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Subject: Comments on the Consultation Paper on Regulatory Framework for Over-The-Top (OTT) Communication Services in India

Dear Sir,

On behalf of the **Asia Internet Coalition (AIC) and its members**, I am writing to express our sincere gratitude to the Telecom Regulatory Authority of India (TRAI) for the opportunity to submit comments on the Consultation Paper on Regulatory Framework for Over-The-Top (OTT) Communication Services.

The AIC is an industry association comprised of leading internet and technology companies. AIC seeks to promote the understanding and resolution of Internet and ICT policy issues in the Asia region. Our members include AirBnB, Amazon, Apple, Expedia, Facebook, Google, LinkedIn, LINE, Rakuten, Twitter and Yahoo (Oath).

The unprecedented disruption which India is currently undergoing, has posed many opportunities for companies offering OTT services. Consumer preferences and content consumption patterns over the internet have evolved over a period of time. This evolution is expected to drive and determine the focus areas for the growth in the OTT market in India. India's online video advertising market will contribute close to INR 80 billion (US\$ 1.13 billion) out of total digital advertising market of INR 185 billion (US\$ 2.62 billion) in revenue by 2020. Advertising video on demand (AVoD) services will see a compound annual growth rate (CAGR) of 38% between 2016 and 2021. Music OTT subscription market is expected to grow from INR 1.15 billion (US\$ 16 million) to INR 10.3 billion (US\$ 146 million) by 2020.¹ OTT is successful because of its innovation and the value it gives to its end customer.

In seeking to create a "level playing field" between OTT providers, and legacy media and network providers, introducing rigid frameworks could stymie innovation and competition or cause irreversible consumer harms. Imposing a strict and unyielding regulatory framework based on telecommunications regulation and licensing could engender new risks. OTT service providers should not be subject to fresh regulations since they are not comparable to the services offered by telecom operators. Further, the new regulatory framework for OTT players would curtail innovation.

With India at the forefront of the global technology ecosystem, we find that this discussion around the regulatory framework for OTT services is timely and imperative.

As responsible stakeholders in this process, we appreciate the ability to participate in this public consultation process. In this submission, we identify the overarching concerns and recommend the way forward for a sound regulatory framework for OTT services in India.

¹ [https://www.ey.com/Publication/vwLUAssets/EY-digital-opportunity/\\$FILE/EY-digital-opportunity.pdf](https://www.ey.com/Publication/vwLUAssets/EY-digital-opportunity/$FILE/EY-digital-opportunity.pdf)



As such, please find appended to this letter detailed comments and recommendations, which we would like to respectfully request that TRAI consider when reviewing the regulatory framework for OTT services. We are grateful to TRAI for upholding a transparent, multistakeholder approach in developing a regulatory framework for OTT services.

Should you have any questions or need clarification on any of the recommendations, please do not hesitate to contact our Secretariat Mr. Sarthak Luthra at Secretariat@aicasia.org or at +65 8739 1490. Thank you for your time and consideration.

We would also be happy to offer our inputs and insights directly through meetings and discussions with the relevant authorities.

Sincerely,

A handwritten signature in black ink that reads "Jeff Paine".

Jeff Paine

**Managing Director
Asia Internet Coalition (AIC)**



Detailed Comments and Recommendations on the Regulatory Framework for Over-The-Top (OTT) Communication Services in India

Q. 1. Which service(s) when provided by the OTT service provider(s) should be regarded as the same or similar to service(s) being provided by the TSPs. Please list all such OTT services with descriptions comparing it with services being provided by TSPs.

“And”

Q. 2. Should substitutability be treated as the primary criterion for comparison of regulatory or licensing norms applicable to TSPs and OTT service providers? Please suggest factors or aspects, with justification, which should be considered to identify and discover the extent of substitutability.

OTT applications that do not interconnect with the public telephone network and provide any-to-any connectivity are not the “same or similar” to services provided by TSPs because:

1. apps and TSPs have fundamentally different technical and economic characteristics;
2. apps typically provide a wider set of features than traditional services;
3. apps are, unlike traditional services, accessible on any Internet-capable device; and
4. apps operate in different layers than do traditional services.

Regulators and policymakers in other jurisdictions, such as in the EU and Australia, have determined that non-interconnected OTT applications are not equivalent to or are not perfect substitutes for traditional telecom services. We request the Authority to consider that globally, many laws and policymakers recommend a cautious approach to extension of existing telecom regulation to OTT applications and consideration of opportunities to deregulate traditional services.

Moreover, the so-called substitutability of OTT communications application for traditional services is especially misleading since it is not an option for the majority of users who still do not have access to smart devices, and thus do not have access to OTT apps.

Usage and Technological Differences between OTTs and TSPs

In this context, we submit the following points for the consideration of the Authority regarding the important differences between OTT communications applications and traditional services:

1. Implying that OTT communications applications and TSPs provide the same services or operate in the same market ignores critical differences between the two. OTTs are not the substitutes of TSPs; they depend on them. A consumer cannot even access OTT applications without first purchasing internet access service from a network operator. TSPs control the underlying broadband access infrastructure and are the gatekeepers to broadband internet access and therefore, OTTs themselves. Further, consumers typically have limited choices in their TSP and there may be costs associated with switching (and telecommunications regulations have been structured with those considerations in mind). By contrast, OTT applications cannot be offered without access to the physical networks that *only* TSPs deploy. OTT apps operate in a highly competitive market in which it is easy and often cost-free for consumers to switch between competing apps, and many consumers access multiple OTT communications apps from one device (thus, the rationale underpinning many legacy telecommunications regulations does not apply to OTT communications applications). TSP licenses also confer several exclusive rights that OTT players do not enjoy. These include, for example: (i) the right to acquire spectrum, (ii)

the right to obtain numbering resources, (iii) the right to interconnect with the PSTN, and (iv) the right of way to set up infrastructure. Also, OTTs enjoy no exclusive right to deploy their applications. TSPs can and often do provide their own OTT applications. On the other hand, an OTT application provider would need a license to deploy a TSP Network. And as noted above, because entry barriers and switching costs are low for OTT applications, the OTT market, unlike the TSP market, is highly competitive. We elaborate on this further in subsequent questions.

2. Equating OTT communications with traditional services is overly simplistic and ignores that OTTs often offer diverse functionalities, do not easily fall into straitjacketed categories, and may use messaging or calling merely to augment unrelated services and improve the consumer experience. Conceiving “communication services” as a sub-category of OTT applications creates an impractical distinction between communication functionalities and non-communication functionalities among OTT applications. For example, gaming, document editing, photo sharing, social media and many other fundamentally dissimilar functionalities allow users to communicate with each other. It would be incorrect and inappropriate to characterize and regulate them as telecommunications services. Some examples of such communication service features are as follows:
 - Messaging/calls in payment apps (such as PayTM)
 - Messaging/calls in gaming apps (such as Call of Duty)
 - Messaging/calls in rental apps (such as Airbnb)
 - Messaging/calls in food ordering apps (such as Zomato)

Clearly, these examples above are vastly different. Since their usage and functionalities are very different from traditional telecom services, there is little comparison between the two. For example, traditional message services can be used between two devices and include basic text and image content. An OTT messaging app may provide additional functionalities such as the ability to have group chats, and share documents and videos, among other features. Thus, OTT services provide expansive experiences to customers that go beyond conventional messaging and communication options provided by TSPs. OTT communications applications such as WhatsApp, Hike Messenger, and Google Hangouts provide rich messaging features not available through SMS, and they also have broad economic impact. A recent study estimates that for the year 2017, this consumer surplus for India provided by “Rich Interactive Applications” or “RIA” was a substantial Rs 6.3 lakh crore. This means that the benefits provided by RIAs are higher than the price paid by the consumers for the RIAs.

A 2017 report by WIK found that each 10% increase in usage of RIAs led to an average increase of US\$5.6 trillion in global GDP (0.33% of GDP) from 2000 to 2015.² And according to one study, a five percent increase in WhatsApp penetration in 2015 is associated with a US\$22.9 billion increase in global GDP.³ In this context, viewing OTTs as free riders on TSP networks, not subject to any regulation is incorrect. OTT services deliver massive consumer value and are regulated under the framework of the Information Technology Act (IT Act).

3. The diversity of OTT services can be evidenced by the multiplicity of devices that can use them. Any device (mobile, tablet, laptop, desktop) connected to the Internet (whether WiFi or mobile or fixed line) can use OTT applications, which is not the case for traditional services. Effectively, any proposal for additional regulation by the Authority will cast a very wide net bringing the entire software industry under a new regulatory framework. This level of disruption will raise new uncertainties for the industry.

² Dr. Rene Arnold et al. The Economic and Societal Value of Rich Interaction Applications in India. Broadcast India Forum. November 2017. Access [here](#)

³ Rosie Mate and Greg Rafert. The Global and Country-level Economic Impacts of WhatsApp. Analysis Group. Access [here](#)



4. Telecom networks and OTT applications operate in different layers (network layer and application layer respectively) and offer functionalities on different devices and compete for different groups of customers.

Global OTT Policies and Regulations

Many regulators and policymakers have already determined that OTT communications applications are not equivalent to traditional network-based services.

We call the Authority's attention in particular to the European Union's acknowledgment in the revised European Electronic Communications Code of the fundamental differences between "number-based interpersonal communications services" (NB-ICS), such as those interconnected with the public telephone network, and "number-independent interpersonal communications services" (NI-ICS), which includes non-interconnected OTT communications apps that ride over the network. The EU created separate regulatory regimes for NB-ICS and NI-ICS, subjecting NI-ICS to lighter touch regulation.

The Australian Competition & Consumer Commission (ACCC) determined in its April 2018 Communications Sector Market Study that there "is no basis for requiring equivalent regulatory treatment" of OTT and traditional voice services. The ACCC reasoned that "the extent of substitution from traditional voice services to OTT voice services is limited by technical shortfalls (such as any-to-any connectivity) and consequently we do not consider OTT services to be full substitutes for voice services at this time." The ACCC went on to state that the "emergence of OTT services has largely been a positive development for consumers," including in how OTT companies "provide[] consumers with new services (such as entertainment, social media, ride-sharing, shopping, etc.) and innovative alternatives to traditional communications services (such as voice and text messaging)," and that the ACCC "consider these developments have a strong pro-competitive impact on a variety of markets."

And as the Authority notes, Ofcom has similarly determined in the context of a review of the market for mobile call termination for the period of 2018 to 2021 that "there are no sufficiently close substitutes for termination of calls to mobile numbers for us to widen the market definition, nor are any likely to emerge over the period covered by this review. This means that, for example, voice calls terminated using Over the Top (OTT) services which do not use mobile number ranges, such as FaceTime, Skype or WhatsApp, are not part of the relevant markets."

Additionally, policymakers around the globe caution against extending telco regulation to online apps and are considering deregulation of traditional services. Globally, many law and policymakers recommend a cautious approach to extension of existing telecom regulation to apps and consideration of opportunities to deregulate traditional services. For example, in a joint letter to the European Commission (EC) regarding reform of the European Union's telecoms framework, the governments of 10 European countries cautioned against "automatically extending" regulation to online apps, urging the EC to "consider deregulation of traditional telecoms services." Similarly, the Nordic National Regulatory Authorities recommended "a cautious approach to regulation" of online apps and that "possibilities to simplify, modernize and lighten existing regulation should be pursued." Regulators and lawmakers are also actively reconsidering existing telecommunications regulatory frameworks in light of changes in the marketplace. For example, Hong Kong's Commerce and Economic Development Bureau (CEDB) has initiated a review of its broadcasting regulatory framework "with the aim of relaxing obsolete statutory requirements." The CEDB did not propose to extend existing obligations for traditional audiovisual services to online apps in part because "[t]hough OTT and other Internet TV and radio programme services are gaining their prominence, traditional media . . . are still highly pervasive and accessible to all in the family, young and old."

In October 2017, the Australian Parliament enacted broadcasting reform legislation that in part



eliminated media control and broadcast audience reach restrictions and was intended to “improve the sustainability of Australia’s free-to-air broadcasting sector” and “reform[] outdated media regulation . . . to better reflect the contemporary digital media environment.”

In November 2017, the US Federal Communications Commission (FCC) eliminated or revised several of its broadcast ownership rules to “reflect the present, not the past” of the media landscape. The FCC concluded that updating those rules – which principally limit a single entity’s ownership of multiple media outlets – would afford broadcasters and local newspapers “a greater opportunity to compete and thrive in the vibrant and fast-changing media marketplace.”

Criteria for Comparing OTTs and TSPs

Substitutability is only one of the many criteria that should be considered by the Authority in determining whether comparable regulations should apply on OTTs and TSPs. Other relevant factors include: ubiquity and adoption, consumer welfare, addressable markets, level of competition, maturity of industry, lifecycle of product/services, impact on economy (especially SMEs and startups), level of innovation, nature of the underlying technology and other technical considerations such as whether the service connects to the public telephone network, and switching costs, amongst other factors.

Even if functional comparison were the only criteria, consumers do not view OTT communications applications that do not provide any-to-any connectivity as substitutes for traditional telecom services. And regardless, it would be illogical for all functionally similar services to be regulated the same because then, for example, cars and bicycles or Airlines and Railways would have a common regulatory framework. Further, it must be recognized that substitutability in itself is a complex criteria: it comprises many considerations and factors and shouldn’t be simply reduced to one factor. In this context, we submit the following points for the consideration of the Authority:

1. Several considerations are important for determining substitutability in the context of regulation besides functional similarity. For example, the players must: (i) compete in the same layer (e.g., network layer, application layer, etc.) with comparable rights to resources; (ii) offer functionally comparable services; (iii) compete for the same group of customers; (iv) operate in the same service area; and (v) offer services on comparable devices. Given the differences highlighted in our response to Question 1, it is clear that Internet communications applications and TSPs are far from being perfectly substitutable.
2. Invoking substitutability between the services to justify regulation or licensing requirements for OTT services will hurt consumers and industry. It will create a new barrier to entry for both new apps and service providers by raising the cost of service provision. Low barriers to entry, the open nature of the Internet, and rich interactions and experiences that OTT application and content providers enable are key to the continued growth of the digital economy. Ill-conceived regulatory and/or licensing obligations risk throttling Internet-based innovation as well as the nascent start-up ecosystem in India. Further, a poorly justified domestic regulatory framework can discourage foreign investment in India. It will encourage Indian Internet companies to move their operations to more permissive regulatory jurisdictions abroad, a trend prevalent even today.
3. The criterion of substitutability is contrary to the government’s current approach to carriage (TSPs) and internet content (OTTs) which fall under the Department of Telecommunications (DoT) and Ministry of Electronics and Information Technology (MeitY), respectively. OTT services are already regulated under the IT Act framework, as elaborated by the consultation paper. In Chapter 4, the consultation paper has detailed the obligations applicable to TSPs that are not applicable to OTT service providers.

Further, the consultation paper has also delineated jurisdiction related issues, specifically data localization and CLOUD Act, which come under the ambit of the Ministry of Electronics and Information Technology.

4. Any finding of substitutability based on the test of “substantial functionality” as iterated in Para 2.2.8 is bound to be flawed, because:

- It is not an objective test, as most OTT applications provide multiple functionalities (such as gaming, payments etc) and identifying whether the communications functionality is ‘substantial’ or ‘ancillary’ might depend on vague and varying factors. Such a test will invite uncertainty and litigation.
- It will encourage some OTT service providers to attempt to disguise the communication (messaging and voice) features among non-communication features, in order to escape obligations imposed on communication service providers.
- It will encourage OTT service providers to lower investments in their messaging and voice features in order to prove that they are ancillary, leading to a slowdown in the growth of these functionalities. This will hurt innovation, competition and customer choice.

Q. 3. Whether regulatory or licensing imbalance is impacting infusion of investments in the telecom networks especially required from time to time for network capacity expansions and technology upgradations? If yes, how OTT service providers may participate in infusing investment in the telecom networks? Please justify your answer with reasons.

There is no regulatory or licensing imbalance between TSPs and OTTs because legacy telecommunications regulations are ill-suited for OTT applications, as described above. Further, the poor financial health of the industry is unrelated to ‘licensing imbalance’. TSPs and OTTs invest in different parts of the digital ecosystem.

There are numerous suggestions that the poor financial health of the sector, and the resulting consolidation, is caused by factors other than the growth of OTT applications and services. Specifically, it is not a consequence of OTT usage, but of cut throat price competition between infrastructure providers which has hurt the margins of TSPs.

It may be pertinent to revisit TRAI’s recommendation on "Regulatory framework for Internet Telephony" issued on October 24, 2017. The regulator while examining the arguments on revenue loss to existing TSPs by introducing telephony services over public internet noted that "*internet use is growing at an unprecedented high rate, and existing providers will generate revenue from data services which will be required by a subscriber to make even an internet telephony call. The Authority is of the view that increasing revenue realisations from data services due to increasing internet traffic will not only compensate for the loss of conventional voice traffic but will also increase the revenue potential...*

⁴". The telecom regulator, in this respect also noted the presence of symbiotic relationship between accessibility of services over the public internet and telecom sector.⁴ Under recent reforms, India’s telecom players can now determine the nature, scope, and scale of their investments in the market based on their own commercial considerations. Because the Authority forbears on end user tariffs, TSPs are free to set price of Internet access for their subscribers. And thanks to liberal norms for entry, exits, and mergers, players continue to invest in one or more parts of the industry. There have been substantial investments in optical fibre networks in recent years.

⁴ TRAI Recommendation on ‘Regulatory framework for Internet Telephony’; available at https://trai.gov.in/sites/default/files/Recommendations_24_10_2017_0.pdf



Recent massive investments in 4G networks are primarily due to revenue opportunities offered by OTT applications. OTT music, video functionalities continue to drive growth of data and the accompanying revenues for TSPs.

The growth of OTT apps expands, not reduces, the avenues for greater revenues for TSPs. With OTTs offering progressively richer services, incentives for investment in networks will increase further. This will attract and make available greater funds to enable deployment of newer technologies and investment in network capacity and quality.

It is also important to note that OTT apps already participate in infusing investment in the networks, facilities, and equipment of the internet. A study by Analysis Mason in 2014 found such investment to be significant in the US context – between approximately USD28 billion and USD36 billion annually from 2011-2013, with a blended average in the region of USD33 billion per annum.

Another significant way in which OTT providers drive investment in this sector is by building physical facilities such as data centres, fibre networks, servers and routers. There is a wide array of advanced and expensive physical equipment that underpins the operation of the internet, which requires significant investment, and much of it is carried out by OTT players and their network service providers.

In view of the above, the Authority should focus more on unshackling TSPs from unnecessary and expensive regulation which severely limits their ability to invest in networks. Indeed, it should also incentivize OTTs too to invest more in their part of ecosystem.

Further, OTTs have provided investment and revenue opportunities across the economy, not just for TSPs alone. A recent study conducted by WIK-BIF found that “rich interaction applications” like WhatsApp, Facebook Messenger, Google Hangouts and Hike created a consumer surplus of US\$98 billion (INR 6.3 lakh crores) in India. This is equivalent to 4.3% of India’s GDP of US\$2264 billion (INR 147 lakh crores) in 2016. Another study, by ICRIER in 2017, determined that during the period 2015-16, OTTs contributed a minimum of USD 20.4 billion (Rs. 1357.6 billion) to India’s GDP. The study forecasts that by 2020, OTTs could contribute a minimum of USD 270.9 billion (Rs. 18275.9 billion) to India’s GDP.

As can be seen, focusing only on the impact of OTTs on TSP revenues would present an incomplete picture of the positive impacts of OTTs on consumers and the overall economy. It is easy to see that raising barriers for OTT players could hamper innovation in digital applications, and raise costs for users and the economy at large, instead of spurring investment.

Q. 4. Would inter-operability among OTT services and also inter-operability of their services with TSPs services promote competition and benefit the users? What measures may be taken, if any, to promote such competition? Please justify your answer with reasons.

Interoperability Among OTT Services

Lack of interoperability, as it refers to users’ ability to move or switch between OTT services, has not been seen as a serious barrier to competition. The rationale for requiring TSPs to interconnect and interoperate does not apply to OTT communications services. TSPs offer essential services including access to emergency services. If TSP services did not interoperate or interconnect, potentially large populations would be cut off from communications and life-saving access to emergency services.

There has been no evidence of consumer harm due to a lack of interoperability of OTT applications. On the contrary, consumers have a vast range of choices at low to zero costs because the OTT market



is highly competitive and has low switching costs. Consumers find it extremely easy to acquire knowledge about different apps and switch from one to another. This is corroborated by the Competition Commission of India in its order *in re Vinod Kumar Gupta and WhatsApp Inc.*, which has stated as follows:

"The Commission also observes that there are no significant costs preventing the users to switch from one consumer communication apps to another. It may be due to the following reasons:

- *all consumer communication apps are offered for free of cost or at a very low price (mostly free),*
- *all consumer communication apps are easily downloadable on smartphones and can co-exist on the same handset (also called 'multi homing') without taking much capacity along with other apps,*
- *once consumer communication apps are installed on a device, users can pass on from one app to its competitor apps in no-time,*
- *consumer communication apps are normally characterised by simple user interfaces so that costs of switching to a new app are minimal for consumers, and*
- *information about new apps is easily accessible given the ever increasing number of reviews of consumer communication apps on apps store like google play store etc."*

Further, the OTT economy is arguably more competitive than TSP services. Constant new entry is a feature of the online space because the barriers to entry for online services are low. The products offered are typically software-based, which means they can be rolled out, adopted, and built upon much more quickly (and cheaply) than industrial products. A new mobile app requires minimal staff, capital investment and infrastructure. The rise of cloud-computing platforms has dramatically decreased the time and capital necessary to start and scale an online service. Moreover, app stores provide pre-existing distribution platforms for applications to reach users and scale quickly.

The above factors all make it easier for new services to compete with established products on the merits, and to do so quickly. This constant competition has led to a high rate of churn among the most popular online services.

- It is notable that technology is organically moving toward even technical interoperability, with Windows apps that can ‘talk’ to Android and iOS apps and vice versa. Music apps across platforms allow sharing of media, playlists etc. Crucially, these developments are not in pursuance of any regulatory mandates, but in response to market conditions.
- India has a robust antitrust regime that is equipped to deal with issues relating to abuse of dominance. The Competition Commission of India, associated with the Competition Act, 2002 is the competent forum to address such matters. Thus, no regulatory measures based on a notion of perceived consumer harm will be justified.

Interoperability between Telecom and OTT Services

- The interoperability between telecom and OTT services has already been examined by the Authority in its Recommendations on Regulatory Framework for Internet Telephony published in 2017. In its recommendations, the Authority has noted that the present regulatory framework permits Unified Access Service Licensee (UASL), Cellular Mobile Telecom Service (CMTS) licensees and Unified Licensee (access service) to provide unrestricted Internet Telephony, which extends to both PC to Phone and Phone to PC calls within India as well as abroad. Additionally, ISPs in India are presently permitted to provide one-way PC-to-Phone Internet Telephony service for International Long Distance outgoing calls only on PSTN/PLMN to such countries where termination of Internet Telephony calls is permitted.

Thus, telecom and OTT services are already interoperable, to the extent provided above.

- There already exists a regulator to address competition issues arising from lack of interoperability. In this context, sweeping regulations regarding interoperability will be economically unjustified and misplaced.

It is possible that forcing interoperability of OTT apps with traditional network-based services can lead to a loss of popular innovative features and functions available on apps.

Q. 5. Are there issues related to lawful interception of OTT communication that are required to be resolved in the interest of national security or any other safeguards that need to be instituted? Should the responsibilities of OTT service providers and TSPs be separated? Please provide suggestions with justifications.

Issues Related to Lawful Interception

There are no issues related to lawful interception of OTT communication stemming from the regulatory framework per se. We believe that existing laws pertaining to law enforcement access to data already address this issue and are sufficient in this regard.

Therefore, there is no need for any additional rules in this regard.

The consultation paper has raised this question in the context of the use of security practices by OTT players, particularly encryption of communications. It suggests that miscreants may use encrypted communication services for “spreading rumour without getting traced.” However, what it fails to note is that several OTT players are actively working with the government in order to introduce new features to curb the spread of rumours, to identify fake news, and to develop techniques of traceability that would stop anonymous proliferation of content. Over the last few months, several such consultations have taken place successfully, resulting in the introduction of a host of new features in this regard.

Encryption

We are of the opinion that the encryption methods and other security related measures instituted by OTT players are critical for safeguarding the privacy of users. Research suggests that it is in the national interest to encourage the use of strong encryption policies by OTT service providers, and that its social benefits must be weighed against the perceived costs to law enforcement access.

Encryption policies in India need to be evaluated in light of the following:

- The Supreme Court has recently declared the right to privacy to be a fundamental right in India, of which informational privacy is a critical facet. OTT service providers seek to safeguard informational privacy through the usage of several security measures, including a variety of encryption methods.
- The use of secure pathways for communication serves to reduce the risk of cyber-crimes. It protects financial assets and proprietary data, enhances national security and thwarts cyber-enabled crime. Strong encryption prevents enormous losses that could otherwise take place when unauthorized access is attempted through increasingly sophisticated tools by cyber criminals.

Interoperability between OTTs is also not possible due to technical reasons. This is because many OTT communication services are encrypted end-to-end. In order to make them interoperable, it will



require assigning and handshake of keys which in turn will be an enormous rearchitecting challenge. This would also compromise the safety and privacy of the OTT services.

Separation of TSP and OTT Responsibility

As regards the separation of TSP and OTT responsibility, we believe that these are not comparable market players for reasons highlighted in our responses to Questions 1, 2 and 7. Since they operate in different layers (with TSP operating in the infrastructure layer and OTT in the application layer) and have differential rights (TSP has exclusive rights to spectrum and other rights that OTT does not have), therefore it is fair and justifiable that they should have differential responsibility in this regard. In light of the above, we do not believe that any additional obligations should be imposed on OTT applications to facilitate lawful interception.

If the existing mechanisms are deemed inadequate for law enforcement purposes, the government may work towards strengthening them through multilateral dialogues and stakeholder consultations, which have proven to be successful in the recent past. The creation of additional data access obligations would only create regulatory uncertainty and impact the ease of doing business in India.

Q. 6. Should there be provisions for emergency services to be made accessible via OTT platforms at par with the requirements prescribed for telecom service providers? Please provide suggestions with justification.

Emergency services are an important part of the digital ecosystem. However, with respect to OTT applications, it is important to consider the following:

- OTTs, which require consumer permission for location functionality, do not always have the persistent and granular geolocation information that is required for emergency services to locate emergency callers. The device operating system (OS) serves as a layer between OTT communications apps and these location inputs, meaning that an app's access to geolocation information is subject to the framework of the device OS and to user permissions for location data access. And even if geolocation information based on Wi-Fi is available, Wi-Fi is still not a consistently reliable substitute for the persistent, unlimited access to comprehensive caller geolocation information available to the network operator. For example, power outages, which are common causes of emergencies in the first instance, can affect Wi-Fi availability and positioning accuracy. And, depending on the type of device used by the caller, Wi-Fi may only capture the location of the last place where the user is logged in. As such, requiring OTT communications apps to provide access to emergency services could in fact compromise, rather than expand, access to emergency services.
- Most public-safety answering points (PSAP) are currently not equipped to handle incoming emergency communications from OTTs that are not interconnected with the PSTN. They will have to upgrade their IT systems and invest in new technologies.
- The reason telco operators have emergency services requirements is because they own the network and they know where consumers are located – automatically. Location is based on GPS information and tower location information. Operators have both and can therefore route calls properly.

Keeping the above in mind, one way forward may be for OTTs to have a transparency requirement to clearly inform users on their websites that emergency services are not available on their platform.

TRAI may consider reiterating its recommendation in its Consultation on Regulatory Framework for Internet Telephony, in which it recognised the limitations of Internet Based Services and recommended the following "*In view of the above, the Authority recommends that the access service*

providers providing Internet Telephony service may be encouraged to facilitate access to emergency number calls using location services; however they may not be mandated to provide such services at present. The subscribers may be informed about the limitations of providing access to emergency services to Internet Telephony subscribers in unambiguous terms.”

Q. 7. Is there an issue of non-level playing field between OTT providers and TSPs providing same or similar services? In case the answer is yes, should any regulatory or licensing norms be made applicable to OTT service providers to make it a level playing field? List all such regulation(s) and license(s), with justifications.

At the outset, we believe there is no “non-level playing field” issue between OTT service providers and TSPs, as OTTs and TSPs provide different services, do not operate in the same network layer, and because – as discussed above – there are fundamental technical and business differences between traditional services and apps.

OTT providers offer an array of different services that are accessed by users through the data services provided by TSPs. Thus, the services provided by TSPs, while they enable access to OTT services, are fundamentally different – as explained earlier. Whether the app provides communications or any other function or service over the Internet, the nature of such a service and the regulatory regime applicable to it cannot be compared to the provision of internet access services *per se*.

The regulatory impetus for TSPs is closely linked to the nature of the service and its indispensability to the general public. The National Digital Communications Policy (NDCP) 2018 refers to “*recognizing communication systems and services as essential connectivity infrastructure at par with other connectivity infrastructure like Roadways, Railways, Waterways, Airlines etc.*” In fact, telecom has been seen as an essential commodity from the time of National Telecom Policy 2012, which had sought to “*recognise telecom, including broadband connectivity as a basic necessity like education and health and work towards Right to Broadband.*”

The regulation of an essential resource is fundamentally different from the regulation of any other service. OTT applications operate in an extremely competitive market, and OTT providers do not control critical infrastructure that holds value to the public. Thus, the regulatory framework for the two cannot be the same.

It should be noted that, as explained above, competition laws, consumer protection laws and information technology laws already govern the relevant facets of internet services, so it would be incorrect to characterize this market as unregulated. On the contrary, a far broader range of laws and regulations are applicable to an OTT service provider depending on the nature of services sought to be provided by it. Therefore, it would result in incoherent regulatory governance if additional regulations applicable to a different industry are imported for a specific sub-section of OTT players.

The impact of a potential license raj for OTT players would also have an enormous spillover effect on consumer welfare, which cannot even be predicted at this stage. Not only would individuals, companies and entire industries that rely on various OTT services find their costs increasing disproportionately, it would also result in much confusion as regards to who comes under the purview of such “leveling” regulation.

Moreover, licensing requirements or other heavy-handed regulatory obligations could create barriers to entry and expansion for app providers, particularly start-ups that lack the resources to obtain a license or establish locally in every country where their applications are provided. This could result in Indian consumers not being able to access the full benefit of global online applications, depriving the Indian public of innovative and useful technology.



Licensing requirements could also impair the ability of Indian businesses to use online applications to grow and reach more people. The global reach of online applications makes them useful to business, including small businesses, because it enables companies to reach a larger potential customer base that extends beyond India's borders. This increases their business and collectively expands the Indian economy. Licensing requirements could fragment applications and services provided over the Internet and therefore erode the utility and usefulness of a global outlet for Indian businesses. Keeping the Internet open, decentralised, and free of barriers is critical to helping Indian businesses remain competitive in today's increasingly digital economy.

Further, enacting licensing or other prescriptive regulatory requirements might set precedent for other countries to follow suit with reciprocal regulations for online applications, one effect of which would be to build walls for Indian digital entrepreneurs trying to expand beyond India's borders.

And as TRAI notes in the consultation paper at Para 2.2.8, the multiplicity of functionality offered by such platforms may make it difficult to practically segregate communication from non-communication related OTTs. Thus, we may find ourselves in a position where OTT applications that provide the same basic functionality, are treated differently under law simply on account of the different ancillary functionalities they offer, which may be seen as competing with TSPs. With increased innovation in the development of OTTs, such distinctions will become more and more complicated, and would soon give rise to entirely new “non-level playing field” considerations across OTT applications. As a matter of policy, regulators should prioritise clarity and predictability.

Otherwise, regulation risks becoming obsolete with development of new technology and services. The lack of regulatory justification for imposing TSP restrictions for OTT players, coupled with difficulty of enforcement, and the extremely negative impact it may have on consumers, would make any regulatory intervention highly cumbersome and potentially undermine the authority of the regulator who seeks to impose them.

Q. 8. In case, any regulation or licensing condition is suggested to made applicable to OTT service providers in response to Q.7 then whether such regulations or licensing conditions are required to be reviewed or redefined in context of OTT services or these may be applicable in the present form itself? If review or redefinition is suggested, then propose or suggest the changes needed with justifications.

No regulation or licensing conditions have been suggested in response to Q. 7, and thus, no review or redefinition is required. As discussed above, legacy telecommunications regulations should not be automatically extended to online applications because of the fundamental technical and business differences between traditional services and apps.

We instead strongly urge the Authority to consider reducing the legacy regulatory barriers on TSPs, especially licence fees, spectrum usage charges, other levies and taxes, to improve the business case for TSPs. A less burdensome regulatory regime will benefit all stakeholders as well as the economy at large.

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

The consultation paper should bring clarity on TRAI's jurisdiction over regulating OTTs and its extra territorial application.