



1178 / TRAI/ ISPAI /23-035
September 1, 2023

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New Delhi – 110 002

Subject: ISPAI Response to TRAI Consultation Paper on 'Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services'

Dear Sir,

We congratulate the Authority to have come out with this Consultation paper on the matter captioned above and sincere thanks for providing us the opportunity to submit our response on this important issue.

We have enclosed our comprehensive response for your consideration.

We believe that the Authority would consider our submissions positively on the subject matter.

Thanking you,

With Best Regards,
For Internet Service Providers Association of India

A handwritten signature in black ink, appearing to read 'Rajesh', with a long horizontal stroke extending to the right.

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Encl: As above

**ISPAI Response to TRAI Consultation Paper on
'Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and
Selective Banning of OTT Services'**

ISPAI thanks TRAI for providing an opportunity to share our comments on this aptly issued consultation paper on the need of institutionalizing regulatory mechanism for Over-The-Top (OTT) Communication Services and Selective Banning of OTT Services.

There has been an exponential rise in the number of internet subscribers in India. This has driven heavy usage and data consumption on network and extensive penetration of OTT services and applications. This has made OTTs significant players. The impact of digitization and new age applications/OTTs is particularly significant in telecom. For example, as per TRAI data the number of OG SMS/sub/month has reduced by ~55% between QE June 2013 and QE December 2022. Similarly, OG ILD MoU /wireless sub/month down by 83%. The telecom market has undergone a paradigm shift with the IP network and services layers. Today, these services can be delivered using traditional text messaging and CS voice or packet switched (IP) voice/SMS over a Telco network and also via a standalone untethered application as a packet switched VoIP/messenger.

As per a GSMA report since 2015 the internet has continued to grow at pace-there were over 4.6 billion users in 2020, representing 59% of the world population. A study of the economics of the subsegments of the internet value chain shows that the online services and user interface segments are benefiting most from value-chain growth and generating the largest shareholder returns, whereas the internet access connectivity segment has generated relatively low and even single-digit returns on capital. Clearly, OTTs have created successful service substitutability in telecom and broadcasting, and it needs to be regulated similarly. It may be noted that other sectoral regulators in India e.g. RBI, SEBI, IRDAI etc. have created regulatory framework in their respective sectors, without hindering innovation and the growth of OTTs/online players but ensuring legal & regulatory oversight.

As rightly depicted in the consultation paper also that in the earlier time of the development of the telecommunication services sector, voice was the main product which has now been substantially replaced by data as main product with the today's Internet Protocol (IP) based telecom networks. In our view, if OTT Communication Services available for users is a substitutable service to the services offered by licensed service providers, then such OTT communication services should be considered as the same service offered under the telecom license granted by Government in the regulatory framework.

Therefore, all such OTT services should be governed by the same set of rules irrespective of whether provided by an operator on its own network or through the internet.

OTT services should be defined as a service(s) that deliver audio, video, voice, data and other media or communication content over the internet directly to users/consumers while avoiding the traditional cable, fiber, wireless, satellite or information and broadcasting platforms.

ISPAI has proposed to categorize OTT communications services as follows:

- *OTT Communications services providing communication services similar and complementary to the services provided by the licensed service provider (ISPs/ TSPs)*
- *OTT Application services which are different from the services being offered by the licensed service providers and also includes OTT broadcasting services*

ISPAI recommends that functional similarity and/or substitutability should be treated as primary criterion for comparison of regulatory and licensing norms equally applicable to licensed service providers and OTT communications service providers. Further, it is also pertinent to mention that the responsibility of national security should also be equal to both licensed service providers and OTT communication service providers providing real time communication services and no compromise should be allowed in the national security. Presently, OTT communication services continue to be unmonitored – hindering the processes of law enforcement and crime prevention. There are no checks and balances w.r.t. customer data as most of their servers are located outside India. It is therefore important that security, privacy and consumer protection measures are horizontally applied across all interpersonal communication.

In order to reap the benefits of technological advancements and economies of scale, substitutability of such OTT communication services with licensed services should be treated as primary criterion while determining regulatory mechanism for OTT Communication services. TRAI should recommend a new Service Authorization namely “OTT Communication Services” under the present Unified license regime in terms of simpler version of the Access Service Authorization considering the fact that OTT communication service providers are offering communication services akin to traditional voice, video and messaging services offered by UL-Access Service Provider. ISPAI recommend broad and light touch regulatory framework based on the principle of “same service, same rule” applicable to all service providers should be promoted for ensuring a level playing field. Such framework will ensure sustainable competition, safeguard network investments and will enable well balanced regulatory environment for all players in the digital ecosystem irrespective of using any technology to deliver content & applications through internet to the end customers. This kind of environment will benefit the consumers and enterprise in terms of better customer experience, innovative offering and quality of service.

ISPAI would also like to mention that since OTT communication services heavily depend on the infrastructure provided by ISPs / TSPs to reach their registered users. In order to deliver and sustain digital connectivity, there is a critical need for a collaborative framework amongst all market players benefiting from the digital transformation. There should be a policy framework to enable commercial arrangements among licensed service providers and OTT communications service providers. Since this is an issue of critical importance for the sustainability of the sector in the long run, to ensure fairness and compensate for the increased data demands, it is justifiable for OTTs to pay a fair and reasonable network usage charge to ISPs / TSPs for utilizing their network infrastructure. This will support the expansion of networks and related infrastructure of ISPs / TSPs and also enhance contribution to exchequer since these revenues will be a part of TSPs' AGR calculations which contribute directly to the national treasury.

On selective banning of OTT Services and Websites, we welcome the suggestion of exploring

selective banning of such services as an alternative to complete internet shutdowns. However, blocking shall be done at the source level for it to be effective. ISPAI is of the view that the network service provider like ISPs/TSPs should not be responsible for blocking of the information and content available on internet particularly which relates to OTT content services, Social Media Intermediaries and OTT content aggregation services including user generated content hosted on YouTube, Instagram, or any other similar OTT applications. It is very difficult for the underlying network service provider to block such content in its network especially in the era of HTTPS when most of the sites have become secure. Therefore, as far as blocking of content on internet is concerned in respect of any type of OTT service / application, the responsibility of blocking / banning of such content should be of OTT service/ application provider as these OTT service providers are the aggregators of such content / information which is being produced by their registered Users on their platform. Therefore, OTT service provider should take lead and responsibility in blocking / banning of such content and there is no role in blocking / banning of such OTT content of network service provider who is providing only underlying network for the same.

ISPAI issue wise comments are as follows:

A. Issues Related to Regulatory Mechanism for OTT Communication Services

Q1. What should be the definition of over-the-top (OTT) services? Kindly provide a detailed response with justification.

Response:

Services provided by licensed TSPs and OTT communication services providers are functionally substitutable offering same core utility. OTT services, over the years have been drastically increasing their ambit and there are a wide range of services that are available for subscribers such as Content, Communications, E-Retail, Social Media, Gaming and Payment services etc.. Hence OTT services need a comprehensive and clear definition which ensures the removal of any ambiguity.

As also rightly indicated by ITU, there is no single universally agreed definition of an Over the Top (OTT) service, and a variety of definitions are used by different bodies and in different forums. But in essence, an OTT service is a service or application which is provided to a user over the internet, in most cases without a network operator being involved. This covers a wide range of services which are provided “over the top” of the internet, including communication and messaging services and audio and visual broadcasting services. Accordingly, OTT services can be defined as any service provided over the internet that bypasses traditional operators’ distribution channel.

ITU-T in its Recommendation D.262 (05/2019) defined OTT as follows:

“an application accessed and delivered over the public Internet that may be a direct technical/ functional substitute for traditional international telecommunication services”.

Similarly, definition of OTT Service given by Commonwealth Telecommunication Organization in its report on ‘Over The Top (OTT) Applications & Internet Value Chain’ defined OTT as

follows:

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

SATRC (South Asian Telecommunications Regulator’s Council) in its report on ‘Policy, Regulatory and Technical Aspects of OTT Services in SATRC countries’¹ published in 2016 had specified that SATRC member countries while defining OTT services and will be following the ITU or industry definition. The member countries have suggested the following definition for OTT services:

The term OTT refers to applications and services which are accessible over the internet and ride on operators’ networks offering internet access services.

From the above definitions it can be concluded that OTT services should be defined as a service(s) that deliver audio, video, voice, data and other media or communication content over the internet directly to users/consumers while avoiding the traditional cable, fiber, wireless, satellite or information and broadcasting platforms. A globally accepted understanding of OTT services would be services which run on top of Internet provider by ISPs & TSPs in the respective country. Therefore, we are of the view that the above provided definitions are comprehensive definitions of OTT Services and similar definition of OTT service should be adopted by TRAI as suggested below–

OTT can be content, or service provided to the end user on demand that may offer audio-video content, instant messaging, voice/ video calling and other media over Public Internet.

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.

Response:

The classification of OTT services can be made into two categories based on the primary function they serve - communication and application services. DoT Committee Report on Net Neutrality (May 2015), have also classified OTT Services as follows:

- (i) OTT communication services which focus on providing real-time communication between users over the internet enabling users to send messages, make voice and video calls, and share multimedia content with each other. These services such as VoIP/Messaging, enable real-time Application/person-to-person telecommunication over the internet, utilizing the network infrastructure of licensed telecom service providers (TSPs). 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 TSPs’ services by utilizing their existing infrastructure.

¹ https://www.apr.int/sites/default/files/Upload-files/SATRC/SAPIV/WGSPEC/SATRC_Report_OTT_Services.docx

OTT content / application services including broadcasting services which primarily focus on providing on-demand content, entertainment, and various utility services to users over the internet. Some of the examples of this category of OTT services are media services, trade and commerce services, cloud services, and social media, Gaming applications etc. These services utilize the network infrastructure created by TSPs but don't directly compete with the services offered by TSPs under their licensed operations governed by the Indian Telegraph Act, 1885.

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.

Response:

OTT communication services refer to digital platforms or applications that enable real-time communication and interaction between users over the internet. These services utilize internet connectivity to facilitate various forms of communication, such as instant messaging, voice calls, video calls, and multimedia content sharing. TRAI in its earlier Consultation paper on Framework for OTT Services issued in 2015 also defined 'OTT Provider' as a service provider which offers Information and Communications Technology (ICT) services, but neither operates a network nor leases network capacity from network operators.

Today, voice and SMS communications services can be delivered using traditional text messaging and CS voice or packet switched (IP) voice / SMS over a TSP network. They can also be delivered via a standalone, untethered application as a packet-switched VoIP /messenger.

ISPAI is of the view that the OTT Communications Services are those services which are similar and substitutable service to the Services offered by licensed service providers under a telecom license issued under section (4) of the Indian Telegraph Act, 1885. For instance, some of the OTT Communications Services (Skype, WhatsApp, Telegram, Viber, Facebook Messenger etc.) are comparable to Internet telephony service provided by Internet Service Provider under its UL-Internet Service Authorization considering the fact that the Internet Telephony Service is also same as OTT Communications service described above.

The regulatory regime should be future fit to accommodate such changes impacting service delivery and regulate them appropriately considering the functional substitutability of service as a key parameter for classification. OTT communication services which are similar to licensed telecom services (such as collection, carriage, transmission and delivery of voice and/or non-voice messages), internet telephony, services including IPTV, triple play, i.e., voice, video and data, voice mail, unified messaging services, video conferencing, cell broadcast, value-added services and supplementary services, provided by traditional licensed service providers, should be considered under this definition.

Accordingly, ISPAI suggest following definition of OTT communication services–

OTT (Over the Top) Communication services enables the end user to establish communications such as Instant Messaging/ Voice/ Video calling on demand via platforms

like digital application or website available on mobile device/ personal computer over public/ private internet network, as independent interpersonal communications service.

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.

Response:

Functional similarity and/or substitutability of services of licensed telecom services should be used as the intelligible differentia for the reasonable classification of OTT communication services.

As submitted in response to Q3 above, OTT communication services are delivered over the internet, allowing users to access them using internet-connected devices. OTT communication services are being provided at platform through an application or webpage and it doesn't rely on licensed service provider's network, however, many OTT applications provide similar services as provided by licensed service providers. In case, OTT Communication Service(s) available for the Users is substitutable service to the services offered by the licensed service providers, then such OTT communication services should be considered as the same service offered under the telecom license granted by Government in the regulatory framework.

Broadly, OTT communications services can be classified under two categories:

- *OTT Communications services which provide communication services similar and complementary to the services provided by the licensed service provider and includes Text-based communication services and voice & video calling services.*
- *OTT Communications / Application services which are different from the services being offered by the licensed service providers and includes social media-integrated communication services and Business, Collaboration communication services, Security focused communication services and Virtual Assistant-Integrated Communication Services.*

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.

Response:

It is reiterated that the OTT communication services should be brought under the appropriate regulatory framework. The principle of 'same service, same rules' needs to be applied so as to address the glaring licensing, regulatory and security asymmetries between two sets of services to ensure a level playing field and to protect competition. The licensed service providers are subject to multiple regulatory fees and levies such as one-time non-refundable entry fee, annual license fee (LF) of 8% (this includes a USO levy of 5%) and in case of spectrum, spectrum-related payments and charges. Moreover, licensed service providers also have to comply with the various regulations, orders and directions issued by TRAI from time to time which is not the case for OTT communications service providers.

In view of the above, ISPAI has following views on various aspects of OTT communication services vis-à-vis licensed telecommunication services in India:

- (a) **regulatory aspects:** OTT communication services are presently not regulated in India, while licensed telecommunication services are governed by various regulations, including licensing requirements, spectrum usage charges, and quality of service standards. TRAI in its paper has also highlighted that in the earlier phase of the telecom sector, voice was the main product which has now been substantially replaced by data as the main service with today's Internet Protocol (IP) based telecom networks. In the entire internet value chain of Internet ecosystem, OTT Applications and messaging services are playing a vital role in proliferation of new and innovative use cases and applications for Enterprises which are helping them immensely in driving operational efficiencies. Therefore, it is imperative for the Government and Sectoral Regulator to ensure regulatory equality among all licensed telecom service providers and OTT Communication Service Providers by way of implementation of regulatory framework based on the principal of 'Same Service Same Rule' for ensuring level playing field. Further, ISPAI is of the view that if OTT Communication Services available for users is a substitutable service to the services offered by licensed service providers, then such OTT communication services should be considered as the same service offered under the telecom license granted by Government in the regulatory framework.

Additionally, In this regard, we would also like to share various international practices for TRAI reference:

- In the context of regulatory framework for OTTs, the EU implemented the European Electronic Communications Code on 11th of December 2018. The EECC introduced two new regimes for OTT providers: one for number-independent services like instant messaging, and another for number-based services such as VoIP. When OTT services grant access to publicly assigned numbers, they are governed by rules akin to traditional telecom operators. Conversely, those providing "number-independent interpersonal communications services" fall under a new and less stringent regulatory regime. This update ensures clearer and appropriate regulations for OTT services in the EU.
- Further in July 2021, the European Union Agency for Cybersecurity (ENISA) published its 'Guideline on Security Measures Under the EECC' (4th Edition)⁸⁸, which affirms

that security provisions in the EECC for number-independent interpersonal communication services (NI-ICS) are similar for the number-based services.

- Germany has gone one step further, by proposing for a new regulatory framework to monitor content on online platforms. It introduced Telecommunications Act (Telekommunikationsgesetz, TKG) which came into force on 1st December 2021. Under this Act OTT-I providers are regulated under telecommunications law for the first time. OTT-I services facilitate individual and group communication in the form of language, images, videos, or other data using the internet protocol only over the open internet, without offering content.

- (b) **economic aspects:** OTT communication services have had a significant impact on the economics of the telecom industry. OTT communication services have led to a decline in the usage of traditional voice and SMS services, which has reduced the revenue of licensed telecommunication operators from traditional telecom services.

Although OTT services and applications have proliferated broadband and internet services in the country and also incentivized licensed service providers to invest more in the expansion of their infrastructure and networks, however, there is a need to ensure regulatory equality. Therefore, we recommend that in order to reap the benefits of technological advancements and economies of scale, substitutability of such OTT communication services with licensed services should be treated as primary criterion while determining regulatory mechanism for OTT Communication services.

- (c) **security aspects:** ISPAI is of the view that the responsibility of national security should be equal to both Licensed service providers and OTT communication service providers providing real time communication services and no compromise should be allowed in national security.

The powers to lawfully intercept and monitor communications are derived from section 5 of the Indian Telegraph Act, 1885. The terms and conditions of the license granted to telecom and internet service providers form the next layer of the legal framework for national security considerations. Some of these terms and conditions are listed below:

- Domestic traffic to stay within India.
- Network to be set up within service area or in the country.
- Provision of lawful interception to the security agencies.
- Access of subscriber database to the security agencies.
- Maintenance of CDR/IPDR for various security requirements.

Incidentally, OTT communication service providers do not have any such security, privacy oversight. They offer calls across telecom networks in India using strong encryption and switching servers located outside the country and hence effectively prevent any lawful interception and/or monitoring. The unencrypted content can only be intercepted in the switching systems installed outside the country and the encrypted content can only be decrypted outside the country. Since the TSPs merely provide internet and the switching servers are also not under their control, the systems deployed by them are unable to intercept and monitor such strongly encrypted content.

Licensed service providers have rightfully put the national security first in their business but that is not true for OTT players having an asset-light business model with no or minimum liabilities and are not obligated under existing regulatory framework. OTT Communication service providers should also be brought under the regulatory framework and should have similar obligations of license compliances especially for security compliances, lawful interception requirements, URL blocking, data privacy and security requirements etc. Regarding CAF & KYC requirements, licensed service providers are heavily regulated and ensure traceability of their customers. However, the same does not hold true for the users of OTT Communication services. These OTT players just got registered their users on their application / platform for collecting information meant for their own business purposes and no KYC details are maintained or are kept outside the country. This is also a security threat and therefore OTT communication service providers should also be obligated to conduct proper KYC of their Users so that traceability can be ensured.

Even the DoT Committee Report on Net Neutrality (May 2015) acknowledged the paramount nature of national security and the risks to national security posed by OTT communication services. Accordingly, it recommended inter-ministerial consultations to work out measures to ensure compliance of security related requirements from OTT service providers. Therefore, OTT communication service providers should be held responsible for establishing the technical infrastructure required in India for lawful interception, so that national security agencies may intercept their traffic as per requirement

- (d) **privacy aspects:** In the Internet services sector, TSPs, OTT communication service providers, content providers, equipment/handset manufacturers, entities dealing with smartphone operating systems, and browsers, etc. operate in the same internet ecosystem. In this sector, customer privacy has three significant sources of vulnerability – device, network and content providers. All three of these vulnerabilities need to be plugged in order to holistically address the issue of the protection and privacy of personal data.

However, the privacy protection requirements applicable to TSPs are not applicable to the OTT Communications service providers even though they deal with the same personal data of subscribers. Licensed services providers are subject to privacy regulations and data protection laws in India. They are required to adhere to strict guidelines for the collection, storage, and processing of user data. OTT communication providers should also be mandated to collect and store user data strictly as per existing licensing and legal framework. The Existing IT Act including IT Rules should be followed by them.

TRAI itself recognized the inadequacy of the extant framework in its Recommendations dated 16.07.2018 on “Privacy, Security and Ownership of the Data in the Telecom Sector” and recommended that to protect telecom consumers against the misuse of their personal data by the broad range of data controllers and processors in the digital ecosystem, all entities in the digital ecosystem which control or process their personal data should be brought under a data protection framework.

Taking note of the critical nature of the issue, TRAI also recommended interim measures,

i.e., till such time as a general data protection law can be notified by the Government, the existing rules/license conditions applicable to TSPs for protection of users' privacy should be made applicable to all the entities in the digital ecosystem and OTT communication service providers should be required to comply with the various data protection and privacy norms including any specific measures prescribed under the UL.

- (e) **safety aspects:** OTT communication providers should also be mandated to collect and store user data strictly as per existing licensing and legal framework. The IT Act 2000 as amended from time to time and related IT Rules should be scrupulously followed by them. Our member ISPs have put in place various measures to filter and block malicious or harmful content as they are obligated under licensing requirements. However, similar measures are not applicable for OTT communication services to curb the dissemination of harmful content on their platforms.
- (f) **quality of service aspects:** There have been global/regional outages in OTT services that are observed, but these are mostly associated with infra or new features compared to basic functionality. However, presently, there is no methodology / framework that exists on quality of service applicable for OTT communication service providers providing real time communication services. We are of the view that TRAI should address this issue and look at the larger views of the OTTs app with QoS so that this can bring in a new way of communication while it is used for enterprise applications.
- (g) **consumer grievance redressal aspects:** Licensed telecommunication services are required to have established grievance redressal mechanisms to address customer complaints and issues. Users can approach telecom operators or regulatory authorities to resolve disputes. However, similar redressal mechanisms are not presently available for Users of various OTT Communication service providers. This is a concern because it could lead to a lack of consumer protection.

Thus, in order to protect the interests of the consumers, OTT communication service providers should be required to set up a consumer grievance redressal mechanism with clear timelines for resolution of issues in a standardised format.

- (h) **any other aspects:** Emergency services are a very essential part of any telecommunications network's obligations across the world. Licensed service providers are obligated to ensure availability of emergency services for their customers under the regulatory and licensing framework. The OTT communication service provider offering real time communication services should also be providing emergency services.

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.

Response:

Yes, OTT communication services should be brought under the present licensing/regulatory

framework to promote a competitive landscape for the benefit of consumers and service innovation and also to have parity with licensed service providers. TRAI in para 2.67 of the paper has mentioned that the telecom service providers in India are regulated by several laws, including the Indian Telegraph Act, 1885, the Wireless Telegraphy Act, 1933 and the Telecom Regulatory Authority of India Act, 1997. The terms and conditions of the Unified License Agreement entered by the ISPs/ TSPs with the Central Government are binding upon them. However, presently none of these obligations are applicable to OTT communication service providers.

In our view, if OTT Communication Services available for users is a substitutable service to the telecom services offered by licensed service providers, then such type of OTT communication services should be considered as the same service offered under the telecom license granted by Government in the regulatory framework. For instance, there are several OTT applications such as Skype, WhatsApp, Telegram which are providing On Net Voice/ Video and conferencing services to their registered users which are substitutable to the Internet Telephony Service which licensed Service providers (TSPs / ISPs) are allowed to provide to their customers under the scope of services of their respective Access Service and Internet Service Authorizations of Unified License.

Although OTT services and applications have proliferated broadband and internet services in the country and also incentivized licensed service providers to invest more in the expansion of their infrastructure and networks, however, there is a need to ensure regulatory equality.

ISPAI strongly recommend that substitutability should be treated as primary criterion for comparison of regulatory and licensing norms equally applicable to licensed service providers and OTT communications service providers. Further, we also recommend that a broad regulatory framework based on the principle of “same service, same rule” applicable to all service providers should be promoted for ensuring a level playing field. Such framework will ensure sustainable competition, safeguard network investments and will enable well balanced regulatory environment for all players in the digital ecosystem irrespective of using any technology to deliver content & applications through internet to the end customers.

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.

Response:

ISPAI is of the view that the OTT communication service providers are using traditional telecom services as underlay services to reach to the user availing OTT communication services and does not require telecom resources incl. numbering series, interconnection with licensed service providers. However, such OTT communication service providers are offering services which are substitutable service to the telecom services offered by licensed service providers. Therefore, OTT communication services should be brought under a licensing/regulatory framework for ensuring a level playing field among all service providers and to protect Users privacy and data protection for addressing privacy and safety concerns about the data of their Users.

TRAI should recommend a new Service Authorization namely “OTT Communication Services” under the present Unified license regime which should be lighter version of the Access Service Authorization considering the fact that OTT communication service providers are offering communication services akin to traditional voice, video and messaging services offered by UL-Access Service Provider.

In view of the above suggested provisions with the aim to have light touch framework under the proposed OTT Communication Service Authorization in Unified License, following are our inputs on various provisions sought by TRAI-

- (a) lawful interception - The OTT communication service provider should be obligated to ensure provision of requisite monitoring/interception facilities incl. equipment for each type of service and monitoring shall be in accordance with rules in this regard under Indian Telegraph Act, 1885. This Obligation will ensure that OTTs offering real time communication services will create necessary infrastructure in India there by protecting the security interest of India.
- (b) privacy and security: These obligations should be applicable to all OTTs as well and accordingly the OTT communication service provider should ensure protection of privacy of communication and obligated to take all necessary steps to safeguard the privacy and confidentiality of its Users. The existing IT Act requires all service providers to outline a detailed privacy policy that will be applicable to all users, which includes the nature of data collected, stored, purpose and further use. Now with the implementation of newly introduced The Digital Personal Protection Act 2023 will further strengthen the privacy and security requirements.

Further, OTT communication providers should also be mandated to collect and store user data strictly as per existing licensing and legal framework and should also implement necessary systems / solutions to filter and block malicious or harmful content as a part of the licensing requirement.

This obligation will help in preventing OTTs monetizing user data and private data without the consent of the user. This will bring required discipline in OTT behavior benefiting Indian consumer at large.

OTTs indulging in ISP like behavior such as direct interconnect to exchange internet content traffic with ISPs should also be brought under the ambit of ISP/VNO licenses and should enforce same license compliances and obligations, tax compliances, URL blocking, lawful interception, etc. as TSP/ISP.

- (c) emergency services: The OTT communication service provider offering real time communication services should also be providing emergency services and therefore should be obligated to follow the guidelines /directions/ standard operating procedures as may be prescribed for the disaster management/emergency response services or any other instruction issued by DoT in this regard from time to time. The OTT Communication service provider shall also facilitate the priority routing of emergency/public utility or any other type of user calls as per guidelines /directions as may be prescribed by DoT.
- (d) unsolicited commercial communication: The OTT communication service provider should also be mandated to scrupulously comply to TRAI regulations/ directions issued on curbing unsolicited commercial communication as adhered to by the Access Service Providers.
- (e) customer verification: The OTT communication service provider should be obligated to adhere CAF & KYC requirements as envisaged in the Unified License agreement and ensure traceability of their Users. Therefore, OTT communication service providers should also be obligated to conduct proper KYC of their Users so that traceability can be ensured.
- (f) quality of service: As mentioned earlier, presently, there is no methodology / framework/ benchmarks that exist on quality of service applicable for OTT communication service providers providing real time communication services. Therefore, it is suggested that TRAI should undertake suitable consultation process and issue necessary QoS regulation which would exclusively be applicable on OTT communication service providers.
- (g) consumer grievance redressal: The OTT communication service providers should also be required to have established grievance redressal mechanisms in order to address complaints and issues of their registered Users. TRAI should undertake suitable consultation process and issue necessary Consumer grievance redressal regulation which would exclusively be applicable on OTT communication service providers.
- (h) eligibility conditions: The OTT communication service provider wishes to obtain Unified License with the proposed OTT Communication service authorization must be an Indian Company registered under the Companies Act'2013. The FDI policy should also be made applicable to the composite foreign holding of the applicant entity. The applicant should also have minimum paid-up equity capital and net worth as applicable to the Access Service Authorization.
- (i) financial conditions (such as application processing fee, entry fee, license fee, bank

guarantees etc.): The financial conditions as applicable to the Access Service Authorization should be equally applicable to the proposed Communication service authorization. This is due to the fact that the OTT Communication Service providers are offering services which are similar to telecom services irrespective of the domain of operation, i.e. voice, video, internet traffic exchange or any other.

(j) any other aspects (please specify): no comment.

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.

Response:

Yes, there is a need for a collaborative framework between OTT communication service providers and the licensed telecommunication service providers in order to promote competition, consumer protection, consumer benefits, dynamic innovation, sustainable investment and infrastructure development, accessibility and affordability of premium OTT applications.

Under the proposed collaborative framework, OTTs should pay a fair and reasonable network usage charge to ISPs / TSPs for utilizing their network infrastructure. This will support the expansion of networks and related infrastructure of ISPs / TSPs and also enhance contribution to exchequer since these revenues will be a part of TSPs' AGR calculations which contribute directly to the national treasury.

The collaboration is also needed to bring down overall costs, provide better QoS for OTT consumers. Such collaborative framework can be implemented at a broader level within the proposed licensing/ regulatory framework. OTT should have necessary licenses similar to ISP/TSP and should adhere to all the compliances and rules adhered by all licensed service providers. There should be a defined framework for collaboration between OTT and licensed telecom service providers.

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.

Response:

There are several challenges for collaboration between OTT communication service providers and the licensed telecommunication Service Providers. These are:

- (a) Competition – Many OTT services directly compete with the services offered by licensed telecom operators in areas concerning voice, data, video conferencing, etc. OTTs provide services that are substitutable to telecom services and should be

regarded as same to the services offered under license in India in the interest of promoting a fair & level playing field.

- (b) Unfair advantage to OTTs in the current environment - Many OTT providers directly choose to connect with large and small ISPs and MNOs and thereby provide them direct access to the internet-based OTT content. This is equivalent to an OTT operating as an ISP without the mandatory and necessary licenses as per the norms of India. These could be ISP, ILD, NLD licenses of international internet gateway approvals. Further, OTTs also connect to internet exchanges (private) and other such non-ISP entities that are presently operating in an unclear environment and facilitating traffic exchange in an informal manner.
- (c) Revenue Sharing – It is not clear how should the revenue be shared between OTTs and Telecom service providers and there is no defined guideline or mechanism for the same.
- (d) Net Neutrality – In the interest of consumer protection and consumer experience, it is important that all traffic is treated equally on the internet. Collaboration between OTT and TSP may involve preferential treatment of traffic or content and may raise concerns about net neutrality. There has been a precedence of such a collaboration between OTT and TSP in the past in India.
- (e) Compatibility of systems and networks between OTT & TSP – As the 2 parties collaborate, it could be a technical challenge and arduous task to integrate the systems and networks between the 2 parties.

Privacy and customer data security – OTT apps. have a tremendous trove of customer and end user data as well as communication data which should be subject to the same stringent data protection rules/laws followed by TSPs. Also, ISPs in India have to invest y-o-y in setting up and maintaining multiple security mechanisms such as lawful interception, URL filtering, and other compliances. On the other hand, OTTs use this infrastructure by procuring network infrastructure from TSPs and provide similar services to end users as well as business entities through public cloud platforms. While OTTs claim they provide many services free to customers, one of their primary revenue streams is the revenue earned from registered users and ad revenue. Communication OTTs are usually global, large firms having deep pockets and large revenues but do not invest in major security infrastructure in India or share any revenue with the govt. from the revenue earned from the India market.

B. Issues Related to Selective Banning of OTT Services

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.

Response:

Considering the impact of data barring orders on the everyday lives of people, the economy

and licensed service providers, we completely agree with the Parliament's Standing Committee on Communication and Information Technology, which has suggested that alternative measures need to be explored. One of the alternatives suggested by the Parliamentary Committee is the selective banning of OTT services and websites.

'According to Access Now, in 2022, authorities shut down the internet across 35 countries at least 187 times. India shut down the internet at least 84 times — the highest number of any country in the world for the fifth consecutive year.² As mentioned in the consultation paper, the shutdown of telecommunications or the internet can have significant ramifications for a country's economy and may affect the life and livelihood of the citizens of the country. For these reasons, selective banning of specific OTT applications and websites/ URLs etc. appears to be preferable as compared to complete banning of the OTT communication services.

However, it is believed that banning of internet services is made to maintain the public safety and averting public emergency, but as stated by UN in 2016 that “measures to intentionally prevent or disrupt access to or dissemination of information online (is) in violation of international human rights law.”³ Also, the Supreme Court has declared access to internet a fundamental right.⁴ Moreover, it is very challenging to selectively ban anything available on the internet. Presently, below are some methods can be considered for the selective banning, some probable challenges are also mentioned alongside:

- Deep Packet Inspection (DPI) and Content Filtering:⁵

Challenge: Identifying and blocking specific OTT services and websites requires deep packet inspection, which can be resource-intensive and may lead to false positives or negatives.

Solution: Implement robust DPI techniques to accurately identify and filter the desired content. Utilize machine learning algorithms to improve accuracy and reduce false positives/negatives. Regularly update the filtering rules to adapt to changing service URLs and content delivery mechanisms.

- Network traffic analysis (NTA):⁶ Network traffic analysis (NTA) is a technique that monitors and analyzes the flow of data packets across a network. It can help detect and prevent various types of cyberattacks, such as denial-of-service, malware, or data exfiltration.

Challenge: Data volume and complexity, Data privacy and compliance, Data analysis and interpretation

Solution: Invest in SSL/TLS interception solutions that decrypt and inspect encrypted traffic. However, this approach raises privacy concerns and requires careful handling of

² [Five years in a row: India is 2022's biggest internet shutdowns offender - Access Now](#)

³ [Why Internet Access Needs to Be Considered a Basic Human Right \(globalcitizen.org\)](#)

⁴ [Internet access a fundamental right, Supreme Court makes it official: Article 19 explained - India Today](#)

⁵ [What is Deep Packet Inspection? \(And How it Really Works\) \(digitalguardian.com\)](#)

⁶ [What are the main challenges and limitations of network traffic analysis for infrastructure security? \(linkedin.com\)](#)

user data.⁷

- VPNs and Proxies:

Challenge: Users can use virtual private networks (VPNs) and proxies to bypass regional restrictions, making it challenging to enforce bans effectively.

Solution: Implement advanced VPN detection mechanisms that analyze traffic patterns and behavior to identify potential VPN usage. Regularly update the list of known VPN and proxy server IPs.

- Legal and Ethical Considerations:

Challenge: Selective banning may infringe upon free speech and raise concerns about censorship and surveillance.

Solution: Involve legal experts and stakeholders in the process to ensure compliance with laws and regulations. Implement transparent processes and mechanisms for challenging and revising bans based on due process.

Further, we also wish to highlight that there could be multiple technical challenges in selective banning of OTT services, the key ones are listed below:

- **Identify & Classify:** Accurately identifying and classifying OTT services and websites for banning is a challenge and some new websites may use higher encryption or dynamic IP address to avoid getting tracked/detected easily.
- **VPN:** Users can easily circumvent the ban by using proxy servers or VPN to mask their location and identity and continue using the OTT service/accessing the website.
- **Encryption –** If the OTT service/website is using HTTPS connection, then it will be a challenge to inspect the content of traffic.
- **Regular updated list/database to be maintained –** Constant monitoring and co-ordination amongst the different players in the ecosystem (regulators, ISPs, etc.) would be required to ensure the correct OTT services are banned and the ban is accurate and effective.
- **Load on provider networks and network performance impact –** Implementing such bans at the network level can impact overall network performance of the Network service provider which will lead to potential slowness and the service and degradation of end user experience.

In view of the above, it is submitted that implementing selective bans on OTT services and websites involves a combination of advanced technical solutions, and careful consideration of legal and ethical implications. It also involves budgets (that may need to be increased periodically) to establish and further improve such systems that may deliver the desirable outcomes.

It is also pertinent to highlight that the network service provider should not be responsible for

⁷ [What Is SSL Inspection and How Does It Work? - InfoSec Insights \(sectigostore.com\)](https://sectigostore.com)

blocking of the information and content available on internet particularly which relates to OTT content services or OTT type of video content services including user generated content hosted on YouTube, Instagram, or any other similar OTT applications. OTT service provider should take lead and responsibility in blocking / banning of such content and there is no role of network service provider who is providing only underlay network for the same in blocking / banning of such OTT content. The barring through licensed service providers can only be implemented at network levels and selective and geographical barring has many difficulties, like override using a VPN, changing urls, dynamically changing IPs etc.

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.

Response:

Yes, in the interest of national security, there is a need to put in a 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 relevant law, in force. This will ensure balance between national security, public safety and protection of individual rights and freedoms. However, OTT services being internet-based services, complete ban of same may not be possible as OTT apps bring in new features and functionalities globally.

The network service provider like ISPs/TSPs should not be responsible for blocking of the information and content available on internet particularly which relates to OTT content services, Social Media Intermediaries and OTT content aggregation services including user generated content hosted on YouTube, Instagram, or any other similar OTT applications. It is very difficult for the underlying network service provider to block such content in its network especially in the era of HTTP when most of the sites have become secure. Therefore, as far as blocking of content on internet is concerned in respect of any type of OTT service / application, the responsibility of blocking / banning of such content should be of OTT service/ application provider as these OTT service providers are the aggregators of such content / information which is being produced by their registered Users on their platform. Therefore, OTT service provider should take lead and responsibility in blocking / banning of such content and there is no role in blocking / banning of such OTT content of network service provider who is providing only underlying network for the same.

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.

Response: It is important to ensure that the proposed regulatory framework for selective banning of OTT services should be balanced and proportionate. The key objective should be

to protect public safety and national security. The Blanket bans on entire classes of OTT services should be avoided, and measures should be targeted and focused on specific services or platforms. Thus, it is important that the regulatory framework for selective banning of OTT services should be well-defined, transparent, and subject to legal oversight.

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.

Response:

Yes, apart from OTT services, if required, specific websites should also be banned. These would typically include websites that engage in the following:

- Illegal Actions – Websites promoting CASM, promoting terrorism, anti-national activities, encouraging or facilitating cybercrime, encouraging or facilitating dangerous or harmful social media trends and societal practices, etc. should be banned and subject to legal actions.
- Harmful content – Websites spreading/promoting hate speech, misinformation/fake news, inciting users to violence, etc. that may pose law and order risk to the society and nation in general.
- Dark Web/Deep Web – Websites that promote/indulge in online sales/trade of narcotics, arms & ammunition, some cryptocurrency, etc. should also be banned.

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.

Response:

There may be a need to selectively ban specific websites – apart from OTT services – to meet the purpose, depending on the circumstance. As in the case of OTT services, all classes of websites should be included under the regulatory framework for selective/complete banning, in order to enable the Government to issue blocking orders to requisite websites as and when necessary. However, since there are multiple technical challenges in selectively banning websites from a TSP's end, the Authority should explore the option of source-level blocking and look at ways of involving the entities hosting the specific websites for effectively achieving the desired objective.
