

Digital switchover



Following an overview of European policies we examine the influence of the EU policies on the national media landscape and on the regulatory environment. We chose Hungary for this purpose. The main reason for choosing this country was that this is the media system we are the most familiar with. However, we are also convinced that the peculiarities of the Hungarian media and the ways it is regulated are very similar to other EU member states in Central Europe. Such peculiarities are:

- the relatively small size of the national media market (except Poland and Romania),
- the relatively low income of the population (when compared to the living standards of the EU 15 countries),
- the strong presence of pan-European and global media companies in almost all segments of the media value chain, and
- the unclear barriers between policy objectives and political objectives in regulation, complemented with often fierce political struggle between the political parties.

Against this background we believe that the developments on the Hungarian media landscape are also interesting from a Central European point of view.

In the past two years Hungary has introduced a series of regulatory measures with the purpose of accelerating digital transition. These measures are designed to achieve the goals defined by the European policymakers. However, both the media landscape they are designed to form, and the way they are executed gives them a national character.

In an analysis of how the European encouragement to go digital shapes the Hungarian media policy first we give an overview of the Hungarian audiovisual media sector. Here we provide a brief description of the most important television channels, their market positions and attitudes towards digitisation, the role and perspectives of public service broadcasting and the structure of programme delivery platforms and their expected development. Consumer attitudes are also analysed.

Following this, the possibilities of the national regulator are assessed. The Hungarian broadcasting regulation is extremely rigid: according to the Constitution (with a little simplification) the acceptance or the amendment of the Broadcasting Act needs a 2/3 majority of votes. On the one hand, this defends media legislation from *ad hoc* political intentions. On the other hand it requires an extremely high degree of political consensus for any change – even purely of technical nature. This burden of the necessity of qualified majority is not present in the telecoms regulation that leads to two conclusions. First: telecoms regulation seems to provide tools for the regulator much easier to use in the course of digital transition. Second: the digital switchover might place those questions of telecoms regulation into the focus of political attention that would otherwise be indifferent for politicians.

Providing this overview of the background of market and legal conditions, next we describe and evaluate the steps of the Hungarian regulator taken so far with the

The ICT sector is widely recognized as a driver of the modern economy. As such it receives a large amount of attention from the European institutions and continues to be subject of several initiatives. In this regard the first of such initiatives to be mentioned is the action plan *eEurope 2005: An information society for all*. The objective of this three years programme (ranging from 2002 to 2005) was “to provide a favourable environment for private investment and for the creation of new jobs, to boost productivity, to modernise public services, and to give everyone the opportunity to participate in the global information society” (*eEurope*, 2005, 2002, p. 2). The *eEurope 2005* action plan – as published in 2002 – explicitly referred to digital television among its proposed actions: Under the title “Digital switchover” one can read: “In order to speed up the transition to digital television, Member States should create transparency as far as the conditions for the envisaged switchover are concerned. Member States should publish by end 2003 their intentions regarding a possible switchover. These could include a road map, and an assessment of market conditions, and possibly a date for the closure of analogue terrestrial television broadcasting which would enable the recovery and refarming of frequencies. National switchover plans should also be an opportunity to demonstrate a platform-neutral approach to digital television, taking into account competing delivery mechanisms (primarily satellite, cable and terrestrial)” (*eEurope*, 2005, 2002, p. 18).

Taken into account that *eEurope 2005* was an action plan with focus on information society issues it is worth analysing why the preparing Commission found the issue of digital television important in this context. The action plan refers to digital television mostly as an interactive platform, and mentions this way of content delivery together with the third generation (3G) mobile infrastructure. This shows that the policy maker considered digital television primarily as a tool of multi-platform access, i.e. the possibility to connect to the Internet via other means than the PC. This reflects the anticipations attached to this new technology in the early years of this decade. However, the evolution of digital television in Europe made it clear that the television set – even if it is digital – will remain first and foremost the source of entertainment for viewers. Interactive services continue to appear only as ancillary products by the side of television programme packages. Given the lack of technical possibilities of direct and individual point-to-point communication in most of the cases, digital television remained marginal for the purpose of providing broadband Internet connection. As a consequence we may say that the *eEurope 2005* action plan probably overestimated the significance of digital television as a platform for alternative Internet connection. However, the first steps towards digital switchover have been taken by most of the EU member states upon the encouragement of this action plan.

i2010 – A European Information Society for growth and employment – the successor of *eEurope 2005* – continues to focus on creating a Single European Information Space. The *i2010* strategy also refers to digitisation, but in a slightly changed

context. eEurope 2005 emphasised the importance of digital television and connected it mainly to interactivity and multi-platform access to online content. On the contrary i2010 highlights the economic potential of the digital content with the view of its extremely valuable contribution to reaching the objectives of the Lisbon Strategy – i.e. to create economic growth and jobs (i2010, 2005, p. 4). The other main element underlining the significance of digitization is the digital dividend, the frequency spectrum that can be released after the switchover (i2010, 2005, p. 5–6).

But from the perspective of digital switchover the most significant feature of i2010 is the lack of mentioning it explicitly. While eEurope 2005 defined a particular community action in connection with digital switchover i2010 does not foresee any specific strategic step to be taken towards this objective.

The i2010 strategy was adopted in 2005 and by today more than half of its time-frame passed. The Commission's mid-term review on the implementation of the strategy also does not refer directly to the process of digital switchover (i2010 Mid-term review, 2008). It seems that by 2005 completing digital switchover ceased to be an objective for the higher strategic levels of EU policy but has remained an issue for the community policymakers.

THE LEVEL OF EU POLICY MEASURES

On the basis of action plan eEurope 2005 the European Commission provided guidelines for member states first in a communication published in September 2003 under the title *On the transition from analogue to digital broadcasting (from digital 'switchover' to analogue 'switch-off')* (Switchover Communication, 2003). In this communication the Commission referred to more efficient spectrum usage and to increased transmission possibilities as the main advantages of digital television when compared to the analogue way of broadcasting. According to the Commission's evaluation these characteristics lead to new services, wider consumer choice and enhanced competition.

Digital broadcasting will attract different consumer segments if it is associated with other services not available in analogue. Mobile reception is undoubtedly the most important of such features. Wide-screen and high definition are also referred to by the Commission's paper. Data and interactive services ("Information Society Services") also got emphasis in the Commission's approach. The document even refers to digital television as a possible transmitter of interactive public services and other e-government services.

In the Commission's view market players and consumer demand shall be the driving forces of digital switchover. The role of the state shall be secondary to them. State intervention can happen only if general interests are at stake, and market forces alone fail to deliver in terms of collective welfare. If the state decides to intervene than this intervention shall be transparent, justified, proportionate and timely. The

aim of these criteria is to minimise distorting effects of the state intervention to the operation of the market. Importantly, the Commission also emphasised that digital switchover cannot be regarded as equal with the introduction of digital terrestrial television (DTT). In this context digitisation is interpreted as a development occurring on all platforms of broadcast distribution. As a consequence, discriminatory treatment of market players or particular groups of consumers, or measures that are in contrary with the principle of technological neutrality are in contrary with Community Law unless properly justified.

In the Switchover Communication the Commission made it clear that policies aiming at promoting digital switchover fall definitively into the competences of the individual member states, and the corresponding measures have to be taken mostly by national authorities. The role of the Community is reduced to providing the general regulatory background and to the coordination of the national actions. Another possible area of EU intervention is promoting the harmonisation of eventual national labelling scheme for consumer equipment.

The Commission's communication reminded the member states of the importance of national switchover strategies and invited them to send their respective documents to the Commission by the end of 2003. The elaboration and the publication of the proposed national measures enabled the Commission to specify its intentions and expectations and to explicitly propose a deadline for analogue switchoff for whole Europe. In its second communication on digital switchover published in May 2005 (*On accelerating the transition from analogue to digital broadcasting*) (Second Switchover Communication, 2005) the Commission defined the beginning of 2012 as the switchover date for the Community. The definition of the date is based on the assumption that "by the beginning of 2010 the switchover process should be well advanced in the EU as a whole" (Second Switchover Communication, 2005, p. 3).

Since the second Commission paper on digital switchover in 2005 digital broadcasting has been subject of a communication only once more. However, the subject of the Commission communication published in November 2007 (*Reaping the full benefits of the digital dividend in Europe: A common approach to the use of the spectrum released by the digital switchover*) (Third Switchover Communication, 2007) is no longer the transition process itself, but one of its results, the digital dividend.

From the perspective of frequency planning and wireless communications digital switchover produces unprecedented increment. The frequency spectrum released as the direct result of the technological change is considerable both in terms of quantity and quality.

As regards quantity it is worth noting that digital compression systems allow the transmission of 6–8 standard digital television channels in a frequency previously used for the transmission of a single analogue channel. The efficiency of transmission is even expected to improve in the following years. It is also known that in the UK it is planned to provide 45 television channels via a digital network in a consid-

erably less spectrum than previously used for the equivalent of 7 analogue national television channels (Third Switchover Communication, 2007, p. 3).

As regards quality a corresponding note of the recent Commission communication states that “not all spectrum bands offer the same physical characteristics: higher frequencies do not carry signals as far, and do not penetrate buildings as easily, and lower frequencies have capacity limitations and create more interference. The spectrum of the digital dividend is particularly attractive because it is part of the ‘best’ spectrum located between 200 MHz and 1 GHz, offering an optimal balance between transmission capacity and distance coverage. Its good signal propagation characteristics entail less infrastructure to provide wider coverage, which reduces cost and improves service, particularly in ensuring communications inside buildings and reaching out to remote populations in rural areas” (Third Switchover Communication, 2007, p. 4).

From the communication it seems that the Commission has turned its attention towards the gains and the tasks emerging from the completion of the switchover process while showing less interest in the switchover process itself.

If we are looking for tendencies in the way questions of digital switchover are addressed in the strategic documents of the EU and in the policy pursued by the European commission we can draw the following conclusions regarding the role of the community.

In the first years of this decade digital television was considered as an important contributor to the information society goals of the Community. Documents from the first half of the decade emphasise the importance of interactive services provided via the digital broadcasting infrastructures and, in some cases, even regard digital television as an alternative platform of Internet access.

By 2005 the digital television began to reach considerable proportions of national audiences. It became clear that the habits of the viewers are basically conservative and change much slower than the technological possibilities. The take-up of interactive services appears to be much slower than anticipated, and it seems that viewers continue to expect, above all, linear television services even from digital broadcasting network operators. With the exception of video on demand (VOD) services and electronic programme guides (EPG) few interactive applications offered in the framework of digital broadcasting proved to be a definite success. It also turned out that we cannot expect digital terrestrial broadcasting to provide a serious alternative platform for broadband Internet access.

EU policies quickly reacted to these experiences. Introducing digital television ceased to be an objective explicitly mentioned in high-level EU strategies. Unlike action plan *eEurope 2005*, the *i2010* strategy does not even refer to digital switchover except the context of the releasing of frequencies for the purposes of wireless applications. In the policy documents of the European Commission the importance of the digital switchover gained a slightly changed reasoning. Its possible contribution to the building of the European information society is less frequently men-

- is the most appropriate instrument for achieving these objectives,
- is limited to the minimum necessary level, and
- does not unduly distort competition.

In general, state support schemes must satisfy the criteria of transparency, necessity, proportionality and technological neutrality.

By the end of 2008 the Commission has brought 14 decisions on various state support schemes granted with the aim of promoting digital switchover. Of these, 9 decisions were born as a result of a preliminary examination. Formal investigation procedures were closed by Commission decisions in 5 cases.

The first decision on the compatibility of a support measure promoting digital switchover was brought by the Commission in March 2005. The subject of the case was the Austrian Digitalisierungsfonds, a special fund for supporting digital switchover. The sources of the Digitalisierungsfonds were dedicated to support for DVB-T in Austria through pilot projects and research; and to subsidies to individuals for the purchase of set-top boxes for any platform to prevent the exclusion of low-income households from access to TV reception. As the result of the *ex ante* assessment the Commission found that the support scheme, notified by the Austrian authorities prior to its implementation, was in compliance with the community state aid rules (Decision Digitalisierungsfonds, 2005).

The next decision of major importance was the case of Berlin-Brandenburg, where the Commission established the presence of state aid in the process of the switchover not compatible with the community law (Decision Berlin-Brandenburg, 2006). The subject of the case was the subsidy provided by the media authority of Berlin-Brandenburg (MABB) to commercial broadcasters, for example RTL and ProSiebenSat.1, to meet part of their transmission costs via the DVB-T network launched in November 2002. In return, the broadcasters undertook to use the DVB-T network for at least 5 years. According to the Commission's evaluation this granted undue economic advantage to the company T-Systems, the operator of the DTT network. The Berlin-Brandenburg decision of November 2005 was certainly a turning point in the introduction of digital television in Europe. Until this negative decision the rapid and complete switchover in Berlin was widely considered among European media professionals as an obvious and unquestionable success.

In its decisions on the Austrian efforts and on the subsidy in Berlin the Commission not only assessed the measures upon which the inquiries were initiated, but also gave guidance with the view of orientating national regulators facing similar challenges in the course of the switchover process. In this regard, according to its statement the Commission views in particular favourably:

- „funding for the roll-out of a transmission network in areas where otherwise there would be insufficient TV coverage,
- financial compensation to public service broadcasters for the cost of broadcasting via all transmission platforms in order to reach the entire population, provided this forms part of the public service mandate,

comparison of the EU policies aiming at increasing broadband connectivity within the countries of the Community and the EU efforts to accelerate digital switchover. Broadband Internet connectivity and digital broadcasting both represent the latest developments of technology. Both infrastructures reach millions of households and the importance of both of them is increasing. Digitisation and the acceleration of broadband penetration have equally far reaching consequences for content production and for users' habits.

In a comparison, first we shall examine *the factors that underline the importance* of digital broadcasting and broadband connectivity for the Community. In this regard the value of both of the infrastructures in question is defined by their potential to contribute to the objectives of the Lisbon Strategy. Widespread broadband connectivity is a key element of creating the information society. Broadband is also important for small and medium enterprises. Widespread availability of broadband access to the Internet is also a definitive driver of the growth of the content production sector.

Digital broadcasting shares some of these characteristics, but not all. The multiplication of the possibilities for transmitting television channels and the introduction of new value added audiovisual services, such as video on demand, is also a powerful driver of the development of the content production sector. However, digital television as an infrastructure may contribute to information society purposes of the EU to a much lesser extent than broadband.

If we consider *the level where corresponding policy objectives are formulated* we may note that increasing broadband connectivity appears even at the level of the Lisbon Strategy, and provides a crucial element of the i2010 strategy.

On the other hand following the expiry of the eEurope 2005 initiative the high-level strategic documents of the EU no longer refer directly or substantially to digital switchover in broadcasting. As this could be seen above, the EU objectives in this regard are outlined at the level of various Commission communications.

Both broadband connectivity and digitization of broadcasting falls primarily into the competence of the individual member states. This means that corresponding measures shall be made at the national level. The *role of the community* is limited to provide a favourable legal environment and to a series of policy efforts aiming to make the progress in member states transparent and comparable.

As a direct consequence of the sharing of responsibilities between the EU and its member states, as outlined above, both causes are promoted definitively by the means of policy tools at the community level. In this regard member states have neither any legal obligation nor pre-fixed targets of any kind to perform. Even the 2012 switchover date for broadcasting by the Commission lacks any legal binding force. However, the EU also dedicated and continues to dedicate substantial resources from the structural funds with the prior purpose to boost broadband Internet connectivity. For the digital switchover of broadcasting no similar resources have been made available for member states so far.

Brandenburg media authority for the purposes of the quick accomplishment of the analogue switch off unlawful has made many of the member states hesitant. So, in objective terms the EU incentive to boost digital transition can be qualified as moderate.

However, it depends very much on the actual circumstances at the level of member states how they translate this relatively soft pressure for their own policy objectives.

THE HUNGARIAN MEDIA LANDSCAPE – THE BROADCASTERS

Hungary is a relatively small media market with approximately 3.8 million households. The other definitive characteristic of the Hungarian television broadcasting landscape is the almost total lack of the regional and local level. Although there are a number of local television channels they cannot be considered as a significant part of the media market, both in terms of ratings and revenues. As to the different actors of the Hungarian media landscape their three main types can be distinguished:

1. In market terms the most important broadcasters are M-RTL Zrt. and MTM-SBS Zrt, the operators of the two *national terrestrial television channels* under the brands of “RTL-Klub” and “Tv2”. Both of them are subsidiaries of major pan-European media enterprises: M-RTL is a part of the RTL-group, MTM-SBS has recently been acquired by the Pro7-Sat1 holding. They began to provide their programmes right after the creation of the dual media system in 1997 at the same time. Their licences (more precisely: their broadcasting contracts) are valid until the summer of 2012.

The position of the two national commercial terrestrial channels is ideal in terms of profitability. According to the recently published draft National Audiovisual Media Strategy their aggregated audience share was 61.6% in 2006. On this basis they were able to reach 91.5% of the total television advertising revenues available on the Hungarian market (PMO, 2007, Vol. II, p. 108). This performance makes them the most powerful actors of the Hungarian media market. As a consequence of their ideal position these two broadcasters are disinterested in any structural change of the market within the term of validity of their licences.

However such structural changes seem to be unstoppable. In the past years these broadcasters suffered – and continue to suffer – a stable and ever growing decline of their audience shares. More and more viewers turn to the content offered by thematic channels and on-demand services available via the Internet. As a consequence M-RTL began to create bridgeheads in the thematic segment by forming partnerships with thematic television channels, while MTM-SBS seems to respond later to the challenge.

2. The second most significant group of television broadcasters in Hungary is *the segment of thematic channels*. There are approximately 60 television channels avail-

of public service broadcasters, for example with new and exclusive digital content, could also provide a significant support for the process of digitisation itself. However, as a consequence of the legal requirements of the EU related to their financing from state resources, public service broadcasters are not free to define their activities. Unless the state does not provide them with a clear set of objectives their state support cannot be regarded compatible with the EU competition law. As a consequence the role public service televisions can play in the process of switchover is strongly depending on the performance of the state as regulator.

As from this short overview can be seen there are no potent actors in the broadcasting segment of the Hungarian media market that would have both the means and the intention to support the process of digital switchover. The public service television companies are not in the position to decide their role to play in this process by themselves. The two largest commercial broadcasters are interested in slowing down the changes of the media landscape. There are only a few cable and satellite channels that could clearly and directly benefit from a rapid switchover, but their ability to form the market is strongly limited.

As to the attitudes of broadcasters towards the switchover, attention should also be paid to the fact that they operate as parts of larger Central-European or pan-European groups of media enterprises. The circumstances of the Hungarian media market therefore are not the only starting points in planning their strategies. Conclusions driven from the analysis of the national circumstances may be overwritten by the common corporate objectives.

THE HUNGARIAN MEDIA LANDSCAPE – PLATFORMS OF CONTENT DELIVERY

The structure of platforms for content delivery is of crucial importance from the point of view of the digital switchover and, more importantly, from the analogue switch-off. It is an unconditional obligation for the state to grant free access to the programmes of the publicly financed public service channels. Today this obligation is fulfilled by the means of analogue terrestrial broadcasting. In the case of subscribers of cable and satellite broadcast distribution services the state has only a limited role to play. As regards the terrestrial platform the state must provide a proper substitute of analogue broadcast diffusion.

Digital terrestrial television is widely considered as this kind of substitute; however satellite may also play such a role. In this sense, the task for the state is to find an operator, who is ready to provide a nationwide coverage for – at least – the public service television channels that remains freely available for the viewers. If there is a considerable mass of audience that can be reached by this service then the operators will find it attractive and will be ready to make the necessary investments for accelerating the switchover. So it is finally the population that regards analogue terrestrial broadcasting as their principal means reception that will determine whether the role of the operator of this “basic” digital service will be attractive or

not from the commercial point of view. This determines the way the platform structure shall be analysed for the point of view of the digital switchover.

In Hungary the role of the different broadcast distribution platforms in 2007 may be described as follows (Figure 1).

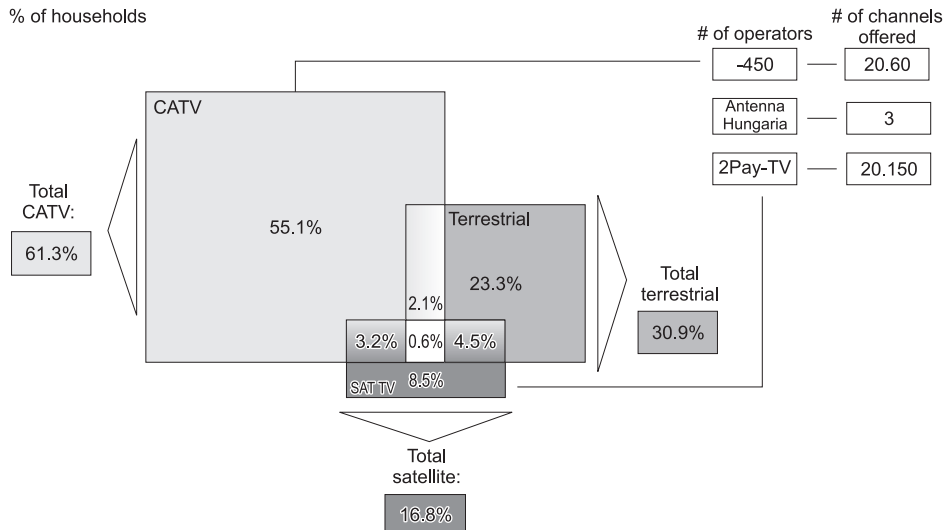


Figure 1. Broadcast distribution platforms in Hungary

Source: Telkes/Colosseum/own estimation.

On the diagram it can be seen that the dominant platform in Hungary is cable with its constant share of 61.3% of households. The population depending exclusively on terrestrial reception is only 23.3% of the Hungarian households. It is important to note that even this proportion of the terrestrial mode is constantly declining. This is the result of the freshly began competition that was brought by the recent developments in the satellite platform.

Until the summer of 2005 UPC Direct was the only satellite programme distributor which offered services in Hungary. UPC Direct is a subsidiary of the UPC-UGC group that is also the owner of the largest Hungarian cable operator company. UPC Direct established its prices well over the average price applied by cable operators. As a result its satellite programme distribution service was primarily a possibility for consumers who did not have the technical opportunity to connect to any cable network to have a multi-channel programme package, rather than a real substitute of cable television services. In this construction the one player satellite segment did not really compete with cable broadcast distributors. In 2005 a new satellite DTH operator entered the Hungarian market under the brand “DigiTv”. Digi Tv quickly forced UPC Direct to change its pricing policy and charge much less the subscribers for its services. This triggered the real competition between the various programme distribution platforms.

As a result of the declining prices more and more households opt for multichannel reception mode whatsoever. Consequently the share of the terrestrial reception is ever decreasing. According to a model for the dynamics of the changes in the platform structure prepared in 2006 during the elaboration of the National Strategy for Digital Switchover (PMO, 2006) we may look into the future changes in this segment with the following expectations (Figure 2).

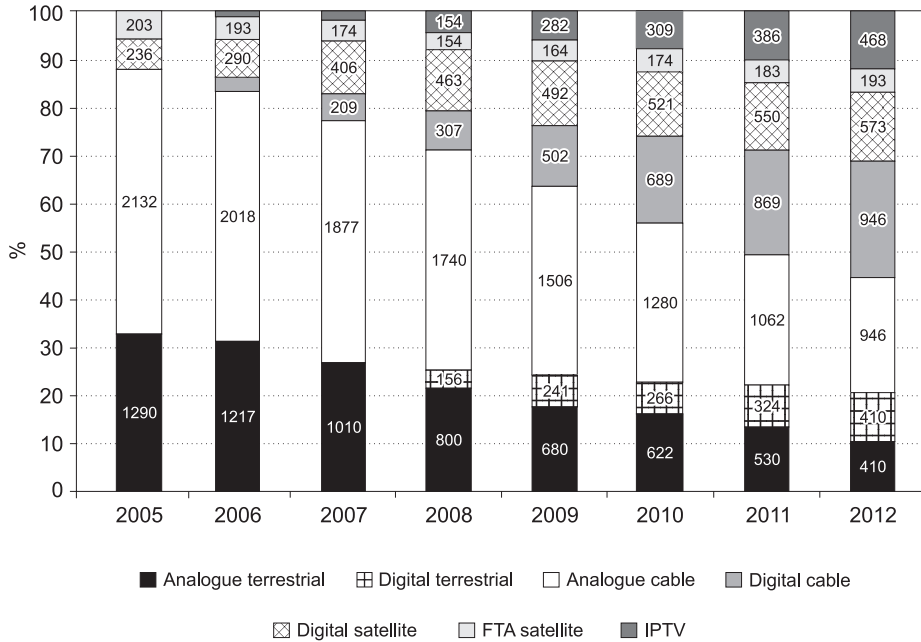


Figure 2. Expected changes in the Hungarian broadcast distribution platform structure
 Source: (PMO, 2006, p. 2).

If we evaluate these developments from the perspective of the digital switchover we may come to the following conclusions:

The increasing competition decreases the significance of the analogue terrestrial reception mode. As a consequence, the market segment of those households depending exclusively on terrestrial reception becomes less and less valuable for market players.

On the other hand, the obligation of the state to secure free reception of – at least – the public service programmes remains absolutely binding. The state has to provide a free platform for citizens unconditionally, by whatever technical means.

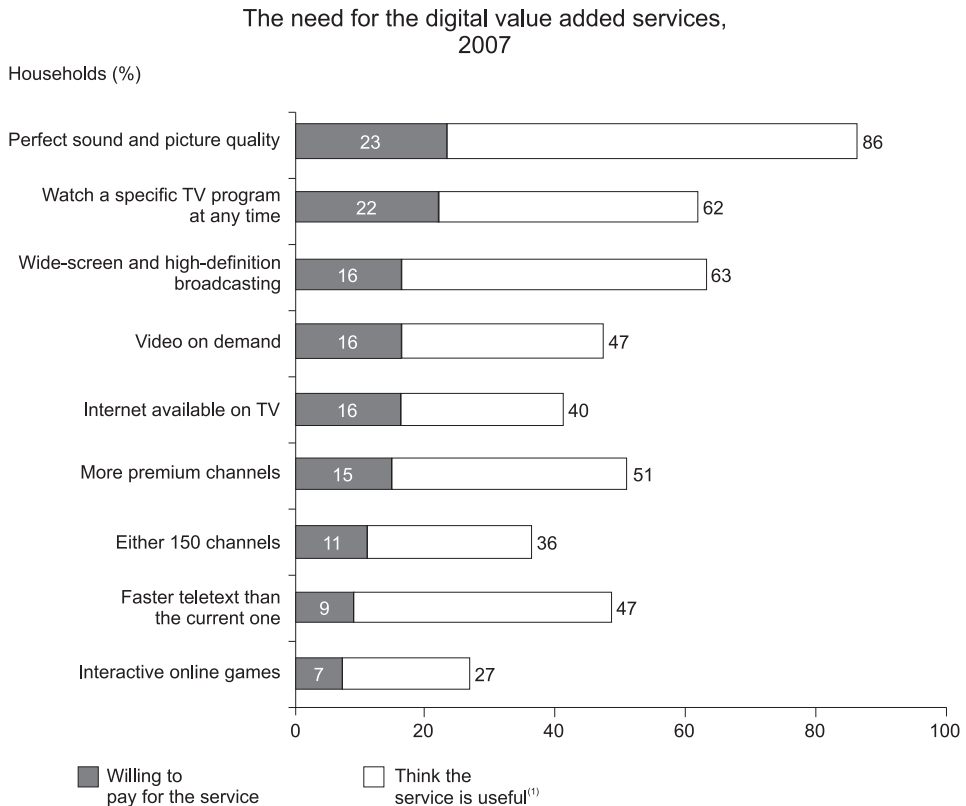
If market value of the asset to perform this state obligation (i.e. the value of the frequencies for broadcasting purposes) is constantly decreasing, but the task to be solved continues to require the same level of resources the state has no other option than to auction these frequencies as quickly as possible.

THE HUNGARIAN MEDIA LANDSCAPE – THE VIEWERS’ EXPECTATIONS

Viewers may change to digital reception mode for two reasons:

- because they regard digital services as richer than the analogue and they are ready to pay for it, or
- because they would change their television set otherwise, and if they do so, they do not want to have their new set already outdated by technological reasons.

To evaluate the consumers’ expectations it is necessary to assess how strongly these motivations are present among them. In 2007 the National Communications Authority (NHH) conducted an empirical research to get a clear picture in this sense. According to its results the expectations concerning digital value added services can be summarised as on the diagram below (Figure 3).



(1) – at least 3 in a range of 1–5

Figure 3. Consumer evaluation of the benefits of digital switchover

Source: NHH.

These results show that the need for digital added value services is moderate among the Hungarian population. Seemingly, the public wishes to benefit from

improvement much more in programming content than in the technical modalities of programme transmission.

As to the natural pace by which consumers change their television sets the NHH found the following results (Figure 4).

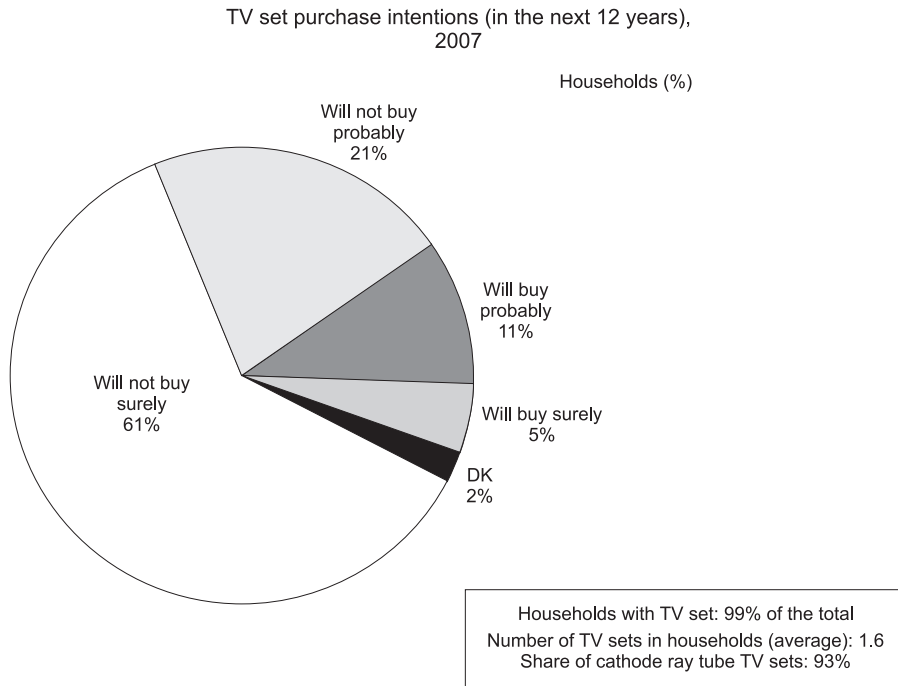


Figure 4. The natural pace of change of consumer equipments

Source: NHH.

The general experience shows that it is not an uncommon case that a television set continues to stay in use in a Hungarian household for more than 10 years. Consequently the natural pace of change of consumer equipment is also unlikely to serve as a powerful driver for switchover.

The available data shows that consumer demand for digital switchover is at a very low level. This means that neither the interested market players nor the state can expect the fast take-up of digital television services unless considerable efforts are being taken to stimulate the interest of the general public towards the new services.

THE REGULATORY BACKGROUND

From the legal perspective digital switchover is influenced primarily by media regulation and telecoms regulation. It is a question of strategic importance for the state to decide by which of these regulatory logics it wants to address the issue of digital switchover.

The question is not unique in a sense. There are other regulatory issues also seeming to be important for both the telecom and for the media regulator. Such regulatory issues are the so called “must carry” regulation, regulation of the wholesale market of programme distribution (connections between broadcasters and programme distributors, formerly known in the terminology of the European Commission as “market 18”) or questions of vertical integration. In this regard the question of which way of regulation to choose to address digital switchover is just one of the problems in demarcating the two, sometimes conflicting territories of law.

The decision needs above all the evaluation of the regulatory tools provided by the two different set of norms and to assess their efficiency from the point of view of the digital switchover.

1. The most important characteristic of media regulation is that it considers viewers as citizens. The central categories of media regulation are freedom of expression, the right to receive impartial information, protection of minors, protection of human dignity, protection of consumer’s interests against misleading commercial communication practices, cultural diversity, promotion of national cultural identity.

These values are safeguarded by media regulation in essentially two ways. The first is a set of norms providing traditional “command and control” type regulation in the strictest sense of the word. These norms cover for example the questions of advertising, quotas for European works and (in some countries of the EU) works linked to the national language and culture, or prohibitions with regard to the healthy development of minors.

The other definitive tool of media regulation is establishing and maintaining the system of public service broadcasting. This enables the society to directly satisfy its democratic and cultural needs in the system of broadcasting and to set up a benchmark of expected quality for the commercial segment.

2. Telecommunication regulation perceives viewers first and foremost as consumers. The whole legal regime is based upon promoting competition in the telecommunications sector as its core value. This is complemented by protecting consumer’s rights.

The toolkit of telecommunications regulation comprises the *ex ante* evaluation of telecommunications markets and defining remedies in case such evaluation reveals any structural failure. Therefore the application of telecommunications law presupposes the detailed knowledge of the market mechanisms by the regulator.

In addition these general characteristics of the two regulatory logics – valid in all EU countries – the following national characteristics shall also to be taken into consideration:

According to § 61. (4) of the Hungarian constitution “A majority of two-thirds of the votes of the Members of Parliament present is required to pass the law on the supervision of public radio, television and the public news agency, as well as the appointment of the directors thereof, on the licensing of commercial radio and

television, and on the prevention of monopolies in the media sector.” This means that legislation concerning material questions of the media requires not just the determination of the governing political forces, but a broad political consensus. This results that legislation concerning issues of broadcasting is extremely rare in the Hungarian practice. The backbone of the Hungarian media regulation is Act I of 1996 on Radio and Television Broadcasting (Broadcasting Act). This act, although already 12 years old, has been amended only once since its adoption in an extensive manner. At this occasion, in 2002, the reason was the necessity of harmonising the act to fit to the EU law before the 2004 accession.

On the contrary Act C of 2003 on Telecommunications (Telecommunications Act, 2003) required only a simple majority to adopt. As a consequence telecommunications regulation provides a much more flexible tool for regulation.

From the overview of the European regulatory objectives and the attitudes of the relevant stakeholders in Hungary as given above, it is clear that there are to main incentives pushing the national policymakers towards accelerating digital switchover:

- the pressure from the EU and its institutions, that is mainly formulated on economic grounds (boosting the performance of the audiovisual sector and releasing a segment of premium frequencies), and
- the pressure to act swiftly because of the ever declining market value of the possibilities to provide free to air digital television programme distribution services as a consequence of the rapidly growing share of satellite distribution.

It is also clear that both of these drivers can be identified as challenges essentially of economic nature. As a result Telecommunications law seems to provide the proper tools for the state to handle it. This general recognition is also confirmed by the rigid character of media regulation as the result of its constitutional constraints.

THE NATIONAL REGULATION OF DIGITAL SWITCHOVER

In line with the logic outlined above the Hungarian regulator chose the toolkit of telecommunications law to provide the background of its efforts to promote the process of digital switchover. The basic set of rules regulating the switchover process is provided by Act LXXIV of 2007 on the Rules of Broadcast Transmission and the Digital Switchover (Digital Switchover Act, 2007). The background of this act (definitions, procedures of the authority) is provided by the Telecommunications Act (2003).

The acceptance of the Digital Switchover Act was preceded by a series of decisions by the competent authorities. The issue of digital switchover reached the level of government policy in spring 2005 by the adoption of Government Decision 1021/2005 (III. 10) on the Prior Governmental Tasks in relation with the digital switchover of the terrestrial broadcasting. This decision was clearly a response to the communication of the European Commission *On the transition from analogue*

to digital broadcasting (from digital 'switchover' to analogue 'switch-off') requesting the member states to publish their intentions and strategies for their role in the process of digitisation. The Government Decision called the competent ministry (then the Ministry of Informatics and Telecommunications)

- to prepare the basic elements of the necessary related changes of the legal environment,

- to set up an intergovernmental commission in order to coordinate the involvement of the state in the digitisation, and

- to prepare a report for the Government on various (social, business, competition, frequency planning, etc.) aspects of the digitisation of the terrestrial platform with the involvement of the National Radio and Television Commission (ORTT).

By December 2005 the Ministry of Informatics and Telecommunications prepared a bill (Bill No. T-1981) "on the amendment of Act C. of 2003 on Telecommunications in relation with the Digital Switchover and on the Intermediary Rules of Digital Switchover." While the bill was initially welcomed by the parliamentary factions, in the course of its adoption a series of initiatives have substantially changed its content. As a result the proposing ministry decided to withdraw it.

In the course of 2006 the Ministry of Informatics and Telecommunications has prepared a National Strategy for Digital Switchover. However, in the summer of that year, as a result of the general elections held in April and the subsequent changes in the structure of the Government, the Ministry of Informatics and Telecommunications was integrated into the Ministry of Economics, while the issue of digital switchover was inherited by the Prime Ministers' Office (PMO). As a consequence the strategy was finalised and submitted to public consultation by the PMO.

The finalised strategy, that was raised to the level of official policy by Government Decision No. 1014/2007 (III. 13), was a turning point in the regulatory approach in several aspects:

- While Government Decision 1021/2005 (III. 10), as adopted a year earlier, interpreted the process of digital switchover strictly in the context of the terrestrial platform, the adopted and finalised strategy examined questions of digitisation with the view of the whole segment of broadcast transmission and retransmission. This can be attributed to the influence of the Commission decisions concerning the Austrian Digitalisierungsfonds and the state aid in Berlin-Brandenburg, emphasising the need for platform and technological neutrality.

- The strategy was the instrument that ultimately decided the dilemma whether to address the switchover as an issue for media regulation or to place it into the domain of telecommunications regulation. The approach of the strategy was clearly an approach originated in the regulation of the telecoms sector.

- The finalised strategy put an end to another regulatory dilemma. One of the basic questions in the switchover process was whether to adopt a model based on a "strong" or on a "weak" position of the terrestrial multiplex operator. This regulatory issue is strongly linked to the question mentioned under the previous bullet point.

If it is the state that directly chooses the broadcasters and providers of other audiovisual services (the model of the “weak” multiplex operator) then it assumes direct responsibility for content on the terrestrial network. This naturally leads to the primacy of the media regulation approach. If, beyond the basic standards and the “must carry” rules, the state does not take a direct role in issues of content it will be the “strong” terrestrial multiplex operator who decides on the composition of the bouquet of services transmitted via its programme distribution network. In the latter case telecommunication regulation tools can be expected to perform better in regulating the programme distribution market.

Consistently with its telecommunications approach the strategy adopted the “strong multiplex operator” concept.

If we examine the connection between the EU and national policies it is the structure of objectives and indicators of the strategy that tells the most about this. The DSS outlines the following general objectives and indicators of success.

Table 1. Strategic objectives and indicators for the Hungarian switchover process

Areas of intervention	Priorities	Specific objectives	Indicators
Program provisions	strengthening of media pluralism	switching off analogue terrestrial broadcasting should not mean that popular free channels (m1, RTL Klub, tv2) will be lost	the percentage of households currently accessing analogue supply
		availability and use of multi-channel (10+) television services should dynamically increase as a result of digitalisation	DTV coverage and penetration
		public service radio must be granted a broadcasting opportunity on the DVB-T multiplex and an independent DAB multiplex access	digital coverage of public service radio channels
	digital content and service development	promotion of the digitalisation of already existing television and radio programming contents	digitalised content per total content to be digitalised
development of interactive DTV services of high added value		number of interactive services and set-top boxes	
Broadcasting	sustainable and effective competition between the broadcasting networks	the percentage of households using digital broadcasting service should reach the level of the following EU15 benchmark countries: Portugal, Ireland, Finland, Germany, Denmark, Sweden	DTV coverage and penetration
		frequencies and tendering system ensuring a balanced switchover and favourable long term business opportunities for digital television and radio broadcasting	number and coverage of frequencies available for digital television (fixed, portable, mobile) and radio
		promotion of effective compression procedures	number of MPEG4-compatible end-user devices

Table 1, cont.

		gradual switch-off of analogue terrestrial services by 2012 in order to free the frequencies currently used for analogue broadcasting	
		introduction of T-DAB service	
End-users	improving consumer awareness, providing information on digital television opportunities	presentation of the advantages of digital television and radio services preparation of households for the switching off of analogue terrestrial services, and the effective communication of the opportunities, benefits and costs of changing the reception mode	number and percentage of households with analogue terrestrial reception only
	improving the access opportunities of disadvantaged groups	provision of end-user devices providing access to public service contents for those who cannot afford to purchase such a device	number and percentage of households with subsidized digital access devices

Source: (PMO 2006, p. 8).

As it can be seen the detailed objectives and the indicators of success, as outlined by the DSS, the pressure coming from the EU to go digital is translated by the strategy into national regulatory objectives that are valid even in themselves.

As to the implementation of these regulatory objectives the strategy outlines the following set of activities (Figure 5).

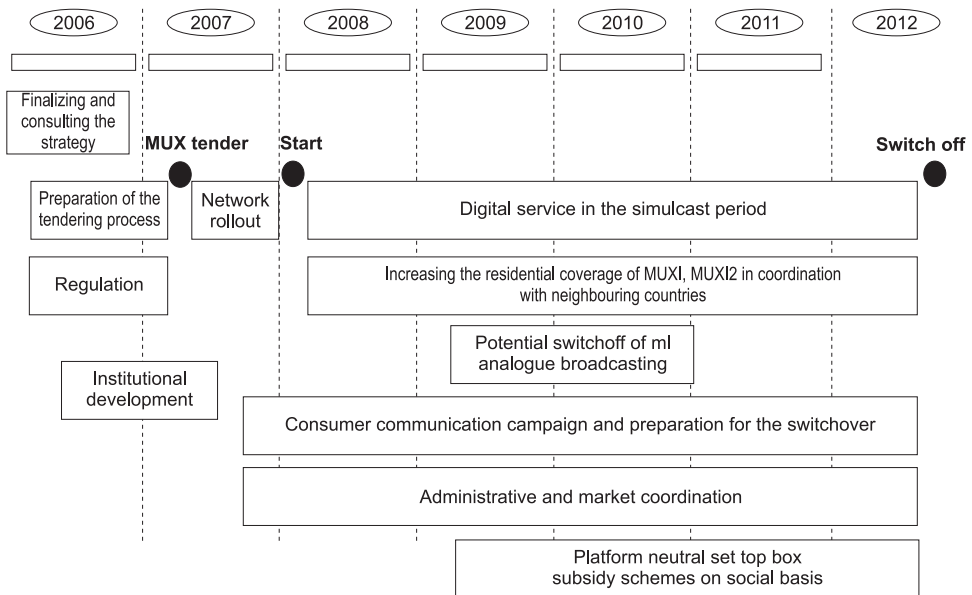


Figure 5. Timeline for proposed regulatory activities

Source: (PMO 2006, p. 13).

During the preparation and finalisation of the state strategy competition began to reach a new level on the broadcast distribution market. As we previously referred to it, the appearance of DigiTv as a new competing satellite platform finally led to the continuous decrease of the audience share of the terrestrial platform. As a consequence of ever intensifying competition on the multi-channel programme distribution market, the main goal of the state became to start building up the terrestrial digital platform by the earliest possible time. This required the quick preparation and adoption of the act that would create the procedural rules of the tendering process for operating the terrestrial multiplexes, clarify the legal status of the multiplex operator and define its relationship with the content providers.

The corresponding act, the Digital Switchover Act, was adopted in June 2007. While it forms the part of telecommunications regulation some of its crucial elements fall under the scope of the constitutional requirement of qualified majority at adaptation. Consequently, beyond a set of rules in compliance with the DSS, the act contains also some elements of political compromise. One of such compromises is the preferred treatment of at least two “television program providers broadcasting news or programs of public interest serving the information of citizens and operating for at least four years at the time of the entry into force of [the Digital Switchover – addition by the author] Act” (Digital Switchover Act 2007, § 39). This preferential treatment is an obligation of the platform operator to conclude a contract on the offer of the broadcasters concerned.

Another area of political compromises was the procedure of the tender for the right to provide programme distribution services on the terrestrial platform and the use of the frequencies allocated for this purpose. The procedure itself is conducted by the NHH, the regulatory authority for telecommunications. However, its activity is limited strictly to a kind of administrative role:

- The NHH is not free in defining the conditions of the tender in any way. The Digital Switchover Act provides the material elements of the call for the tender in an extensive and compulsory manner.

- In the tendering procedure the activities of NHH are supervised by an *ad hoc* committee set up by the Parliament. The preliminary and final approval of the documentation of the call for tenders, the decision concerning the validity of the application procedure or the individual offers submitted and the decision on the winning bid of the tender are both issues that require the consent of the *ad hoc* parliamentary committee.

As a consequence the responsibility in the process of tendering the terrestrial multiplexes is shared by the NHH and the Parliament. While the latter maintains a direct and full control of the procedure and pursues its media policy objectives, the telecommunications regulator remains responsible for the technical, administrative and professional aspects of the tender.

This direct and substantial involvement of the parliamentary *ad hoc* committee into the tendering process leaves no space to ORTT, the media authority in the

process. Despite its presence in a low level committee preparing the draft decisions of the NHH in the tender the role of ORTT is almost nonexistent in this context. The explanation for that can be found in the structure itself and in previous decisions made by the media authority:

– As regards the structural side the ORTT is also supervised by the Parliament. In this respect the establishment of the *ad hoc* parliamentary committee as mentioned above can be regarded in a certain sense as the duplication of the media authority for this specific task.

– As to the practice of the media authority in questions of digital switchover an important decision of the ORTT made in 2005 shall be recalled. That time M-RTL and MTM-SBS successfully lobbied for the renewal of their broadcasting licences with unchanged conditions for a further period of 5 years from its original date of expiry in 2007. With this decision the two national commercial broadcasters, clearly disinterested in quick digital switchover, remained the most powerful players of the Hungarian media market. This decision of the ORTT attracted criticism from almost all the relevant stakeholders. The unanimous evaluation of this step was that the ORTT – together with the two broadcasters – is not interested in the acceleration of digital switchover. As a consequence the ORTT got isolated in the process of strategic planning and lost its leading role in media policy.

On the basis of the Digital Switchover Act the NHH published the call for tenders for operating the terrestrial digital television platform. Another call was published for the introduction of DAB radio services by operating such a platform for radios. Both of the tenders concerned national services. There were two applicants for each of the possibilities. As regards DTT AH and Digital Broadcasting, a newly formed company presented concurring bids. Concerning DAB the national transmission company Antenna Hungaria (AH) competed with the offer of the Hungarian public service radio company, Magyar Rádió.

Both of the tenders were won by AH. As the closing accord of the procedures, in September 2008, the representatives of the NHH and AH signed the respective agreements on the launch of commercial DTT and DAB services. Although these decisions and the service contracts were challenged by the Magyar Rádió and by a cable company (the latter claiming that the procedure was in breach of the principle of technological neutrality) the competent court (finally the Metropolitan Court of Appeal) has rejected the corresponding appeals by November 2008. As a consequence, no legal obstacle remained in the way of the actual introduction of digital terrestrial broadcasting services in Hungary.

The DTT service was launched at the end of 2008. AH has chosen the MPEG4 standard for the purposes of broadcasting. The initial area of reception of the service covers approximately 60% of the Hungarian population. According to its commitments the coverage of the DTT service will reach 88% by the end of 2009.

In the contract concluded with NHH, AH also undertook to launch mobile television services. By the end of 2008 this was expected to cover 16% of the Hungarian

population. For 2012 this proportion is established at 50%, but subject to the market conditions coverage may also reach 70–80% by that time.

The switch-off of the analogue television network is scheduled for 2011 when the DTT is expected to have universal coverage.

Digital radio broadcasting services are also to be launched by the end of this year. The initial coverage will be extended to an approximately 30% of the population. Concerning DAB the reach of the national coverage is scheduled by 2013–2014.

CONCLUSIONS

We began our analysis by highlighting the multiple natures of the media. Just as the media itself, the process of digital switchover can also be interpreted from at least three different perspectives.

– From the *economic* point of view: digitisation is a possibility to boost competition and to eliminate traditional monopolies in the programme distribution sector. Beyond this purpose digital switchover is also a challenge for the state that owns the terrestrial frequencies: it has to find ways to utilize these common goods with the highest available rate of return.

– From the *cultural* aspect the digital switchover may create the premises of a richer media that represents a much higher level of cultural diversity than ever anticipated.

– From the *social* point of view digital switchover may create simply more space for different ideas. This may lead to granting a wider perspective of individuals and provide them with the means of forming better founded decisions in the democratic processes. However, digitisation also bears the risk of a segmented society with entirely different worlds of entertainment and information for the different social groups.

Having defined this triplet of significance of the digital switchover it seems rather strange how the economic way of thinking about this process overgrew the other two points of views. It seems that both at the European and national level of thinking about the switchover the economic is the dominant logic. Documents addressing the phenomenon of digital switchover often mention – as a sort of obligatory exercise – some social and cultural aspects. However the language decision-makers use comes, almost exclusively from the economics.

On behalf of the European Community we may identify two main drivers of regulatory measures promoting digital switchover:

1. The digital transmission mode multiplies the capacities of programme distribution networks, thus it creates a number of market opportunities for the content sector. Consequently, the digital switchover may substantially contribute to economic growth in the audiovisual sector and the creation of jobs therein.

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