

The legal aspects of the digitalisation

1. Introduction

The most determinative factor is the digitalisation on the worldwide infocommunication markets recently. The digitalisation is a technical solution, which ensures a more effective data transmission on the several networks. Generally the market drives this phenomenon but in special case (e.g. digital terrestrial television, detailed below) there is needed for direct regulatory intervention in favour of support of digital transition. So the legal aspects of the digitalisation could be divided into a direct and an indirect form of the regulatory intervention.

2. Indirect regulatory consequences of the digitalisation

Due to digitalisation the limits being between the several transmission platforms are demolished. The digitalisation ensures that the same content or signal could be sent on the different networks. Such erosion of the borders between the infocommunication networks results in another significant factor on the market: the convergence. So the digitalisation is the engine of the infocommunication convergence as well. It is necessity for additional regulation to promote this process from legal point of view. This is the indirect legal consequence of the digitalisation.

2.1. What is the infocommunication convergence?

The convergence is the market consequence of the technical digitalisation. Beyond to the technical basis and the market dimension there is also a regulatory factor of its. The infocommunication convergence so means the merger of the media, telecommunication and the information market from content, network, and terminal point of view. These are the core elements of the value chain of the infocommunication markets.

This model shows the consequence of the convergence according to which the limits being between the several markets are demolished and the same content could be transmitted on the different networks.

MARKET	REGULATION			MARKET	
	Sectors/ Values	Telecommunication	Information		Media
	Content	voice	data		audiovisual
	Network	Wire/wireless	fibre		CATV/terrestrial/satellite
	Terminal	Phone	PC		TV
TECHNOLOGY					

The following examples confirm this position. Due to digitalisation the voice services are available also on the IP and the cable networks (CATV), the access to the Internet is possible on the CATV and PSTN platforms, and the TV signals also are sent on the PSTN.

2.2. The indirect regulatory dimension of the infocommunication convergence

These examples indicate that the competition between the several sectors will strengthen. The task of the regulation is the support of this horizontal direction of the convergence across the uniform regulatory approach and additional regulatory intervention.

The horizontal effect requires **uniform regulatory approach**, which ensures that the same rules will be applied to all networks regardless the contents transmitted. The European regulatory framework for the electronic communication follows this principle in order to protect and facilitate the effective competition between the networks.

There is needed for the success of the horizontal effect of the convergence an **additional regulatory intervention** as well. Other words, there is not enough to promote the competition and demolish all barriers in front of the horizontal direction. It is necessity to regulate the new bottleneck arising from the digitalisation and the vertical integration between the content and the network level of the value chain. The competition law is not able to prevent and remedy this harmful effect of the vertical integrated entities in the digitalised environment. The competition law does not accept access to the network elements in any cases while the media law would require it from cultural diversity point of view. At the same time the media law does not concern the harmful effects of vertical integration between the content and network level, which results in bottlenecks. Therefore the European regulatory framework contains additional ex-ante regulation for the access issues of the digital television.

3. Direct regulation of the digitalisation

As I mentioned above there are such situations when the digitalisation requires direct regulatory intervention. Generally the market drives the digitalisation but e.g. in case of digital terrestrial broadcasting there is needed for direct support of regulation. Because the digital terrestrial broadcasting has public service character and requires frequencies. So the regulation must ensure the conditions of effective competition in course of the allocation of digital frequencies.

4. Summary

The digitalisation is determinative factor of the infocommunication markets. Generally the market drives it itself but in special case there is needed for additional regulation. So the legal consequences of the digitalisation are divided into two parts.

One of them is the direct form, which is arises from e.g. in case of the digital terrestrial broadcasting because it requires frequencies and has public service character.

On the other hand the digitalisation is the engine of the convergence because it demolishes the limits between the different networks. Namely, the same content will be transmitted on the several platforms. This phenomenon should be promoted by the regulation as well, which constitutes the indirect legal aspect of the digitalisation. This indirect regulation requires uniform approach of the all networks and additional regulation on the electronic communication to promote the access to network elements in the light of the cultural diversity.