

Medij. istraž. (god. 13, br. 2) 2007. (5-21)  
IZVORNI ZNANSTVENI RAD  
UDK: 654.19(497.5):004  
Primljeno: lipnja 2007.

# Digital Television in Croatia: Is Television Becoming a New Media?

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## SUMMARY

*We live in a multimedia world and media convergence is our everyday reality. Technological improvements cause important transformations in society and the economy, and the media are the first to be changed. Digitisation transforms the media, especially television, into new media with numerous possibilities for new products and services. The main characteristic of this process in Croatia is the fact that implementation precedes development strategies or plans. Furthermore, the lack of public discussion enables these processes to remain far away from citizens who do not understand them or are not motivated to understand them. The proliferation of new digital channels (terrestrial, cable, satellite or broadband) as well as fragmentation of the mass audience make this process even more complex. Technological improvements have produced a new multimedia environment breaking down the traditional boundaries between telecommunications, computers and the audiovisual industries.*

*As in many countries in the region, the public service television in Croatia is faced with a program identity crisis and at the same time is fighting for stable financing. Regarding the process of general digitization and media convergence, we must ask if it is possible to predict the future of the 'old media', especially of television, which is still the most influential. If it wants to survive, public service television has to reorganize and redefine itself as a converged, multimedia public service.*

Key words: television, digital television in Croatia, DTV, digital platforms, public service, multimedia, interactivity, convergence, Internet

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### **Television – a medium of continuous change**

It is always technology that unavoidably incites the media to change. Since the middle of the 1990s, there has been a very pessimistic atmosphere in academic circles (see Blumler and Gurevitch, 1995; Dahlgren, 1995; Weymouth and Lamizet, 1996; Tracey, 1998; Jakubowicz, 2003) in predicting the future of television as a medium and especially the future of public service television. Looking back, we can argue about the consequences of technological changes that the media faced in the 20<sup>th</sup> century. Did the talking pictures introduced in the 1920s kill the beauty of the silent film? Did the newly introduced radio stop newspaper production? Did colour broadcasting in the 1950s ruin the simplicity of black-and-white view on life? Introduced in the second half of the 1970s, did teletext, that 'modern implement', force TV programs to lose their audience? On the other hand, it is true that television did cause a decline in going to the theatre and cinema. It is also true that fewer and fewer people read printed newspapers.

Arguing about transformation of television as a media, it is important to differentiate the processes of technological change from the processes of economic and socio-historical change, although it is not possible to study them isolated one from the other as they do stipulate mutual development. Technology influences media industry as it offers platforms for new forms and formats of information and communication. The creative industry is the one in charge of creating these new formats and contents. However, it is not correct to blame technology and new formats of mass communication for the changes which we recognize on the one hand as a lack of serious news, documentaries and culture programs or quality drama programs, and more infotainment on the other hand that goes too far into trivia, plus the existence of very low quality entertainment programs.

Television in Croatia follows European trends slowly but still faster than in some other East European countries<sup>1</sup>. The Croatian media context has unique characteristics. Television in Croatia has undergone a rapid social, political and economic transition over the last decade and a half. Changes include transformation from one political (socialistic, communistic and totalitarian) and economic system (planned economy) into another which is clearly defined as a liberal democracy with a market economy. In addition, the war that lasted from 1990 to 1995 further affected the transformation of television. Beside the war, democratization and ideologization of society, the impact of the free market, globalism and transnationalism, as well as of the digital technological revolution must be considered. What has happened is the fact that television in Croatia, still disturbed by transitional changes, is not ready for a new complex digital transformation. It is not only a question of adopting new technology. Buying new digital equipment and starting producing and transmitting digitally does not yet mean that we really have or watch digital television. Digital television brings many new opportunities for new contents and services. More channels in one multiplex means more specialised programs while digitization opens possibilities for interactive video content, voting opportunities, advertising or gaming. Also, new contents have to be adapted for different formats: for large plasma or LCD screens, for notebook monitors, for handheld or mobile telephone screens. It is a major and complex

change, and it seems that media experts, TV producers, editors and journalists, as well as legislators, still do not see this process from all its angles. The aim of this paper is to provide a synthesis of the ongoing implementation process of DTV in Croatia, its successes and failures with a special emphasis on the possible future of public service television in Croatia in a new digital age<sup>2</sup>.

### **Temptations of digitisation – theoretical framework**

There is no question that television is undergoing a huge transformation process and there is a need to redefine television as a media. TV used to be a small screen in our living room which offered us information and entertainment while we were using our free time, warmly doubled up on the couch. Times have changed. Internet has introduced us to some new standards and new information services and because of the faster pace of life we expect even television to offer us new, different, more time-flexible and more diverse information or entertainment content.

Discussing television, Stylianos Papathanassopoulos (2002) apostrophizes that television always follows the imperatives of industry, not of technology. Because the television market (or the audience itself) is final, the main role of the television industry is to sell new products which have to replace the old ones, although they are very similar in format and content (2002: 64).

So, what comes first, technology or industry? Technology, for sure. It is the one that impels important social and economic changes, which in turn stimulate developments in the media industry. For decades, Europe tried to protect the monopoly of public radio-television with the help of laws, directives and recommendations and was successful until the 1980s. The development of cable and satellite television neutralized such protection as they offer the audience hundreds of commercial TV channels. The official resolution on the liberalization of the European television market enabled free competition of public service and commercial televisions in the fight for viewers<sup>3</sup>. The results of viewers' free choice on what to watch, the effect of such market democracy, was the decline of public service TV ratings.

Today's new paradigm of media policies is, as Karol Jakubowicz (2003) states, that they are more oriented to economy goals than to social or political goods; they are primarily concentrated with commercial competition, technological innovations, transparent ownerships and fair monitoring, as well as with maximum possible access and assortment to all consumers. The main characteristics of this stage are deregulation and elimination of any obstacles to the free media market which largely functions on neo-liberal principles. The principle of non-commercialism is rather transformed in a way that the public interest in mass communication has become largely questionable. In trying to adapt to the new reality, it depends on the governments' will which is not much help as governments are under the strong influence of the commercial media influence. Public service must redefine its mission if it does not want to be pushed into an ideology-motivated concept whose main virtue is that it does not compete with commercial players. If this trend continues, Jakubowicz predicts that public service media will be forced to adopt the

‘monastery model’ (2002: 7) and concentrate exclusively on culture, education and other contents which are not profitable to commercial media.

Furthermore, liberalization of the media market and the rapid increase of different, often specialized, TV channels has resulted in large audience segmentation. As they want to be different from general channels, new channels offer specialised programs (sports, film, fashion, children’s channels etc.) which has taken over a considerable share of the audience.

However, new digital technology brings new options to public service television bringing more channels, which means more specialised programs and that further means more possibilities to come closer to a segmented audience. While in the 1950s and 1960s a family gathered in the living room in front of the TV set, sometimes even inviting neighbours to join them in the social event of watching television, today’s digital technology allows an individual to watch video contents on notebooks, cell phone screens or handheld devices, and therefore watching television is no longer spatially stipulated. As the viewer or consumer of such a service is a single person, we can assume that we have a completely fragmented audience.

### **Internet v. television**

It is obvious that television is in a continuous process of transformation. Changes (social, economic, political or technological) that provoke that transformation are so common that it seems there is a constant need to redefine television as a medium. Since the mid-1990s, Internet development has speeded up inter-media convergence. First, the Internet offered traditional newspaper contents. Later on, bandwidth allowed on-line listening to radio programs and music and today it is possible to watch on-line video contents as well. The popular phrase “what wasn’t on telly didn’t happen”, Nenad Prelog replaced with a new one: “What is not available on-line doesn’t exist” (1998: 127).

However, the Internet was not just a new information service. Prelog stresses that “introduction of every new media into the processes of transmission, storage and presentation of information, if we look back, sooner or later influenced the content and structure of information. In the beginning, it functioned on the principles of analogies; the ‘old structures’ were maximally developed inside the frame of the previous presentation and were repeated in the new media; but the media achieved real success only with its own, media-suitable way of organization of information” (1998: 126). What differentiated the Internet as a new media from other media was its communicational-informational saturation, the interactivity that the Internet offered to its consumers. Howard Rheingold wrote in 1993 about the ‘virtual community’ and computers whose task was not only to transmit information but also to connect people in a ritual way. On-line social interaction that the new media provides is not based on pleasing individual interests; the need for social networking and community is what motivates such interaction. It is precisely this communication element where, if compared to television, the main advantage of the Internet lies.

In the past, live video distinguished television from other media. However, since video has become an integral part of on-line and telecommunication contents and services, new media, especially the Internet, took over the exclusive privilege that television had on video content. Furthermore, according to recent research, these changes have resulted in a decrease in watching television<sup>4</sup>. And the contents are only such as we can see on *YouTube* or *MySpace*<sup>5</sup>. Originally television contents, such as sitcoms or soaps, live sport events, newscasts or TV documentaries are now also available on-line. The largest web portals such as Yahoo!, AOL or MSN<sup>6</sup> also offer specialised video contents to its consumers.

On the other hand, and this does not depend on Internet development, television is changing as a media because of digitisation. Even though it is still not used widely, interactivity, as a basic Internet characteristic, is becoming an important possibility for television services as well (e.g. interactive games and quizzes, on-line television shopping, information services with feedback option, public forums<sup>7</sup> etc.). So the question is: what will the difference be between these two media in the future? How successfully can interactive television compete with the Internet and its services, and is it possible for the Internet to completely take over the television program? As they are becoming even more similar, it is natural for these two media to have started to merge into one new media, aiming to gather all the information and video contents on people, events and facts in one place, in order to help search the information more easily. Depending on information or news stories, it will be possible to watch live programs and of course, users will be able to create their own clips and to communicate with each other on different levels.

We are actually talking about *cyberspace* – the virtual world of humans and computers, or to be more precise, the virtual world of humans and diverse digital contents. In his book on digital capitalism, Dan Schiller (1999) says that it is all about tools united to deepen consumerism on a trans-national level. He argues that digital capitalism has already started to undermine education as it has left the most sensitive processes of social learning to the mercy of market logic.

It is difficult to stay indifferent in the face of such complex changes that are happening inside the media sphere as they are deeply interlaced in most people's everyday life. The role of an individual in such a media sphere could be the role of a creative author or producer, active user or just passive consumer.

### **Digital television (DTV) in Croatia – technological overview**

The main privilege of digital technology, comparing to analogue transmissions, is the more efficient way it delivers television programs. It enables same services to be delivered with greater clarity in less frequency space than with analogue transmissions. While a single frequency channel can carry only one analogue TV channel, digital transmission allows four to ten TV channels / programs, plus radio and text-based services to be broadcast using a single frequency channel – a digital multiplex<sup>8</sup>. Furthermore, DTV offers superior picture quality and improved audio quality.

There are four main DTV platforms: terrestrial (DVB-T), satellite (DVB-S), cable (DVB-C) and television via broadband (DSL). All these digital TV variants carry

standard-definition television (SDTV<sup>9</sup>), while high-definition television (HDTV<sup>10</sup>) is developing very fast and probably will take over soon.

The DVB-T platform dominates in Europe as it is developing rapidly. It is planned that DVB-T will dominate in Croatia, too. In EU countries 2012 is noted to be the year of final analogue switch-off. Existing analogue TV frequencies will be free for resale to communications operators, for example. DVB-T uses the same band of frequencies (UHF) as analogue television. Signals are broadcast through an up-graded transmitter network and received through a normal TV aerial. *Set-top box* is a device that turns the received signal into content which is then displayed on the screen of conventional analogue TV sets. It is also possible to use a recording device with an integrated digital tuner or TV programs can be viewed directly using an integrated digital television set (IDTV).

Beside the larger number of channels, common benefits that all DTV platforms offer include improved picture (e.g. no ghosting effects, true widescreen 16:9) and digital quality sound. Improved digital teletext will offer new interactive services, but it needs a two-way data communications path. Interactive Digital Video Broadcasting – Handheld<sup>11</sup> (DVB-H) will probably become the most handy source of news and information services such as news, weather forecast or traffic info, stock exchange info, education content, interactive games, banking, shopping, gaming or betting etc. However, content providers have to keep in mind that because of screen dimensions of cell phones or pocket PCs the contents must be edited and presented differently than for large screens; they have to be reduced and the picture has to be clear without unnecessary details.

Just to keep in mind that discussion on digital television phenomena does not stop at the technological possibilities and on accepting the new formats and standards. How to redefine television as a media is the key question that waits to be answered.

### **DTV platforms in Croatia**

It was in 1994 when the first testing of digital transmission in Croatia started, introduced by the *Transmitters and Communications Ltd.*<sup>12</sup> (TC) – a state owned company that provides services of audio and video transmitting (terrestrial and via satellite). Digital Video Broadcasting on Satellite (DVB-S) was introduced in 1997 and two years later experimental Digital Audio Broadcasting (DAB) as well. An experimental Digital Video Broadcasting – Terrestrial (DVB-T) system started in May 2002 when the first two DVB-T transmitters were installed by the public service broadcaster – *Hrvatska radiotelevizija* (HRT)<sup>13</sup>. The objective of the trial was to test different modes of operation.

Digital Terrestrial Television (DTT) is still in the experimental phase in Croatia. At present, there are more than 10 digital video transmitters and these experimental free-view (free-to-air) broadcastings can be received in an area that covers the homes of about 70% of Croatia's 4.5 million population. There is no official data on how many set-top boxes have already been sold in Croatia. That is why it is not possible to say what percentage of Croatian homes access digital television services. The use of a return path (a two-way data communications path to allow

DTV set-top boxes to return information back to the operators) is not available yet.

At present, two DVB-T multiplexes are in use in Croatia and they both use the MPEG-2 standard. One multiplex carries public service television channels HTV1 and HTV2 and soon it will carry more specialised HTV channels such as a news channel. The other experimentally carries two Croatian commercial channels with national coverage – *Nova TV* and *RTL Televizija* and two local TV stations – *Nezavisna Istarska Televizija (Independent Istrian Television – NIT)* from Pazin and *Slavonska Televizija (Television Slavonia – STV)* from Osijek. All televisions work with digital equipment and the whole production process is digital.

Four national channels (two public service and two commercial) broadcast general programs that are completely the same in both analogue and digital format, as well as the commercial breaks. It is also possible to receive these channels in DVB-S standard<sup>14</sup>, but still not in DVB-C (Digital Video Broadcasting – Cable) or DVB-H standard. Furthermore, digital pay TV<sup>15</sup> channels are still not offered in Croatia. Licences for IPTV (Internet Protocol Television) were assigned to providers in 2005. IPTV is a system where a digital television service is delivered by using the Internet Protocol over a network infrastructure (as part of the *Triple play* service that includes three-in-one access – digital TV, broadband Internet and *Voice over IP / telephone*). *Max TV* is one among few IPTV services in Croatia. It provides more than 55 TV channels, digital video rental store, interactive TV guide and search plus recording possibilities.

### How to regulate digital television?

Even though the process of digitization has already begun in Croatia, there is still no comprehensive law on digital broadcasting, no strategy or policy documents and no action plan for digital broadcasting switchover. There is no public professional debate that will help create media policy on digital television content. There are four laws on media in Croatia<sup>16</sup>, and only the recently annexed Law on Electronic Media<sup>17</sup> introduced digital radio and digital television. All legislation and regulation must be adjusted to the EU audiovisual policy and with the Committee of Ministers' Recommendation<sup>18</sup>.

The regulatory authorities for the media in Croatia are: *Council for Electronic Media*<sup>19</sup> (CEM), *Croatian Telecommunications Agency*<sup>20</sup> (CTA), *HRT's Program Council*<sup>21</sup> and the recently introduced *Agency for Electronic Media* (AEM) which supervises CEM.

A license from the CEM is required for broadcasting in the digital terrestrial network. That is what content providers will have to apply for. Licences for DVB-T operators (transmitter network operators and multiplex operators) will be held after the new *Law on Electronic Communications* is passed, hopefully in 2008. The CTA is likely to become responsible for operating the digital multiplexes and to be in charge of issuing the licenses for digital terrestrial platforms' future operators. No license is needed to provide digital television programs via satellite or cable. Providers just have to be registered within the CTA.

Hopefully, it seems the legislative problems connected with implementation of digital television in Croatia have finally moved from 'ground zero'. At the end of 2005 the Ministry of the Sea, Tourism, Transport and Development (MSTTD) appointed a Working Group to plan and coordinate preparation and implementation of DVB technology and services in Croatia. It has to prepare a National plan and study of the prospects and possibilities for digital terrestrial television in Croatia. A proposal of the National strategy for digital broadcasting switchover should be presented by the end of this year.

Traditionally in Europe, planning and distribution of radio and TV broadcasting frequencies has been coordinated at an international level<sup>22</sup> because of the high potential for long distance interference created by transmission of broadcasting signals from high power towers. At present there are no free frequencies available. CTA has been creating a frequencies plan for DVB-T in Croatia since 2004, trying to adjust it with neighbouring countries.

In May and June 2006 the second ITU<sup>23</sup> Regional Radio-communication Conference (RRC-06) was held in Geneva. A new regional agreement on digital frequency distribution was signed, according to which Croatia was allocated 8 multiplexes, just as many as Croatia had asked for. However, this Agreement will finally become operative in 2015 and until then each country has to find its own way to solve interference problems with neighbouring countries. That is why, at present, only two multiplexes are in use for experimental broadcasting in Croatia.

The European Commission's *Communication on digital switchover*<sup>24</sup> set out the deadline of 2012 for analogue switch-off. Even though the CTA is very optimistic and predicts it will achieve 100% digital coverage in Croatia before 2010, the switchover will have to wait for the license awarding process to be completed and for viewers to buy the needed equipment (at least 90% of households must have set-top boxes or any other device that functions as a digital TV receiver). A re-adopted legislative framework and a national strategy for switchover are the basic preconditions to achieve these plans.

As there is only one operator of the analogue transmission network in Croatia, and that is a monopoly, the recommendation is that the regulatory authorities should issue licences to a diverse range of network and multiplex operators to ensure that the present dominant positions in analogue broadcasting are not extended. Parliaments should adopt legislation to prevent the emergence of monopolies of operators involved in the digital chain – such as digital multiplex operators, television stations, content providers and software providers.

It is the role of the Government to adopt the digital media policy in Croatia, to introduce the strategy for *simulcast* (parallel broadcasting of public service television in both analogue and digital networks) and to define subsidies for set-top boxes. For the region of Istria, the Government has already confirmed a grant of 15 million kunas including a 200 kuna subsidy for each household.

The debate on digitization in Croatia opens questions on the implementation of new technology, changes in program production (shooting, editing, video data storage), digital transmission and its regulation. However, there are more opportunities for new contents and services and that possibility must not be left aside. Some of them are: information services with return path, search options, interac-



tive games and quizzes, live video public debates, TV forums, digital shopping via TV etc. Not only the Government and the regulatory bodies, but also the professional and civil society organizations, as well as media professionals should initiate a public debate on the digitization policy. The media has reported sporadically on the issue, so there is no sustained analysis and public debate. It is a question of extraordinary important media changes and they should not be marginalized in society.

### **Digital media convergence: the future projections and pre-conditions of the existence of public service television and television in general**

Despite new information technologies and rapid new media development, television is still the principal source of information and entertainment for the European majority. Television did not automatically lose its audience because of the Internet, it has been happening gradually<sup>25</sup>. Now is the moment when we should re-define television as a medium. Roger Silverstone (1994) understands the phenomenon of television as a system of complex and permanently changing relations between television as a medium, television as technology and television which is constructed and defined by the rules, tasks and rituals of everyday life. It is also possible to define television as an institution (see Corner, 1999). However, if defined as a media, we understand television as an industrialized model of time and space management, with the general task of producing and distribution of audiovisual contents. Focusing on its contents, television can be, at the same time, comprehended as an information service or as the product of the entertainment industry. If it is re-defined as a medium, the question is if the concept of television will hold its meaning of pre-defined television channel programs or television will become a word for every single video content (even video clips). Use of the concept of television and video, both in literature and in everyday use, is not standardized. *Pay TV* and *video on-demand* are good examples. Is it correct to understand that *television* or *TV* includes the possibility of subscribing to a service or to a package of different video contents while *video* content means a single product or a single footage?

With such an articulation of the definition, it will be more precise to say that because of the offer of on-line video contents, general television programs lose their audience. This new moment mostly affects public service television which still leans on the concept of general programs. Most of European public service televisions have already launched some specialized channels, but they are still pre-scheduled. Pre-scheduled programs are exactly what viewers no longer want to watch. Their free time to watch television is limited so they want to choose what they will watch and at what time they will watch it. Furthermore, because of the speed of the life of a modern woman or man, deep analysis of political affairs or daily events lose the fight with short news; investigative journalism gives its time up to *infotainment*; serious journalism disappears in front of the tsunami of television tabloidization<sup>26</sup>. On the other hand, HDTV and large LCD screens or plasma

monitors bring back the 'cinema atmosphere' into our living rooms while watching documentaries or films.

Accordingly, the Internet experience should be of a great help to public service radio-television's attempt to reorganize itself as a new digital multimedia. If it does not want to lose its audience, its task is to produce newscasts, documentaries, politic affairs and educational programs or entertainment shows (segmented to information, news, pieces of shows, shows, serials etc.) with the possibility of improved search and available to viewers whenever they want to watch and in formats that are most handy to viewers at that moment (cell phone, pocket PC, office PC, auto-radio, free newspaper handed out in front of the metro etc.). Only human creativity is the limit for new interactive video contents such as have already been mentioned: shopping via TV, voting, advertising, reservation services, gaming and quizzing etc. New services can offer interactive contents and advice on health, food or travel; they can provide local info on restaurants, theatres, museums or clubbing; they can help create holidays or organize parties; they provide TV auctions, home-delivery of food or other products, sending and receiving text, audio or video messages, e-mails etc. In contrast to the already existing similar Internet services, these new ones would offer more video interactivity. Such a useful and handy multimedia public service would warrant its public financing.

On the other hand, there are authors who argue that the survival of general television channels is possible because of their very specific audience which is not ready to accept new formats and change. Roman Karlović writes that Internet users "are a completely different type of users than television viewers" (2005: 60). They are active, emancipated in selection and in creating their own texts, audio or video clips so they actually contribute to the total of Internet content. Considering all of this, television interactivity will not eradicate the stereotype of the *couch potato* as an absolutely passive consumer of television contents and messages. Even in the digital age viewers will exist who will voluntarily consume the pre-packaged media content without considering what they hear or see. Karlović finds the reason for that in the lack of quality education for the media. He says that television "as the most influential medium of the 1980s" was not a "metaphysical instance that will dispose of and re-form viewers' cultural habits". He notes that "the degradation of television and its audience was growing parallel with the decay of the education system and with the manifestation of new individual or social group self-descriptions" (2005: 61).

In discussions on the media in Croatia, the concept of media literacy has finally started to be considered more often. It does not relate only to technological literacy; it concerns education for the deliberate use of media contents. The Internet was the first mass media conceived as a decentralized system which is hard to control or manipulate from one centre. To preserve its liberal quality from misuse, it also requires new forms of technological and media literacy. Decentralization will be one of the key peculiarities of digital television in Europe. However, the misuse of the Internet should help us regulate digital media and protect users not only from the contents that numerous television productions will offer, but also from the contents that users will create themselves.

Let us turn back from these future projections to the Croatian reality. The fact is that because of the lack of professional and public debates on the new contents and services which digital television can provide, most of the television audience understand that beside the technology improvements there are no other differences between digital and analogue television programs. The second fact is that, in principle, Croatia even today could offer the viewers up to 40 digital television programs. At present, 23 televisions broadcast in Croatia in analogue technology (four with national coverage and 19 local televisions). While on public service HTV, there are some plans to introduce new specialised programs, such as news or sports, on both national commercial televisions there are still no exact plans for new programs.

The fact is that interactivity fragmentises the television audience even more and the individual, instead of being a representative of the audience, becomes the audience in total. Again, this is a call for televisions to offer even more specialized programs and to introduce new formats and contents.

Arguing about the content, the question *what we watch* is not possible to isolate from the question *how it is presented to us*. That opens even new questions: Does digital editing brings completely new possibilities for manipulation? How will it be possible to differentiate reality from the virtuality? Further more, quite a number of viewers anticipated the pleasure of digital television and the future possibility of skipping the commercial breaks with just one click on the remote control. However, it is not that simple. *Product placement*<sup>27</sup> has obstructed such a possibility. It is a highly sophisticated model of advertising, where editing possibilities help products become an integral part of the TV program. That kind of advertising is not denoted, so it is actually hidden for every passive viewer, which is nothing other than manipulation.

Without the regulation of new contents and advertising formats that digital technology makes possible; without a strategy for digital television development, worked out in detail, that will contain more than just new technology implementation problems; without a public policy on education for the media; without a plan for education of journalists and editors; in other words, without a complete national plan for digital television, it seems completely absurd to announce any deadline for a final switchover from analogue to digital transmitting in Croatia.

## Conclusion

The crucial problems we observe while discussing television digitization include the fact that technology develops rapidly and it results in the implementation of new technological devices and solutions without waiting for the adoption of a legislative and regulative basis and without waiting for both the professionals and the audience to understand what possibilities and effects such changes will bring. That is where the doubt in quality and stability of this transformation from analogue to digital transmitting comes from. Further fear is vindicated by the open possibility of new forms of manipulation, especially in field of TV advertising.

It is true that technological development has resulted in media diversity and pluralism. However, at the same time, as a result of faster production and especially

because of the lower advertising revenues of a single provider (as a result of fragmented audiences), the media market becomes extremely competitive. Audience fragmentation opens the question of the legitimacy of the obligatory licence fee which viewers have to pay to public service TV, and that is why the financial stability of public service is shaken. It is up to the Government to plan how to finance the complete process of television transformation from analogue to digital, and how to motivate both citizens and the media to take part actively in that process.

In western European countries the role of public service television in digital transition is crucial (e.g. in UK, Sweden, Italy etc.) as Governments give subsidies for it and in that way initiate its faster development. In many Central and East European countries media policies on digital television development and its regulation are disregarded<sup>28</sup>. At the same time, as the market adopts new technology, media digitization finds its own way to drive broadcasters to implement it. Croatia is also such an example. It is the Croatian public service broadcaster HRT that is expected to be the leader in this transformation process.

Digital television is major challenge to the entertainment and culture industry. It brings a large number of new opportunities through the possibility of access to improved or new contents and services. At the same time, there is the potential for interactive advertising development and interactive sales of products and services. Telecommunications and media industry will definitely benefit by new technology development, new work standards, new services and contents and new sales methods. The concept of television as a content provider and the concept of television as a medium must change. Finally, the concept of the public service media where television still carries the fundamental role must be modernized digitally. The 20<sup>th</sup> century public service radio-television must be transformed into a converged multimedia public service, using the advantages of all the media. The role of television can no longer be just to transmit information and entertainment content, it must also connect people. It must become a platform for an interactive information, entertainment and communication multimedia virtual community.

Today, in 2007, a little time is left for thinking and debating about the pre-conditions and circumstances of digital television. Even without regulations and development strategies, experimental digital transmitting has already found its way into our homes.

What may discourage us is the fact that the media market leans towards neo-liberal discussion speaking in favour of less state intervention in the economy and other spheres of society. It refers to destruction of the welfare state which is supported by state intervention in different areas of social life, including public communications. The question is: Will the neo-liberal idea conquer even in the case of the public service media? If that is the case, the future of public service television (or the public service media) will be confined to an exclusive service designed for minorities (like the intellectual minority) and with a no less exclusive market price.

## ENDNOTES:

- <sup>1</sup> See country reports for East European countries in *Television across Europe: regulation, policy and independence*, volume 1-3 (2005) Budapest: Open Society Institute; also see country reports for 10 South East European countries in Udovičić, Radenko (ed.) (2007) *Indicator of Public Interest*, Sarajevo: Media Plan Institute.
- <sup>2</sup> I did the first research on digital television in Croatia in 2006 for the report presented at the conference *Digital Television in Central and Eastern Europe: Policies, Development and Public Debate* that was held in Tirana. The report is available at <http://mita.institutemedia.org/Digital%20TV/Digital%20papers/>
- <sup>3</sup> Law on Telecommunication from 1994 (NN53/94) allowed commercial television launching in Croatia. The first commercial television with national coverage was *NovaTV*, launched in 1999, and after selling the third channel of public HTV in 2003 the second commercial television with national coverage – RTL, started to broadcast.
- <sup>4</sup> According to the research results 9% of UK inhabitants watch online or mobile video once a week or more. Some 43% said they watched less normal TV as a result. Source: BBC/ ICM, <http://news.bbc.co.uk/2/hi/entertainment/6168950.stm>
- <sup>5</sup> <http://www.YouTube.com> and [www.MySpace.com](http://www.MySpace.com) are video sharing websites where users can upload, view and share video clips.
- <sup>6</sup> <http://www.yahoo.com>; <http://www.aol.com>; <http://www.msn.com>;
- <sup>7</sup> For example, when clicking on the remote controller or keyboard, it will be possible for the viewers to ask a question, make a remark, tell their own experience and in that way to actively participate in TV public debate shows.
- <sup>8</sup> A multiplex is the basic principle of DVB standard. All channels in multiplex are mixed together for broadcast. A set-top box is required to unmix and select a channel for viewing. A multiplex can carry 4 to 5 TV channels in MPEG-2 standard. In MPEG-4 standard a multiplex can carry even 8 to 10 channels. The number of channels also depends on the resolution of the system used (e.g. higher resolution as HDTV uses more space in multiplex what means fewer channels to carry).
- <sup>9</sup> *Digital Standard Definition Television* has the same appearance as the regular analogue TV (NTSC, PAL, and SECAM).
- <sup>10</sup> *High-Definition Television* is a digital television broadcasting system with a significantly higher resolution than traditional formats (NTSC, PAL, and SECAM). HDTV standards include 1080i (1,080 actively interlaced lines), 1080p (1,080 progressively scanned lines), and 720p (720 progressively scanned lines). It is wrong to match HDTV with different DVB standards. For example, DVB-T is only one among other standards of transmitting TV programs in HDTV resolutions.
- <sup>11</sup> DVB-H is a technical digital platform for bringing broadcast services to handheld devices.
- <sup>12</sup> Odašiljači i veze d.o.o.
- <sup>13</sup> Each transmitter was approximately 250W. They covered the city of Zagreb and the surrounding area, which has a population of around 800,000.
- <sup>14</sup> DVB-S in Croatia offers three channels of public service television (HTV1, HTV2 and HTV Plus) and the Croatian *Music Channel*. Two national commercial channels are not available in digital format on satellite. Their digital transmitting via satellite is available only as a backup of terrestrial transmitting.
- <sup>15</sup> *Pay TV* (Pay Television) is a subscription-based television service. Every package offers a range of movies, serials, sitcoms, documentaries etc. and subscribers can pick and watch anything offered at any time they decide to watch it.

- <sup>16</sup> Law on Croatian Radio-Television (NN 25/2003), Law on Electronic Media (NN 122/2003), Law on Media (NN 59/2004) and Law on Telecommunications (NN 60/2004).
- <sup>17</sup> Zakon o izmjenama i dopunama Zakona o elektroničkim medijima (NN 79/2007).
- <sup>18</sup> Recommendation Rec(2003)9 of the Committee of Ministers to member states on measures to promote the democratic and social contribution of digital broadcasting, adopted on 28 May 2003 at the 840th meeting of the Ministers' Deputies.
- <sup>19</sup> CEM issues the broadcast licenses and it monitors the compliance of the broadcasters with their legal obligations.
- <sup>20</sup> CTA is the independent regulatory body that manages the frequency spectrum in Croatia.
- <sup>21</sup> It is regulatory and monitoring body of the Croatian public service broadcaster HRT.
- <sup>22</sup> The current international frequency plan dates back to the *Regional Agreement for the European Broadcasting Area* (Stockholm 1961).
- <sup>23</sup> International Telecommunications Union.
- <sup>24</sup> COM(2005) 204.
- <sup>25</sup> The largest group of audience that television loses is the one aged between 16 and 24. Source: BBC/ICM, <http://news.bbc.co.uk/2/hi/entertainment/6168950.stm>; page seen 22/01/2007.
- <sup>26</sup> Television genres become more and more popular. News is edited and presented in a way that unusual, popular and entertaining news have the advantage over the economy, culture or political actualities. That is *infotainment*. The private lives of celebrities get more minutes than, for example, news on science and technology. That is news tabloidization.
- <sup>27</sup> Product placement is the model of advertising where promotional ads are placed using real commercial products and services in the media. The products are presented as an integral part of plays, film, television series, music video, video games and books. It occurs with the inclusion of a brand's logo in shot, or a favourable mention or appearance of a product in shot. Despite the discussion on manipulative circumstances of legalization of such a model of advertising, the Council of Europe supports it with the proposal of annexes of the Directive Television Without Frontiers; see Proposal for a Directive of the European Parliament and of the Council amending Council Directive 89/552/EEC of 13/12/2005.
- <sup>28</sup> See reports from the conference *Digital Television in Central and Eastern Europe: Policies, Development and Public Debate* held in Tirana, available at <http://mita.institutemedia.org/Digital%20TV/Digital%20papers/>.

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## **Digitalna televizija u Hrvatskoj: Postaje li televizija novi medij?**

**Viktorija Car**

#### **SAŽETAK**

Živimo u multimedijском društvu, u kojem je medijska konvergencija svakodnevna. Tehnološki razvoj prouzročio je značajne transformacije u društvu i gospodarstvu, pa su i mediji izloženi neprestanim promjenama. Zahvaljujući digitalizaciji koja medije transformira u potpuno nove, otvarajući im prostor za brojne mogućnosti, proizvode i usluge, i televizija se našla u vrtlogu promjena. Za taj proces u Hrvatskoj karakteristično je da implementacija prethodi razvojnoj strategiji i planiranju, a nedostatak javne rasprave dodatno povećava nerazumijevanje. Proliferacija novih digitalnih kanala (zemaljskih, kablinskih, satelitskih i široko-



pojasnih) te fragmentacija masovne publike, dodatno uslozjavaju proces. Tehnološka dostignuća omogućavaju razvoj novog multimedijskog okruženja, koji pritom ruši tradicionalne granice, one koje su postojale između telekomunikacija, računala i audiovizualne industrije.

Kao u većini zemalja u regiji, javna televizija se i u Hrvatskoj suočava sa sve izraženijom krizom identiteta te rastućim problemom čuvanja stabilnog financiranja. Kada je riječ o općoj medijskoj digitalizaciji i konvergenciji, nameće se pitanje je li uopće moguće predvidjeti budućnost sada već 'starih medija', posebice televizije, koja još uvijek uspijeva zadržati primat najutjecajnijeg medija. Opstanak javnog servisa moguć je upravo ako se i sam multimedijski redefinira i restrukturira.

Ključne riječi: televizija, digitalna televizija u Hrvatskoj, DTV, digitalne platforme, javni servis, multimedija, interaktivnost, konvergencija, internet