**International Telecommunication Union – Public Consultation**

**Public Policies Considerations for OTTs**

**CONTRIBUTION OF BRASSCOM, ASSOCIAÇÃO BRASILEIRA DAS EMPRESAS DE TECNOLOGIA DA INFORMAÇÃO E COMUNICAÇÕES**

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Brasscom, the Brazilian Association of Information and Communication Technology Companies (*Associação Brasileira das Empresas de Tecnologia da Informação e Comunicação*), is an entity that encompasses a select group of companies that provide software, ICT solutions and services, as well as providers of OTT services and telecommunications services and whose mission is to work for the development of the sector, disseminating its reach and enhancing its effects on the economy and social welfare, increasing efficiency and productivity and creating benefits for the whole society.

Brasscom welcomes the ITU and supports it for its important and fundamental role in worldwide coordination of the shared global use of radio frequency spectrum, promotion of international cooperation in the field of orbital satellites and intensive work in the improvement of telecommunication infrastructure in developing countries, as well as in establishing global standards to provide interconnection between various communications systems.

However, we believe that the expansion of ITU's competence to eventually include the Internet, whether in relation to services and content provided through the network, or in relation to issues of privacy, security and data flow, would be a worrying change, and would call for a perspective of sectoral regulation for a transversal theme in all the relevant segments of the economy.

In this context, over the past few months, Brasscom has promoted wide discussions and heard its members on various topics related to information and communication technology, including OTT applications. In our discussions, there was a consensus that it is not prudent to propose a discussion on the regulation of OTTs at the current stage of technological development. In this way, our answers to the questions made by the ITU in this consultation seek to ratify our understanding and demonstrate the need to allow the Internet environment to remain free and as a great incentive for innovation.

**1. What are the opportunities and implications associated with OTTs?**

The rapid development of information and communication technologies has enabled the flourishing of a variety of innovative services. Some applications made available through the Internet, commonly called by the generic name of Over the Top (“OTT Applications”), offer the most diverse features, from the interaction between users through text messages and videos, to applications for traffic monitoring, offering of services and electronic government applications, health data monitoring, among many others. These applications bring numerous benefits to users by facilitating daily activities, as well as leveraging economic growth, job creation, increase in productivity and innovation on a global scale.

One of the features of this new connected reality is the endless traffic of cross-border data, allowing society to reap the benefits of the innovation process. It is worth mentioning that OTT Applications and the free international data flow have played a fundamental role as components of socioeconomic impact[[1]](#footnote-1), as they open the doors to new physical and digital companies in various parts of the world, allowing the innovation and the visibility of products both locally and globally. In addition, they enable digital business models to evolve and adapt to better meet consumers' demands/needs, including improving the rendering of services to the citizens through applications.

OTT Applications, in addition to bringing opportunities and benefits to their users and society as a whole, have also brought positive implications to telecom companies. This is because these online platforms drive the demand for Internet connectivity services, thus increasing traffic[[2]](#footnote-2) and, consequently, the revenue of telecommunication service providers. Broadband services are usually offered with commercial models linked to the data usage, involving transfer speed and traffic amount, typically tied to minimum consumption. Users who make heavy use of OTT Applications are compelled to hire plans with higher performance and capacity. In fact, it is already estimated that data services revenue will largely offset the decline in voice service revenues, becoming the core business of the carriers[[3]](#footnote-3).

Accordingly, some studies have already shown that the increase in broadband penetration, in order to meet the growing demand, contributes directly and indirectly to economic growth. A World Bank[[4]](#footnote-4) study shows that the 10% growth in broadband internet penetration contributes to the 1.38% increase in GDP of developing countries. Based on these data, a Deloitte[[5]](#footnote-5) study goes further to estimate that the growth in Internet access at levels experienced in developed countries can increase the GDP of developing countries by up to US$ 2.2 trillion, a total growth of 15%.

It is also relevant to emphasize that the applications are global. This means that users are able to access and use them, regardless to their geographic location. In addition, the usage of different applications by users is not subject to exclusive contracts. In other words, a user can an application of his/her preference and then immediately choose to another one, with no costs. This fact demonstrates that there is a real competitive relation between OTTs.

The inexistence of exclusive contracts is an incentive to creators and innovators who develop applications for the users, at the same time this condition boosts competitiveness between developers, characteristic that attracts investments and contributes to the economic growth and creation of social value.

It is therefore clear the direct and indirect benefits that a thriving OTT industry brings to the economic and social development of a country so that the focus of public policy should be encouraging this ecosystem in all its aspects, instead of creating barriers that discourage innovation and deprive users of the benefits created by OTT applications.

**2. What are the policy and regulatory issues associated with OTTs?**

Given the dynamism of the innovation process in the context of digital business models, we are concerned that any ex ante regulatory initiatives may have the perverse effect of stifling the development of new technologies, services and applications and suppress free enterprise, a general rule in any democracy, by which any person may conduct his own undertakings, as long as such person meets the general legal structure.

In addition, costs arising from regulatory and compliance requirements may constitute a harmful barrier to entry, especially for startups/SMEs. And, consequently, negatively affect the provision of online services and, therefore, the day-to-day of users and businesses that rely on these applications in their activities.

Thus, since barriers to entry for new OTT providers are virtually non-existent, we believe that any regulation of such services should be carried out ex post only in cases where effectively anti-competitive conduct is identified, by using the appropriate mechanisms usually found in the legal framework to defend competition.

It is worth remembering that the economic and legal literature is the majority in the sense that an ex post competitive regulatory approach is better than an ex ante intervention. The determination as to whether a conduct is unlawful is best done upon incidental regulatory control when facts that will allow an accurate assessment of the practice, such as motives and impact of practice, are known. A case-by-case analysis promotes free competition and technological experimentation, especially in an innovative market in continuous development, making the ex-post regulatory approach always efficient when the public interest is violated by the behavior of a specific economic agent and not by the structure of the market itself.

Neither is it advisable to impose additional taxation on OTT Applications. We explain: OTT Applications already generate tax collection based on traffic usage. Any additional demands on Internet applications in general and OTT Applications, particularly, would have the power to reduce demand by depriving the neediest of tools to facilitate everyday life and enable greater agility, including the performance of activities aimed at the economic maintenance, becoming factors that inhibit the massification and the digital inclusion of the low-income population.

**3. How do OTT providers and other players who offer application services contribute to aspects related to consumer privacy and security?**

As already addressed in 1st answer, the emergence of OTT Applications has consolidated a plural environment of opportunities and benefits, which is both dynamic in the view of the consumer who is eager for novelties and requires innovation and agility on the part of the service providers. To the extent that these Applications are intended to provide the best services to meet the user's demands, mechanisms to improve their security and privacy are among the measures most sought after by OTTs. So, our perception is that the key word to ensure the balance of the binomial development and privacy protection of individuals in this ecosystem is trust, without which OTTs themselves would not thrive and congregate thousands of users.

In this sense, we emphasize that companies are becoming increasingly proactive in seeking the protection of the data generated by OTT applications to guarantee the security of their users, gaining and/or maintaining the relationship of trust with them, such as the implementation of the use of cryptography across multiple platforms. The goal of these service providers has been to develop best practices for data protection and privacy, which are in constant evolution, for the users of their products and services.

Therefore, OTT Applications have focused on technical innovation by seeking privacy enhancing technologies to enable individuals to manage and control their personal data more easily and intuitively, transforming the application of Privacy by Design and Security by Design principles into key issues in the development of products and services. These proactive measures, adopted on the initiative of the service providers themselves, are designed to demonstrate to users that the companies are aware of their wishes and will take the measures in their power to honor the trust given by the data owners.

The principle of Privacy by Design enables the achievement of personal data protection through controls, starting when the business model, the information system and/or the physical infrastructure of the company are designed, guaranteeing the protection of personal data and their use within the framework that were originally defined and informed to users. It is based on the idea that companies should promote the privacy of the data owner throughout the organization and at all stages of the development of their products and services, i.e., companies should take proactive and preventive measures to enable those responsible for and in charge of handling the data to comply with the principles and duties of the standard on the protection of personal data and to reduce the risk in handling such information.

The concept of Security by Design, derived from the alignment of the Privacy by Design principle with security, arises from the need to develop software aimed at making systems free from vulnerabilities and impervious to attacks, when possible, through measures such as continuous tests, guarantees of authentication and adherence to the best programming practices, i.e., it requires that the software be designed to be safe from beginning to end.

All these measures are adopted voluntarily by the companies offering the OTTs, in order to build an ecosystem based on the users’ trust.

An additional primary issue for the development of OTTs is the international information flows that are extremely necessary for the maintenance of the most diverse types of economic activity and, especially, for the ecosystem of OTTs, that is, among its intrinsic characteristics, an ecosystem with global coverage. Today, international data transfer is an everyday business. As shown by a study by the McKinsey Institute[[6]](#footnote-6), in 2014 the international flow of information generated US$2.8 trillion in value, 45 times more than in 2005, thus reflecting a migration of the trade and financial flow from the analogue to the digital world, a direct consequence of new models and business structures.

This cross-border data flow is not a specific phenomenon of OTTs. On the contrary, it reflects a new structure in the form of business practice which demands a holistic and transversal view of the public policy maker in terms of definition of its buoys.

Any restriction to these transactions, usually advertised as measures to improve data security, has harmful side effects, both for service providers and users, as well as negatively affecting the economic growth of countries, as pointed out by some studies[[7]](#footnote-7).

**4. What approaches can be considered in relation to OTTs to help create an environment in which all stakeholders can thrive and grow?**

As already explained in Question 1, we believe that the rapid development of the Internet and of the ICTs allowed the existence of an innovative digital environment, with positive socioeconomic impacts. We emphasize that this environment has been bringing benefits to telecommunication companies, as online platforms drive the demand for Internet access services, thereby increasing traffic and consequently the revenues of telecommunication service providers. A recent WIK[[8]](#footnote-8) study has found that consumers who use OTT services were more likely to buy new plans with higher bandwidth over the last two years, and the plans purchased are usually monthly plans, rather than pre-payment plans. The study concludes that to the extent that monthly paid plans include voice and SMS, it is not possible to notice a decrease in revenue by telecom companies, even with the growth in the use of OTT services.

The high competitiveness in this environment has made the telecommunications service companies themselves innovate and develop new products and services to conquer the consumer market. For example, in some more mature international markets, many carriers are opting for their own OTT Applications, or other comparable services. Some carriers are well placed to take advantage of integration and control over multi-tier operations in the vertical broadband value chain.

The enormous potential and dynamism of the market created by the Internet must be continuously protected and stimulated in order to promote competition among various types of companies and application providers, since it is in this context that the end-user benefits the most.

Hence, following the logic presented in Question 2, regulatory approaches should be made only after finding market failures, to ensure their full efficiency in adjusting previously identified specific problems, rather than making broad and mismatched regulations that will stifle innovation and suppress market competitiveness.

**5. How can OTT players and carriers better cooperate locally and internationally? Are there models of agreements/partnerships that could be developed?**

The rapid spread of the use of OTT applications, due to the diversity of products and services that facilitate the daily lives of users, has made traditional telecommunications companies realize the need to reinvent themselves and to adapt to the new business model of this global phenomenon. Carriers began to see in OTTs an opportunity to diversify their product catalog to become more competitive.

As a more explicit example of this recent reality, we can see partnerships that have been made between telecom companies and OTT Application providers for the creation of Internet data packages accompanied by OTT services free of charge or discounted for a certain period or even with the offer of applications that do not consume the Internet plan, commonly called "zero-rating"[[9]](#footnote-9). These partnerships bring benefits to OTT applications that seek visibility, to carriers that have their revenue increased, besides benefiting end-users who come across a vast array of ever-cheaper packages, choosing the one that best suit their needs.

Another possibility is agreements to establish programs for incubation and promotion of new technological projects, such as applications of Internet-based startups, particularly in less developed countries, in order to contribute to the socioeconomic development of local communities and to generate legitimate income sources for their citizens.

Several studies, including the WIK study[[10]](#footnote-10) already mentioned, recognize the benefits that affordable, high-quality connectivity brings to telecommunications providers, OTTs and more importantly to communities that have the opportunity to take advantage of this infrastructure and services. In addition to improving education and social engagement, partnerships like this enable communities to develop new and innovative business models and extend the economic benefits created by these business models to others in their community in a kind of virtuous circle.

Having said that, we believe that there is no model of agreement to be developed, since the freedom of carriers and OTTs to establish their own partnerships has shown positive results, especially to customers, including ease of access and payment.



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1. The document “Digital Trade and U.S. Trade Policy” (2017), made by the Congressional Research Service, presents how the digital revolution led by the Internet causes fundamental changes in global economy; not only with the new modes of communication and information sharing, but also with new business models and new sources of growth for the employment rate. The impact of the Internet on the global economy reached US$ 4.2 trillion by 2016. In addition, the GDP per year in developed countries is 5% to 9% and in developing countries 15% to 25% higher than it would be if there was no Internet: <https://fas.org/sgp/crs/misc/R44565.pdf>. [↑](#footnote-ref-1)
2. Specially regarding mobile devices, the main means of accessing the Internet in developing countries, according to the study "Cisco Visual Networking Index: Mobile Data and Internet Traffic, 2013-2018" (2017), which states that between 2013 and 2018, mobile data traffic will have an annual compound growth rate of about 61%: <http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white_paper_c11-520862.pdf>. [↑](#footnote-ref-2)
3. According to the Vodafone Group, in its Annual Report 2014, it is estimated that between 2013 and 2017 data revenues from the telecommunications sector grew by US$ 128 billion, while voice revenues decreased by US$ 38 billion during the same period:

   <https://www.vodafone.com/content/annualreport/annual_report14/downloads/market_overview.pdf>. [↑](#footnote-ref-3)
4. Christine Zhen-Wei Qiang and Carlo M. Rossotto with Kaoru Kimura, “Economic impacts of broadband,” in Information and communications for development 2009: Extending reach and increasing impact, World Bank, 2009. [↑](#footnote-ref-4)
5. Deloitte, *Value of connectivity: Economic and social benefits of expanding internet access,* February 2014: <https://www2.deloitte.com/content/dam/Deloitte/br/Documents/technology-media-telecommunications/ValorConectividade.pdf>. [↑](#footnote-ref-5)
6. McKinsey Global Institute, *Digital Globalization: The new era of global flows,* March 2016: <http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/digital-globalization-the-new-era-of-global-flows>. [↑](#footnote-ref-6)
7. Matthias Bauer et al., *The costs of data localization: Friendly fire on economic recovery*, ECIPE occasional Paper No. 3/2014, May 2014: <http://www.ecipe.org/app/uploads/2014/12/OCC32014__1.pdf>. [↑](#footnote-ref-7)
8. Wissenschaftliches Institut für Infrastruktur und Kommunikationsdienste (WIK). *OTT Services and Consumers’ Communication Behaviour in Germany*. Dr. René Arnold and Dr. Anna Schneider. (Available at <http://www.wik.org/fileadmin/Studien/2016/OTT_Study_ENG.pdf>). [↑](#footnote-ref-8)
9. Chapter 6 of the study “Report on OTT services”, conducted by the Body of European Regulators for Electronic Communications (BEREC), presents more details about partnerships carried out in Europe: <http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/5751-berec-report-on-ott-services> [↑](#footnote-ref-9)
10. Wissenschaftliches Institut für Infrastruktur und Kommunikationsdienste (WIK). *OTT Services and Consumers’ Communication Behaviour in Germany*. Dr. René Arnold and Dr. Anna Schneider. (Available at <http://www.wik.org/fileadmin/Studien/2016/OTT_Study_ENG.pdf>). [↑](#footnote-ref-10)