

To,

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No. BSNLCO-RGLN/25/5/2020-REGLN

Dated 31-08-2023

Sub: BSNL comments on "Consultation Paper on Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services"-reg.

With regard to "Consultation Paper on Regulatory Mechanism for Over-The-Top (OTT) Communication Services, and Selective Banning of OTT Services", please find the comments of BSNL, as below:

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.

BSNL Comment:

OTT (over-the-top) services are basically a multi-media streaming and communication services offered over the public Internet at the request and to suit the requirements of the individual consumer, which implies that a content provider is going over the top of existing internet services. It bypasses traditional media intermediaries like cable, terrestrial TV channels, or satellite channels. It is usually consumed by personal computers, mobile devices, smart TVs, or digital media players. Based on above following definition is proposed:

"OTT can be content, a service or an application accessed and delivered to end user over the 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.

BSNL Comment:

After examining the various classification given in consultation paper in para 2.33 to 2.36, classification given by BEREC and CTO appears to cover all the categories of OTT services. However, for Indian Scenario, OTT based services can be classified broadly in following categories:

- a. **OTT Category 1:** service that qualifies the electronic communication services i.e. all the services allowed to be provided by TSP under various licenses issued by DoT including unified license.
- b. **OTT Category 2:** service not qualifies the OTT category 1 service but potentially competes with OTT Category 1 service.
- c. **OTT Category 3:** service or application that qualifies broadcasting services i.e. all the services allowed under various licenses issued by Ministry of Information & Broadcasting.
- d. **OTT Category 4:** Other OTT service.

Above classification will help to monitor and regulate various OTT services by their respective ministry / licensor/ regulator.

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.

BSNL Comment: As per the reply given in Q2, OTT communication services is defined in category 1 service i.e. **service that qualifies the electronic communication services i.e. all the services allowed to be provided by TSP under various licenses issued by DoT including unified license.**

Therefore there is no need to define separate list of features which may comprehensively characterize OTT communication services, it should be derived from the respective license under which TSP are providing that 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.

BSNL Comment:

Please refer response to Q3 above.

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.

BSNL Comment:

Regulatory aspects;

The TSPs 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. Terms and Conditions of Unified License issued to telecom service providers by DoT are binding to TSP. But presently none of these regulatory obligations are applicable for OTT services which are providing similar type of services viz. messaging and voice/video calls using public internet service. It is fact that OTT are providing some services which are similar to TSPs, in some cases with enhance features, due to this revenue of these services of TSP has been declined considerably. There should be uniform regulatory compliance for similar services being provided by TSP or OTT. Therefore, there is need to bring these OTT service providers under the similar regulatory framework atleast for the services which are similar to services being provided by TSP. NDCP 2018 also envisages to ensure that “a holistic approach for harnessing Emerging Technologies by promoting “Innovation in the creation of Communication services and network infrastructure by **Developing a policy framework for Over the Top services.**

Economic aspects;

Telecom Service Provider pays huge fees in the form of onetime entry Fee, annual license fee, frequency spectrum charges etc. TSP has to roll out its network, do the interconnection with other operators and provide the services within specified norms of licensor and regulator. There is huge cost involved in developing the network, customer provisioning and regulatory / licensing compliance. As presently these OTT service providers are not under any regulatory obligations and not bound to comply with any obligations defined under existing policy & regulations for TSPs. They are providing the similar type of services over the public internet services. It is the fact that revenue of TSPs for these services has been declined considerably. The entry cost for a OTT player in market is much lower than that of TSP and there is genuine concern about level playing field being offered for TSP Vs OTT. In consultation paper it is mentioned that due to increase in spectral efficiency in various technologies Data usage is increasing and ARPU in also increasing. However, fact should be kept in consideration that spectral efficiency is increasing due to rollout of new technology network by TSP which involve a huge cost. India is having unique telecom market scenario where services are being offered at one of the cheapest rate in world, therefore, there is need to do details study to compare this increase of ARPU is actually subsidizing the investment cost or not. Consultation paper also refer the ITU report which denies that claim that growth in traffic does not necessarily equate to equivalent growth in cost. It concludes that there is no market failure. However, there is need to do a detailed study in this regard in Indian context, as this report has been published by ITU in 2017 and in India fact cannot be ignored that in last 10 years many TSPs have shut down their operations and number of TSPs have been reduced from more than 12 to 4.

Based on above it is submitted that considering the unique market proposition of India in telecom space there is need to create equal level playing field for TSP and OTT and arbitrage in entry & operating cost should be addressed.

Security and Privacy aspects;

TSPs as per the terms and conditions of license are required to ensure the protection of privacy of communication and to ensure that unauthorized interception of messages does not take place. The license agreement also restricts the Licensee from employing bulk encryption equipment in its network and mandates the ensuring of network security. The Licensee is also required to provide the call data records of all the specified calls handled by the system at specified periodicity, as and when required by the security agencies in the format prescribed from time to time.

The Information Technology Act, 2000 (IT Act) and the rules framed under it place certain regulatory obligations on body corporates or intermediaries which includes TSPs and providers of OTT services that can be regarded as same/ similar to the services provided by TSPs it include Lawful interception, privacy and security, Intermediary liability etc.

Based on above it appears that there are similar regulatory obligation imposed on OTT service providers with regard to Security and Privacy aspect.

Safety aspects;

The Licensee is mandated to provide, either independently or through mutually agreed commercial arrangements with other telecom service providers, all public utility services as well as emergency services including toll free services like police, fire, ambulance. However, there is no such obligation on OTT service providers. There is need to frame a policy to mandate OTT service providers to provide these services.

Quality of service aspects;

All TSPs has to meet the Quality of Service (QoS) benchmarks defined/notified by the TRAI. In case of non-compliance, telecom service providers are liable to pay financial disincentives. All these OTT applications runs over the infrastructure/network of TSPs and to maintain the QoS parameters of their voice & data services TSPs are spending lots of money. There is no QoS imposed on the OTT service providers. The fact need to be taken into consideration that TSPs are bearing the regulatory cost for maintain the QoS of its services which includes the services being provided by OTT. Ironically, these similar services provided by OTT providers are eroding profit margin of TSPs using TSPs infrastructure.

Based on above, there is need to create a regulatory framework for OTT providers for maintaining the QoS of communication services being offered through its platform.

Consumer grievance redressal aspects;

As per the UAL license conditions, licensee (TSP) are to be responsive to the complaints lodged by its subscribers, rectify the anomalies within the mean time to restore (MTTR) specified and maintain the history sheets for each installation, statistics, and analysis on the overall maintenance status. Further, Licensee (TSP) is

also mandated to notify in writing to its customers, all the policy and arrangements with respect to repair, fault rectification, compensation, or refunds.

There is no such mandate for OTT providers providing the communication services, so there is need to create a regulatory frame work for the same

Any other aspects (please specify).

No comment

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.

BSNL Comment:

In the name of Competitive landscape for the benefit of consumers and service innovation similar services being provided by OTT providers should not be left unregulated indefinitely. The fact has been considered in consultation paper also that OTT communication services are in ecosystem from last many years and they are matured enough. Similar type of services they are providing from many years using public internet for which TSPs pays hefty fee in the form of one time entry fee, annual license fee and frequency spectrum charges. Internationally, EU and some countries have started to revise its framework to regulate these services at par with communication services being provided by TSP.

To balance this differential treatment there is a need to put OTT services / service providers into similar licensing and regulatory frameworks for providing their communication services as specified for licensed telecom service providers (TSPs).

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.

BSNL Comment:

It is submitted that comparison for majority of aspects mentioned in this question have already been given in response to Q4, Q5 & Q6 above. Please refer the above responses. It is further mentioned that there is need to regulate the OTT category 1 and Category 2 services only i.e. services which are similar to the services being provided by TSPs.

However, following specific points, which may not have been covered in above responses, may be taken into consideration while defining the regulatory frame work OTT communication services.

a. emergency services;

All the licensed Telecom Service Providers (TSPs) are mandated to provide, either independently or through mutually agreed commercial arrangements with other telecom service providers, all public utility services as well as emergency services including toll free services like police, fire, ambulance etc. There is need to provide similar frame work for OTT service providers.

b. unsolicited commercial communication;

There is specific regulation for curbing UCC for TSP. it involve a lot of efforts and cost of TSP to comply with above regulation. Communication services being provided through OTT may be new target of these spam/ fraudulent messages/ calls generator. As at present these services are unregulated for such kind of communication, it will be new problem for customers. There is need to mandate a regulatory framework to avoid the UCC on OTT services at par with TSPs.

c. customer verification;

At present there is no provision for customer verification for OTT communication services. However, license has mandated TSP for complete customer verification of its customer. At present all LEA are asking the customer data from TSP for any suspected activities occur through OTT communication services. There is strong need to make these OTT service provider responsible for customer verification so that in case of any misuse of its platform LEA may verify the customer credential from OTT provider.

Obligations defined under unified license agreement is primarily focused on security, emergencies and privacy viz. Lawful interception, privacy and security, Emergency services, Call Detailed Record (CDR), customer verification, Entry /

Exit obligations, Customer grievance redressal etc. but all these obligations are applicable for TSPs / licensee only and OTT communications service providers are not bound to these. However they are providing OTT communication services over the infrastructure of these TSPs.

Similar to TSPs, regulatory obligation may be framed for these OTT communication service providers (ECS based services). This will also be in the interest of national security as with these regulatory guidelines these OTT services providers becomes obliged to comply with lawful interception obligations, privacy and security obligations, customer verification, entry / exit obligations, Customer grievance redressal etc.

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.

BSNL Comment:

In consultation paper Authority has examined ITU recommendations on collaborative framework for OTT and voluntary commercial arrangement between telecommunication network operators and OTT providers. As these recommendations were issued after examined various aspects including encouraging competition, innovation, investment, customer protection and international collaboration, therefore in similar line, **in addition to regulatory framework as suggested in various responses above**, a fair, transparent, stable and non-discriminatory collaborative framework between OTT providers and TSPs may be prescribed.

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.

The collaborative framework should be created on the principles of net neutrality and non-discriminatory access. The collaboration should focus of the aspects of subscriber verification and quality of service being provided.

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.

BSNL Comment:

The selective banning of specific OTT services and websites in specific regions of the country for a specific period requires the support from the OTT service provider, as for banning their services in network full range of URLs and IPs are required. As many of these OTT services are hosted on cloud and are difficult to ban selectively since they operate from multiple locations in multiple countries and continuously shift from one service to the other.

For banning these OTT services, configurations changes are required in PGW and PCRF of Home PLMN. Hence, banning of OTT service for in-roamer will be a challenge. Further, banning of OTT services for international in-roamers will not be possible, as banning OTT services for international in-roamers similar type of configuration needs to be done in PGW & PCRF of HPLMN (of other country).

Current dimensioning of TSP infrastructure had not envisaged such type of deep packet inspection at the time of roll out of its network. Implementation of selective banning of OTT will impact the processing power of resources and huge augmentation in processing power will be required at TSP end. It is pertinent to mention that such type of selective barring can be done for limited time for limited OTT services. There will be need to define this time period and limit of number of OTT service to be banned at a time, this will help to designing and expanding the TSP infrastructure accordingly.

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.

BSNL Comment:

TSP are bound to act as per the terms and conditions defined in license or provisions of various acts imposed through the license. At present, provisions of banning of internet/ OTT is being done on the direction of designated authority under law. At present law enforcement agencies are asking for complete banning of internet service in particular areas. There is no specified provision for selective OTT banning in Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017. As there is no clear mandate for selective banning of OTT services in selective area under license or other relevant acts, TSP has not designed its network capacity for selective banning of OTT in selective area. Therefore, to bring the more transparency and to make the mandatory obligation for all service providers the requirement of selective banning of OTT services should be clearly mandated in regulatory framework under the Temporary suspension of Telecom services (Public Emergency or Public Safety) Rules, 2017. However, it is pertinent to mention that significant cost and time will be involved at TSP end to implement 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.**

BSNL Comment:

- a. Selective banning of OTT services for all classes are technically feasible and any class of OTT service can be banned based on the requirement of designated authority. However, for implementing the same support from the OTT service provider is necessary, as for banning their services in network full range of URLs and IPs are required. As these type of activities are to be done in the interest of national security, therefore, all classes of OTT services should be covered under regulatory framework.
- b. While defining the provisions and mechanism in regulatory framework for selective OTT banning following should be considered:
 - a. order issued by designated authority should clearly mention the name, URL and class of OTT service to be banned.
 - b. In addition to above, location at which it is required to ban and all the relevant IPs of said OTT should be provided.
 - c. Starting and ending time (Time period) for banning of OTT service.
 - d. As implementation will require some time, therefore, reasonable time should be provided for implementing the same.

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.

BSNL Comment:

Technically, there is no separate mechanism is involved for banning website or OTT. Therefore, TSP having the capability of banning OTT will also be capable to ban the websites too. As most of the OTT services (including OTT communication services) provide their services from application as well as from website for example WhatsApp, Facebook etc. so there may be requirement of designated authority to ban the selective website too. Therefore, suitable provisions may be made in regulatory framework for banning of selective website too along with selective OTT services. For implementing the banning of OTT services / website support from the OTT service provider / website is necessary, as for banning their services in network full range of URLs and IPs are required.

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

BSNL Comment: No comments

This is for your kind consideration please.

Yours sincerely

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