

Study on OTT Services

Introduction

An increased availability of wireless broadband access, technology advances and an ever-growing number of smartphone users (including users of handheld devices in general), have brought about significant changes in how we communicate today. This encouraged the development of open source platforms and applications enabling provision of various services via mobile networks and the public Internet network. These applications compete with similar services exploited by the conventional fixed and mobile network technologies. For instance, Skype, WhatsApp and other applications offering message and voice transmission over the Internet, are partially or fully comparable to the traditional voice and SMS transmission offered by the electronic communications operators (EC operators). Internet calls are far more cheaper than fixed or mobile telephone calls, in some cases even free, which makes these applications popular to use. Similar situation is with online video streaming and video on demand services (VoD; Netflix, YouTube), representing competition to the providers of media content distribution services. Generic name for these services is OTT: Over-the-top services.

There is no generally approved definition of OTT services. What is characteristic for this type of services is that they bypass the traditional operators' distribution channels. The majority of these services fall out of the general licensing regime and persons who provide them – the OTT providers, do not pay any fees for their activity. They do not own network, nor do they invest in the construction or maintenance of electronic communications networks (EC networks); however, their impact on the electronic communications market is considerable. OTT providers are global operators, offering applications accessible by all users of public Internet which operated by servers located anywhere in the world.

The emergence of OTT services has impacted the EC operators' business activities in a negative way, reducing their income from the traditional services. This situation represents a challenge for regulators, who are supposed to create operating rules for the OTT providers, so that all market players behave according to the same rules (registration obligation, payment of fees, participation in infrastructure funding etc.) and that user protection is provided (prescribed content, price, quality of service, safety etc).

Conclusion

OTT service regulation options

There are various opinions on which type of regulatory reform is needed.

According to [12], the traditional regulatory approach has proved to be unable to keep up the pace with the technological development.

In general, an OTT service policy regulation action could be resumed to the following [13]:

- prescribe roughly the same obligations for the OTT providers as those binding for the EC operators, namely the requirements regarding user protection and public safety (for

example: OTT applications must provide access to emergency service numbers, protection of personal data and lawful interception of communication);

- adopt regulation which would "relax" existing obligations, binding for the EC operators, and which could also be applied to the OTT providers (in other words: simplify the requirements and implement *ex-post* instead of *ex-ante* regulation, in order to encourage innovation);
- introduce separation between network (infrastructure) regulation and service regulation.

The majority of bodies dealing with regulatory aspects of the OTT providers' activities propose adoption of a common regulatory frame for online services as a whole. The study [13] carried out by the Directorate-General for Internal Policies of the Union contains several propositions aimed to establish equal conditions for the EC operators and OTT providers regarding their business activities:

- Traditional EC services should be divided into various categories, meaning that apart from electronic communications services and Internet access services, there should be a more detailed division, so that the new service categories could be classified;
- User protection should be guaranteed by all service providers, regardless of whether they be EC operators or OTT providers;
- Implementation of *ex-post* regulation should be proposed, in order to avoid misunderstanding and discrimination by the operators on one hand, and to enable innovations benefiting both consumers and companies on the other [14]. This measure is likely to ensure a healthy competition and enhance development in the area of electronic communications.

The purpose of regulatory initiatives is to motivate international bodies and organizations to act and cooperate on the establishment of OTT service regulation standards which could guarantee strong user protection. In regulating this market segment, it is extremely important to adopt a global or at least regional approach, taking into account the specific nature of these services.

In the document [15], a list of recommendations is given, which should be taken as a guideline by the NRAs in their regulating of the OTT services nationally:

- It is necessary to perform broadband network market analysis more often, in order to determine if the objectives of the regulation implementation are commercially viable (level of development-depending policy);
- Regulations governing the EC operators' network construction should be revised, to ensure the former's compatibility with market changes;
- Continuously monitor and determine if the provision of specific (free-of-charge) OTT services represents disloyal competition and harms the market, and if so, undertake appropriate measures;
- Find out if the lack of competition in the field of fixed broadband access hampers the functioning and development of the market, and if so, undertake appropriate steps to liberalize the market;
- Manage fair work requirements for existing EC operators and new OTT providers.

In view of very dynamic changes occurring in the electronic communications market, both EC operators and OTT providers, but also regulators, must break the current business concept and contribute each with appropriate and timely action.

In the document [16], adopted in July 2018 in Geneva, are listed the guidelines for taking future action by the regulators, in order to enable development of a reliable electronic communications infrastructure, access to digital services and user rights protection. In addition, Item II, referring to business and investment models supporting the digital transformation, confirms that it is necessary to promote the development of new digital services and applications and guarantee equal treatment of EC operators and OTT providers.

Regulation should be changed so it refers to all market players who earn an income from the provision of electronic communications services. That way, equal work conditions would be imposed on all participants in the electronic communications market. Since the issue here is a technology that transcends state borders and single regulators' jurisdictions, the establishing of a future efficient regulatory frame represents a great challenge. Currently, the OTT providers are under a minimum of regulatory restrictions.

The nature of these services (they are provided via the global Internet network) does not allow for the regulation governing this area to be approached nationally, but rather by means of reaching measures applicable on the global level (or at least on a regional level, such as the European level). Due to the OTT services, which are offered at very affordable prices or free of charge, the EC operators' income is declining. The OTT providers' income is generated not only through the OTT service provision, but also through marketing and sales, suggesting a strong connection between the telecommunications sector and other industries. This makes the said regulation extremely complicated and involves other institutions' and sectors' competences.

Proposition of further activities resulting from the study

- initiate global or at least regional (on the European level) OTT service regulation, to create a common position contributing to a single global approach;
- relax the EC operators' requirements and intensify those of the OTT providers (payment of selected fees), in order to distribute more evenly the burden of the EC infrastructure construction costs;
- in accordance with the Directive on personal data protection – oblige the OTT providers to fulfill the requirements prescribed in this Directive;
- classify the OTT services according to categories and adapt the regulation to each of the categories, given that a single regulatory approach is not applicable to such a vast spectrum of different services;
- consider the possibility of an Internet access service charge dependable on the quantity of transmitted data, so that some of the costs would be borne by the OTT providers.