fair share determination, given as below:

    a. **Option 1:** Regulated Fair share charge.
    b. **Option 2:** Determination of Fair share charge based on mutual commercial negotiations between TSPs and large OTT players, with fallback to Option 1.

4. **We recommend to start with Option-1 as first phase of implementing this mechanism. After few years of gaining intelligence on the market practice, the Regulator/Government may review the option.**

B. OTT Services – Definition and Classification:

1. In our view, **"OTT services can be described as content, services or applications that are provided to end users over the Internet independently of the access network service provider. This means that the term OTT does not refer to a particular type of service but to a method of provision, namely provision over the public Internet. We further note that services provided via the**

internet are delivered without control over the underlying network and they are therefore referred to as OTT services."

2. Based on wide range of offering made by these OTT Services, like type of content, communications they enable, business model, or primary function they serve, there can be various classification of OTT services. However, the classification provided by DoT in its Net Neutrality Committee report appears to be the most appropriate one, i.e.:

   a. OTT communication services
   b. OTT application services

C. OTT Communication Services (OTT-CS) – Definition and Classification:

1. **Definition:** DoT's definition as provided in Net Neutrality Committee Report, May 2015, appears to the most closely placed. We recommend that the same definition should be used for OTT-CS, with a minor modification (in Red font) as given below:

   Definition of OTT communication services: ***These services (e.g. VoIP) provide real-time person/application to person/application ~~tele~~communication services. These services are similar to the telecommunication services provided by the licensed telecom service providers (TSPs) but are provided to the users as applications carried over the internet using the network infrastructure of TSPs. Essentially OTT communications services compete with the services provided by TSPs riding on the infrastructure created by TSPs.***

2. **Classification:** We recommend that such classification should be based on number of subscribers of the OTT-CS, given as below:

   a. **Significant OTT-CS players (like an SMP):** Having more than 50 lakhs subscribers e.g. Meta (having Facebook, whatsapp, Instagram, Threads), Twitter, LinkedIn.
   b. **Non-Significant OTT-CS players (like non-SMP):** Having less than 50 lakhs subscribers.

   There should be an exception to above Significant OTT-CS players whereby the entities providing incidental communication services, as a support to their non-communication services, should be excluded.

D. Need of Licensing and Regulatory Framework for OTT-CS Providers

1. **There is a substantial non-level playing field between licensed TSPs and OTT-CS providers, emanating from the licensing and regulatory framework applicable on the TSPs whereas none of such framework apply on OTT-CS providers.** OTT-CS providers are not accountable towards supporting National Security objective and consumer interest protection by providing transparent consumer grievance, privacy and spam protection norms.

2. **Considering the critical aspects of consumer protection, national security and level-playing field, there is an urgent and critical need of putting in place a Licensing and Regulatory framework for OTT-CS. It should be done by introducing a separate authorization under Unified License which should include provisions for lawful interception, privacy and security, emergency services, unsolicited commercial communications, customer verification, quality of service, etc.**

E. Need of Collaborative Framework between OTT-CS and Licensed TSPs

1. **The OTT-CS providers use TSPs' infrastructure but do not contribute to the costs of building and maintaining it. A collaborative framework between OTT-CS providers and licensed TSPs is the best and immediate way forward to support the overall communication needs of the society. It can include provisions for revenue sharing, where OTT-CS providers contribute a portion of their revenue to telecom operators.**

2. Few models which can be explored are Revenue Sharing, volume based charging and QoS based charging. We request TRAI to recommend the same to the DoT for its early implementation.

F. Selective Banning of OTT Services/websites:

1. There is network capability available with us as TSP to selectively block the OTT services/websites subject to proper identification details (list of IPs) are provided by Competent Authority. However, there are certain technical challenges as below:

    a. **Identification (which traffic is to be blocked):** Proper identification of the requisite details of list of IPs being used by the OTT services/websites which are required to be blocked is challenging.

    b. **Segregation (from live traffic):** The existing technical and network systems deployed for a given geography in a network, cannot segregate OTT service/website traffic based on content, if the specific OTT/URL is communicating in a "secure nature" between internet access (mobile) client and OTT service/website server.

2. There is a **need to put in place a regulatory framework for selective banning of OTT services/websites and following requirements should be covered in this framework:**

    a. **Blanket shutdown of Internet should be explicitly disallowed.**

    b. **For selective banning of OTT services/websites by TSPs, the regulatory framework should enable Competent Authorities to have access to proper identification details of domain name and list of IPs of selective OTT services/websites, which they can provide to TSPs under shutdown orders.** As the services are provided by OTT service/website service providers, they should be directed to declare list of IPs being used, on a regular basis. This should be done on a regular basis, so that action during a crisis/unrest is not held up due to want of information from OTT-CS/websites.

c. **Complementary Solution:** Due responsibility should be casted upon these OTT service/website service providers, for providing solutions to ensure selective blocking of their services in a specific region. In such cases, the OTT players and/or OS providers should be directed to put a technical solution in place and block use of specific OTT apps within a defined geographical region.

3. Classification of OTT services/websites to be covered under selective banning of OTT services/websites:

   a. **OTT service/website services providers involving P2P communication at mass level – required for blocking:** This could include those services which allows P2P communication at mass level.

   b. **OTT service/website services providers – required for content take down:** This could include those services where certain content, uploaded by a person, can be viewed by any other person, and needs to be taken down.

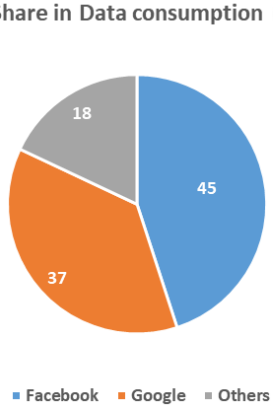
Detailed Comments

Comments on Fair Share contribution from large OTT Service providers

In the discussion on OTT, the most important area to be deliberated is about fair share mechanism from OTT players, who consume most of the data network capacity. Therefore, we would request TRAI to address it during this consultation paper itself. Our comments on this topic are given as follows:

1. Mobile data traffic continues to grow rapidly. Video content and social networking continues to be the major drivers of growth in volume of mobile and fixed data, which explains why only few entities account for large portion of the network's data consumption as shown in picture below.

Picture-1

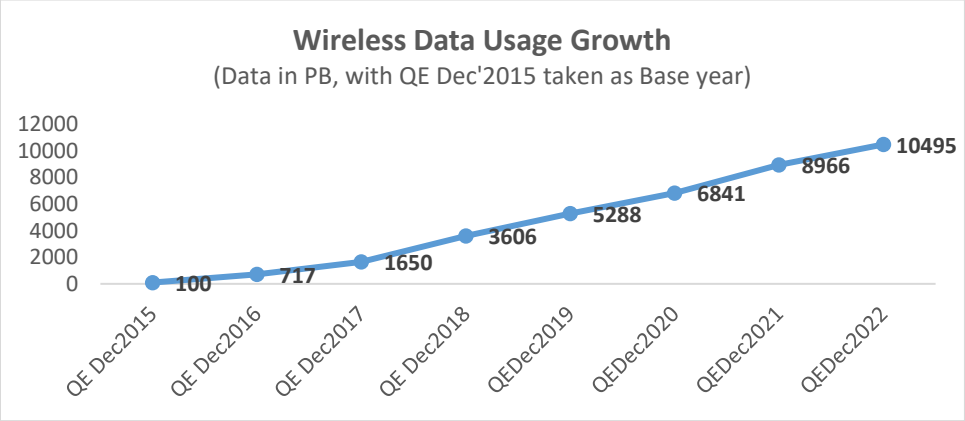


Source: This information is based on VIL's Core network and Cache set-ups as well as peering links by OTT players deployed with VIL at different locations

2. Meeting the demand for data while maintaining quality of service, requires large investments by mobile operators to expand capacity. With onset of 5G, the Government and Regulator have set ambitious visions for consumers and businesses to gain access to advanced next generation technologies with enhanced quality of experience and functionalities offered by 5G. There are minimum roll-out targets also prescribed spectrum band wise.

3. **Data demand expected to rise exponentially with 5G:** Faster speeds of 5G are also expected to usher India into huge growth of demand in data. In case of 4G also, India witnessed mammoth growth in network data consumption. Below picture depicts the said growth with 4G over the years as compared to the data usage prior to 4G in quarter ending Dec'2015. With 5G also, similar leap in demand of data is expected.

Picture - 2

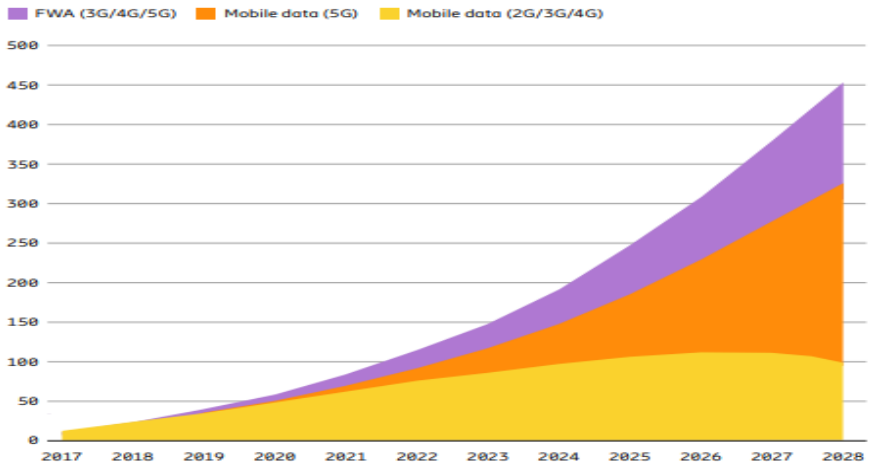


Source: TRAI's Quarterly Performance Indicator reports

Further, the below graph shows that 5G is expected to lead to huge growth in demand for Data in coming few years.

Picture - 3

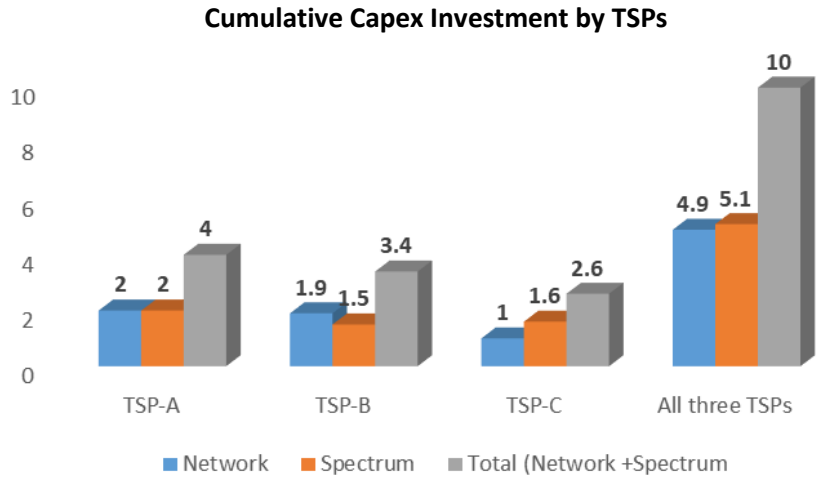
Global mobile network data traffic (EB per month)



Source: Ericsson Mobility Report, November 2022

4. **Massive investment required in Telecom Networks:** To support extensive network roll-out and to support such huge growth in demand of data, it would require massive investments from operators. As per the financial model submitted by VIL (with confidentiality remarks) to TRAI vide our comments to the TRAI's consultation paper on Auction of Spectrum in frequency bands identified for IMT/5G dated 30.11.2021, estimated CAPEX investment from industry over next 10 years would be ~2.6 trillion INR for 5G network deployment and expansion. As per our understanding and calculations from the publicly made available figures by other TSPs, following is the cumulative CAPEX investment including spectrum commitments, done by TSPs:

Picture - 4



5. **Major factors which can improve returns on investment:** From economics perspective, there are 3 major factors which can improve returns on investment and are explained as below.

   a. **Higher payments from end-users of telecommunication services:** Considering the price sensitivity and objective of keeping telecom connectivity affordable for general masses, it is very difficult to raise tariffs and get higher payments from end consumers.

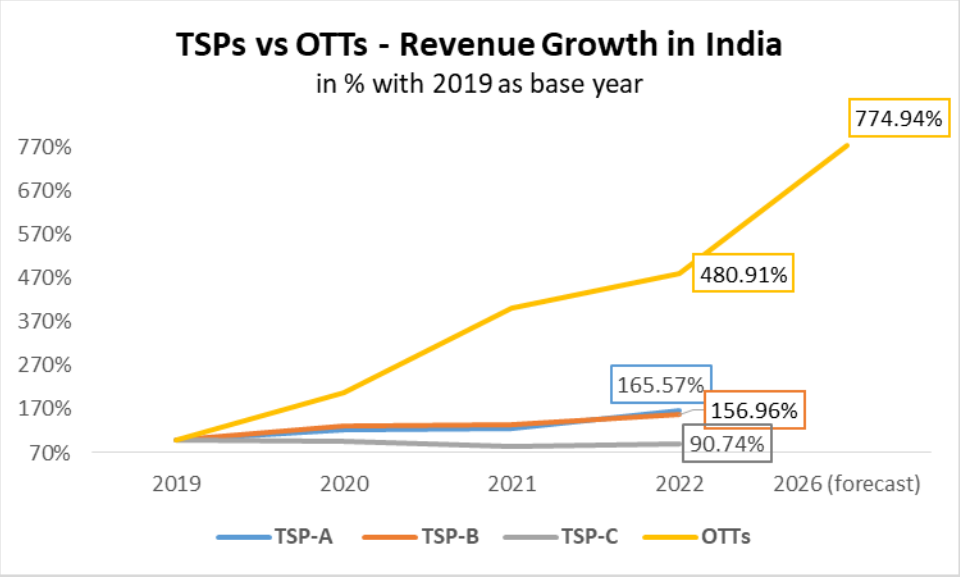
   b. **Reduction in levies leading to reduction in cost to operate:** This has been debated for long time and TRAI has also given recommendations. However, it doesn't appear to become reality in coming short time frame.

   c. **Payments from content providers:** So far, the OTT players do not pay anything to TSPs for utilizing the data network capacity. This kind of payment is the only plausible area which should be deliberated and a policy framework should be put in place, to ensure large OTT players who are using the network the most, contribute 'fair share' to the investments being made by the TSPs in setting up networks.

6. **Revenue comparison of TSPs and large OTT players:**

a. There is a significant arbitrage being enjoyed by one stakeholder i.e. OTT players in terms of huge increase in revenues, whereas the other stakeholder i.e. licensed TSPs doesn't have significant revenue growth despite massive investment in network infrastructure creation. The graph given below clearly illustrates the difference between % Revenue Growth of OTT players v/s licensed TSPs in India[1].

Picture – 5

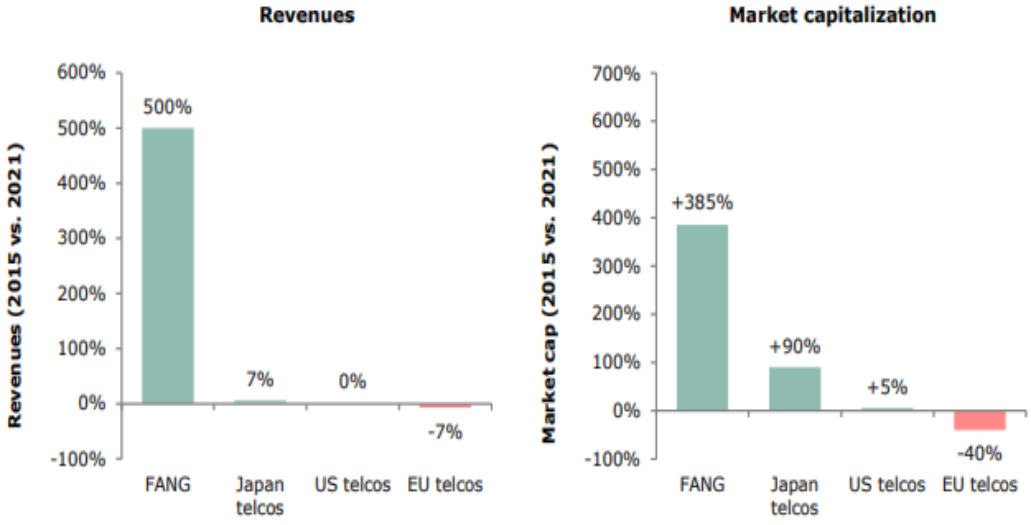


b. Globally also, there is similar arbitrage in favor of OTT players, who are enjoying massive increase in revenue and market capitalization as compared to licensed telcos in global geographies. The below given picture provides the revenue growth and market capitalization growth of Telcos in Europe, US and Japan as compared to FANG (Facebook (now Meta), Amazon, Netflix and Google (now Alphabet), based on Report[2] by Axon.

[1] PWC Global Entertainment & Media Outlook 2022-2026 with forecast of OTT revenues in 2026 and Financial Information Report published by TRAI providing TSPs gross revenues

[2] https://www.etno.eu//downloads/reports/europes%20internet%20ecosystem.%20socio-economic%20benefits%20of%20a%20fairer%20balance%20between%20tech%20giants%20and%20telecom%20operators%20by%20axon%20for%20etno.pdf

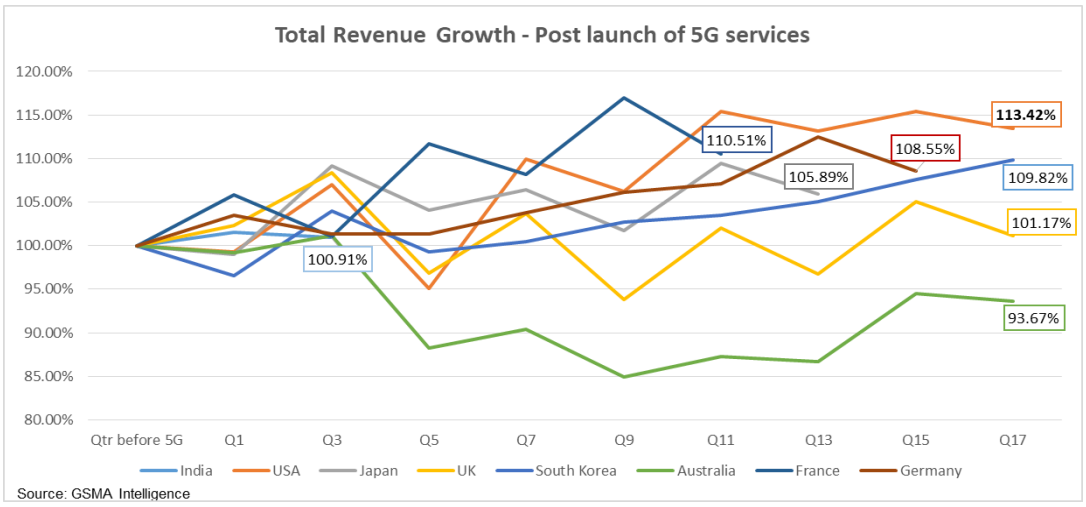
Picture - 6



7. **5G not expected to increase revenues – Global context:**

   a. We have provided information vide our comments to the TRAI consultation paper on 5G spectrum, about the global examples on revenues which have not witnessed increase after various quarters of 5G launch. Following picture provides updated information[3] of revenue growth for telecom operators in various countries:

Picture - 7



[3] GSMA intelligence data

b. It is clearly evident from above that even after 4 years of launch of 5G services, there is no substantial growth in revenues for telecom operators across most of the countries and same trend is expected in India also.

c. Thus, it can be concluded that present economic factor determining returns on investment i.e. revenues from end customers, would not be able to provide returns on the massive investment required to deploy 5G networks.

8. **Stability required considering Importance of Telecom networks**:

a. The importance of telecom networks in Indian society has increased manifold. The telecom networks are propelling digital wave in the society, leading to huge push to new line of businesses, jobs and increase in economy along with propelling start-ups and unicorns. During pandemic times, telecom networks have provided much needed relief to consumers, to stay connected with others as well as to access digital services including education/health from their homes.

b. The Government of India has also set a target of 1 trillion digital economy by 2025[4], which in our view, can only be achieved through a robust network infrastructure set-up by financially stable licensed TSPs.

c. Therefore, it is imperative for our developing nation to ensure the stability of telecommunication sector and continued massive investments in telecom networks, by finding additional source of revenues.

9. **Critical Question to be considered is:**

"Considering growth of large OTT platforms, whether present provisions will achieve best objectives for the Indian society and economy going forward?"

a. Few OTT players (generally very large OTT players) are accountable for most of the traffic being handled by telecom networks. The traffic they generate (particularly video traffic from which they earn advertising and subscription revenues) creates highly imbalanced traffic flows. There is a need that they should contribute towards investment in network.

b. Commercial negotiations with large OTT players may not deliver efficient arrangements given a large imbalance in bargaining power. While OTT players tend to dominate their core markets, whereas telecom operators face effective competition such that an individual

[4] https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1565669

operator cannot credibly threaten to limit access to an OTT player's services if the OTT player does not contribute to the costs of delivering data. Such an action would lead to its customers switching to rivals. Besides, any such action by TSP would find it challenging from the prism of net neutrality.

c. **Therefore, there is a need to put in place policy framework on 'Fair share' contribution from the large OTT players towards the telecom networks. It would be of immense importance and value for our country to work towards an effective policy framework on the same and set-up global example.**

10. **Policy framework on Fair Share:**

Any regulatory intervention on Fair Share will have to address several key policy areas which will include:

a. **Determining the policy objective**
The ultimate objective for such policy framework should be to ensure that all market participants have incentives to operate and invest efficiently, leading to maximizing benefits to society and economy.

b. **Determining which OTT players would be subject to the policy:**
To ensure there is no impact to Innovation and Net Neutrality principle, the policy should be applicable only on the large OTT players, who consume most of the data networks capacity. These large OTT players can be determined based on certain % threshold (let's say 5%) of the overall peak hour traffic or based on certain minimum number of active subscribers they serve (let's say 50 lakhs which is also mentioned for qualifying as Social Media Intermediary under Indian law).

c. **Principles for determination of Fair Share contributions by large OTT players**: In our view, there are two options of principle for fair share determination, given as below.

i. **Option 1:** Regulated Fair share charge.

ii. **Option 2:** Determination of Fair share charge based on mutual commercial negotiations between TSPs and large OTT players, with fallback to Option 1.

We would like to recommend that, in India the framework should start with Option-1 as first phase of implementing this mechanism. After few years of gaining intelligence on the market practice, the Regulator/Government may review the option.

11. **Benefits of Fair Share contribution from large OTT players:**

a. Helps stabilize telecommunication sector and ensure more investments in networks.

b. Increase in creation of network infrastructure – which is backbone for any digital growth in economy and society.

c. Balance between all stakeholders of the ecosystem, on returns from capital employed.

d. No impact to net neutrality principles.

12. **Global Examples on Fair Share:**

a. **South Korea:**

i. In 2020, South Korea initiated a form of 'fair contribution' for large traffic generators through amendment to their Act, thereby putting in place an obligation for large domestic and foreign content providers exceeding a certain size threshold to secure means for stability of service. This size threshold should be in excess of either 1m daily internet users in South Korea or if their traffic accounts for more than 1% of Korean internet traffic.

ii. Some of the large traffic generators have started contributing fair share to local telcos whereas certain entities are challenging it or trying to bypass it through re-routing.

b. **Europe:**

i. The European declaration on digital rights and principles for the digital decade fueled the debate on whether large traffic generators should contribute financially to telcos' deployment of very high capacity networks (VHCNs) such as optical fibre and 5G. The declaration commits to develop 'adequate frameworks so that all market actors benefiting from the digital transformation assume their social responsibilities and make a fair and proportionate contribution to the costs of infrastructure, for the benefit of all Europeans'.

ii. The European Commission has also launched a consultation this year on 'the future of the connectivity sector and its infrastructure', which includes deliberations on the fair contribution as well.

13. **Myths v/s Reality w.r.t. Fair Share Contribution:**

We have noticed that there is lot of misinformation which is spread during debates on fair share. As the OTT players control contents shown to consumers over their digital journeys, it is imperative that certain myths are busted and real scenario is transparently made available to all. This will help explain telecom operator’s perspective and how fair share contributions will bring balance in commercial interests of all the stakeholders enabling this ecosystem.

The myths and reality are explained as follows:

a. **Myth 1: The telecom sector remains profitable and we are pushing rapidly towards digital decade targets.**

Reality:

i. The Indian telecom sector has faced continuous years of decline. Despite the massive investments required for each new technology generation of networks, a sustainable return on capital has been evasive for licensed TSPs for years.

ii. The investment returns for the telecom operators has been below the cost of capital (WACC) for over a decade. The Picture-5 given above, clearly provides the insignificant growth in revenues of licensed TSPs.

iii. The CAPEX spend by telecom operators includes diverting spend from planned projects to address unexpected capacity demand and for maintaining existing services and revenue streams rather than transformational activity.

iv. The outcome is a vicious circle, where the largest content generators, with their higher ROCE, are able to invest in new revenue streams that, in turn, trigger a need for network operators to make further significant investment (i.e. investing in network capacity and quality to handle these new services). For reasons outlined above, the TSPs remain unable to make a fair return on that investment, which continues to limit available CAPEX budget.

v. In sum, content generators are in a cycle of developing or launching new services that creates huge revenues for them but, at the cost of putting an increasing cost-burden on the networks that facilitate their services, and further shrink ability of TSPs to create returns on investments.

b. **Myth 2: OTTs already contribute towards network costs via investments in delivery (i.e. peering and caching), transport (e.g. subsea cables) and hosting (e.g. local data centers). They have invested in developing encoding technology to reduce file sizes and optimize bandwidth use.**

Reality:

i. These investments do not replace neither complement the investments on national core, aggregation and access networks.

ii. OTTs have only invested in submarine cables to cope with increasing traffic demand in international transport routes.

iii. However, the demand is also present at national core, transport and access networks, which is not addressed by OTTs.

c. **Myth 3: Fair Share will result in lower quality for internet users and result in prices increases for them. Adding a cost to accessing free or cheap content would inevitably be transferred to the consumer, effectively raising the cost of internet usage.**

Reality:

i. Fair share will benefit all stakeholders i.e. end customers, telecom operators and large traffic originators, by ensuring the deployment of faster high capacity networks with the required quality and with innovative services.

ii. An efficient and fair cost-sharing policy applicable only to large OTT players (few in number) will ensure a better Quality of service for users and a faster roll-out.

iii. A fairer allocation of network costs can relieve the pressure on consumer prices for communication services as the only way to meet investment needs.

Submission: Fair contribution from large OTT players to TSPs would address the inequalities between different stakeholders and enable TSPs to roll-out in a faster and more inclusive way and improve network quality for users.

d. **Myth 4: Demand for 'revenue sharing' or 'fair share' are an attempt to dilute net neutrality in India.**

Reality:

i. Fair share does not affect access to an open and free Internet.

ii. Content and services will remain fully accessible with no traffic management / differentiation implemented for any specific entity. There will be no throttling, no blocking and no paid prioritization.

iii. The price for the traffic paid by end users will not change depending on whether the traffic originator is subject to fair share payments or not.

Submission: By defining a threshold resulting into only large traffic originators having to pay fair share to TSPs, there will be no impact to net neutrality.

e. **Myth 5: Demand for telecom services is entirely dependent on the ability of OTT services to attract users. Levying additional cost on OTTs, without providing any additional services, would be akin to double charging of customers.**

Reality:

i. Fair Share is not double charging. Many Internet services are based on two sided market business models.

ii. Fair share just aims to get paid by users (tariff) and Traffic Originators (bandwidth usage/traffic).

iii. Internet companies get paid by users and businesses at the same time: App Store from app developers and buyers / users of apps, Google from users (data) and businesses (ads).

f. **Myth 6: OTTs (Over The Top) / CAPs (Content and Application Providers) are not traffic generators, it's end users by requesting services.**

Reality:

i. This is a flawed argument. CAPs decide without user control and knowledge, the traffic volumes delivered. They decide on compression techniques i.e. whether to transmit standard definition, high definition or ultra-high definition and how to proceed in case of network congestion -reducing the quality of the streaming, or "over provisioning".

ii. The CAPs decide the quality of transmission – Standard Definition or High Definition or Ultra High definition and also prices the end product accordingly. This has a huge bearing on network utilization, but with no control at TSPs' end, whatsoever, to influence this or get compensated for the same while the CAP charges a premium on the other hand.

iii. Features such as auto-play, continuous-play are not requested by end users, and automatically provisioned in services. These result in significant traffic volumes.

Therefore, above points as Myths v/s Reality, clearly explains the rationale and reality behind the fair share mechanism and the value it brings to the telecommunication sector and economy as a whole.

Question-wise Comments

Q1. What should be the definition of over-the-top (OTT) services? Kindly provide a detailed response with justification.
And
Q2. What could be the reasonable classification of OTT services based on an intelligible differentia? Please provide a list of the categories of OTT services based on such classification. Kindly provide a detailed response with justification.

VIL Comments to Q. no. 1 and 2

1. Over-The-Top (OTT) services are a category of digital content delivery systems that provide multimedia resources over the internet. The term "Over-The-Top" is used to describe the nature of these services, which bypass traditional media distribution channels such as cable, broadcast, or satellite television platforms. Instead, they deliver content directly to consumers over the internet.

2. The proliferation of OTT services has been driven by advancements in internet technology and the widespread adoption of smart devices. As internet speeds have increased and become more reliable, it has become feasible to deliver high-quality content directly to consumers over the internet. At the same time, the proliferation of smartphones, tablets, smart TVs, and other internet-enabled devices has created a vast market for OTT services.

3. Mobile data traffic continues to grow rapidly. Video content and social networking continues to be the major drivers of growth in volume of mobile and fixed data, which explains why only few entities account for large portion of the network's data consumption.

4. Faster speeds of 5G are also expected to usher India into huge growth of demand in data. In case of 4G also, India witnessed mammoth growth in network data consumption. The Picture – 2 given above shows the said growth with 4G over the years as compared to the data usage prior to 4G in quarter ending Dec'2015. With 5G also, similar leap in demand of data is expected.

5. For the quantum leap in growth in demand of data, fueled majorly by few OTT players contributing the most in the data traffic (large traffic originators), TSPs have to invest heavily in deploying the network and augmenting the capacity. Despite massive investments, the return on investments in telecom networks has been substantially low.

6. To ensure stability for investments in telecom networks, there is need to make a head start for bringing balance between all the stakeholders of this ecosystem. For this, OTT services have to be defined. **The definition should enunciate and bring about the required clarity and a comprehensive understanding of the nature and scope of OTT services.**

7. **Definition and characteristics of OTT Services:**

a. There are numerous definitions across various international forums and jurisdictions. TRAI has mentioned some of them in its consultation paper also. Following are some of such examples:

i. **Organisation for Economic Co-operation and Development (OECD) Communications Outlook (2013)**

"video, voice and other services provided over the Internet rather than solely over the provider's own managed network"

ii. **Body of European Regulators for Electronic Communications (BEREC) in 'Report on OTT Services" – January, 2016**

"content, a service or an application that is provided to the end user over the public Internet"

iii. **Commonwealth Telecommunication Organization (CTO) in its report on 'Over The Top (OTT) Applications & Internet Value Chain' in 2020**

"OTTs can be content, a service or an application that is provided to the end user over the public Internet."

iv. **South Asian Telecommunications Regulator's Council (SATRC) in its Report On Policy, Regulatory And Technical Aspects Of OTT Services In SATRC Countries, October, 2016**

"Applications and services which are accessible over the internet and ride on operators' networks offering internet access services"

b. **In our view, "OTT services can be described as content, services or applications that are provided to end users over the Internet independently of the access network service provider. This means that the term OTT does not refer to a particular type of service but to a method of provision, namely provision over the public Internet. We further note that services provided via the internet are delivered without control over the underlying network and they are therefore referred to as OTT services." It is based on earlier submission[5] made by GSMA to TRAI.**

8. Further, based on wide range of offering made by these OTT Services, such as the type of content they deliver, communications they enable, their business model, or the primary function they serve, there can be various classification of OTT services. However, the classification provided by DoT in its Net Neutrality Committee report appears to be the most appropriate one. The extract of the Net Neutrality report is given as follows:

[5] https://www.trai.gov.in/sites/default/files/GSMA08012019.pdf

a. ***OTT communications services****: These services (e.g. VoIP) provide real-time person to person telecommunication services. These services are similar to the telecommunication services provided by the licensed telecom service providers (TSPs) but are provided to the users as applications carried over the internet using the network infrastructure of TSPs. Essentially OTT communications services compete with the services provided by TSPs riding on the infrastructure created by TSPs.*

b. ***OTT application services:*** *All other OTT services such as media services (broadcasting, gaming), trade and commerce services (e-commerce, radio taxi, financial services), cloud services (data hosting & data management platforms/applications), social media (Internet based intermediary applications like Facebook, YouTube) offer services to end-users using the network infrastructure created by TSPs but do not directly compete with the service offerings for which the TSPs have obtained a license under the applicable law i.e. the Indian Telegraph Act, 1885.*

9. While above classifications are appropriate, there is a need to understand and clarify that:

   a. 'person' in the OTT communication services would mean an 'individual person or an entity' as many of the large OTT communication service providers have entered into the domain of A2P messaging as well.

   b. As OTT player may provide service(s) which may overlap in between the classes, therefore, such service should be covered in both the classes.

Q3. What should be the definition of OTT communication services? Please provide a list of features which may comprehensively characterize OTT communication services. Kindly provide a detailed response with justification.
And
Q4. What could be the reasonable classification of OTT communication services based on an intelligible differentia? Please provide a list of the categories of OTT communication services based on such classification. Kindly provide a detailed response with justification.

VIL Comments to Q. no. 3 and 4

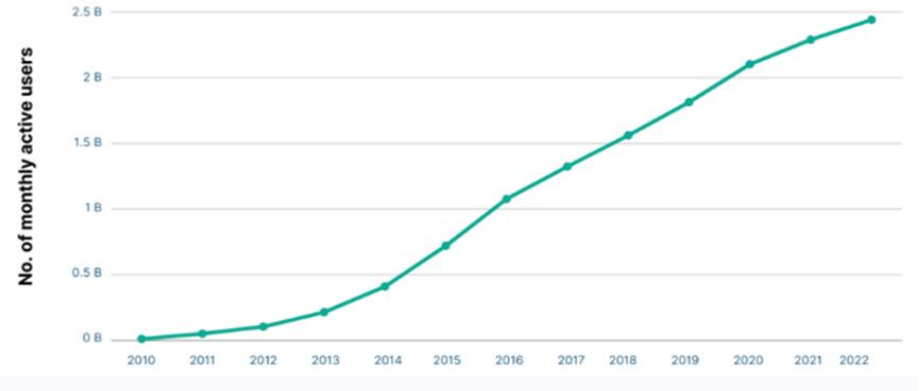
1. OTT Communication services players are displacing TSPs services and revenues

a. OTT-CS are generally communication services which are substitutable to voice, video and SMS services being provided by TSPs. OTT-CS are generally real-time and enriched communication services taking place over the internet, using the network infrastructure of TSPs. Some of the examples of highly used OTT-CS are whatsapp, telegram, Instagram, Facebook, skype, Google-Talk etc.

b. With the deployment of next generation telecom networks globally in past decade or more leading to increased internet speeds, the OTT-CS has proliferated globally by riding on the telecom networks and thereby providing services in competition with traditional telephony services of TSPs. The OTT-CS generally provide their services as free to the end consumers, which has led to a huge increase in their subscriber growth and is evident from below table:

Picture - 8

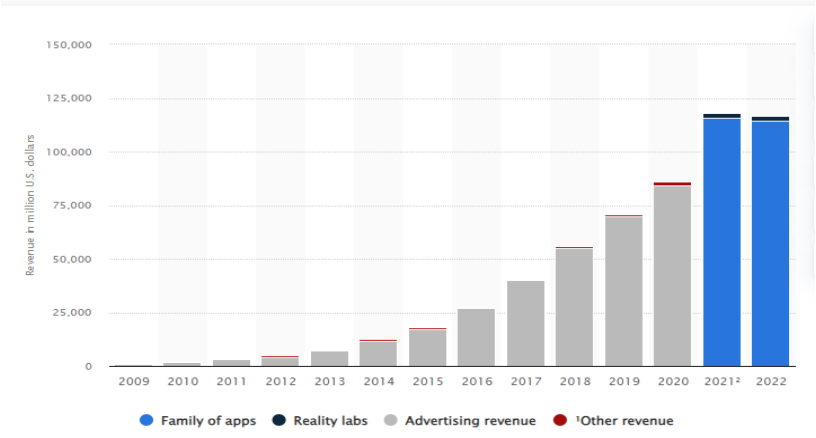
Monthly global active users of the one of the OTT-CS app[6]



c. The business model of OTT-CS players is based on getting revenues from advertising or making A2P communications or by sharing consumer information, without complying with any of the conditions as are applicable on licensed TSPs.

d. Following picture[7] depicts the huge global revenues over the years, of one of the major OTT-CS provider with multiple apps.

Picture - 9



[6] https://jungleworks.com/how-can-small-businesses-use-whatsapp-to-drive-sales-with-hippo/

[7] https://www.statista.com/statistics/267031/facebooks-annual-revenue-by-segment/

e. One of the major marketing point for the OTT-CS is that they provide end to end secured and encrypted services[8], which generally cannot be decrypted by anyone else. This otherwise is forbidden for licensed telecom operators.

f. No regulatory framework applicable on the OTT-CS, is dangerous from National Security perspective as OTT-CS may tend to play hard ball with designated LEAs and may choose not to provide requisite and timely support to them, citing their architecture, solution design etc.

g. Further, the licensed TSPs have to invest heavily in creation of digital infrastructure whereas the OTT-CS ride over the said infrastructure without any investments in access network infrastructure and generate disproportionate revenues. Most importantly, there are many licensing, security and regulatory norms which apply to licensed TSPs but, none apply to OTT-CS players.

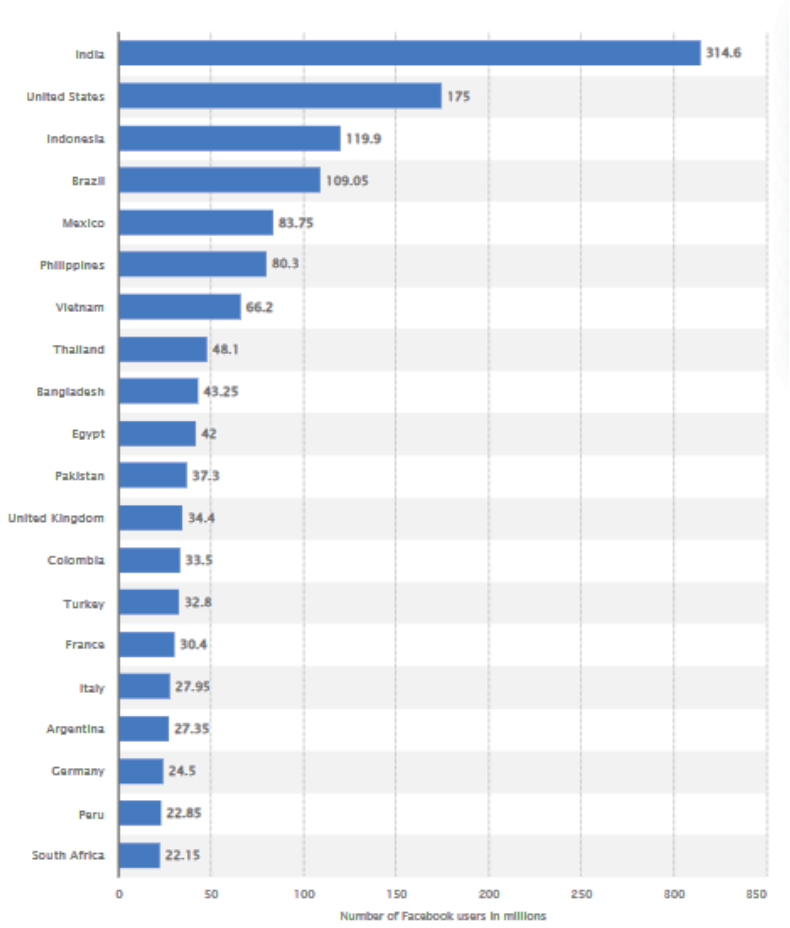
h. Due to this above-given arbitrage, it has led to significant displacement of voice and messaging volumes from licensed telecom operators to OTT-CS and thus, eroding significant revenues sources of licensed TSPs especially international voice/messaging. These OTT-CS players have also started entering the Enterprise messaging (A2P) domain[9] and there is already a shift in volumes and revenues towards them from TSPs.

2. **Need to define OTT-CS**:

a. India has a typical national security requirements, coupled by the fact that India generally contributes the most to the subscribers of OTT-CS players, as compared to many other countries. In this regard, following graph[10] clearly shows the huge growth for such OTT-CS players due to services being provided to Indian customers.

[8] https://www.whatsapp.com/privacy
[9] https://business.whatsapp.com/blog/enterprise-business-messaging
[10] https://www.statista.com/statistics/268136/top-15-countries-based-on-number-of-facebook-users/

Picture - 10



b. There are various global examples where the OTT-CS services have been regulated, considering the extent of their role in respective societies and impact to their national security.

c. Considering above, there is a need to regulate OTT-CS at par with licensed TSPs so that the national security, consumer related issues, loss to national exchequer and non-level playing field related concerns are addressed.

d. For regulating OTT-CS, the first and foremost step would be to define OTT-CS with uniform and unambiguous interpretation, and such that the OTT-CS can be distinctively carved out from the plethora of services provided over Internet and in Digital world.

3. Definition and characteristics of OTT-CS

a. There are many definitions given by credible Government/Regulatory bodies and other entities, couple of which are given below for reference:

DoT Committee Report on "Net Neutrality" of May 2015

Definition of OTT communication services: These services (e.g. VoIP) provide real-time person to person telecommunication services. These services are similar to the telecommunication services provided by the licensed telecom service providers (TSPs) but are provided to the users as applications carried over the internet using the network infrastructure of TSPs. Essentially OTT communications services compete with the services provided by TSPs riding on the infrastructure created by TSPs.

SATRC Report on Policy, Regulatory and Technical aspects Of OTT Services in SATRC Countries

Definition of OTT communication services: Real time voice, video and messaging services which are primarily concerned with communication applications but use internet as the transport rather than the legacy telephony core infrastructure.

b. **Ingredients/Characteristics:** In our view, the OTT-CS are those which are substitutable to the services provided by licensed TSPs and hence, an OTT-CS, may have any one or more of following basic ingredients/characteristics:

i. **Internet-Based:** OTT communication services use the internet to transmit data, bypassing traditional telecommunication networks. This allows them to operate independently of network operators and to provide services globally, as long as users have an internet connection.

ii. **Variety of Communication Modes:** OTT communication services can support various modes of communication, including text messaging, voice calls, video calls, and group communication. Some services may specialize in one mode, while others offer multiple modes.

iii. **Real-Time or Near Real-Time Communication:** Many OTT communication services facilitate real-time or near real-time communication, allowing for instant interaction between users.

iv. **User Accounts:** Users typically need to create an account to use an OTT communication service. This account is often tied to a user's email address or phone number, and it allows the service to identify users and facilitate communication between them.

v. **Cross-Platform Access:** OTT communication services are often accessible on multiple platforms, including smartphones, tablets, computers, and sometimes even smart TVs. This allows users to access the service from any device with an internet connection.

vi. **Multimedia Sharing:** In addition to text, voice, and video communication, many OTT communication services also allow users to share multimedia files, such as photos, videos, and documents.

vii. **End-to-End Encryption:** Some OTT communication services offer end-to-end encryption for their communication. This means that only the sender and the receiver can read the messages, providing a high level of security and privacy.

viii. **Integration with Other Services:** Many OTT communication services are integrated with other services. For example, a service might be integrated with a social media platform, allowing users to communicate directly within the platform.

c. **Recommended definition:** Considering the above characteristics, DoT's definition appears to the most closely placed. We recommend that the same definition should be used for OTT-CS, with a minor modification (in Red font) as given below:

Definition of OTT communication services: ***These services (e.g. VoIP) provide real-time person/application to person/application ~~tele~~communication services. These services are similar to the telecommunication services provided by the licensed telecom service providers (TSPs) but are provided to the users as applications carried over the internet using the network infrastructure of TSPs. Essentially OTT communications services compete with the services provided by TSPs riding on the infrastructure created by TSPs.***

4. Classification of OTT communication services:

Recommended Classification

a. For laying down classification for OTT-CS, it is important to understand its objective. If the classification is to be done with an objective to put a licensing and regulatory framework, we would like to recommend that such classification should be based on number of subscribers of the OTT-CS. Based on number of subscribers, following can be two classifications:

i. **Significant OTT-CS players (like an SMP):** Having more than 50 lakhs subscribers e.g. Meta (having Facebook, whatsapp, Instagram, Threads), Twitter, LinkedIn.

ii. **Non-Significant OTT-CS players (like non-SMP):** Having less than 50 lakhs subscribers.

b. The above classification should be determined with the active subscribers of a legal entity, irrespective of number of mobile apps it would have for providing OTT-CS. The 50 lakhs threshold is similar to the criteria applicable for Social Media intermediary under the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021.

c. We believe that the above classification will be best suited to develop the regulatory framework for such services, in the first phase. This is because regulating the entire ecosystem of OTT communication services would be complicated if classification is done basis sub-set of the services.

d. There should be an exception to above Significant OTT-CS players whereby the entities providing incidental communication services, as a support to their non-communication services, should be excluded. Examples of such entities providing incidental communication services between their agents and consumers, are like Food delivery companies (Zomato, Swiggy), Cab aggregating/Radio Taxi services (Ola, Uber), e-commerce services (Amazon, Blinkit, bigbasket) etc.

Alternate Classification

e. An alternative to above would be to classify the OTT-CS based on the primary mode of communication they facilitate, their target audience and specific needs they cater. Below given is a classification based on primary mode of communication they facilitate.

f. **OTT Messaging Services:** These services primarily facilitate text-based communication between users. They often support group messaging, multimedia sharing, and sometimes even voice or video calls. Examples include WhatsApp, Facebook Messenger, and Viber. The justification for this category is that these services primarily facilitate text-based communication, which has different usage patterns and technical requirements compared to other modes of communication.

g. **OTT Voice Call Services:** These services primarily facilitate voice calls between users over the internet. They often support group calls and sometimes even video calls or text messaging. Examples include Skype, Google Voice, and Viber. The justification for this category is that these services primarily facilitate voice communication, which has different technical requirements and usage patterns compared to text-based communication.

h. **OTT Video Call Services:** These services primarily facilitate video calls between users over the internet. They often support group video calls, screen sharing, and sometimes even text messaging or voice calls. Examples include Zoom, Google Meet, and FaceTime. The justification for this category is that these services primarily facilitate video communication, which requires significant bandwidth and has different usage patterns compared to voice or text-based communication.

i. **OTT Social Media Services:** While not exclusively communication services, these platforms facilitate communication as a key part of their functionality. They allow users to post updates, comment on others' posts, and send direct messages. Examples include Facebook, Instagram, and Twitter. The justification for this category is that these services facilitate communication within the context of a broader social media platform, which involves different user engagement strategies and community management considerations compared to standalone communication services.

j. **OTT Collaboration Services:** These services primarily facilitate communication and collaboration within teams or groups, often in a business or educational context. They often support text messaging, voice and video calls, file sharing, and other collaborative features. Examples include Slack, Microsoft Teams, and Google Workspace. The justification for this category is that these services primarily facilitate collaborative communication, which involves different user engagement strategies and technical requirements compared to other types of communication.

k. **While above would appear distinct categories however, generally large OTT-CS providers tend to provide mix of these services and with advancements, there is always overlap of services which will render this classification bit challenging.**

Q5. Please provide your views on the following aspects of OTT communication services vis-à-vis licensed telecommunication services in India:
(a) regulatory aspects;
(b) economic aspects;
(c) security aspects;
(d) privacy aspects;
(e) safety aspects;
(f) quality of service aspects;
(g) consumer grievance redressal aspects; and
(h) any other aspects (please specify).
Kindly provide a detailed response with justification.

VIL Comments to question no. 5

There is substantial non-level playing field between licensed TSPs and OTT-CS providers, emanating from the licensing and regulatory framework applicable on the TSPs whereas none of such framework apply on OTT-CS providers. Most importantly, OTT-CS providers are not accountable towards supporting National Security objective and towards consumer interest protection by having transparent consumer grievance, privacy and spam protection norms. In this regard, our detailed comments are given as follows:

1. **Regulatory aspects:**

a. Telecom services in India are regulated through licensing framework from the Licensor (the DoT) and regulatory framework from the Regulator (the TRAI), which imposes various obligations on TSPs basis the Indian Telegraph Act 1885, its Rules and the Telecom Regulatory Authority of India Act 1997, and guidelines/orders/instructions/regulations thereof.

b. The obligations on licensed TSPs include licensing fees, compliance with QoS standards, adherence to specific security protocols, meeting global/domestic standards, Lawful

Interception, 24x7 support to LEAs, security obligations, trusted network elements, EMF norms, emergency services, principles of non-discrimination and traffic management, transparency, norms on tariffs, roll-out obligations, customer protection related norms, measures to curb unsolicited commercial communications, interconnection etc.

c. On the other hand, OTT services are primarily governed by the provisions of the Information Technology Act 2000, and the rules made thereunder, which have far lesser scope in comparison.

d. OTT players, without any regulatory burden offer real-time and non-real time communication services e.g. voice, messaging and video call services and compete in similar market segment as that of licensed TSPs, thereby acting as substitutes for the communication services offered by TSPs.

e. The heavily regulated telecom industry incurs significant costs in terms of license fees, spectrum charges, OEM equipment and LI Infrastructure whereas none apply to OTT-CS providers.

f. **It is evident from above that there is non-level playing field in terms of regulatory requirements/restrictions, thereby creating regulatory imbalance between OTT communication providers and licensed TSPs.**

2. **Economic aspects**

I. Investment in Network Infrastructure creation:

a. In order to enable "any-to-any communication" on own network as well as with other operators, TSPs invest heavily in:

i. Building the Network Infrastructure Layer – Spectrum, MW Access, Core Transport (NLD, Metro), Core IP and Internet Access
ii. Setting up TDM/IP based Voice and Messaging interconnects between operators
iii. Setting up ILDO voice Interconnects
iv. Pay heavy IUC charges for terminating voice and messages (National/International) to other networks
v. Enabling Numbering Schema to identify MSISDN-Operator linkage
vi. Setting Up LRN based routing and Inter Operator STP connectivity, Portability DB Dipping to facilitate any-to-any communications between operators
vii. SMS Firewalls, DLT Platforms to handle SMS traffic and enable spam protection measures
viii. Dealing with comprehensive requirements of TRAI, DoT for regular and special audits.

b. OTT-CS Providers, on the other hand, without investing in any of the above infrastructure access the all crucial Application Layer of the TSP Telecom Infrastructure which is End-User-

facing and provide similar voice and messaging services (over Internet) which are not restricted to any single network; within the country or outside. TSPs are only serving customers within the regulated LSA whereas the OTT service providers are serving all over the globe. This way they erode a crucial part of TSPs revenue via service usage as well as IUC collectibles.

c. OTT services have significantly disrupted the economic model of traditional telecom services. They offer many services for free or at a lower cost than telecom operators, leading to a shift in consumer behaviour. For instance, services like WhatsApp and Skype offer free messaging and voice/video calling features, which have led to a decrease in revenue from SMS and voice calls for telecom operators.

d. Certain OTT-CS providers have started giving A2P services without any transparency and governance compliances, whereas TSPs are following comprehensive TCCCP Regulations through DLT based systems.

II. Statutory levies:

a. TSPs pay huge part of their revenues to National Exchequer as License fees and Spectrum Usage charges. The licensee fee is fixed at 8% of the revenue which includes 5% towards Universal Service Obligation Fund whereas SUC differs from circle to circle depending upon quantum of spectrum, rules of specific auction and may be ~4% of revenues.

b. There is no such statutory levy applicable on the OTT-CS, whereas they provide similar communication services to the end consumers. This significantly shift the balance in favour of OTT-CS providers v/s the licensed TSPs.

As is evident from above, there is huge economic arbitrage applicable in favour of OTT-CS providers as compared to licensed TSPs, which is a clear case of non-level playing field in substitutable services.

3. **Security aspects:**

a. There are various security conditions applicable on licensed TSPs, to support National security of the country. These conditions deal with Lawful Interception, KYC, trusted network elements, 24x7 Nodal support, approval for foreign nationals, no bulk encryption, CDRs/IPDRs related, LI demo of new products etc. The license conditions for these are given below on sample basis only:

i. ***Lawful Interception:***
8.1.1 Lawful Interception and Monitoring (LIM) systems of requisite capacities are to be set up by LICENSEEs for Internet traffic including Internet telephony traffic through their Internet gateways and /or Internet nodes at their own cost, as per the requirement of the security agencies/Licensor prescribed from time to time. The

cost of maintenance of the monitoring equipment and infrastructure at the monitoring centre located at the premises of the licensee shall be borne by the Licensee.

8.1.2 In case the Licensee obtains Access spectrum for providing Internet Service / Broadband Wireless Access using the Access Spectrum, the Licensee shall install the required Lawful Interception and Monitoring systems of requisite capacities prior to commencement of service.

8.2 The Licensee, while providing downstream Internet bandwidth to an Internet Service provider should ensure that all the traffic of downstream ISP passing through the Licensee's network can be monitored in the network of the Licensee.

ii. **Tracing Facilities:** *38.2 The LICENSEE is obliged to provide, without any delay,* ***all the tracing facilities to trace nuisance, obnoxious or malicious calls, messages or communications transported through his equipment and network****, to the agencies of Government of India as authorized from time to time, when such information is required for investigations or detection of crimes and in the interest of national security. Any damages arising on account of Licensee's failure in this regard shall be payable by the Licensee.*

iii. ***Subscriber Verification (KYC):***

39.17 (i) The Licensee shall ***ensure adequate verification of each and every customer before enrolling him as a subscriber****; instructions issued by the Licensor in this regard from time to time shall be scrupulously followed. The Licensee shall make it clear to the subscriber that the subscriber will be responsible for proper and bonafide use of the service.*

39.17 (ii) Format prescribed by the Licensor delineating the details of information required before enrolling a customer as a subscriber shall be followed by the Licensee. A ***photo identification of subscribers shall be pre-requisite before providing the service****. The Licensor may prescribe service-wise detailed instructions for enrolment of subscriber and activation of service from time to time.*

39.18 The ***complete list of subscribers shall be made available by the Licensee on their website (having password controlled access), so that designated Security Agencies are able to obtain the subscriber list at any time****, as per their convenience with the help of the password. The list should be updated on regular basis. Hard copy as and when required by security agencies shall also be furnished.*

39.19 The Licensor or its representative(s) will have an access to the Database relating to the subscribers of the Licensee. The Licensee shall also ***update the list of his subscribers and make available the same to the Licensor at such intervals as may be prescribed****. The Licensee shall* ***make available, at any prescribed instant, to the Licensor or its authorized representative details of the subscribers using the service****.*

iv. ***CDR/IPDR Related:***

39.20 The Licensee shall ***maintain all commercial records/ Call Detail Record (CDR)/ Exchange Detail Record (EDR)/ IP Detail Record (IPDR) with regard to the***

communications exchanged on the network. *Such records shall be archived for at least one year for scrutiny by the Licensor for security reasons and may be destroyed thereafter unless directed otherwise by the Licensor. Licensor may issue directions /instructions from time to time with respect to CDR/IPDR/EDR.*

v. ***Bulk Encryption:***

37.1 ***The Licensee shall not employ bulk encryption equipment in its network.*** *Licensor or officers specially designated for the purpose may evaluate any encryption equipment connected to the Licensee's network. However, the Licensee shall have the responsibility to ensure protection of privacy of communication and to ensure that unauthorized interception of MESSAGE does not take place.*

b. The above conditions apply only on licensed TSPs and not on OTT-CS providers. The proliferation of IP-based OTT communication services over secured and encrypted layer creates huge risks to National Security. The end-to-end encryption deployed by OTT-CS providers like Telegram, WhatsApp, Viber, etc. leads to lack of visibility into internet traffic for legal purposes of designated security agencies. This poses a major security challenge for government as this traffic flow can include any type of data, could be illegal content, or wrongful intent.

c. Technical, legal and regulatory measures are mandated by Law Enforcement Agencies including the DOT. Lawful Intercept (LI) is the legally approved surveillance of a telecom network for investigating and prosecuting mala-fide and illegal activities.

d. We understand that similar situation emanated from the secured communication over blackberry messenger (RIM), to which firm stance was adopted by DoT and MHA and it led to RIM deploying appropriate servers in India to meet the National security requirements.

e. **As is evident from above, there is huge National Security risk with unregulated OTT-CS and it leads to non-level playing field for licensed TSPs.**

4. **Privacy/Confidentiality aspects:**

a. There are various conditions pertaining to privacy and confidentiality of information applicable on licensed TSPs, to support data privacy. These conditions deals with encryption of data and ensuring customer about keeping their information confidential, etc. The license conditions for these are given below on sample basis:

37.2 Subject to terms and conditions of the license, the Licensee shall take all necessary steps to safeguard the privacy and confidentiality of any information about a third party and its business to whom it provides the Service and from whom it has acquired such information by virtue of the Service provided and shall use its best endeavors to secure that:

a) No person acting on behalf of the Licensee or the Licensee divulges or uses any such information except as may be necessary in the course of providing such Service to the Third Party; and
b) No such person seeks such information other than is necessary for the purpose of providing Service to the Third Party.
Provided the above para shall not apply where:
a) The information relates to a specific party and that party has consented in writing to such information being divulged or used, and such information is divulged or used in accordance with the terms of that consent; or
b) The information is already open to the public and otherwise known.
37.3 The Licensee shall take necessary steps to ensure that the Licensee and any person(s) acting on its behalf observe confidentiality of customer information.
37.4 The Licensee shall, prior to commencement of Service, confirm in writing to the Licensor that the Licensee has taken all necessary steps to ensure that it and its employees shall observe confidentiality of customer information.
37.5 The use of encryption by the subscriber shall be governed by the Government Policy/rules made under the Information Technology Act, 2000.

b. **TRAI's TCCCP Regulation 2018** which provides detailed regulatory framework for protecting consumers from unsolicited commercial communications. There are various huge number of modules and processes which TSPs are obligated to implement making it a stringent compliance whereas OTT players have a free hand and do not have to comply with any such modules/processes. The modules/processes to be implemented by TSPs includes:

   i. Adoption of Distributed Ledger Technology (or blockchain) as the regulatory technology to ensure regulatory compliance while allowing innovation in the market.
   ii. Registration of principal entities, telemarketers, SMS headers, content templates, consent templates etc.
   iii. Registration of subscribers' consent and providing them with complete control over their consent and the ability to revoke the consent.
   iv. Preferences for consumers to give granular choices for receiving/blocking promotional messages.
   v. Customer Complaint management

   The Regulation also provides for stringent financial disincentives, if unable to meet provisions of the Regulation or if there are complaints from the consumers.

c. While OTT players do not have to follow the Regulatory norms and TCCCP Regulation, in our view, they also lack in protecting rights of consumers and do not have grievance redressal and spam-preventing frameworks, leading to huge inconvenience for consumers. One of the OTT-CS player has implemented 'Report and Block' feature in their mobile app for consumers to report and block a spam message. However, while pressing such option, it eventually deletes the very evidence of the spam message received by consumer. As usual there is no response generated which can be utilized by consumer in future and there is no transparent or

response-back processes being followed. Similarly, there is non-transparency on consumer grievance redressal mechanism, quality of services etc.

5. **Safety aspects**

a. There are various conditions pertaining to safety of consumers and environment on licensed TSPs. These conditions include compliance to Electro-magnetic field (EMF) radiation norms as prescribed by the Licensor from time to time. The license conditions for these are given below on sample basis:

24.1 Norms on Electromagnetic Field exposure by BTS (Base Stations)
In case the Licensee install BTS for providing the service, if permitted under the scope of the service authorization, the Licensee shall conduct audit and provide self certificate, at prescribed interval and as per procedure prescribed by Telecommunication Engineering Centre (TEC) / or any other agency authorized by Licensor from time to time for conforming to limits / levels for antenna (Base Station Radiation Emissions) for general public exposure as prescribed by Licensor from time to time.
The LICENSEE shall comply with the instructions / directions/ guidelines issued by Licensor on EMF exposure norms from time to time.

24.2 The Licensee shall adopt Renewable Energy Technologies (RETs) for powering the Telecom Network, deploy energy efficient equipment and reduce the carbon footprint as per prevailing directions/ instructions and shall abide by further directions / instructions as may be issued in this regard by Licensor/ TRAI from time to time.

b. OTT-CS, despite being the providers of similar services in nature, are not bound under any such conditions.

6. **Quality of Service aspects**

a. The TSPs are bound to meet various conditions, as specified by the Licensor regarding quality of service under the UL and specific Regulations/Directions of TRAI. The TSPs also need to report such parameters on regular basis to the Authority.

b. Some such license conditions are reproduced below:

4.2 The Licensee may deploy circuit switched or managed IP network to engineer their ILD networks. The quality of service parameters shall be as prescribed by Licensor or TRAI from time to time. The Licensee may engineer lower than toll quality network provided that such service is offered through calling card or carrier selection. The toll quality will mean a Mean Opinion Score (MOS) of 4 or above in a scale of 1-5.

4.3 The subscriber should be fully made aware of lower than toll quality network as well as lower tariff for the same. A separate code, allotted by Licensor, will have to be offered by the operator for such service.

4.4 ***The engineered network shall conform to the applicable international and national standards. The measurement of voice quality both by objective as well as subjective methods shall be as defined from time to time.***

c. Similarly, **the TRAI regulations of 'Standards of Quality of Service for Wireless Data services regulations 2012' and 'Standards of QoS of Basic Telephone service (wireline) and Cellular Mobile Telephone Service Regulations, 2009'** apply on licensed TSPs whereas the OTT-CS enjoys no regulatory framework.

d. Further, the TSPs are expected to report network outage incidences to TRAI whereas the OTT-CS players are not bound to do so.

7. **Consumer Grievance redressal aspects:**

a. In this regard, the TSPs are bound to follow "Telecom Consumers Complaint Redressal Regulations, 2012" as issued by TRAI. The regulation directs the licensed TSPs to establish complaint center for redressal of complaints and for addressing service requests of its consumers. It also includes establishment of a 'Web Based Complaint Monitoring System' to enable the consumers to monitor the status of their complaints.

b. In addition to this, the Regulator has also prescribed the time limit for redressal of complaints or addressing service requests of consumers to be followed by licensed TSPs.

c. Further, TSPs are also bound to organize workshops and seminar on regular basis to educate the consumers whereas OTT-CS are not bound under any such regulatory arrangements.

8. **Any other aspects – Emergency Services:**

a. The licensed TSPs are mandated to provide emergency services to consumers whereas no such provision apply on OTT-CS players. Below given clause of license is self-explanatory in this regard.

7. ***Emergency and Public Utility Service:***
7.1 The LICENSEE shall provide independently or through mutually agreed commercial arrangements with other Telecom Service Providers all public utility services as well as emergency services including toll free services like police, fire, ambulance. Licensor may declare any public utility or emergency number as toll free service from time to time. While providing access to public utility services/ emergency services/ emergency response services/ services for relief and rescue

on occurrence of disaster including police, fire, etc. as defined from time to time, the Licensee shall take all measures to ensure that such calls are delivered to the designated control room of the concerned authority, as prescribed from time to time.

b. With the massive increase in subscribers of large OTT-CS players, consumers accessing their services over wired broadband and in certain in-building/deep basement areas where there may be lesser wireless coverage, it would be crucial for public at large to be given Emergency services access by the large OTT-CS providers.

Q6. Whether there is a need to bring OTT communication services under any licensing/regulatory framework to promote a competitive landscape for the benefit of consumers and service innovation? Kindly provide a detailed response with justification.

VIL Comments to question no. 6

Need to bring OTT-CS under Licensing/Regulatory framework

1. The question of whether to bring OTT communication services under a licensing or regulatory framework is a multifaceted one. It involves containing risk to National Security, protecting consumer interests, balancing the need for a level playing field between OTT services and traditional telecom operators and fostering innovation.

2. Through its recommendations on Regulatory Framework for Over-the-Top (OTT) Communication services, TRAI has earlier recommended that it is not opportune time for recommending a regulatory framework on different aspects of OTT services. The extract of recommendations given as follows:

3.1 iii. It is not an opportune moment to recommend a comprehensive regulatory framework for various aspects of services referred to as OTT services, beyond the extant laws and regulations prescribed presently. The matter may be looked into afresh when more clarity emerges in international jurisdictions particularly the study undertaken by ITU.

3. **In our view, yes, there is an urgent and critical need of putting in place a Licensing and Regulatory framework for OTT communication services.** Below points further elaborates and supports this contention:

4. **National Security:** Since OTT platforms deploy end-to-end encryption for internet based voice or message exchanges, there is a need to have a licensing/regulatory framework to meet National security requirements of Lawful Interception, IPDRs, 24x7 support, trusted equipment etc.

5. **Consumer Protection:** A regulatory framework could help protect consumers by setting minimum quality of service standards, ensuring data privacy and security, and providing a clear mechanism for consumer grievance redressal. However, it's important to note that many OTT services already have robust mechanisms in place for these issues.

6. **Payments to National Exchequer:** As OTT-CS are also involved in a commercial activity of providing communication services within the country, they should also be made to contribute to the National Exchequer to the same extent as is applicable to licensed TSPs.

7. **Level Playing Field:** Traditional telecom operators are subject to a range of regulatory obligations, including licensing fees, quality of service standards, and security norms. OTT services, which offer similar functionalities (like voice calls or messaging), are not subject to the same regulations, leading to a regulatory imbalance and arbitrage in favor of OTT-CS. Bringing OTT services under a similar licensing and regulatory framework would help ensure a level playing field.

8. **Innovation and Net Neutrality:** To support innovation and also while meeting net neutrality principles, the licensing and regulatory framework should apply to large OTT CS providers, based on a certain threshold of active subscribers. This will help smaller OTT CS providers by providing them ground to continue to innovate and also meeting the principles of net neutrality.

9. **Global examples:** Many countries are already debating the regulatory framework for OTT-CS providers and many countries have gone ahead and put in place certain framework around the same considering their country-specific requirements. Examples of countries under European Union are also captured in TRAI's consultation paper and supports the need of putting in place a regulatory framework. The framework for India should suit its own National security, consumer protection, spam prevention, and other requirements.

Considering the above, in our view, it is most opportune time for TRAI to recommend putting in place a defined licensing and regulatory framework for OTT-CS, under the Indian Telegraph Act, 1885 and TRAI Act, 1997.

Q7. In case it is decided to bring OTT communication services under a licensing/ regulatory framework, what licensing/ regulatory framework(s) would be appropriate for the various classes of OTT communication services as envisaged in the question number 4 above? Specifically, what should be the provisions in the licensing/ regulatory framework(s) for OTT Communication services in respect of the following aspects:
(a) lawful interception;
(b) privacy and security;
(c) emergency services;
(d) unsolicited commercial communication;
(e) customer verification;
(f) quality of service;

(g) consumer grievance redressal;
(h) eligibility conditions;
(i) financial conditions (such as application processing fee, entry fee, license fee, bank guarantees etc.); and
(j) any other aspects (please specify).
Kindly provide a detailed response in respect of each class of OTT communication services with justification.

VIL Comments to question no. 7

1. As described in our comments to Q. no. 6, considering the critical aspects of consumer protection, national security and level-playing field, there is an urgent and critical need of putting in place a Licensing and Regulatory framework for OTT communication services.

2. In our view, same should be done by introducing a separate authorization under Unified License as we believe this is the only way to create level playing field across the entire communications ecosystem to introduce healthy competition and incentivize investment, including facilitating fair contribution.

3. Following provisions should be made in the licensing/ regulatory framework(s) for OTT Communication services in respect of the following aspects:

   (a) **Lawful Interception:** As provided in our comments to Q. no. 5, similar lawful interception guidelines, as in the case of licensed TSPs, should be levied on OTT-CS providers.

   (b) **Privacy and Security:** Similar to licensed TSPs, various security conditions like data encryption, 24x7 nodal support, subscriber verification, protecting consumers from unsolicited commercial communications, provision of CDR/IPDRs, etc. should be mandated on OTT-CS providers in interest of national security.

   (c) **Emergency Services:** As provided in comments to Question no. 5, since the OTT-CS players cater large number of users, they should be liable to provide emergency services to them, as is being done by TSPs.

   (d) **Unsolicited Commercial Communication:** Similar to the licensed TSPs, OTTs should be asked to comply with the similar regulatory provisions as listed in comments to question no. 5, for protecting consumers from such unsolicited commercial communications. Further, as in the case of TSPs, non-compliance of such regulation/directions or any consumer complaints should lead to stringent financial disincentives for OTT-CS providers.

   (e) **Customer Verification:** The licensing entity should form user verification guidelines for OTT-CS as is being done in the case of licensed TSPs.

(f) **Quality of Service:** The regulatory framework for OTT-CS should include provisions in terms of quality of service to be provided to the customers. Also, these entities should be asked to report application outage incidences to the Regulator.

(g) **Consumer Grievance Redressal:** OTT-CS should also be bound to address the consumer complaints in a time-bound manner, just like TSPs. They should also be obligated to educate the consumers about their services and applications and issues related to them.

(h) **Eligibility Conditions:** In case of eligibility conditions, some may be authorization agnostic like should be an Indian entity, while some conditions may vary from one authorization to other like minimum paid up equity capital, networth. Both the conditions should apply to OTT-CS providers, however, the conditions/values which are specific to authorization can be calculated basis the market size/revenue potential, from such services.

(i) **Financial Conditions** (such as application processing fee, entry fee, license fee, bank guarantees etc.): Similar to licensed TSPs, one-time non-refundable Entry Fee should be prescribed for the OTT licensees. In addition to this, annual license fees as some percentage of Adjusted Gross Revenue (AGR) shall be fixed for OTT-CS licensee on PAN-India basis. Further, if any violation is detected, stern action shall be taken according to the terms and conditions of the License Agreement, including imposition of financial penalty, as done in the case of licensed entities.

Q8. Whether there is a need for a collaborative framework between OTT communication service providers and the licensed telecommunication service providers? If yes, what should be the provisions of such a collaborative framework? Kindly provide a detailed response with justification.

and

Q9. What could be the potential challenges arising out of the collaborative framework between OTT communication service providers and the licensed telecommunication service providers? How will it impact the aspects of net neutrality, consumer access and consumer choice etc.? What measures can be taken to address such challenges? Kindly provide a detailed response with justification.

VIL Comments to question no. 8 and 9

Need for Collaborative Framework:

1. **Yes, there is indeed a need for a collaborative framework between OTT communication service providers and licensed telecommunication service providers.** This need arises from the fact that OTT services rely on the infrastructure provided by telecom operators without involving in network infrastructure creation, and yet they compete with them in certain areas such as voice and messaging services.

2. OTT-CS providers for VOIP and Messaging Services make no investment at the network layer unlike the TSPs who have invested heavily in network rollout and building access and long distance backbones. OTT-CS simply utilize the Application Layer of the network and compete with traditional voice and messaging services offered on licensed TSPs, thereby eating into their revenues.

3. A collaborative framework between OTT communication service providers and licensed TSPs is justified because it will resolve non-level playing field and ensure a better experience for users. The provisions that could be included in such a collaborative framework are explained below.

4. **Revenue Sharing: One of the main points of contention between OTT services and telecom operators is revenue sharing. The OTT-CS use TSPs' infrastructure but do not contribute to the costs of building and maintaining it. A collaborative framework could include provisions for revenue sharing, where OTT-CS contribute a portion of their revenue to telecom operators. Few models which can be explored are Revenue Sharing, volume based charging and QoS based charging.**

5. **Quality of Service:** OTT services depend on the quality of the network provided by telecom operators. The framework could include provisions for telecom operators to ensure a certain level of quality of service for OTT services, in return for the revenue sharing mentioned above.

Challenges in Collaborative Framework:

6. A collaborative framework between OTT-CS and licensed TSPs, while beneficial, could also present certain challenges, given as below.

7. **Net Neutrality:** One of the key principles of net neutrality is that all internet traffic should be treated equally. A collaborative framework could potentially violate this principle if the regulatory framework is loose enough and doesn't define which OTT-CS providers will get covered and mandatorily follow the collaborative framework.

8. **Consumer Access and Choice:** A collaborative framework could potentially limit consumer access and choice if OTT-CS providers are given the option of not to share revenues and instead route their traffic differently which can impact service quality and resultant impact to consumer access and choice.

9. **Oversight from Licensing/Regulatory Authorities:** A collaborative framework would require oversight from Licensing/Regulatory authorities for initial years to ensure OTT-CS providers do not bypass the regulatory/licensing framework and mandatorily share revenues with licensed TSPs.

Measures to address Challenges

10. The collaborative framework will not introduce any challenges which can't be overcome. There can be several measures which will ensure smooth and seamless migration to the collaborative framework. Details of these measures are illustrated below.

11. **Uphold Net Neutrality:** Any collaborative framework should respect the principles of net neutrality. This means that telecom operators should not prioritize traffic from certain OTT services over others, and should not exclude data from certain services from users' data caps. The collaborative framework (revenue sharing) should be applicable only on large OTT-CS providers who are having subscribers more than a certain defined threshold (let's say 50 lakhs). The DoT/TRAI should define such large OTT-CS providers at a regular frequency i.e. annually, to avoid any clash of interest or impact to Net Neutrality principles. With such defined threshold, it will neither impact any new OTT-CS providers nor innovation in the digital domain of OTT-CS.

12. **Protect Consumer Access and Choice:** Any collaborative framework should ensure that consumers have access to a wide range of OTT services, and that they are free to choose the services that best meet their needs. It means that the OTT-CS providers have to be mandated with clear and simplified licensing/regulatory framework to comply with Indian norms and adhere to the collaborative framework (revenue sharing). They should not be allowed to changing routing of their traffic which can allow them not to comply with collaborative framework, but, resulting into degrading of quality for consumers.

13. **Promote Competition and Innovation:** Any collaborative framework should be designed to promote competition and innovation and should not apply to new or smaller OTT-CS entities.

14. **Simplified framework and Regulatory oversight:** Any collaborative framework should be as simple and straightforward as possible, to minimize interpretation as well as bypassing issues. A dedicated and regular oversight would be needed from Licensor (the DoT) and Regulator (the TRAI) in initial few years such that the OTT-CS providers comply with the framework in letters and spirits.

In conclusion, a collaborative framework between OTT-CS and licensed TSPs is the best and immediate way forward to support the overall communication needs of the society. We request TRAI to recommend the same to the DoT for its early implementation.

Q10. What are the technical challenges in selective banning of specific OTT services and websites in specific regions of the country for a specific period? Please elaborate your response and suggest technical solutions to mitigate the challenges.

VIL Comments to question no. 10

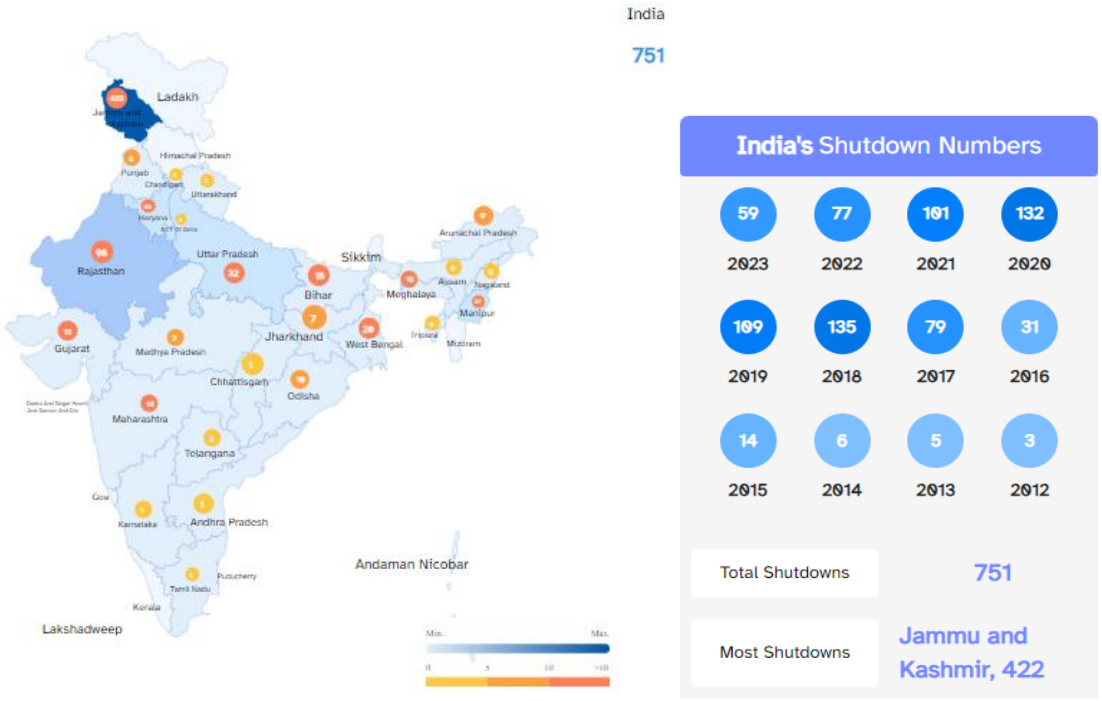
1. With the proliferation of digital communications to the masses, different State/Central authorities have felt need to ban the OTT services/websites to contain civil unrest/riots etc. and to maintain peace, law and order. As there has been no practical solution to ban the OTT services/websites, a

short term solution of banning the entire internet is resorted to. However, this also puts forth huge short-term and long-term issues of consumers not being able to use other non-communication based services and often land up more inconvenienced instead.

2. Internet shutdowns have implications on national economy, freedom of press, education, and healthcare services as banning of such services in their current form prohibit access to all types of information and services on the internet.

3. Over past many years, Internet shutdowns are being resorted to and their frequency has not reduced. One of the tracking website has claimed that since 2016 India has accounted for approximately 58% of all shutdowns (documented in the Shutdown Tracker Optimization Project - STOP database[11]). An another website[12] which also tracks such internet shutdowns, claims >100 instances of shutdown in past few years – kindly refer to picture below:

Picture - 11



4. Such internet shutdowns leads to huge losses to Indian economy besides causing huge inconvenience to consumers. With the growing transition of small and medium sized businesses to online platforms, the losses will only increase if internet shutdowns are continued to be resorted to.

[11] https://thewire.in/tech/india-remains-internet-shutdown-capital-of-the-world-for-fifth-year-running-report
[12] https://internetshutdowns.in/

5. Further, the transit to online mechanisms during Covid has led to further reliance on the internet as a medium for work, education, access to essential services such as health care, small businesses etc, all of whom have integrated online/digital as mode of delivering their services to citizens. For a robust economy to function, instead of shutting down entire internet, the Government should look for selectively banning the OTT services/websites and allow the functioning of services in rest all other sectors/areas such as healthcare, e-commerce, banking, education, services, bill payments etc.

6. The blanket internet shutdowns also impacts M2M/IoT related services. With expanding services horizon and technology advancements including 5G services launch, it is expected that these M2M SIMs will be adopted across wide range of industries / verticals, including many missions' critical applications like in health, education, agriculture and automotive sectors. Therefore, suspending services on the M2M/IoT SIMs during implementation of service barring order will not only cause loss of business but can also lead to massive and catastrophic service disruptions.

7. Selective banning specific OTT services/websites will prevent customer hardships/agony which emanates from blanket ban on Internet services. The intent of selective banning is to prevent some communication services from operating which may increase the unrest/crisis in a particular geographic region, while leaving other services untouched.

8. In our detailed comments below, we have explained few possible solutions, which if resorted to collectively, can address some of the technical challenges and mitigate inconvenience and hardship faced by consumers at large, while meeting the requirements of maintaining law and order. Having said that, there is no fool proof / zero-error technical solution existing, which can yield selective banning of specific OTT services and websites and that too in specific region of the country, in specific period.

9. For selective blocking, there are three different constituents:

    a. **Identification and Details of OTT services/websites which Government Authority wants to be blocked:**

        i. In unrest/crisis situations, there could be different requirements of Government Authority which can range from blocking certain OTT services/websites fully (like blocking WhatsApp, Facebook, Twitter etc.) or to block certain content being circulated over OTT services/websites (like blocking certain videos etc. over Facebook, YouTube etc.). For the second part i.e. blocking of certain content, the competent Authority issues suitable instructions under the Information Technology Act whereas for the first part, generally Internet shutdown is resorted to.

        ii. The identification detail for blocking certain OTT services is generally done on a very basic level i.e. like name of OTT service is available. In digital and internet world, the traffic is identified through Origination-IP and destination-IP, just like in voice/SMS, the traffic can be identified through A-Party MSISDN and B-Party MSISDN.

iii. The identification of the OTT services/websites should be done in technical sense i.e. their domain name and list of IP's should be identified, which can properly represent and identify the traffic originated towards specific OTT services/websites.

iv. This step of proper identification (i.e. domain name and list of IPs) is to be done by Competent Authority (of course, State Government would need support from Central Government i.e. MHA), as TSPs would have no control over the OTT services/websites to get such information.

b. Segregation and Blocking of data traffic of OTT services/websites identified as part of a. above, for a specific region, from entire live internet traffic of a circle:

i. For Segregation of data traffic for a particular OTT service/website, the pre-requisite is proper identification in so far which network systems understands i.e. domain name and list of IP-Is.

ii. Once the domain name and list of IP-I is made available by Competent Authority, the TSP has to segregate the data traffic originating or terminating towards them, from the entire internet traffic of that particular telecom circle.

iii. This segregation can also be done for a smaller selective region, on the basis of TAC/LAC.

iv. As TSP, above can be configured in the network systems.

c. Blocking of data traffic segregated as part of b. point above

i. The pre-requisite for this step is effective segregation, which depends upon proper identification.

ii. For properly identified and effectively segregated traffic, blocking can be achieved with the help of our Core Network Nodes.

10. **As is evident from above, there is network capability available with us as TSP to selectively block the OTT services/websites subject to proper identification details are provided by Competent Authority.** However, there are certain technical challenges in point no. 9.a and 9.b which are explained below.

11. **Technical Challenges in effectiveness of above:**

a. **Identification (which traffic is to be blocked):**
   i. In present situation, there would be challenges for Competent Authority to properly identify the requisite details of list of IPs being used by the OTT services/websites which are required to be blocked.

ii. The list of IPs would be available with OTT service/website service providers, if they are using Static IPs for providing the services. However, if any OTT service/website is using dynamic IPs, it would not be possible to list down IPs at present.

b. Segregation (from live traffic):

i. The existing technical and network systems deployed for a given geography in a network, cannot segregate OTT/website traffic based on content, if the specific OTT/URL is communicating in a "secure nature" between internet access (mobile) client and OTT/website server.

ii. Further, if certain individuals use VPN to access the said OTT service /website with disguised IPs, the network would not be able to segregate such traffic. However, quantum of such traffic is expected to be very low.

iii. Therefore, the only solution lies in proper identification so that the segregation and blocking could become effective.

12. **Complementary solutions:**

a. In most of the cases, the need of Competent Authority would be to block services of few major OTT services/websites, which can stop it to be used by miscreants to spread unrest/crisis, by communicating with large masses. The masses are not expected to be using small OTT services hence, in first phase, the focus can be kept on significantly large OTT service providers, having a substantial number of subscribers let's say 50 lakhs – as is applicable in Social Media intermediary rules as well.

b. When Internet shutdowns are resorted to, even though the objective would be to stop miscreants to communicate with large number of people through the commercial services of OTT service/website entities, all the genuine entities and consumers end up on losing side. The consumers end up suffering with unavailability of internet which is needed for their banking, education, health, e-commerce, agriculture requirements. The entities provides these services also end up suffering as they are unable to provide services to the consumers. Thus it leads to a severe hardship and impacts economy, jobs, services, businesses etc.

c. It is more important to figure out an optimal blocking strategy which can strike the right balance catering all dimensions – effectiveness, impact to economy, cost to implement, customer experience/hardship and privacy.

d. Therefore, it is important that the due responsibility is casted upon these OTT/website service providers, for either providing solutions to ensure selective blocking of their services in a specific region. In this regard, there could be two options as given below, which may mitigate the situation to a large extent:

e. **Option-1:**

i. As the services are provided by few Significant OTT services/websites, they should be directed to declare list of IPs being used, on a regular basis. This should be done on a regular basis, so that action during a crisis/unrest is not held up due to want of information from OTT/website service providers.

ii. If these entities are using dynamic IPs, they should be directed to have an alternate static IPs based technological architecture, for dealing with emergent situation. During the situation of unrest/crisis, they must be mandated to shift to static IPs based architecture.

f. **Option-2:**

i. Most of the handsets nowadays have GPS facility, which helps the handset to identify its location. We understand that Android-OS based handsets, the device sends the GPS location to OS back-end server at regular intervals, even if the GPS is turned off by user[13]. Further, even if internet is switched off, the GPS location is aggregated in the device and sent to OS back-end server, once the Internet is available (we can't independently verify this except the mentioned source information available on open internet).

ii. In such cases, the OS providers should be directed to put a technical solution in place and block use of specific OTT apps within a defined geographical region.

iii. Also, the OTT players also at times seek access to locations and hence, can be asked to put in place a technical solution to block use of their OTT apps within a defined geographical region.

iv. This option should be followed along with suitable audit and penalty norms so that the OS providers and OTT players comply with the blocking requirements and do not try to overreach it.

g. Option-3:

i. Another option could be to block entire internet and do selective unblocking of services like banking, health, financial services, education etc.

ii. However, this will have the same challenges of identifying the list of IP addresses or domain names.

[13] https://www.wired.com/story/google-location-tracking-turn-off/#:~:text=1%3A37%20PM-,Google%20Tracks%20You%20Even%20If%20Location%20History's%20Off.,you%20thought%20you%20opted%20out.&text=If%2C%20like%20most%20people%2C%20you,account%20settings%2C%20you%20were%20wrong

iii. The entities in these sectors might also be providing services over internet, through dynamic IPs and secured layer, which will leave this solution to be ineffective.

iv. **Also, this option will shift the hardship to find a solution from the few entities giving communication services, to rest all huge number of entities whose services can't be used for increasing creating unrest/crisis.**

13. **Recommendation:**

a. Segregation and Blocking facility is available in our telecom network. However, onus of giving proper identification (i.e. list of IP addresses, domain names) should be with competent Authorities.

b. For getting list of IP addresses, suitable instructions should be issued to OTT service/website service providers.

c. Complimenting solution as given under Option-2 of point no. 12 above, would be the most effective way and suitable enabling legal and regulatory provisions should be prescribed. Besides enabling powers, there should also be audit and penalty norms so that the OS providers and OTT service providers comply with the blocking requirements and do not try to overreach it.

Q11. Whether there is a need to put in place a regulatory framework for selective banning of OTT services under the Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017 or any other law, in force? Please provide a detailed response with justification.

VIL Comments to Question no. 11

1. As explained in comments to question no 10 above, yes, there is a need to put in place a regulatory framework for selective banning of OTT services under the Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017 as well as another law prevailing in the country.

2. In our view, there are three requirements which should be covered in the regulatory framework, given as follows:

a. Blanket shutdown of Internet not be ordered. As many of these orders are issued by competent authorities under State Government, there could be potential gap unless the law specifically disallows blanket shutdowns. Therefore, The Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017 should explicitly disallow blanket shutdown of internet.

b. For selective banning of OTT services/websites by TSPs, there should be a regulatory framework enabling Competent Authorities to have access to proper identification details of domain name and list of IPs of OTT services/websites, which they can provide to TSPs under shutdown orders.

c. Suitable empowerment under Information Technology Act and related Rules, for ordering OTT services/websites and/or OS providers for complying with Option-1 and Option-2 as explained in comments to Point no 12 of comments to Question no. 10 above.

3. We would like to highlight that there are certain section in existing laws which provides for above framework mentioned at point no. 2b and 2c however, there would be a need to bring in more clarity through proviso etc, so that there is no interpretation issue with any stakeholder. For reference, certain section of existing laws are given as follows:

Information Technology Act, 2000. The Chapter XI – Offences of IT Act, 2000

69A. Power to issue directions for blocking for public access of any information through any computer resource.*–(1) Where the Central Government or any of its officers specially authorised by it in this behalf is satisfied that it is necessary or expedient so to do, in the interest of sovereignty and integrity of India, defence of India, security of the State, friendly relations with foreign States or public order or for preventing incitement to the commission of any cognizable offence relating to above, it may subject to the provisions of sub-section (2), for reasons to be recorded in writing, by order,* ***direct any agency of the Government or intermediary to block for access by the public or cause to be blocked for access by the public any information generated, transmitted, received, stored or hosted in any computer resource.***
(2) The procedure and safeguards subject to which such blocking for access by the public may be carried out, shall be such as may be prescribed.
(3) The intermediary who fails to comply with the direction issued under sub-section (1) shall be punished with an imprisonment for a term which may extend to seven years and also be liable to fine.

69B. ***Power to authorise to monitor and collect traffic data or information through any computer resource for cyber security****.–(1) The Central Government may, to enhance cyber security and for identification, analysis and prevention of intrusion or spread of computer contaminant in the country, by notification in the Official Gazette, authorise any agency of the Government to* ***monitor and collect traffic data or information generated, transmitted, received or stored in any computer resource.***
(2) The intermediary or any person in-charge or the computer resource shall, when called upon by the agency which has been authorised under sub-section (1), provide technical assistance and extend all facilities to such agency to enable online access or to secure and provide online access to the computer resource generating, transmitting, receiving or storing such traffic data or information.
(3) The procedure and safeguards for monitoring and collecting traffic data or information, shall be such as may be prescribed.

(4) Any intermediary who intentionally or knowingly contravenes the provisions of sub-section (2) shall be punished with an imprisonment for a term which any extend to three years and shall also be liable to fine.
Explanation.–For the purposes of this section,–
(i) —computer contaminant|| shall have the meaning assigned to it in section 43;
(ii) —traffic data|| means any data identifying or purporting to identify any person, computer system or computer network or location to or from which the communication is or may be transmitted and includes communications origin, destination, route, time, data, size, duration or type of underlying service and any other information.]

4. **Need of Regulatory Sandbox to test Selective Banning:** We would like to submit that the solutions given above at Option 1 and Option2 of Point no. 12 of the comments to Question no. 10, should be put to Regulatory Sandbox to check their effectiveness. Regulatory Sandbox will ensure that the solution is suitably evolved by the OTT service and OS providers, to meet the requirements for maintaining law and order.

Q12. In case it is decided to put in place a regulatory framework for selective banning of OTT services in the country, -
(a) Which class(es) of OTT services should be covered under selective banning of OTT services? Please provide a detailed response with justification and illustrations.
(b) What should be the provisions and mechanism for such a regulatory framework? Kindly provide a detailed response with justification.
And
Q13. Whether there is a need to selectively ban specific websites apart from OTT services to meet the purposes? If yes, which class(es) of websites should be included for this purpose? Kindly provide a detailed response with justification.

VIL Comments to Q. no. 12 and 13

1. **Classification of OTT services/websites**: We understand there are two types of requirements which are to be fulfilled during unrest/crisis i.e. blocking of OTT services/websites or taking down certain content. Based on this, there could be following two classifications of OTT services:

   a. **OTT service/website services providers involving P2P communication at mass level – required for blocking:** This could include service providers like WhatsApp, Telegram, Threads, LinkedIn, Twitter which might be required to be completely blocked in a region for a defined period, to contain situation of unrest/crisis.

   b. **OTT service/website services providers – required for content take down:** This could include service providers like YouTube, Netflix, Amazon Prime, Twitter, Facebook, LinkedIn etc., which might be required to take down certain content. This could include those services where the content uploaded by a person, can be viewed by any other person.

2. As certain services may fall under both the classifications, the Central Government should periodically examine and classify which service providers will fall in respective classification, for the purposes of applicability of orders issued by Competent Authorities.

3. The regulatory framework for above classifications has been explained in comments to question no. 11 above.

Q14. Are there any other relevant issues or suggestions related to regulatory mechanism for OTT communication services, and selective banning of OTT services? Please provide a detailed explanation and justification for any such concerns or suggestions.

VIL Comments to Q. no. 14

No comments.

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