

Ludányi, Arnold; Belényesi, Pál

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Future trends of television

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22nd European Regional ITS Conference
Budapest, 18-21 September, 2011

Arnold Ludányi – Pál Belényesi

Future trends of Television

Television related attitudes are changing rapidly. How are the broadcasters, digital content makers and involved market players planning to pick up the rhythm? What are the regulatory and business challenges that they have to face? The piece addresses these issues.

Keywords: TV, audiovisual, regulation, business

aludanyi@inext.hu

bp@brusselsconsulting.hu

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Introduction

The business model of the television industry is undergoing fundamental transformation. The primary challenges are that television broadcasters are often unable to guarantee advertisers large audiences with desirable demographic statistics, and that pay TV service providers cannot always find the way to monetize new high value added services.

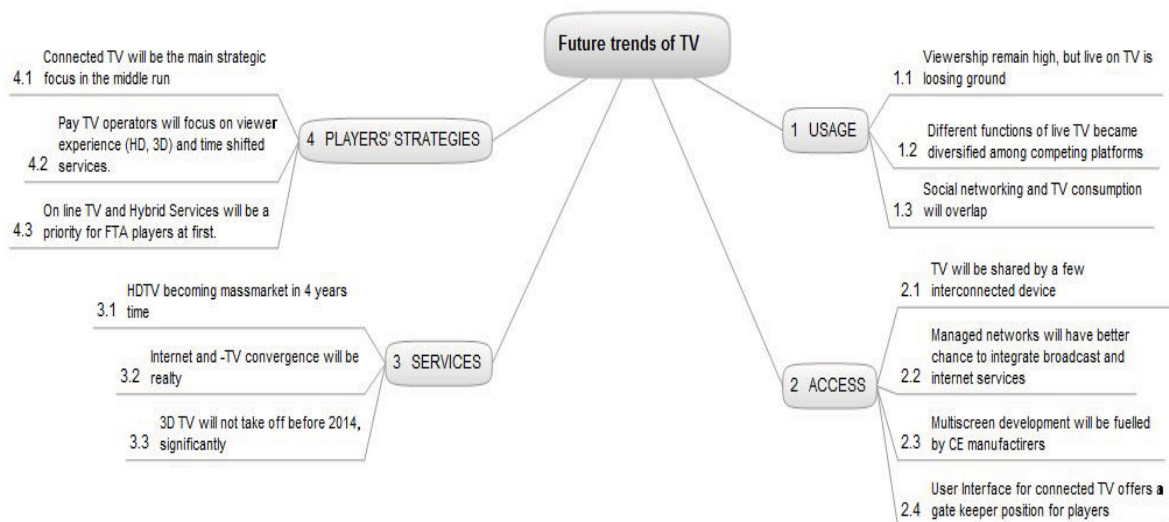
At the same time television remains the most frequently used media in our daily lives. TV has a specific social role in Europe, „[...] *most homes having a television and the average European watching up to 4 hours a day*”.¹ The importance of a well designed regulatory concept is unquestionable on the European level.

In the following we will briefly scan the main drives and trends of these changes and will give a snapshot about the European level regulatory consequences ahead.

Future trends of television

Future trends of television could be examined at the following different levels:

- usage patterns
- access conditions
- service development



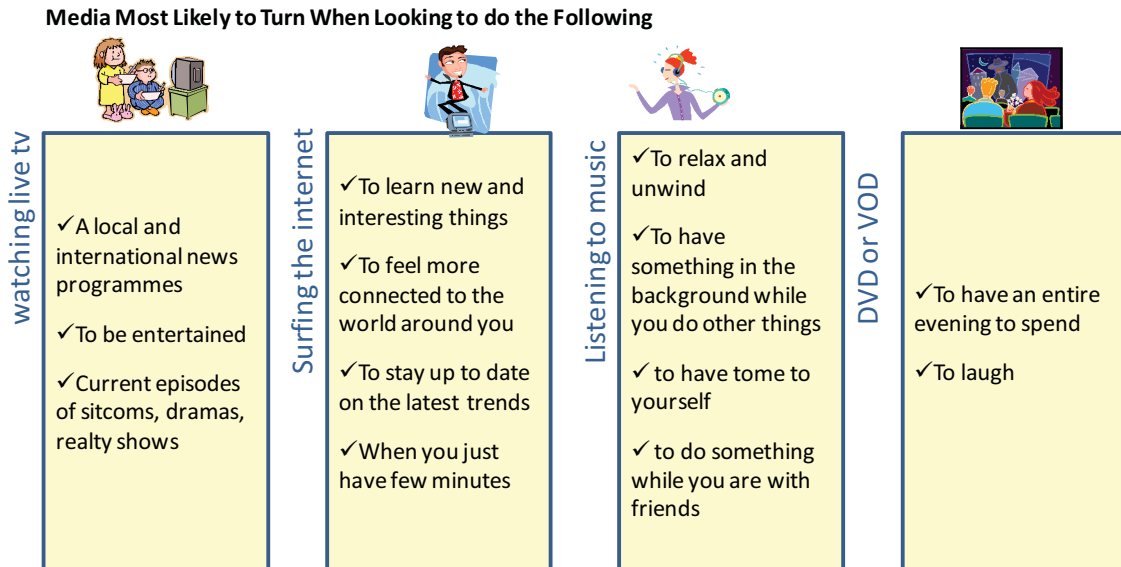
Usage patterns

In case of usage patterns, the most important development is that different functions - once attached to live TV - became more diversified among platforms, e.g.:

- when it is about “learning new and interesting things” live TV cannot compete with the internet;
- relaxing is most often coupled with “listening to music”, and if
- someone has an entire evening to audiovisual self-entertainment, VOD and DVD have the best chance;

¹ European Commission, at: http://ec.europa.eu/avpolicy/index_en.htm

- meanwhile, live TV stands firmly when someone looks for news, programmes, current episodes of sitcoms, dramas, and reality shows and in case of general entertainment.



The other dominant trend, looking at TV usage, is that social networking and audiovisual consumption are gradually overlapping. The main drives behind this are:

Social networks tend to be the primary web destinations among the younger generation's representatives, are gradually incorporating video content into their service offerings, and are rapidly expanding across all age groups (in the US):

- Four-in-five (ages 14 to 29) have a personal web page on at least one social networking site
- 22% of all web time is spent on a social networking site (ages 14 to 29).
- 80% of 18-to-21 year olds are weekly visitors
- 25% of daytime TV viewers - ages 25 to 54 - have a personal web page
- 20% of all web users are watching full episodes at social networking sites.

Consumers are using frequently these networks to tell to other community members what programs they are watching, and how they like it, while they can update social network profiles from their TVs, and can send a personal video page or a channel to members of their network.

Access

Regarding midterm access conditions, television seems to be “shared” by several more or less well interconnected devices and ecosystem by the potential following developments

- the diffusion of hybrid and/or online TV will be accelerated²,

² The HbbTV (Hybrid Broadcast Broadband TV) standard has been developed to deliver internet services to connected TVs and set-top boxes⁶⁵. The European consortium includes broadcasters,

- content stored on one device can be viewed on another device,
- access devices will play greater role in content aggregation,
- online services will be available on all devices,
- mobile phones are to be integrated into remote controls,
- multi-screen development (TV, PC, Tablet, Mobile Phone) would be effectively catalyzed by the Consumer Electronic (CE) manufacturers,
- User Interfaces (UI) developed for connected TV can have significant content aggregation and gate keeper functions

The main challenge of the upgrade of online television is that this process must not make the system harder to use. A connected TV needs to continue to be a device that is easy to use for any member of the household. It should also keep its main quality, namely providing easy and immediate access to general home entertainment. In other words, the new access solutions' overall user-friendliness and short learning curve are critical to ensuring that consumers will adopt them.

Services

According to midterm industrial forecasts, service development will be focused on

- time shifted consumption (DVR, VOD), and TV-internet convergence (online TV, Hybrid services).
- improving viewer experience (HDTV, 3DTV)

The breakthrough of time shifted consumption must be fuelled by the emergence of the internet as a viable way of delivering video content and web-like applications on the TV. The following first movers of these services appeared on the market all over Western Europe:

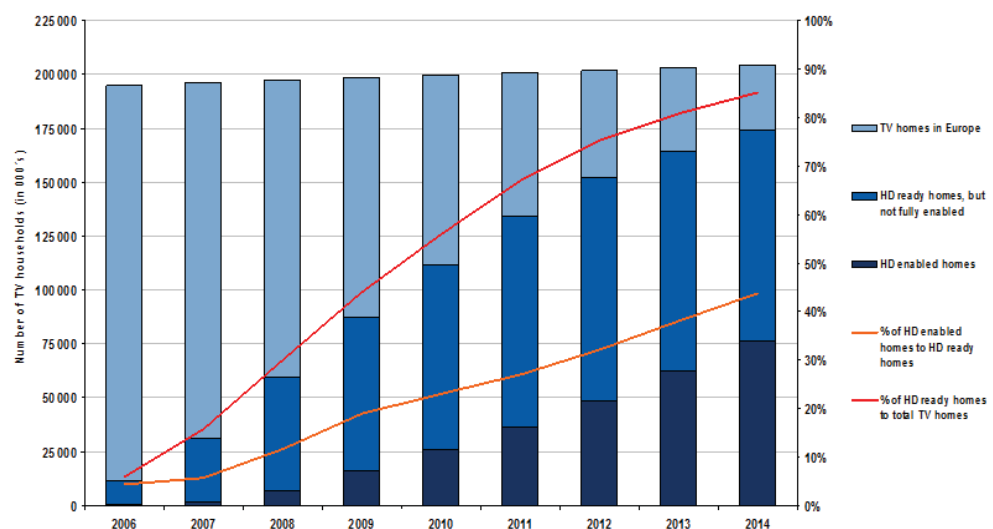
- Liberty Media, the pan-European cable operator, plans to launch a new device that will allow customers to watch pay-TV, access internet content through their television and stream content downloaded on the DVR throughout the house.
- Spanish cable operator Ono has announced plans to roll out new set-top boxes based on the TiVo DVR technology to its cable subscribers. The box will also allow Ono to launch a hybrid DTT/internet service to those outside its cable network.
- Virgin Media, the UK cable operator, has announced plans to launch a 'converged TV and broadband interactive platform' based on TiVo technology in Q4 2010. The company said that the device will have a dedicated internal modem to offer internet services and applications directly to the TV.
- Digital satellite broadcaster Canal Digital announced in November 2010 plans to launch set-top boxes including the TiVo technology in Norway, Sweden, Denmark and Finland. The devices will offer standard DVR/HDTV functionality as well as universal search, home networking and integration with mobile devices.
- Mobile operator Vodafone is reportedly looking to launch hybrid TV devices in Spain (DTT and broadband) and Germany (digital satellite and analogue cable).

such as TF1 and France Televisions, and manufacturers including Samsung and Philips. HbbTV services have already launched in Germany.

- YouView (formerly Project Canvas) devices are set to launch in 2011. They will provide access to on-demand content and web-like applications delivered over broadband to the TV alongside the Freeview broadcast channels. YouView, which is backed by the UK's PSBs, Arqiva and internet service providers, also plans to offer access to paid-for content.

Simultaneously with the above developments, HDTV becomes a mass-market even in the short run:

- 120+ million HD ready sets have been sold in Europe since 2005,
- Number of HD channels has grown exponentially since 2007
- More than 8 out of 10 European TV homes will have HD ready TV set in 2014 and nearly 1 out of 2 of them will be watching HD programming.



Source: Screen Digest TV Intelligence Database, July 2010

In case of 3D TV the following trends can be observed. From one hand, there are signs of an early take off:

- 3D cinema seems to be growing strong; the business model already seems solid, with higher revenue per title for 3D releases.
- 3D development is pushed by CE manufacturers: all major TV set manufacturers have launched 3D TV sets in 2010 (more than 90 models globally between 32" and 67")
- Introduction of 3D is cheaper than HD: 3D can use HD post-production and distribution infrastructure.
- Video games can be easily converted to HD, so gaming market could be the key driver in equipping households with 3D TVs.

From the other hand a few factors support the assumption that 3D TV will be a competitive edge and a source of additional revenue only in the longer run, significant take off cannot be foreseen before 2014:

- Lack of an industry standard
- 3D without glasses in good quality will take 3-4 years
- 3D content very limited now - much worse than at HDTV introduction
- Business models have yet to be established
- A 3D production is today approx. 60% more expensive than SD

- Low penetration of 3D TV sets

Players' strategies

In line with the above trends, in case of content aggregators the following main strategic moves can be observed.

- As a general trend, both pay TV and FTA channels try to increase HD presence to improve viewers' experience and increase their revenues:
 - many FTA channels are launching HD not available on FTA platform,
 - HD TV became a key product to differentiate pay TV from FTA platforms.
- Usually FTA channels are moving faster towards the Internet services, in order to diversify revenue streams to be able to offset the potential loss of revenue and to find new sources of growth – one case, e.g. being the M6 group in France, which is already involved in e-commerce with the Mister Gooddeal online shop, in social networking via the Habbo Hotel virtual universe and in online gaming with M6 Games.
- *FTA channels could benefit from catch-up TV³* offers, interactive services and content associated with the TV programmes
 - to adapt to viewers' new consumption habits
 - to take advantage of new advertising spaces (service menu, widgets),
 - broadcast programmes that did not air on television, e.g. when several live events are happening at once, like during the Olympic Games or the French Open.
- Pay TV theme channels in general have the weakest business models and therefore are the most threatened. Most of them have limited ability to offer value-added programming and services to build subscriber loyalty and attract new customers.
- Premium channels (movies, sports, documentaries) are in an above average position (exclusive content, strong brand),

The strategic focus of pay TV operators may therefore well be to implement solutions in order to meet viewers' need for flexibility and personalization (VOD, DVR On Line TV), and/or to put greater than ever emphasis on quality content, quality sound, quality picture and quality service. Specific strategies in different pay TV operators' category are as follows:

- Satellite packages will bank on coverage „anywhere, anytime” niche.
- Cable operators are trying to take advantage of their exceptional network capacity, and two-way communication.
- ISPs may implement a strategy based on offering a broad array of free channels with Internet subscription.
- Commercial DTT operators are essentially playing the "pay TV for all" card.

In case of telecom service providers, the vertical integration strategy towards content and services is still valid, and the integration of traditional broadcast television into a broader

³ Catch up TV or Replay TV is a type of Internet TV in which TV shows are available through the Internet for a period of days after the original broadcast. The shows are made available by the broadcasters themselves, and also by aggregator sites.

video offering (combining channels, personal content, online videos) to expand their role from basic Internet access management to digital household management.

Potential regulatory challenges

The services and products being discussed are subject to rules of the single European Market. The AVMSD, which defines the framework for national media regulation, covers both traditional TV and on-demand services. It does not cover Internet.

The AVMSD replaced the Television without frontiers Directive (1989) in 2007, entering into force on 19 December 2007, giving a leeway of two years for the Member states for its implementation. A codified version of the AVMS Directive⁴ was adopted by the Council in February 2010, which mainly changes the numbering of the Articles and provides a consolidated set of Recitals⁵.

The Directive aims at providing rules to shape technological developments, creating a level playing field for emerging audiovisual media, preserving cultural diversity, protecting children and consumers, safeguarding media pluralism, combating racial and religious hatred, guaranteeing the independence of national media regulators. The Directive promotes light regulation, self-regulation and flexible regulatory arrangements with effective enforcement⁶. In spite of the aim of the AVMSD to set the standards for the services of television channels, videos online and on-demand⁷ - lighter regulation for on-demand services -, gaps still remain in the member states' regulation. In the following we briefly describe the challenges – directly or indirectly - related to this area: media and spectrum challenges, content related problems, institutional challenges.

TV and technology development

The historical distinction between radio and TV communications, Internet and broadcasting is blurring. As mobile networks are growing, being upgraded to LTE networks, mobile television is being widespread, the switchover to digital television is a daily issue, transitional regulatory challenges are present. If not taken care of, these challenges become long term problems and drawbacks for innovation and lower service/ product prices for consumers.

Convergence of services and offers is not a newcomer to the European media and telecommunications regulatory field. Besides the Audiovisual Media Services Directive (AVMSD), for example, there has been a project within the European Regulators Group (ERG), which deals with convergence, for over 5 years. In 2009, a report on (only) fix-mobile convergence was concluded, losing much of its original impetus⁸. Actually, the document aims at analyzing the relationship, the technical characteristics and specific regulatory policy approach to both fixed and mobile services and service providers. However, in doing so, fails to clearly identify the consumer patterns, the likely developments and therefore, the core of regulatory intervention: future – ready regulation of e.g. content-related services – such as broadcasting -, let it be on mobile, virtual mobile or fixed networks. On the other side, the document points out that a vertically integrated operator could benefit from its business

⁴ Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive), OJ L 95/1, 15.4.2010

⁵ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:095:0001:0024:EN:PDF>

⁶ See also on the Commission's site. At: http://ec.europa.eu/avpolicy/reg/tvwf/provisions/index_en.htm

⁷ The distinction between the two depends on who decides when a specific programme is transmitted and whether a schedule exists. Television broadcasts are 'linear' services because they follow a schedule arranged by the broadcaster, while on-demand (or 'nonlinear') services leave users to decide when to watch a particular programme. At: http://ec.europa.eu/avpolicy/docs/reg/avmsd/fact_sheet_en.pdf

⁸ ERG (09) 06 Report on Fixed-Mobile convergence, at: http://erg.eu.int/documents/erg/index_en.htm

model, as consumers no longer differentiate as they used to between networks when opting for a service.

Spectrum - the fair and effective management of scarce resources

New sharing technologies, such as cognitive radio and wireless (broadband) access services are now present and successfully challenge broadcasting services, therefore indirectly the business models of media companies. Cognitive radio and wireless broadband services are now present and effectively challenges broadcasting services, therefore in some way require sufficient amount of resource in radio spectrum. Therefore allocation of radio spectrum must be – and it seems that it is - one of the centre questions in Europe.

The redistribution of spectrum seems to have caught the interest of the policy and decision makers. The member states' experts formed Radio Spectrum Policy Group (RSPG) has written its opinion on the Commission's draft Radio Spectrum Policy Program (RSPP) already in June 2010⁹. Last part of the document outlines in 11 points what should be the spectrum policy objectives. In particular, it underlines that "[...] *spectrum policy approach for intelligent spectrum sharing which should, inter alia, promote the use of cognitive technologies, to enhance the effective and efficient utilisation of spectrum.*" In addition, it points out that the 800 MHz band for ECS should be used for other means than broadcasting by 2015.

This opinion has no binding power, yet the Commission took most of its recommendation into account when it proposed the RSPP for a Parliament and Council joint decision in September 2010¹⁰.

In addition, to further harmonize – and open up spectrum use for new technologies -, the Commission adopted a new decision in April 2011 about the particularities of 4G and GSM frequencies. As the press release of the Commission stated: *"In particular, the Commission's Decision sets out technical parameters allowing for the co-existence on the 900 MHz and 1800 MHz frequency bands of GSM (2G mobile phones), 3G systems that add mobile internet to regular phone services (using the Universal Mobile Telecommunications System - UMTS) and 4G mobile technology delivering high speed broadband (using the Long Term Evolution (LTE) and Worldwide Interoperability for Microwave Access (WiMAX) systems, enabling [...]"*¹¹ Yet, the challenge remains: national administrations have to implement the rules until end of December 2011 and must ensure that LTE and WiMax is effectively let into the GSM bands.

At the end of the day, challenges still remain: *will the EU administration be able to push its members to a better redistribution of spectrum, which enables bands for mobile broadband, new technologies, or do we remain in the middle ages of digital literacy and we must obtain information from broadcasting?*

Content regulation and new technologies

Content regulation is also a key issue for the member states' administrations, as well for users and minors. These days content can come from several platforms, and can appear on several other platforms; they may come from within the national borders and may arrive from overseas. In addition, new business models are emerging, like Apple's Appstore, Google's Android marketplace, Netflix, other Pay TV services on various platforms. Traditional media regulation, internet regulation and telecoms regulation is no longer ready to handle these issues.

⁹ See: http://rspg.groups.eu.int/documents/documents/meeting/rspg22/rspg10_330_rspp_opinion.pdf

¹⁰ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0471:FIN:EN:HTML>

¹¹ See: IP 11/480, <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/480&format=HTML&aged=0&language=EN&guiLanguage=en>

In order to expertly protect consumers – to start with, at EU level - standards must be set at wider than national level, and the executive power should be unified, whilst distributed among the member states. Information programs, Gov2.0 initiatives may have a more important role than ever.

As for the rules applicable to this area of problems, Articles 12 and 27 of the AVMSD deal with the protection of minors. This approach follows the general “*gradual* regulation” philosophy of the Directive. However, making simply a difference between on-demand and linear services, and the varying seriousness of possible implications of specific contents is not enough. The protection of minors should be dealt with meticulous care as now there are more efficient technologies to reach the audience without the ability to track down the source of information¹². Parental responsibility is a prerequisite¹³.

Another content related problem is how a specific content can be regulated once it appears on several platforms at different times? Should a public service media change when it appears online? Is a parentally controllable VOD service any different from interactive web sites where viewers can contemporarily comment on the show?

In any case, regulation must be for the consumers and for the industry. It should not be a standalone central intervention for the market and the technology itself. Consumer service - and complaint-handling practices are to be the primary information about what should the object of the intervention be. At the same time minimising the regulatory burden for the industry would always be welcome by market players, and would enable market entry, product diversification and lower prices for consumers. Self regulation of the industry should be welcomed by the competent authorities in Europe.

Institutional answers to convergence processes

The convergence of media services brings along challenge related to the convergence of regulatory authorities. In Europe, this is a somewhat general trend, however Hungary has been facing a complicated environment of such adaptation procedure since mid 2010 when the rumors about the converged authority started to emerge¹⁴.

As a result of the entry into force of a series of new laws on 1 January 2011, the new super authority (NMHH) has started its operations. Its principal task is, to carry out the tasks and possess the uniform jurisdiction of its legal predecessor, the National Communications Authority, as well as of the legal predecessor of the Media Council, the National Radio and Television Commission. This is a new set up for Hungary – institutional challenge -, for the service providers – the authority’s supervisory role for their compliance and market analysis - and for the consumers – the establishment of the position of the new media and communications ombudsman -. In addition, the adoption of the new law was much debated in Europe, with particular regard to Article 30 of the AVMSD, the independence of regulators¹⁵.

¹² See also the European Parliament’s Recommendation on the protection of minors. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0031:FIN:EN:HTML>

¹³ It is also not easy to qualify what is a serious threat to the – mental, physical or moral development of minors.

¹⁴ The merger took place after the entry into force of Law CLXXXV of 2010.

¹⁵ See, e.g.: <http://www.telegraph.co.uk/news/worldnews/europe/hungary/8220836/Hungarys-new-media-law-puts-EU-presidency-in-doubt.html>, <http://www.bbc.co.uk/news/world-europe-12106860>.