

**APT REPORT ON**

 REGULATORY ISSUES RELATED TO OTT SERVICES AND

**APPLICATION**

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# 1: INTRODUCTION

## 1.1: Background and Purpose

Innovation and technological advancements have brought in many new services in the ICT sector. Over the Top (OTT) services are such services that are aided by the advancement in IP networks. However, there are some regulatory concerns across countries regarding regulatory compliance and impact of the OTT services. The licensed Telecom Service Providers (TSPs) have raised some objections as they feel and experience the adverse impact of OTT services on their network due to increased data traffic and the possibility of revenue loss. Also, a new regulatory framework is required to be developed for addressing the compliance of these OTTs with national laws and regulations, including competition and investment issues. Various regulators are adopting different regulatory approaches with respect to OTT services. Under these circumstances, this work item is aimed at analyzing and identifying the regulatory issues related to OTT service and applications, the impact of these OTT services including the revenue impact on incumbent telecom networks and services, studying the current status of OTT services and their regulatory framework in SATRC countries, analyzing the regulatory trend around the world to address the impact of OTT services and suggesting way forward for SATRC countries to better accommodate OTT service.

## 1.2: Scope of Study

The scope of the work includes:

1. Usage and status of OTT service in SATRC countries.
2. Analyzing the impact of OTT services on incumbent networks and services.
3. Regulatory measures, plans and strategy regarding OTT applications in SATRC and other regions.
4. Modus operandi of international OTTs in local markets in SATRC.
5. Revenue, tax and investment contribution of the OTTs.
6. Existing and future collaborative mechanism between OTTs and MNOs.
7. Current and future OTT regulatory trends, including regional case studies in SATRC countries.

## 1.3: Methodology

The study has been carried out by the lead expert in consultation with other experts from member countries on the subject. A questionnaire was initially prepared by the group to obtain uniform information. The questionnaire and replies are included in Annex-1. Based on the inputs and through the analysis of established literature and document, the lead expert discussed and analyzed different aspect of OTT services and suggested ways forward for the SATRC regions.

# 2: OTT Definition

In most of the SATRC countries, OTT services are not yet defined through specific legal documents. Some counties define OTT through practical examples or through working definition. All these are covered by and referred to the ITU-T Recommendation D.262 which provides the **working definition for OTTs as:** “*An application accessed and delivered over the public Internet that may be a direct technical/ functional substitute for traditional international telecommunications services*.” Though, in fact, any application or service provided over the public internet can be defined as OTT, when OTTs are discussed with regulatory and policy implications, we specially focus on the ‘substitute’ nature of OTTs.

OTT services are often discussed together with ‘managed service’ and often are synonymous with online service for many. So, for the sake of clarification, it is important to have a clearer margin to distinguish OTTs of our interest for policy discussion and its relevance to online services and managed services. ITU Technical Report 2017 defines ‘managed service’ as- *a service where the provider offering the service has substantial control over the fixed or mobile access network used for its distribution. The provider may be able to use this control to size its network, or to reserve network capacity to guarantee the quality of the service.* ‘Online service’ is defined as- *a service that depends on the public Internet for its delivery, at least in part; consequently, no single network operator can guarantee the quality of the service delivered.* This report shows the relation of these three working definitions as-

This is especially useful for this report as we are also aiming at discussing the impact of OTT services which are substitutes to conventional telecom services and which are not purely managed or online services.

**Managed Service**

**Online Service**

# 3: Popular OTT Applications in SATRC Countries

The most popular OTT application among SATRC countries is found to be YouTube. In most countries, it stands at either number 1 or 2 in terms of usage. It is associated with the most popular usage of other Google applications including Meet, Duo, and Classroom etc. Though is some cases it is not clear what is meant (exactly which applications) by Google as the most popular application, it is obvious that the Google Apps, led by YouTube is the most accessed OTT application amongst the responses. The 2nd place belongs to Facebook which is mostly ranked 1 or 2 in most of the countries. Only a few reports it to be in rank-3. It seems almost obvious considering the long-term general popularity of Facebook and its Messenger for social networking and message communication. The clear popularity of YouTube and Facebook is not only about the preference of the subscriber for the content and user-friendly features but also about these two platforms’ success in developing economic platforms for individuals and SMEs. Hundreds of thousands individual and small-business entrepreneurships have been developed using Facebook. On the other hand, YouTube has from being a platform to share joyful videos, educational content, and information sharing to a source of income for content creators. Though OTTs like Twitter and Instagram have surpassed the subscription in many countries over the course of last couple of years, YouTube and Facebook still dominates SATRC countries as is evident from their responses.

The next positions in the popularity ranking are held by WhatsApp, TikTok, Imo, Netflix and Instagram. WhatsApp and Imo have become more popular across this region due to their convenient substitute nature of the conventional call and messaging service and they have created significant visible impacts on the PSTN and PLMN voice and messaging service provided by the incumbents. Specially the volume of international overseas call has been decreasing steadily and rapidly for the last 10/12 years thanks to the usage of OTT services like WhatsApp, Imo and Skype (previously popular). This phenomenon is significant for SATRC region as large number of migrants from these countries regularly communicate with their families using telecom applications. It was a good source of revenue for the domestic operators and international carriers but that revenue stream has been severely hit by the introduction of OTT services. These services, especially mobile cellular phone applications like WhatsApp, Imo etc. have become strong substitutes for traditional voice and messaging services. This trend is still going on, as is evident from their status in SATRC countries.

In the discussion of mid-ranked OTTs, TikTok represents more like the highest-ranked category i.e. Facebook and YouTube in terms of content, purpose and business incentive. It has gained popularity at a fascinating rate across the world, especially amongst its target group of youngsters and has become one of the most popular content and video-sharing platform. One significant inclusion of these mid-ranked applications in SATRC countries is Netflix. This streaming service is introduced to these countries in recent years but has gained popularity quite fast. This is another application that is a strong substitute for traditional entertainment services. But unlike WhatsApp and Imo, it is substituting the conventional television service as well as movie distribution and showcasing platform. Instagram is also a comparatively new addition to the popular social networking culture in this region but is increasingly becoming popular for photo and video sharing. Viber is also popular as a mid-ranked app in few countries but it seems to be behind in competition with WhatsApp and Imo. Only in one country, WeChat is ranked in the middle, which may be resulted from the geographical and cultural attributes of the country.

Among other applications, Twitter, SnapChat, Signal, Telegram, LinkedIn and Pinterest are mentioned by the respondents. Though Twitter belongs to the highest-ranked group in many countries for sharing group messages, it is recently gaining popularity in this region. The same is applicable to SnapChat as an instant messaging application trying to break the dominance of Facebook Messenger, Imo and WhatsApp in SATRC countries. Signal and Telegram have become popular recently and are preferred to groups of users who more concerned about encryption and privacy. The rest two, LinkedIn and Pinterest, are used as professional and information sharing platforms and have narrower target or user groups compared to other applications that are already discussed.

# 4: Domestically Developed OTT in SATRC Countries

In most countries, there are domestically developed OTT services. There are mainly two types of soft regulation for these applications. The first is to permit and promote these applications as well as setting content guidelines for them. This is required because there is a question of interoperability and interconnection of these OTTS with incumbent services. The second type of regulation is to define the taxation and financial rule for these services, as they are different from traditional telecom services. This is another requirement, as these services cannot be considered under the same taxation or revenue sharing regulation as other services of the incumbent service providers.

In terms of the type of OTTS which are domestically developed, there are clearly two types. One is the voice and messaging applications. They are substitutes for traditional GSM calling and SMS service. In the soft regulation developed for their promotion in some of the countries (for example, Bangladesh), they are provided the opportunity to have interconnection with PLMN network. This is a special attribute compared to international OTTs of the same nature. Another type of domestically developed OTTs in the SATRC countries includes video-streaming and video-on-demand applications which are substitute for television broadcasting and cinema distribution system. The soft regulations for the promotion of this type of application is primarily focused on the content issue. Though there are numerous types of OTTs developed in the SATRC countries, these two types are the most successful and are the point of discussion when we talk about the market impact or substitution issues.

# 5: OTT Regulation in SATRC Countries

Almost in all the countries, OTT services are not regulated through licensing regime. However, in some of the countries like Bangladesh, India and Pakistan, different legal documents have been issued to ensure compliance of the international OTT services with certain local laws and regulations. Though these documents do not make it mandatory for the OTTs (including the international OTTs) to get license to provide service, these documents put certain obligation on the OTT players. A review of these documents shows that these are primarily focused on content policy, tax compliance, response mechanism to government request, physical presence requirement etc. For some of the countries, rules and regulations for international OTTs are under formulation and those are aimed at content, taxation and local representation issues. Some of the countries responded that the OTT related regulation is not supervised by the telecom regulator, but by other governmental bodies.

In addition to that, some countries have introduced soft regulation to promote local OTTS. Specially we have found this case in Bangladesh and Bhutan. In Bangladesh, OTT regulation has been issued for local licensed IP Telephony service providers. This regulation allows them to offer their own OTT services and sets network topology and tariff structure for the interconnection of OTT voice and message with PLMN network. In Bhutan, the soft regulation is aimed at taxation rule, local content promotion and consumer complaint mechanism.

# 6: Impact of OTT services on the revenue and service of the incumbent

ITU-T *Technical Report 2017- Economic Impact of OTTs* states that substitution effects are arguably also important for international voice calls. Analyst firm Telegeography notes: “Hundreds of millions of people now use “over-the-top” (OTT) voice, video, and text communications on their computers and mobile devices for a growing share of their calls. Telegeography estimates that the on-net international traffic of Skype, the best-known OTT provider, grew to 248 billion minutes in 2014, a 35 billion minutes increase from 2013. While international telephone traffic remains far larger than international Skype traffic, Skype’s volumes are enormous. Skype’s 2013 international traffic was four times greater than that of the largest telco in the world”.

As in so many aspects of OTT services, these facts are subject to multiple interpretations. One can argue that technological progress inevitably implies the existence, not only of winners, but also of losers. The value of creative destruction is core to the views of the economist Joseph A. Schumpeter[[1]](#footnote-1). Under this interpretation, the short-term negative impact on network operators is part of a normal long-term business process that ultimately benefits all.

An alternative narrative argues that OTT services are effectively pumping money out of the network operators at the very moment when substantial investments in fiber-based infrastructure are required. This narrative draws on multiple theoretical sources, including Aghion’s “inverted U” which argues that investment is maximized when competition is neither too low (implying a lack of competitive incentive to invest) nor too high (implying a lack of funds to invest).

It is also worth noting that the loss in traditional voice and SMS revenues needs to understand in the context of compensating increased revenues for (mobile) data services. The data consumption of a WhatsApp message does not generate sufficient network operator revenue to offset what an SMS would have generated, but when someone factors in the increased number of messages, increased volume of content per message (and for voice, longer duration for voice calls), and all of the other data-hungry applications, the effects of online and OTT services on revenues are complex overall.

The responses from the SATRC countries show that there is no specific conclusion about the positive or negative impact of OTT services on domestic telecom revenue stream of the incumbents. Though there are some concerns about the impact of the OTT services on the overall revenue chain and government tax, but there are positive dimensions as well, for example, the increased revenue stream for data services due to the exponentially increasing data consumption using PLMN networks. But few impacts are very clear from the trend of voice and SMS traffic. With the introduction of the OTTs for voice and messaging (like WhatsApp, Viber, Imo) etc. together with the roll-out of 3G cellular network across the region after 2010, OTT services started to substitute traditional cellular calls and messaging services for overseas communication.

As mentioned before, SATRC countries have a large number of expatriates living abroad and overseas call has been a good source of revenue for the telecoms service providers as well for the carriers. The traffic and revenue from overseas call and messaging are decreasing steadily and fast since the widespread introduction of smartphones and mobile broadband in SATRC countries. To date, this trend is going on and has hugely decreased revenue from overseas voice and sms services of incumbent operators. The reality has forced to incumbent to accept this overseas service to be a minor component in their revenue stream and it can be said confidently that the current trend will continue.

The widespread use of smartphone in the mobile broadband network also has a detrimental effect on the revenue for cellular operators from voice and SMS service. But this effect has been offset largely due to the increasingly higher data consumption and associated revenue, the introduction of numerous VAS services using data network and other revenue-streams including advertising, etc. In addition to that, the increase in subscriber base and the large number of 2G service users, especially a vast population who are still using feature-phone, has contributed to the increment of GSM voice and SMS service in some of the countries. But the rate of such increment is decreasing. With further penetration of smartphone usage, the rate will further decrease and eventually may start decreasing, but at the same time increasing revenue stream from these new group of smartphone users’ needs to be considered. Considering these, most of the countries hinted at the possibilities of OTT services to create new revenue-stream for incumbent operators and have not presented any conclusive negative impact on them.

# 7: Impact of OTT services on society

Most of the SATRC countries observe the social impact of OTT services favorably. These have opened-up numerous opportunities to the end users and ever-increasingly convenient ways to communicate and interact. However, some responders have also expressed caution about the possible negative impact of the OTTs, especially when the content may induce violence, hatred, misogyny, false information etc. at an alarmingly fast rate. At this specific issue, some of the countries have set up content policy and coordination mechanism to minimize such concerns. The possibilities are endless, but at the same time the uncontrolled disruptive power of the OTTs are under careful consideration of most of the countries and they are taking policy measures to mitigate the negative impact.

# 8: Content regulation for and coordination with international OTTs

A number of SATRC countries have undertaken specific policy measures to address their concern about the content and compliance issue of the international OTTs. This is in line of an increasing trend across the world to set up legal instruments to address the disruptive power of the OTTs which may be used to promote false news, bullying, may incite violence, hatred etc. by its user. At the same time, these legal documents try to make the OTT platforms to be responsible and responsive in such cases and in the event of security concern. For example, in Bangladesh, the provision of the Digital Security Act, 2018 states in section 8 of Chapter 3 the procedure to remove content that is reasoned unlawful or unethical.

***Power to remove or block some data-information.⎯(****1) If any data-information related to any matter under the jurisdiction of the Director General, being published or propagated in digital media, creates threat to digital security, the Director General may request the Bangladesh Telecommunications and Regulatory Commission, hereinafter referred to as BTRC, to remove or, as the case may be, block the said data-information.*

*(2) If it appears to the law and order enforcing force that any data-information published or propagated in digital media hampers the solidarity, financial activities, security, defense, religious values or public discipline of the country or any part thereof, or incites racial hostility and hatred, the law and order enforcing force may request BTRC to remove or block the data-information through the Director General. (3) If BTRC is requested under sub-sections (1) and (2), it shall, with intimation to the Government of the said matters, instantly remove or, as the case may be, block the data-information.*

*(4) For carrying out the purposes of this section, other necessary matters shall be prescribed by rules.*

Similar approaches have been taken in Bhutan for video and audio streaming. One important aspect of Bhutan’s regulation is to promote and reserve a minimum quota for locally developed content. India’s Ministry of Electronics and Information Technology formulated the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021. This Rule deals with the regulation of intermediaries, including social media intermediaries. Social media intermediaries include messaging-related intermediaries, such as WhatsApp, Signal and Telegram, and media-related intermediaries, such as Facebook, Instagram and Twitter as well as set regulations for digital news-media and OTT platforms, such as Netflix, Amazon Prime and Disney+, Hotstar etc. In Pakistan, the PECA 2016 Act have been enacted to minimize or prevent crimes committed through online information system, including, but not limited to, cyber-stalking, harassment, content against modesty of any person, content against religious beliefs, content that incites violence/hate speech etc. Under PECA 2016, PTA has been empowered to block/remove or issue directions for blocking/removal of any content, which it deems to be unlawful and the Federal Investigation Agency (FIA) has been empowered to investigate any crime, committed under the said Act.

Under the above-mentioned regulation and legal instrument, some countries have set communication channel with the international OTTs to ensure their response in cases when it is required by the rules. Countries, for example, Bangladesh, India and Pakistan have set up specific and official communication and response mechanism. This is a significant shift from the previous status quo, when intentional OTTs were virtually operating in all these countries, and were gaining huge amount of advertising revenue yet are not associated with any type of regulation or were not in established official communication with the respective regulatory authority of these countries. The establishment of the official communication is not only improving the situation in terms of response from the international big players, but also forcing them to disclose the share proper tax revenue with the government of the countries they are operating in.

# 9: Registration and tax payment by international OTTs

Almost no SATRC countries need international OTTs to register with the local authorities to provide service. Only in Pakistan, OTTs with high number of subscriptions need to register with the telecom regulator. But the objective of this registration is very specific, to ensure the removal and to block unlawful content. The SATRC countries seem to be more interested in ensuring that the international big OTTs set up physical presence locally rather than bringing them under any license or registration process. Countries like Bangladesh, India, and Pakistan have already issued instruction for the international OTTs to set up local office, legal representative or intermediary to deal officially on their behalf. One aspect, as mentioned earlier, is the content issue. Another is the taxation and revenue related issue, which is increasingly encouraging SATRC countries to ask for the physical presence of big OTT players.

Most of the SATRC countries replied that they do not need the international OTTs to pay tax nor need to share revenue with incumbent. The exception is Bangladesh, where the international OTTs need to register to pay value added tax (VAT). This regulation is already in place and big players like Facebook and Google are registered and paying VAT. This is a big shift and as it seems, more and more countries will be implementing such regulations. The international OTTs have been collecting huge amount of advertising revenue from all these countries. But because of the lack of physical presence, it has been difficult to bring them under tax regime. Compared with local business, it seems to be unfair as all of the international OTTs has been collecting a huge amount of direct revenue from local business and enterprises but paying nothing back unlike local businesses. Even they are facilitated by the use of news and entertainment content from local entities and are enjoying higher subscription and advertising without any financial or tax obligation. But the reply from Bangladesh telecom regulator shows that this going to be shifted.

# 10: Collaboration with local partner

In addition to the payment of tax to government exchequer, revenue sharing and collaborative agreement between international OTTs and local content creators are also becoming more and more visible. ITU-T recommendation ITU-T D.262 and ITU-T D.1101 encourage such voluntary collaboration and suggest creating enabling environment to promote collaborations.

Almost all the SATRC countries replied that international OTTs’ collaboration with incumbent service providers is not mandated but is voluntary. Few countries, for example Bangladesh, have replied that there are practical examples of such collaboration. One important point is mentioned by Bhutan that in the event of such collaboration, the regulatory authority should take care that net neutrality is maintained in the network and service delivery platform.

# 11: International OTTs’ Impact on Investment and Human Resource

Numerous governments and regulatory authorities worry that OTT services are having an impact on the investments of network operators, and that this may impact their ability to make investments going forward in new fiber-based technologies (impacting both fixed and mobile deployment), and in new mobile access technologies. As an alternative argument, the decline in unit costs for key traffic-dependent items of equipment appears to more than offset the increase in the amount of equipment required to carry fixed network traffic. For the mobile network, the combined effect of increased traffic-dependent equipment volumes and declining unit cost appears to be in line with the increase in the monthly price paid by consumers (ARPU) in some of the countries. But the experience is the opposite in some other countries where ARPU is at very low level or even declining. So, it is difficult to deduce a binary conclusion on the impact of OTTs on the investments and infrastructure of incumbent. Rather the impact can be defined through a spectrum and the exact scenario depends on the different market-oriented parameter.

The international OTTs have invested in different countries to improve the service and content delivery and also did so as part of their collaboration with local partner. But such investment scenario is not very common in SATRC countries. Pakistan mentioned that Facebook was part of an investment scheme to deploy optical fiber network in some areas of the country. India being one of the biggest subscription hub for the international OTTs also has experienced a number of significant investment by big techs like Google, Facebook etc. However, is not very common in other countries and with the increment of collaboration with local partner, big OTTs are expected to invest more in their market of interest.

In addition to monetary investment, there are instances of other social and human resource development initiatives by the international big OTTs. For instance, Meta have been conducting many skill building programs and cyber awareness program in Bangladesh. In India, such initiative are common from Meta, Google etc. To increase digital literacy, Meta created content, partnered with local institutions and trained-up teachers in Pakistan and created entertainment content for awareness building. In addition, TikTok has initiated partnership program to enhance cyber safety awareness. All these show that not only through regulatory enforcement, but from business goodwill and social engagement requirement, international OTTs are engaging locally more and more.

# 12: Overall impact of OTT services on societal welfare

The ITU-T Technical Report of 2007 theoretically and vividly discusses the overall impact of OTTs on social welfare. It says that most analyses of the societal welfare impacts of OTT services tend to be incomplete. Societal welfare is the sum of *producer welfare and consumer welfare*. Consumers presumably view OTT services as offering better price/performance than the services for which they substitute (otherwise, they would not be purchased). The OTT service is either less expensive than an equivalent service, or else offers better value overall. Analysis of the economic impact of OTT services sometimes tends to be incomplete when they consider only costs to producers, ignoring benefits to consumers; when they ignore real benefits that flow to producers of the services; when they may not be clear as to the assumptions that they are making; when they may not be clear as to the comparison they are making, and in particular when they are assuming counterfactual scenario[[2]](#footnote-2).

OTT services tend to intensify competition, and thus to reduce the spread between cost and price (i.e. the profit margin). They reduce market inefficiencies caused by imperfectly informed consumers. The increase in market efficiency has two distinct effects on societal welfare**-**

1. *First*, the reduced retail prices transfer societal welfare from producers to consumers. This transfer is, in a static economic analysis, *neutral in principle to societal welfare*, even though it is harmful to producers. What producers lose; consumers gain.
2. *Second*, the reduced retail prices lead to *increased consumption due to the price elasticity of demand*. This effect (formally referred to as a reduction in deadweight loss) represents a real and unambiguous gain in societal efficiency, benefitting both suppliers and consumers.

For OTT services, the relevant benefits to producers can be assumed to flow primarily from increased overall consumption of network services; and secondarily (but relatedly) from an increased number of subscribers to the network due to the enhanced desirability of the services. OTT services have presumably eroded profit margins for telecommunications market segments that previously had been highly profitable, namely SMS and international voice calls; nonetheless, data revenues are growing substantially, presumably due both to an increase in the number of subscribers and an increase in traffic volume per subscriber, both of which benefit from online services usage in general and OTT service usage in particular. Overall consumer willingness to pay (WTP) presumably also benefits from the use of OTT services. But again, it depends largely on the tariff structure and consumer behavior of any particular market.

Any direct impact of OTT services on the profits and revenues of network operators needs to be understood, in its broader context. Many things are happening at once. Substitution results in lower effective prices to consumers, which not only transfers gain to consumers, but also motivates them to consume more service – thus benefitting not only the consumers, but also generating new revenue for network operators. Globally, the number of network users continues to increase, due in part to improving price/performance, thus also driving new revenues. At the same time, the steady improvement in the price/performance of network and computing equipment lowers unit costs for network operators. The interactions among these factors are complex and the relative magnitudes differ from case to case.

Network operators have to re-think their businesses in order to capitalize on these factors, but it is by no means the case that the news is all bad for them. For consumers, and thus for society as a whole, the potential gains from online and OTT services are substantial. Any ultimate consideration as to what constitutes best practice will need to consider the full range of effects of OTT services.

# 13: Policy challenges and considerations for OTTs

From the responses of the STRAC members, it has been identified that with the growth of OTT and related online services, numerous challenges to public policy have emerged in the SATRC countries, such as-

1. What regulatory obligations (if any) are needed while these OTTs compete with traditional telecom services?
2. Is it appropriate, necessary, or even possible to regulate these services in such a way as to maintain competitive neutrality (i.e. a level playing field) with traditional services with which they compete?
3. In the specific case of OTT services that compete with conventional network services, what are the implications for regulation of the OTT service as distinct from regulation of the underlying network?
4. Are traditional approaches to market definition (and to competition policy) suitable in this rapidly evolving and complex markets? Have specific online platforms amassed too much market power, to the detriment of competitors and consumers?

One could argue that it is important to maintain competitive neutrality between OTT services and the underlying networks with which they compete. Philosophically, one can argue that the choice between traditional versus OTT services should be made by the market, with as little interference as possible by regulatory authorities. The Board of European Regulators of Electronic Communications (BEREC), representing the National Regulatory Authorities (NRAs) of the European Union, expressed the challenge as follows: “A central theme in the discussion about OTT services are the differences in the regulatory treatment of [Electronic Communication Services (ECS), which clearly fall within the scope of the regulatory framework,] and OTT services. BEREC notes that although there is a general appreciation of the idea that services of the same type should preferably be subject to broadly the same regulatory treatment there can also be reasons for different regulatory treatment of services.” Therefore, it is important to consider the special attributes and dynamic nature of the OTT services in setting any kind of policy adjustment.

Policymakers should be careful to avoid putting needless roadblocks in the way of online and OTT services. This would suggest in turn those dynamic economic effects (i.e. the benefits over time that derive from investments in the creation and use of online tools and OTT services) require serious consideration. Competition policy tends to place greater emphasis today on static economic effects, in part because they are easier to analyze. Many of the online platforms are in reality two-sided (or multi-sided) platforms. Pricing arrangements for different sides of the market do not follow the same rules as in conventional markets. Application of conventional competition economics tests can lead to grave errors if applied to two-sided markets.

# 14: Way forward

Almost all the SATRC countries suggest adopting a soft approach in regulating OTTs. However, a stricter approach should be taken for the issues of data privacy and security. ITU recommendation ITU-T D.1102 address and suggest the issue of access and use of personal data as follows: OTT subscribers should be able to make informed decisions about the extent to which their data can be accessed by others and the usage that third parties may make of it. As such, the Member States through NRAs should endeavor to ensure that consumers whose personal data has been collected have a right to:

a) Access their data and understand how it is used;

b) Amend inaccurate data about themselves;

c) Port their data;

d) Control/restrict the processing of their data;

e) Withdraw their consent on the use of their data;

f) Request for the deletion or de-identification of their data.

This recommendation also says that OTT providers should maintain transparent procedures for data collection and processing and establish the requisite infrastructure to ensure a smooth handling of consumer data. These can be achieved through:

a) Establishing systems for accurate and secure records for all data collected;

b) Establishing systems for handling personal data requests, data deletion requests and data disclosure requests in a timely and efficient manner;

c) Obtaining consent through adaptable, technology-neutral, flexible mechanisms, including opt-in and opt-out mechanisms, to facilitate consumer flexibility in exercising their rights;

d) Establishing a comprehensive privacy and security program appropriate to the size and the nature of the information collected, and be able to demonstrate compliance with the program;

e) Establishing oversight of data transfers.

In addition to that, regulators should foster cooperation at regional and international levels for the purpose of sharing information and experiences on OTT consumer protection issues.

All SATRC members suggest that a market-oriented approach should be taken for the operation and service offering of the OTTs rather than following traditional authorization or licensing process. ITU recommendation ITU-T D.262 encourages to consider and develop enabling policies and/or regulatory frameworks to foster fair competition between network operators and providers of OTTs. Regulators should also consider, if necessary, the reduction of the regulatory burden upon traditional networks and telecommunication services.

To ensure level playing field, proper incentive for investment in network development and to ensure proper revenue share to the network operators and content creators, collaboration between international OTTs and local stakeholders should be encouraged. SATRC countries should also support it as a voluntary and market-oriented approach. However, care should be taken to ensure the development of enabling environment for such collaboration. ITU recommendation ITU-T D.262 encourages Member States to foster entrepreneurship and innovation in OTT applications, including their creation, provision and use, which benefit users, and encourage sustainable infrastructure investments. In addition, the regulators should, in the spirit of service availability and affordability, foster enabling legal and regulatory environments, and develop policies that are fair, transparent, stable, predictable and non-discriminatory; and that promote competition, foster technological and service innovation and encourage private sector investment incentives, in order to ensure the continuing growth and adoption of OTTs.

The OTTs must follow and adhere to standard data protection and privacy regulation. It is anonymously suggested by all SATRC countries. They cannot simply ignore data privacy and security issue in countries, including the SATRC only because of the absence of any local law or regulation. Standard rules like General Data Protection Regulation (EU GDPR) should be followed, as suggested by some respondents, in case any local law is absent. However, SATRC countries should be aware of the requirement of such privacy and data security law and should follow best practices in formulating and implementing such laws. Moreover, the OTTs, whether international or local, must follow such local laws.

In addition to compliance with local data privacy and security law, OTTs must follow the content-related guidelines of the local authority. Most of the SATRC countries suggest such regulation and compliance. In some countries, setting up regulations for content control is not popular. Some countries, especially some European countries, avoid strict content policy and provide overall guidance for creating and broadcasting/streaming audiovisual content. But such approach cannot be generalized for all countries. Specially the cultural and social context must have to be taken care of in reviewing content policy and it is well understood that well-defined content policy is highly required for SATRC countries. The argument against such policy says that it is very difficult to provide customized content to particular country or area because of the global nature of internet and OTT services. However, with the advancement of technology including machine learning and AI, such customization is now quite possible to implement and regulations should guide the OTTs to do so.

As described above, OTTs must have to pay tax to the authorities of the country they are operating in. They cannot be exempted only because they do not have any physical presence, though they are collecting huge amount of direct revenue from these markets. Proper and innovative tax rules, which cover the mode of business OTTs are following, should be adopted to ensure proper and justified tax rule imposition.

Different countries may adopt different approaches to ensure the compliance mechanism for OTTs, especially for the international OTTs who are operating with a significant customer base in the country. We have already started to see some significant moves from the SATRC countries in this respect, specially from countries like Bangladesh, India, Pakistan etc. Some of the good examples are- asking OTTs with a threshold-level customer base to set up physical presence or intermediary, to register locally for tax or to appoint legal representative to contact as a focal point. Every country should choose the most suitable method considering the regulatory framework and market condition of the country. Whatever policy or regulation is to be taken for better regulation; preference should be given to empower the consumer. They should have full control of the way their personalized data is used and should be aware of the process of consent.

In spirit of ITU recommendation ITU-T D.262, and to promote fair competition, innovation and investment in a highly dynamic and fast-moving industry, regulators should assess the economic, policy and consumer welfare impacts of OTT in all critical areas affected, including their regulatory frameworks and existing economic incentives with respect to the provisioning and use of OTTs. Specially, for the sake of innovation and consumer welfare, care should be taken that policies should not hinder market entry for new entrants.

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# ANNEXURE – 1

## QUESTIONNAIRE

1. Are OTT services/digital apps/digital services defined and recognized in your country through license/directives/permit? If yes, how it is defined?
2. What are the popular OTT services in your country?

Please rank them according to traffic/usage.

|  |  |  |  |
| --- | --- | --- | --- |
| Serial Number/Ranking | OTT Name(example as follows) |  |  |
|  | Facebook/Messenger |  |  |
|  | Google |  |  |
|  | WhatsApp |  |  |
|  | Imo |  |  |
|  | TikTok |  |  |
|  | Netflix |  |  |
|  | YouTube |  |  |
|  | Signal |  |  |
|  | ……. |  |  |
|  | ………. |  |  |
|  | ………….. |  |  |

1. Do you have any separate regulation for the OTT services or for any specific OTT?

If yes, which aspect of the OTT services are covered in such regulation?

|  |  |  |
| --- | --- | --- |
|  | Item/criteria covered  | Comment/elaboration |
| 1 | Usage (permitted or not) |  |
| 2 | Content |  |
| 3 | Complaint  |  |
| 4 | Tax/ revenue related |  |
| ………. |  |  |
| ………. |  |  |

1. Do your country has any OTT which is locally developed and has significant usage in your country? If yes, is there any policy support for such local OTT?
2. a. How do you see the impact of OTT services on the incumbent telecom network and services in your country?

b. Please share the data from your incumbent telecom service providers about the impact of OTT on their traffic (both domestic and international voice traffic), SMS, revenue, infrastructure etc (if possible, separate data and/or analysis for each type of impact).

1. a. Do international OTTs (dominant and recognized, for example Facebook, google, Netflix etc) need to register in your country?

b. Do they need to set up office and/or appoint local representative?

1. a. Do international OTTs need to pay tax or share revenue with incumbent telecom operators in your country?

b. Is there any regulatory requirement or guideline for the taxation and revenue sharing of OTTs?

1. Is there any example of collaboration between OTT players and incumbent telecom operators in your country? If yes, are this collaboration voluntary/mutual or mandated/vetted by the regulator?
2. a. Has any international OTT invested in your country to develop infrastructure or broadband connectivity?

b. Has any of them shown any commitment towards the local telecom sector and consumers through any other initiative? If yes, please provide a brief description of such initiative.

1. What you suggest is the best way to regulate and/or accommodate the emergence of the OTT services. You may provide your suggestion under the following breakdown:
2. strict or soft regulation for OTT:
3. separate authorization or market-oriented approach to allow them operational in local market:
4. forced or voluntary collaboration among OTT and MNOs:
5. data privacy and security
6. Content regulation
7. Revenue Sharing with MNOs and local telecom and service providers
8. Tax payment
9. Compliance mechanism
10. Any other suggestion

# ANNEXURE – 2

## RESPONSE TO QUESTIONNAIRES

Q1. Are OTT services/digital apps/digital services defined and recognized in your country through license/directives/permit/registration? If yes, how it is defined?

**Afghanistan**:

 No

**Bangladesh**:

OTT is not regulated in **Bangladesh**. However, some of the Digital/ App-based services are covered under the guideline for providing TVAS in **Bangladesh**. According to this guideline such services are defined as below:

"Application Services" are enhanced services, in the nature of non-core services, which either

add value to the core telecommunications services or can be provided as standalone application

services through telecommunications network, the core services.

There also exists a separate directive for local ‘Mobile App Based Calling Services’ provided by IPTSPs.

In order to ensure the best interest of consumers, OTT players and the related stakeholders BTRC is in a process of issuing a guideline titled “Regulation For Digital, Social Media Platforms”

**Bhutan**:

Since OTT platform is newly established in **Bhutan**, regulations on its services are under discussion for right policy interventions and direction. Currently, the OTT players are required to apply for a license in order to provide the services. While license are provided by Authority at the moment, no regulation as such are applied to the service providers

Maldives:

No response

**Nepal**:

No

**Pakistan:**

As per Telecommunication Policy 2015 OTT has been defined as under:

*“OTT designates the carriage of telecom services, such as voice telephony, on top of a general-purpose communication path, such as the internet.”*

Prevention of Electronic Crime Act (PECA) was promulgated on 2016 which gives mandate to the telecommunication regulator to block/remove unlawful online content under the said Act. Since content now as days is hosted on different social media platforms hence they have to comply directions issued by the Authority under PECA 2016 and the Removal and Blocking of Unlawful Online Content (Procedure, oversight and Safeguards) Rules 2021 (Rules) made thereunder.

**India:**

 TRAI does not issue any License/Permission/Registration for any kind of service including OTT (Over the Top) services/platforms. The License/Permission/ Registration for broadcasting and cable services is granted by the Ministry of Information and Broadcasting (MIB).

Ministry of Electronics and Information Technology recently formulated the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 [ “2021 Rules”]. These Rules are made in exercise of the powers conferred under section 87 (2) of the Information Technology Act, 2000 [“IT Act”] which empowers the Central Government to make rules.

The 2021 Rules have come into force with their notification in the official Gazette i.e., from 25.02.2021 which is available on MeitY website (https://www.meity.gov.in/)

Part I of the 2021 Rules mainly lays down the definitions of terms, Part II and Part III contain the actual compliance and requirements.

Part II deals with the regulation of intermediaries, including social media intermediaries. Social media intermediaries include messaging-related intermediaries, such as WhatsApp, Signal and Telegram, and media-related intermediaries, such as Facebook, Instagram and Twitter.  This part is being administered by the Ministry of Electronics and Information Technology (MeitY).

Part III deals with the regulation of digital news media and OTT platforms, such as Netflix, Amazon Prime and Disney+Hotstar.  Part III is being administered by the Ministry of Information and Broadcasting.

**Sri Lanka:**

No

**Q2. What are the popular OTT services in your country?**

Please rank them according to traffic/usage.

**Afghanistan**:

|  |  |
| --- | --- |
| Serial Number/Ranking | OTT Name(example as follows) |
| **2** | Facebook/Messenger |
| **1** | Google |
| **3** | WhatsApp |
| **8** | Imo |
| **7** | TikTok |
| **9** | Netflix |
| **4** | YouTube |
| **11** | Signal |
| **6** | Twitter  |
| **5** | Instagram |
| **10** | LinkedIn |

**Bangladesh**:

|  |  |  |
| --- | --- | --- |
| ~~Serial Number~~/Ranking | OTT Name(example as follows) | Status of Subscriptions (in mn approx..) |
| 1 | Facebook/Messenger | 90 |
| 1 | Google (Classroom +Duo+Meet) | 90 |
| 4 | WhatsApp | 35 |
| 3 | Imo | 38 |
|  | TikTok |  |
| 10 | Netflix | 2.6 |
| 2 | YouTube | 46 |
|  | Signal |  |
|  | Twitter  |  |
| 5 | Snapchat | 18 |
| 6 | Instagram | 15 |
| 7 | Viber | 10 |
| 8 | Skype | 6 |
| 9 | Telegram | 3 |
| 11 | BiosScope | 1.2 |

**Bhutan**:

|  |  |  |  |
| --- | --- | --- | --- |
| Serial Number/Ranking | OTT Name(example as follows) | **Bhutan** Telecom Limited  | Tashi Infocomm Limited |
| 1  | Facebook/ Messenger |  1 |  3 |
|  2 | YouTube | 2  | 1  |
|  3 | WeChat | 6 | 5  |
|  4 | Instagram |  7 |  7 |
|  5 | Telegram |  5 |  4 |
|  6 | TikTok | 3  | 2  |
|  7 | SnapChat | 4  | 6  |
| 8  | Whatsapp | 8  |  8 |
| 9 | PinInterest | 9 | 9 |
| 10 | Twitter | 10 | 10 |
| 11 | linkedIn | 11 | 11 |

**Maldives:**

|  |  |
| --- | --- |
| Serial Number/Ranking | OTT Name(example as follows) |
| 3 | Facebook/Messenger |
| 12 | Google (Plus) |
| 5 | WhatsApp |
| 10 | Imo |
| 8 | TikTok |
| 2 | Netflix |
| 1 | YouTube |
| 11 | Signal |
| 7 | Twitter  |
| 4 | Viber |
| 6 | Instagram |
| 9 | SnapChat |

**Nepal**:

|  |  |
| --- | --- |
| Serial Number/Ranking | OTT Name(example as follows) |
| 2 | Facebook/Messenger |
| 1 | Google |
| 4 | WhatsApp |
| 7 | Imo |
| 2 | TikTok |
| 3 | Netflix |
| 1 | YouTube |
| 6 | Signal |
| 5 | Twitter  |

**Pakistan:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Serial Number/Ranking** | **OTT Name****(Example as follows)** | **Status of Subscriptions** |  |
| 1 | YouTube | More than 50 M Users | 71 M Apprx |
| 2 | WhatsApp | More than 50 M Users | Included in FB figures |
| 3 | Facebook | More than 50 M Users | 57.5 M Apprx |
| 4 | TikTok | Less than 50 M Users | 30 M Apprx |
| 5 | Twitter | Less than 50 M Users | 3.3. M Approx |
| 6 | Netflix | Less than 50 M Users |  |
| 7 | Tamasha | Less than 50 M Users |  |

**India:**

No such information is available with TRAI.

**Sri Lanka:**

|  |  |  |
| --- | --- | --- |
| Serial Number/Ranking | OTT Name(Example as follows) | Status of Subscriptions |
| 1 | Facebook/Messenger | 78.53% |
| 2 | YouTube | 11.22% |
| 3 | Twitter  | 4.35% |
| 4 | Pinterest | 3.11% |
| 5 | Instagram | 1.62% |
| 6 | LinkedIn | 0.66% |

**Q3. Do you have any separate regulation for the OTT services or for any specific OTT?**

**If yes, which aspect of the OTT services are covered in such regulation?**

**Afghanistan**:

No

**Bangladesh**:

In order to facilitate the local Internet Protocol Telephone Service Providers (IPTSP) with their “App Based Calling Services” BTRC issued “Directives on Mobile Applications Based (Over-the-Top, OTT) Calling Services of the IPTSP Operators, 2021”. One of the main objectives of this directive is to establish level playing field through the implementation of proper inter-operator techno-commercial agreement.

|  |  |  |
| --- | --- | --- |
|  | Item/criteria covered  | Comment/elaboration |
| 1 | Usage (permitted or not) | Through these directives mobile app-based calling services (offered by nationwide IPTSP) are allowed into the PLMN and PSTN network only under proper terms and conditions.  |
| 2 | Content | Mobile App Based Voice and SMS Service |
| 3 | Complaint  | As mobile app-based voice and SMS service is a product of IPTSP operators, so the complaints are addressed according to the provisions mentioned in IPTSP Licensing Guideline.  |
| 4 | Tax/ revenue related | According to IPTSP Licensing Guideline. |

**Bhutan**:

|  |  |  |
| --- | --- | --- |
|  | Item/criteria covered  | Comment/elaboration |
| 1 | Usage (permitted or not) | While international OTTs are not regulated in **Bhutan**, a soft licensing approach has been adopted in licensing locally developed OTT platforms in **Bhutan** where a license with a five-year validity is being issued for OTT Services. The main objectives of the licensing are as follows:1. Ensure taxation.
2. Data privacy and protection.
3. Promotion and preservation of local content.
 |
| 2 | Content | The OTT service provider has been mandated to ensure that at least 60 percent of content is reserved for local content to preserve and promote locally produced, and culturally and socially relevant local content. The OTT service providers providing video or audio streaming services shall ensure that the streaming of:* films are certified by National Film Film Commission of **Bhutan**.
* films, all music and video clips, serials and documentaries reviewed as per the Memorandum of Understanding (MoU) signed with the OTT and the National Film Commission of **Bhutan**.
* local or international content which will not impact on national security, social harmony and community vitality.

OTT media (video and Audio content) service providers are allowed to tie-up with Multi Service Operators in the country to provide Video-on-Demand services. |
| 3 | Complaint | The service provider shall put in place appropriate systems to record and resolve consumers' complaints on OTT services without undue cost or burden to the consumers.  |
| 4 | Tax/ revenue related | As per license terms and conditions, an annual license fee is levied to the OTT Service Providers. During the payment of the annual license fee, the OTT Service Provider shall also produce a valid Tax Clearance Certificate as proof of having filed their Business Income Tax. |

**Maldives:**

No

**Nepal**:

There is no separate regulation for the OTT services. However, it is necessary to get license for OTT service from government as well as in context of content also need to get approval from the government.

|  |  |  |
| --- | --- | --- |
|  | Item/criteria covered  | Comment/elaboration |
| 1 | Usage (permitted or not) |  |
| 2 | Content | If one needs to keep any channels in OTT service, that channel should be in approval list of government. |
| 3 | Complaint  |  |
| 4 | Tax/ revenue related |  |

**Pakistan:**

Regulations for OTT are yet to be established and under consultation phase. Government regulatory body for electronic media PEMRA, has been in a process of taking inputs from all stakeholders including regulatory officers, industry experts etc. and PTA has already promulgated Rules 2021 under PECA 2016 to regulate online content.

|  |  |  |
| --- | --- | --- |
|  | **Item/criteria covered** | **Comment/elaboration** |
| 1 | Usage (permitted or not) | Usage is not prohibited until and unless they comply directions of the Authority w.r.t removal of unlawful content under PECA 2016. |
| 2 | Content | Content is regulated under PECA 2016 and Rules 2021 |
| 3 | Complaint  | Complaints can be lodged by public or govt. institutions against OTT applications under the above-mentioned legislations. |
| 4 | Tax/ revenue related |  |

**India:**

TRAI has not issued any regulation for OTT services. Ministry of Electronics and Information Technology recently formulated the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 [ “2021 Rules”].

**Sri Lanka:**

No.

N/A

**Q4. Do your country have any OTT which is locally developed and has significant usage in your country? If yes, is there any policy support for such local OTT?**

**Afghanistan**:

No

**Bangladesh**:

There are two types of OTTs that are mainly popular in **Bangladesh**. The first one is Mobile App Based Calling Service i.e. Alaap, Brilliant Connect, Dial etc. The second type of popular OTT is Video Streaming Platforms i.e. Bioscope, Binge, Toffee, Chorki etc.

As mentioned earlier for Mobile App Based Calling Service BTRC issued “Directives on Mobile Applications Based (Over-the-Top, OTT) Calling Services of the IPTSP Operators, 2021”.

**Bhutan**:

Samuh, Shangreela and Songyala are three locally developed OTT platforms in the country.

Policy support such as facilitating loans for OTT start-ups, sales tax and customs duty exemptions for import of infrastructure for set-up and operations, and tax holiday for a prescribed number of years subject to the fulfillment of conditions as per the Fiscal Incentives Act and Rules of Bhutan.

**Maldives:**

* Yes. (local movies/serials app & music app)
* No specific policy support.

**Nepal:**

Yes, there are multiple OTT services locally developed in the country. Some of them are like. ClearTV ,Viatv, SIMTV, DiskTV, broadTV,Nettv etc..

**Pakistan:**

Tamasha is a locally developed OTT service developed by Jazz Pakistan. Similarly other video on demand and streaming apps like Naya TV and Xtream TV are developed by other ISPs to facilitate their subscribers. However, there is no specific policy which gives preference to local OTTs over international OTT.

**India:**

***-***Some of the locally developed OTT platforms in India are as under: -

(i) Zee5; (ii) Voot; (iii) Aha; (iv) TVF Play; (v) SUN NXT; (vi) ALT Balaji, (vii) BIGFIX, etc.

There are no authenticated inputs regarding signiﬁcant usage etc.

TRAI does not regulate OTT whether local or International. At present Telecom Regulatory Authority has not framed any policy to support local OTT.

**Sri Lanka:**

**No**

1. **How do you see the impact of OTT services on the incumbent telecom network and services in your country?**

**Afghanistan**:

No reply

**Bangladesh**:

As mentioned earlier there are two types of OTTs that are mainly popular in **Bangladesh**. These are (i) Mobile App Based Calling Service and (ii) Video Streaming Platforms. Mobile App Based Calling Service has very less impact on the incumbent telecom network compared to other OTTs. On the other hand, local Video Streaming Platforms are becoming popular every day. These Apps consumes a significant amount of bandwidth in the operators’ network. Sometimes operators are also interested to cater such video streaming applications and offer specially designed data packs for these applications.

**Bhutan**:

OTTs effect on decrease or increase of revenue of telecom service providers has always been a subject of debate between Telecom Service Providers (TSPs) and OTT service providers. In **Bhutan**, the TSPs have never raised issues in OTTs affecting their voice and SMS revenue and they have been working to ensure augmentation of broadband networks to increase the revenue from data services while at the same time maintaining the traditional voice and SMS services. OTT players in the market are very much welcomed by the TSPs in **Bhutan** since it has a positive impact on their revenue from data services.

**Maldives:**

While on the one hand OTT services take up a huge chunk of the traffic and thus cause operators to enhance networks, they also increase the demand for high data volumes thus bringing in more business to the telecom network operators. Consequently, they are not regarded as threats

**Nepal:**

OTT service challenges service provider to make their infrastructure robust and scalable.

**Pakistan:**

Since a lot of telecom services are providing OTT facilities to their subscribers, it’s an indication that telecom sector sees it as a tool to grow and satisfy its existing subscriber base.

**Sri Lanka:**

* SMS revenues will fall down due to increasing adoption and use of Over-The-Top (OTT) messaging applications.
* OTT VoIP applications impact on voice revenues of fixed and mobile operators.
* Impact of OTT players is not just limited to telcos voice and messaging services but has led to an exponential increase in their data traffic causing severe congestion

1. Please share the data from your incumbent telecom service providers about the impact of OTT on their traffic (both domestic and international voice traffic), SMS, revenue, infrastructure etc. (if possible, separate data and/or analysis for each type of impact). Please provide data as per the attached format.

**Afghanistan**:

No reply

**Bangladesh**:

No response

**Bhutan**:

The telecom industry has been one that has had to deal with a continuously changing business and technology environment more than most other industries. The growing impact of OTT services on telcos’ voice and messaging revenue is a widely accepted phenomenon. Their impact on mobile data traffic and telco data revenue are also areas that have been acknowledged as critical points for consideration. SMS revenues fall down due to increasing adoption and use of Over-The-Top (OTT) messaging applications such as Facebook messenger, WeChat etc. A major contributor to the increased data traffic is the growing consumer appetite for more videos causing severe congestion.

With the increasing number of people using smartphones for OTT services, the impact of OTT players is not just limited to telco’s voice and messaging services but has led to an exponential increase in their data traffic. The three key drivers influencing OTT adoption include device improvement, consumer communication demands, network technology and availability. Device intelligence, particularly in the smartphone market, has grown exponentially over the past 10 years and today SMS represents less than 10% of traffic globally.

With OTT platforms giving better user experience and fascinating features that get better day by day, Telcos have seen a decrease in both voice and SMS traffic and so has the revenue of these two services.

**Maldives:**

* Have not received the data yet.

**Nepal: N/A**

**Pakistan: no response**

**Sri Lanka:**



Higher calling rates (because of the higher taxes on international calls and the imposition of VAT) may have now exacerbated the shift to data-based calls in Sri Lank

**Q5. Please provide your analysis/ comments about the impact of OTT services on the society. What are the prevailing legal aspects in your country in this context? Does your country has any collaboration with the OTT players to monitor and moderate the content? Please provide suggestions, if any, in this respect.**

**Afghanistan**:

In general, the use of OTT services has grown rapidly in Afghanistan in recent years, providing new opportunities for communication and access to information. The availability of these services has enabled individuals and businesses in Afghanistan to connect with each other everywhere more easily. However, there are also some concerns such as privacy, data protection, and the spread of misinformation.

In Afghanistan, there are currently no specific laws or regulations in place that govern the use of OTT services. Currently, we have no collaboration with OTT players to monitor or moderate content. However, it is becoming increasingly important for policy makers, regulators and OTT players to work together in order to ensure that these services are used in a responsible and safe manner. Developing industry-wide standards for content moderation and establishing clear guidelines for reporting and addressing content-related issues are suggested in this regard.

**Bangladesh**:

As OTT players can produce content for their own commercial interests that gives them the liberty to create contents containing abusive materials or contents that may be offensive to a specific society or a country. It is worth noting that issue is not with OTT players rather the content they produce. These content producers have the capability to manipulate people’s thought with their content and with easy access to internet and availability of cheap digital devices these content creators can reach billions of populations in no time. Therefore, whether or not the OTT players exercise, they have the capability create different sort of impact on the society.

Regarding prevailing legal aspects, according to Digital Security Act, 2018 the Government can take preventive measures if it feels any adverse situation might occur. As mentioned in section 8 of Chapter 3 of this Act,

**Power to remove or block some data-information.⎯(**1) If any data-information related to any matter under the jurisdiction of the Director General, being published or propagated in digital media, creates threat to digital security, the Director General may request the **Bangladesh** Telecommunications and Regulatory Commission, hereinafter referred to as BTRC, to remove or, as the case may be, block the said data-information.

(2) If it appears to the law-and-order enforcing force that any data-information published or propagated in digital media hampers the solidarity, financial activities, security, defense, religious values or public discipline of the country or any part thereof, or incites racial hostility and hatred, the law and order enforcing force may request BTRC to remove or block the data-information through the Director General. (3) If BTRC is requested under sub-sections (1) and (2), it shall, with intimation to the Government of the said matters, instantly remove or, as the case may be, block the data-information.

(4) For carrying out the purposes of this section, other necessary matters shall be prescribed by rules.

BTRC already has collaboration with Facebook, Google, TikTok, Bigo, Likee to monitor and moderate offensive contents from their platform. Regular meetings take place between these organizations and BTRC to review such issues.

**Bhutan**:

The growth of OTT services has contributed to societal welfare and economic progress in countries around the world. The prominent benefit of OTT services can be enabling effective and efficient public service delivery, impact on economic growth, consumer welfare and creation of an ecosystem for innovation. In terms of content, the OTT service provider shall ensure that at least 60 percent of content is reserved for local content to preserve and promote locally produced, and culturally and socially relevant local content. The OTT service providers providing video or audio streaming services shall ensure that the streaming of films certified by National Film Commission, films, all music and video clips, serials and documentaries reviewed as per the Memorandum of Understanding (MoU) signed with the National Film Commission (NFC) of **Bhutan**. Television contents including BBS Channels authorized by the broadcasters and local or international content which will not impact on national security, social harmony and community vitality. The Media Council of **Bhutan** (MCB), being the content regulator for ICT and media services in the country, regulates contents on ICT and Media services and works closely with the NFC to ensure that the OTT content is in line with the rules on content framed by the council.

**Maldives:**

As a small country we are struggling to set up the legal framework required.

**Pakistan**

As far as OTT applications which provide social networking services or allows user generated content the said applications are governed under PECA 2016 and the Rules made thereunder. The said legislations have been enacted to minimize or prevent crimes committed through online information system including but not limited cyber stalking, harassment, content against modesty of any person, content against religious beliefs, content which incites violence/hate speech etc.

Under PECA 2016 PTA has been empowered to block/remove or issue directions for blocking/removal of any content which it deems to be unlawful while the Federal Investigation Agency (FIA) has been empowered to investigate any crime committed under the said Act.

For the purpose of identification of such unlawful content PTA has developed online portals where unlawful content can be reported.

PTA has established dedicated channels with major OTT players where they have provided portal access to PTA for lodging complaints w.r.t removal of unlawful content, for escalation they have nominated focal persons who can be contacted in case of emergency. In-order to improve the collaboration between regulator and OTT platforms Under Rules 2021 the platforms (having more than 0.5 million users in Pakistan) are obligated to appoint compliance officer and grievance officer based in Pakistan.

**India:**

**-** As and when time matures, the impact analysis will be done. No further details are available.

As already covered in Question 1, Ministry of Electronics and IT (Meity) published Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, dated 25.02.2021 to bring OTT under obligations and compliance.

**Sri Lanka:**

1. impact of OTT services on the society

OTT services are impacting several aspects of our society. Positive impact of this aspect is that it has enabled people to stay in contact with their family, friends, colleagues etc. It has bridged the geographical divide between people and helped them to bond strongly. Studies on OTT services had been indicated that some people in the society are using OTT applications to fulfill the emotional backlog of their lives by trying to find the emotional support they needed.

Addiction to social media networks by users have several negative consequences including, neglect of in-person relationships and difficulty communicating face-to-face, which makes the user feel depressed. OTT application can be used to send  dangerous, terrorizing  messages  to  the  majority  of people to  make  inconvenience  and uproar in the general public.

Before social media, bullying was only possible to do face-to-face. However, now people can bully others online anonymously or not by using OTT services.

1. prevailing legal aspects

Some of the Acts viz. Computer Crimes Act, Data Protection Act, Cyber Security Law, Data Transaction Act are in place when dealing with complaints related to OTT services impacting the society.

1. collaboration with the OTT players

We do not have a facility to monitor and moderate the OTT content, instead we have a “Content Reporting System” to report Facebook and Instagram related complaints such as Fake Accounts (Impersonation), Hacked Accounts, Bullying and Harassment etc.

International collaboration with OTT players are much needed for speedy actions on taking down the reported content viz. pictures, videos etc.

1. **Do international OTTs (dominant and recognized, for example Facebook, google, Netflix etc) need to register in your country? Please provide the current status.**

**Afghanistan**:

Currently there is no requirement for international OTTs to register in our country.

**Bangladesh**:

At present there is no regulation for the international OTTs to register in **Bangladesh**.

**Bhutan**:

No

**Maldives:**

No

**Nepal:**

No need upto till date.

**Pakistan**

Significant social media companies (SSMCs) need to register with PTA under Removal and Blocking of Unlawful Online Content (Rules 2021. SSMC has been defined as any social media service network which has more the 0.5 Million subscribers in Pakistan. So far three companies have registered their applications with PTA under the said Rules, details are as under:

**Sri Lanka: No**

1. **Do they need to set up office and/or appoint local representative? Please provide the current status.**

**Afghanistan**:

As of now, there is no requirement for international OTTs to set up an office or appoint a local representative in Afghanistan. However, it may be very important to do so in the future as regulations and policies evolve.

**Bangladesh**:

At present there is no regulation that requires the international OTTs to set up office and/or appoint local representative in **Bangladesh**.

**Bhutan**:

No

**Maldives:**

No

**Nepal:**

No legal framework has been set up yet.

**Pakistan**

Establishing local office is not mandatory, however SSMCs need to appoint local compliance officer and local grievance officer to handle regulatory issues and user grievances w.r.t content hosted on the platform respectively

**Sri Lanka: No**

**c. Do international OTTs need to pay tax or share revenue with incumbent telecom operators in your country?**

**Bangladesh**:

After hearing a writ petition, the High Court in November 2020 ordered the authorities to collect revenue, including tax at source and other taxes on all sorts of transactions for advertisement, domain sale, license and other fees, from internet-based platforms like Google, Yahoo, Facebook, YouTube and Amazon. Following this order companies like Facebook and Google have already registered for VAT and other taxes.

**Bhutan**:

No

**Maldives:**

No

**Nepal:**

No

**Pakistan**

No such regulations in place which compels the OTT platforms to share revenue or pay tax

**Sri Lanka: No**

**d. Is there any regulatory requirement or guideline for the taxation and revenue sharing of OTTs?**

**Bangladesh**:

 There is no separate regulatory requirement or guideline for the taxation and revenue sharing of OTTs. They are required to pay the regular VAT and other taxes like any other business entities in **Bangladesh**.

**Bhutan**:

No

**Maldives:**

No

**Nepal:**

No

**Pakistan**

No information available as yet.

**Sri Lanka: No**

Q6. Is there any example of collaboration between OTT players and incumbent telecom operators in your country? If yes, are this collaboration voluntary/mutual or mandated/vetted by the regulator?

**Afghanistan**:

No

**Bangladesh**:

There are a collaboration between OTT players and incumbent telecom operators. These collaborations are mostly voluntary.

**Bhutan**:

The collaboration between OTT players and telecom operators are voluntary/ mutual. However, in such a case, the regulator will ensure that the principle of net neutrality is maintained in terms of differential tariff and differential traffic.

**Maldives:**

* Yes, voluntary

**Pakistan**

Collaboration between OTT players and telecom operators is not mandated by law or regulations.

 **India:**

   No such information is available with TRAI

**Sri Lanka:**

Dialog Axiata provides Netflix and Spotify services to their subscribers. The operator collects annual or monthly OTT subscriptions from subscriber (mostly adding to bill) and paid to the OTT player.

1. Has any international OTT invested in your country to develop infrastructure or broadband connectivity (e.g. optical fiber metro network, submarine cable and landing station, Wi-Fi network access points etc.)?

**Bangladesh**:

Yet no international OTT has invested in **Bangladesh** to develop infrastructure or broadband connectivity.

**Bhutan**:

No

**Maldives:**

* No, but few major OTTs host cache in the country.

**Nepal: N/A**

**Pakistan**

Facebook has partnered with local internet provider, Nayatel in Pakistan to improve internet connectivity and also invested in fiber optic deployment in the country.

**Sri Lanka: No**

1. Has any of them shown any commitment towards the local telecom sector and consumers through any other initiative (e.g. digital skill development, social uplift, bridging digital divide etc.)? If yes, please provide a brief description of such initiative.

**Bangladesh**:

MNOs in partnership with Meta, launched text-only Facebook and Discover to enable customers to stay connected more consistently, even when they run out of data. Text-only Facebook enables customers to stay connected with a text-only version of Facebook and Messenger when they run out of data until they can top up their data balance again. Discover, a mobile web and Android app, allows customers to browse the internet using a daily balance of 15MB without data charges. In addition, Discover only supports low-bandwidth features such as text and icons when using free data.

**Bhutan**:

No

**Maldives:**

* No significant

**Nepal: N/A**

**Pakistan**

Various initiatives from Facebook, Google, TikTok and other platforms were designed to uplift digital skills, internet awareness. Few of them are shared below.

* Meta (Facebook) has recently launched its web series Chai Chat for internet awareness, Partnership with Idara-e-Taleem, taken digital literacy course We Think Digital, to 245 schools across 14 districts in all 4 provinces of Pakistan. Trained over 25,000 students and 1200 teachers on concept related to safety, privacy, critical thinking, ability to recognize misinformation and maintaining positive engagement online.
* TikTok joined hands with NGO Zindagi trust for internet safety and creating public awareness.

Google ‘Be Internet Awesome’ To make the most of the Internet, kids need to be prepared to make smart decisions. Be Internet Awesome teaches kids the fundamentals of digital citizenship and safety so they can explore the online world with confidence.

**Sri Lanka: no**

Q7. What you suggest is the best way to regulate and/or accommodate the emergence of the OTT services. You may provide your suggestion under the following breakdown:

**Afghanistan**:

1. strict or soft regulation for OTT: **(Soft)**
2. separate authorization or market-oriented approach to allow them operational in local market: **(market-oriented approach)**
3. forced or voluntary collaboration among OTT and MNOs: **(Voluntary)**
4. data privacy and security **(recommended)**
5. Content regulation **(recommended)**
6. Revenue Sharing with MNOs and local telecom/ broadcasting service providers
7. Tax payment **(recommended)**
8. Compliance mechanism **(recommended)**
9. Any other suggestion

**Bangladesh**:

1. strict or soft regulation for OTT: Regulatory mechanism for OTT players are still evolving throughout the globe. Therefore, should delicately handle this sector so that the growth of this sector does not get hindered.
2. separate authorization or market-oriented approach to allow them operational in local market: Market oriented approach might be more appropriate.
3. forced or voluntary collaboration among OTT and MNOs: There is no need to mandate forced collaboration among OTT and MNOs. They can do collaboration according to their own interest.
4. data privacy and security: OTT players must follow the national data privacy and security standard of a country where they are operating. In many developing and under developed countries such national data privacy and security policy may be absent. In such case OTT players should adhere instructions of the concerned regulatory bodies.
5. Content regulation: Content regulation should be mandatory. OTT player must follow the content regulation of the country where it is operating.
6. Revenue Sharing with MNOs and local telecom/ broadcasting service providers: There should not be any mandatory revenue sharing obligations. Revenue may be shared based on the business interest between both the parities.
7. Tax payment: Yes, like any other market players/ business entities OTT players should also be under tax regime.
8. Compliance mechanism There should be specific compliance mechanism for this sector. Regulator or concerned authorities may define the compliance issues and players in the market should follow those.
9. Any other suggestion

**Bhutan**:

a. strict or soft regulation for OTT:

**Soft regulation**

* To facilitate promotion and preservation of local content.
* To provide healthy competition among the OTT players.
* To prevent market monopolization and options to the consumers.

b. separate authorization or market-oriented approach to allow them operational in local market:

**Market oriented**

This approach will ensure the OTT players undertake a market-driven approach and ensure that customer’s needs and requirements are integrated since OTT is public oriented service.

c. forced or voluntary collaboration among OTT and MNOs: **Voluntary**

* + To promote competition and innovation among OTT and MNOs.

d. data privacy and security: Yes

One of the main reasons for licensing OTTs in **Bhutan** is to ensure data privacy and protection of customers’ data.

e. Content regulation: Yes

At the moment, content regulation for local OTTs is done by the Media Council of **Bhutan** and the National Film Commission of **Bhutan**.

f. Revenue Sharing with MNOs and local telecom/ broadcasting service providers: No

g. Tax payment : Yes

h. Compliance mechanism: Yes

i. Any other suggestions?

* + As a regulator, do we regulate/monitor tariffs for OTT (for local OTTs only)?
	+ When OTTs collaborate with TSPs, is it important to ensure that they do not initiate differential traffic and differential tariffs to uphold the principle of net neutrality?

**Maldives:**

* 1. strict or soft regulation for OTT - soft
	2. separate authorization or market-oriented approach to allow them operational in local market - not applicabe
	3. forced or voluntary collaboration among OTT and MNOs - voluntary
	4. data privacy and security – set up laws, build better relationship OTTs
	5. Content regulation – not capable
	6. Revenue Sharing with MNOs and local telecom/ broadcasting service providers - ideally should be some kind of rev sharing… not sure how
	7. Tax payment – challenging to implement
	8. Compliance mechanism – collaboration with OTT players
	9. Any other suggestion

**Nepal:**

1. strict or soft regulation for OTT:

Ans: Soft regulation for the OTT

1. separate authorization or market-oriented approach to allow them operational in local market:

Ans: Market Oriented approach

1. forced or voluntary collaboration among OTT and MNOs:

Ans: Voluntary collaboration

1. data privacy and security

Ans: Yes required.

1. Content regulation

Ans: No Regulation.

1. Revenue Sharing with MNOs and local telecom/ broadcasting service providers
2. Ans: Need Revenue Sharing with MNOs and local telecom/ broadcasting service providers
3. Tax payment

Ans: Low tax should be applicable to OTT services can foster and can impact local

1. Compliance mechanism

Ans: Compliance is required

1. Any other suggestion

**Pakistan:**

OTT platforms generally provide self-classification of content available on their platforms. Online platforms provide services globally hence may offer a variety of content according to their consumer base. The most effective way to regulate OTT services is through self-regulation and more customized content classification primarily based on local laws and then user preferences.

1. strict or soft regulation for OTT:

A flexible regulatory mechanism in order to encourage innovation and growth and providing a level playing field for new local ventures, legacy broadcast services and other industry leading OTT platforms. However, the regulations to prevent negative effects of social media platforms needs to be stringent.

1. separate authorization or market-oriented approach to allow them operational in local market:

Most of the OTT platforms are based in on

1. forced or voluntary collaboration among OTT and MNOs:

 Collaboration among OTT and MNOs shall be voluntary as per their commercial needs however the regulator needs to step in wherever any dispute arises

1. data privacy and security

OTT/digital platforms must adhere to the same basic data privacy standards in SATRC countries as laid down under international data protection laws e.g., GDPR etc. It has been observed that due to lose or no legislation w.r.t user data protection in developing countries the tech companies give no heed to instructions of the concerned regulatory bodies in such countries.

1. Content regulation

Content hosted on these platforms must be in accordance with local laws and societal norms of the class/viewership it is intended to serve.

1. Revenue Sharing with MNOs and local telecom/ broadcasting service providers

As per their commercial arrangements

1. Tax payment

No comments

1. Compliance mechanism

Enforcement of prevailing laws is mandatory and all stakeholders are obligated to comply, since OTT/social media companies follow international laws, regulatory bodies may develop such mechanism where penalties are imposed upon the violators, such as restricting subscription payments through banks, restriction on websites offering/marketing violating platforms etc.

1. Any other suggestion

OTT platforms must be governed by a broad base policy because unlike broadcast media, digital media provide various options to select and ignore any piece of content as per their likes/dislikes. OTT platforms must ensure users are given complete freedom and options to prefer or avoid certain type of content and also devise a mechanism to imbed parental preferences on their systems.

**India:**

TRAI is seized of the various developments which have taken place in recent past in OTT and shall look into various aspects, such as impact on society, Telecom and Broadcasting Service Carriers etc.. at appropriate time after following due processes. Market forces may be allowed to respond to the situation without prescribing any regulatory intervention. However, developments shall be monitored and intervention as felt necessary shall be done at appropriate time.

**Sri Lanka:**

1. strict or soft regulation for OTT:

Strict regulations are preferred especially in the aspect of data privacy.

1. separate authorization or market-oriented approach to allow them operational in local market:

Market oriented approach

1. forced or voluntary collaboration among OTT and MNOs:

At present, MNOs are operating in an economic environment of lower returns while having to make substantive investments to roll out faster, higher capacity and wider coverage networks, all the MNOs are in search of a more fairer business model to fund this investment and to sustain the revenue. This substantive investment is mostly required due to the high take up of OTT applications and a forced collaboration is more preferred among OTT players and MNOs to overcome this challenge.

1. data privacy and security:

OTT platforms mainly collect the Personal Information of the customers which primarily includes, name, birthdays, gender, e-mail address, contact information and profile pictures, device’s information, search history, location, storage, user generated content and much more. Therefore, strict regulations are required to avoid sharing of above-mentioned information with third parties.

Double authentication method shall be introduced for online Payment Methods.

1. Content regulation
	1. Should not publish any content which is prohibited under any law and take into consideration the implications, and exercise due caution and discretion in respect of the content which affects the sovereignty and integrity of the country.
	2. OTT platforms must display age-based content rating and content descriptor for each content. If applicable, they should also display an advisory on viewer discretion at the beginning of the programme.
	3. Not to host, display, upload, modify, publish, transmit, store, update or share any information” that:
		1. belongs to another person
		2. is illegal, defamatory, obscene, pornographic, or intrusive of one’s privacy including bodily privacy
		3. is harmful to children
		4. threatens the unity, integrity, defense, security or sovereignty of the country, or its relations with other countries, public order (including communal and social harmony), or breaches the secrecy of the government
		5. is offensive, false, humiliating or threatening, or hurts religious values
		6. violates intellectual property rights
		7. impersonates another person, is willfully misleading or deceiving in nature, is patently false or untrue.
	4. Revenue Sharing with MNOs and local telecom/ broadcasting service providers

It would be beneficial to consider what revenue and cost sharing models are available for MNOs and what type of partnerships and/or collaborative arrangements can be agreed upon to reap the benefits.

1. Tax payment

As the challenging industry issues of data traffic increase and the ARPU (Average revenue per unit) is stagnating, it is important to consider reducing regulatory charges such as tax payments, spectrum fees etc. to sustain the industry.

1. Compliance mechanism: maintain an effective complaint handling procedure for processing user complaints
2. Any other suggestion
3. No
1. Chapters VII and VIII of Schumpeter’s Capitalism, Socialism and Democracy, Second Edition, 1942. [↑](#footnote-ref-1)
2. When one speaks of lost revenues or taxes, what assumptions are being made as to what the world would be like in the absence of OTT services? [↑](#footnote-ref-2)