



IAMAI Submission on

TRAI Consultation Paper on Regulatory Framework for OTT Communication Services

IAMAI on behalf of its members would like to thank TRAI for providing the opportunity to make a submission on the Current Consultation Paper on Regulatory Framework for Over-The-Top (OTT) Communication Services released on the 12th of November 2018.

Significant internet penetration (It is estimated that India has 500 Million internet users by June 2018¹) over the last couple of years has led to higher data consumption by the consumers thereby benefitting the TSPs greatly. This steady growth has been coupled with conscious policy of forbearance by the Regulator which is maintained through the absence of onerous licensing or registration requirements.

Inaccurately termed as OTTs, the term does not acknowledge the innovation in the Digital applications at the application layer. The Digital applications encompass a wide range of services including VoIP, Instant Messaging, Cloud Services, Internet Television and Social Networking. Instead, the term 'OTT' and its using seem to imply that they are simply methods of serving and the businesses are a part of telecom service sector, which limits the understanding of the Digital applications. The commonly understood concept of the internet platforms and applications that ride over the top of telecom network is fallacious as it is the consumers who use telecom networks to access apps and internet platforms. These consumers have a contract with the telecom companies and they are using bandwidth that they have paid for at a price that generates profit for the telecom companies. Digital applications (OTT) being a constituent of internet services contribute tremendously to the National Growth and Revenue. This closely aligns with the goals of the TRAI Act and the various iterations of the National Digital Communication Policy 2018 which aim to foster an environment for research and development in India and "*...aims to remove regulatory barriers and reduce regulatory burden that hampers investments, innovation and consumer interest...*". An atmosphere where a conscious policy of forbearance is adopted by the Authority is desirable.

The Authority in the previous recommendation (Net Neutrality) preferred least intrusive and minimal regulatory Framework and thus no separate category of license value added service or content aggregators under Other Service Provider. IAMAI feels that a policy of forbearance on regulation should be maintained in order to avoid hurting growth in this sector and ensuring that access to any content on the internet is not blocked, degraded or discriminated, while at the same time permitting the Telcos to avail themselves far market opportunities and impetus to reduce congestion and invest in infrastructure.

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

It is now well recognized that digital application providers are completely different from network providers like TSPs and ISPs. Any similarity of Digital applications and TSP services should depend not only on the underlying function served but also the technical and

¹ IAMAI IMRB Kantar Report: Internet in India 2017

architectural frameworks, over which, the said service function. Digital applications cannot be offered without access to physical infrastructures that *only* TSPs deploy. On the other hand, digital application providers do not control the internet access points and are dependent on network providers for reaching out to their customers. TSPs control the underlying broadband access infrastructure and are gatekeepers to broadband internet access and therefore, Digital applications (OTTs) themselves.

To illustrate further Digital applications that provide voice communication services transmit communication data over IP networks. Just like any other instance of information exchange over the internet, this communication data is delivered in the form of data packets based on best effort delivery model with no dedicated end to end channel being established for the duration of the communication. This stands in stark contrast to traditional voice services offered by TSPs, which function with a circuit-switched PSTN architectures, where dedicated channels of communications are established between devices for the duration of the communication.

Digital applications deliver Instant messaging data over IP networks as opposed to traditional SMS services, which utilize dedicated infrastructures involving short message centers Short message entities and SMS gateways. Network providers have the exclusive rights to acquire spectrum, obtain numbering resources, interconnect with the PSTN, and set up network infrastructure. Further, most TSPs already provide online services in addition to network access. Thus, while TSPs can operate in both the network and application layers, Internet companies are restricted to only the application layer.

It would be detrimental to have licensing for communication applications and Internet platforms. Many apps incorporate communication as a part of their offering. Even though communication is not the primary purpose of the application, it is an integral part. Any attempt to regulate Internet companies will result in fragmented regulatory approach towards internet as the sector is regulated by the IT Act in the country.

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.

Digital content services are a technological evolution that offers new kinds of services. Even the DoT recognises the change/shift as proven by the fact that the Telecom Commission has been renamed as Digital Communication Commission, taking into consideration that digital communications are taking lead as compared to telecommunication services. By nature, OTT and TSP services are complementary.

Given the rapid pace at which OTT services innovate and grow, the differences between OTT providers and TSPs will only increase in the future.² As a result, OTT services cannot be considered as substitutes for services provided by TSPs at present, and certainly not in the times to come.

² The Economic and Societal Value of Rich Interaction Applications in India, Page 25.

It is also important to highlight that, on a prima facie basis, the distinction between communication OTT providers and non-communication OTT providers is artificial and flawed, since today's applications can hardly be compartmentalized in such clear-cut categories. For example, most gaming, health and e-commerce applications provide integrated communication channels. Creating such an artificial distinction would fragment the Internet into two categories - one that requires a license or additional regulation and a second that doesn't require any regulations. Given the fact, that same platform/app provides multiple services, disaggregating relevant services for the purpose of regulation and otherwise, is not desirable.

Invoking substitutability between services to justify regulation or licensing between Digital applications would stand to hurt the Consumers and the industry. While there are other factors like ubiquity and adoption, consumer welfare, markets addressed, competition levels, innovation levels and nature of technology, etc. we feel, substitutability should not be the only criteria considered in determining whether a comparable regulation should apply on the Digital applications and TSPs. Further, criterion of substitutability is contrary to the government's current approach to carriage (TSPs) and internet content (Digital applications) which fall under the Department of Telecommunications ("DoT") and Ministry of Electronics and Information Technology ("MeitY"), respectively.

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.

We would like to clarify that there is absolutely no imbalance in the regulatory environment in the operation of Digital applications players. As mentioned, the IT Act is a very powerful tool which is specifically crafted to regulate internet companies.

It may also be reiterated that Internet content and services companies are subject to all extant laws of the land and follow them scrupulously. Digital applications are governed by same set of laws that govern MVAS services. Mobile Value-Added Services (MVAS) are services which are similar to Internet services and platforms but they are offered by arrangements between the Access Provider and the MVAS provider. TRAI has had occasion to consider this during its consultations and recommendations on regulating MVAS services. Stakeholder comments during this process clearly outlined that MVAS services were governed by the existing laws in India. These include Intellectual Property Rights laws, the Information Technology Act, 2000 etc. The Information Technology Act is the current applicable regulation to *"...provide legal recognition for transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as "electronic commerce", which involve the use of alternatives to paper-based methods of communication and storage of information...."*

Digital applications 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 Digital Platforms and Service providers. However,

the areas relevant to Digital applications are already regulated by the IT Act and the Rules notified thereunder.

- Lawful interception – governed by IT Act [Section 69 and 69B) + The IT (Procedure and Safeguards for Interception, Monitoring and Decryption of Information) Rules, 2009 + IT (Procedure and Safeguard for Monitoring and Collecting Traffic Data or Information) Rules, 2009
- Privacy and security – governed by IT Act + IT (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011

The Information and Technology Act and the forthcoming Privacy Act is mandated to safeguard the fundamental citizen rights keeping in mind the extremely dynamic technology environment which requires push for development.

There are various ways in which a conducive and balanced environment can be created so that the TSPs are able to invest in network infrastructure. Some of the most important ways suggested by a large cross section of industry and experts has been a) lower spectrum cost, b) improved design of auctions, c) easier roll out norms and d) clearer rights of way for TSPs and e) government support for rural expansion of TSPs³. Most reports suggest that the spectrum cost in India is one of the highest in the world⁴. The increased demand for, and limited supply of spectrum as controlled by the government to keep spectrum prices high under the guise of maximizing public good is a narrow and short-term policy under the assumption that it would be maximizing societal welfare. Improved investment in networks is primarily dependent on the Government's outlook towards the TSPs rather than on the relationship between TSPs and the Internet content and services companies. Other impediments to investment may include high licensing fees, difficulty in obtaining rights-of-way, lack of infrastructure sharing, and limits on foreign investment.

While India's National Digital Communications Policy is intended to address some of these issues, the focus should be on streamlining and easing regulatory burdens in order to promote network investment rather than impose unwarranted, harmful regulatory obligations on OTT providers. Moreover, the TSPs are free to set price of internet access/ data as the Authority forebears on the end user tariffs.

Digital applications music, video functionalities continue to drive growth of data and the accompanying revenues for TSPs. The growth of Digital applications expands, not reduces, the avenues for greater revenues for TSPs. With Digital applications 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 Digital applications 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

³ Net Neutrality, 2015: http://www.academia.edu/16688883/Net_Neutrality_April_2015

⁴ India's spectrum pricing on an average is 25 times costlier than the Countries viz., US, France, Singapore, Germany, Spain and Sweden, and in quality it is well below), the global average and even APAC average or http://articles.economictimes.indiatimes.com/2012-05-22/news/31814404_1_mhz-band-spectrum-price-india-s-2g

USD33 billion per annum⁵. A recent study conducted by WIK-BIF found that that “rich interaction applications” like 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 2016⁶. Another study, by ICRIER in 2017, determined that during the period 2015-16, Digital applications contributed a minimum of USD 20.4 billion (Rs. 1357.6 billion) to India’s GDP. The study forecasts that by 2020, Digital applications could contribute a minimum of USD 270.9 billion (Rs.18275.9 billion) to India’s GDP.

Another significant way in which Digital applications providers drive investment in this sector is by building physical facilities such as data centres, fibre networks, servers and routers.

Therefore, focusing only on the impact of Digital applications on TSP revenues would present an incomplete picture of the positive impacts of Digital applications on consumers and the overall economy. It is easy to see that raising barriers for Digital Platform and Service 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 interoperability of their services with TSPs services promote competition and benefit the users? What measures may be taken, if any, to promote such competition? Please justify your answer with reasons.

All Digital applications can be accessed through any particular telecom connection chosen by the consumer. Whereas a consumer of a particular network cannot choose to make call through any other network operator as switching from one network to any other involves high costs and procedures. On the other hand, costs for switching from one Digital service to the other is extremely low or costless. Further, the Digital applications 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. This constant competition has led to a high rate of churn among the most popular online services.

The interoperability between telecom and OTT services has already been examined by the Authority in its Recommendations on Regulatory Framework for Internet Telephony⁷ 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

⁵ *Investment in Networks, Facilities, and Equipment by Content and Application Providers*, Published by Analysis Mason, Commissioned by Google (September 2014)

⁶ “*The Economic and Societal Value of Rich Interaction Applications in India*,” <https://www.wik.org/index.php?id=934&L=1>

⁷ Available at https://traf.gov.in/sites/default/files/Recommendations_24_10_2017_0.pdf.

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, when it comes to traditional voice connectivity, telecom and OTT services are already interoperable, to the extent provided above.

Interconnection between VOIP and PSTN is not currently legal in India. This forces VOIP based services to operate in limited scope while allowing TSPs complete access to PSTN infrastructure. Bridging this existing gap would promote competition and benefit the users. The argument of better competition and benefit to users would more relevant when such services are monetised for profit. For a customer to shift between Digital Platforms and Service are costless and hence more beneficial for the users. 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.

Q.5 Are there issues related to lawful interception of Digital applications 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.

No, there are no issues related to lawful interception of Digital applications communication stemming from the regulatory framework per se.

The Telegraph Act permits lawful interception of all data traffic by licensed TSPs and ISPs. Further, interception of all data traffic is already happening at international landing stations, and does not require additional intervention from the regulator. The requirement for interception should be delinked from the discussion around encryption, which is a much larger issue with implications for commerce, banking etc and requires discussion with a larger number of stakeholders.

All issues related to security, lawful interception and regulating traffic are currently being addressed by MEITY in the Personal Data Protection Bill. The Data Protection Bill will be an overarching provision that has to be abided by all regulators including TRAI as well as MEITY. The synchronisation of regulators under the Data Protection Bill will ensure that the genuine concerns for regulating communication channels in India are addressed in a systematic fashion.

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.

Presently, the access to emergency services in India such as 100(Police), 101(Fire), 102(Ambulance) & 108 (Emergency Disaster Management) are being provided by Telecom Service Providers (TSPs). As per the National Numbering Plan 2003, these are Category-I services i.e. these are the mandatory services that are to be provided by all the TSPs free of

charge. Digital applications that provide voice services, not being an ECS, do not have to provide access to emergency services. 90% Indians access internet via mobile phones with valid PSTN sim cards issued by TSP/ISP service providers. For Digital Services and Platform to provide ECS, the calls would in any case have to be routed through TSPs as VOIP-PSTN interconnection is not allowed in India.

Some of the Digital applications offer innovative service related to security and safety for individuals that were only possible under advancements of digital technology. Location based services based on GPS tracking have offered services like safe transport, distress and emergency response management, faster response for LEAs and other such service providers. Today, all major services in India like the Police, Hospital and ambulance services, railways, public transport departments, etc. offer a 'mobile app' for instant reach-out. Mobile based Digital payments is currently being promoted by the Government as the most secure, fast, and efficient mode of transaction.

The costs for switching from one Digital applications provider to another are extremely low. There is high competition in the Digital Platforms and Service space. These services have to follow strict guidelines for consumers' privacy, security to be able to get space on given platforms. Any Digital applications failing to provide the security, safety and privacy as per customer expectations risks inevitable customer drop-out in favour of an alternate service provider. The digital sector is known for being highly competitive and all service providers continuously innovate to meet expectations. This has pushed Digital Platforms and Service providers to adopt best practices to improve services and enhance security, privacy and safety through consultation and consumer surveys.

Q.7 Is there an issue of non-level playing held 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 held? List all such regulation(s) and license(s), with justifications.

Digital applications and TSPs provide different services, do not operate in the same network layer. There are fundamental technical and business differences between traditional services and apps.

Digital Applications 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 Digital applications, are fundamentally different. On the other hand, the Digital applications are completely reliant on the TSPs to provide seamless connectivity for uninterrupted usage of Digital applications and the Digital applications players suffer disadvantage when there are connectivity issues. Digital applications operate in an extremely competitive market, and digital applications providers do not control critical infrastructure that holds value to the public. Additionally, Digital applications providers thrive on the open and unbound nature of the Internet which leads them to constant innovation. By attempting to regulate Digital applications in the above manner, individuals, companies and entire industries that rely on various Digital applications would find their costs increasing disproportionately. This would also lead to regulatory uncertainty for Digital applications providers. Thus, the regulatory framework for the two cannot be the same.

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.

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