
Section 2.

INTERNAL POLICIES

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MEDIA POLICY ON THE IMPLEMENTATION OF DIGITAL TERRESTRIAL TELEVISION IN POLAND

Abstract

Thea im of the text was a short presentation of media policy on the implementation of digital terrestrial television in Poland.

Main statements: The digital switch-over in Poland was long overdue, compared with other European states. This should be attributed not only to financial constraints, but first and foremost to the absence of long-term media policy provisions. In Poland, several different strategies of digitalisation were elaborated in various decision-making centres and the process of conversion was based on ad hoc decisions. The digital TV conversion proved successful. Paradoxically, the delay in comparison with other European states benefited Poland as regards, for instance, the choice of the better MPEG-4 standard.

Key words: *media policy, digital terrestrial television, digital switch-over, strategies of digitalisation*

The analogue-to-digital media conversion, metaphorically referred to as another ‘mediamorphosis’ [4; 5, pp. 47-162; 6, pp. 13-20; 13, pp. 22-31], has been carried out on the level of production, distribution and consumption of broadcast content. It has enabled the elimination of the greatest shortcomings of electronic media of the analogue era, such as low picture and sound quality, small data capacity, high broadcasting costs and the lack of interactive broadcasting, as it offers significantly more channels with almost the same broadcast infrastructure and so-called additional services. Digitalisation stimulates civic engagement in the activities of the institutions of the democratic state and the realisation of the concept of the information society [12, pp. 17-35]. This process also results in media convergence, i.e. bringing together and merging hitherto separate sectors, such as media, telecommunications and computing [8, p. 2]. Thus,

the barriers among the three previously disparate social, economic and legal [19, p. 5] areas are currently being eliminated.

It needs to be explained that the term ‘digital conversion’ is understood as a process whereby the production, broadcast and reception of analogue radio and TV content is digitalised – the so-called switchover.¹ In the transitional period, the content viewers receive is simulcast on both analogue and digital platforms concurrently. It is terminated upon switching off the analogue signal, hence its common denomination as the switch-off [2]. Media policy is understood as “activities undertaken by authorities to establish conditions for functioning of the mass communication system – predominantly the press, radio and television” [14, p. 227].²

The digital conversion of radio and television raises the question of the need to redefine the media policy model. Even though nowadays heavy emphasis is placed on the conviction that deregulation³ thereby limiting the scope of state intervention in this area is necessary, what actually should be advocated is its re-regulation. A state discharges numerous duties within an adopted media policy. Above all, it must not fail to make crucial decisions on digitalisation, such as developing a switchover road map and strategy, establishing and supervising the schedule for the digital transformation, but also addressing the problem of funding the conversion process, in particular settling the issue of who should cover the costs of the transformation, and finally determining how the digital dividend should be allocated. The state’s activity should aim to further the principle of technological neutrality and interoperability, and eliminate so-called digital gates i.e. discriminatory principles for the functioning of such digital transmission components as electronic programme guides, conditional access systems and application programming interfaces. Otherwise, access to broadcast content may be monopolised [11, p. 265]. The state should be tasked with international coordination of management of the radio spectrum – necessary for launching domestic digital broadcasting, drafting

¹ English term “switchover” is commonly used to denote the transition from analog to digital broadcasting.

² In the author’s opinion “the analysis of the media policy means examining the ways (methods) public authorities use to create the conditions in which media operate and compete with other entities engaged in activities in this area.” The problem of defining the term is addressed by T. Goban-Klas [7, pp. 164-165].

³ Even those concepts, however, acknowledge the need of limited legal control of content, regarding basic issues such as protection of minors, advertising, and the right of reply.

a road map for the use of that spectrum, introducing technological standardisation [1, p. 246; 19], regulating technical aspects and specifying the technical and operating conditions of the receiver devices used by consumers. Media policy should also counteract the digital divide, which would mean taking measures to help citizens who are unable to access the technical as well as economic requirements. It is also imperative to implement an adequate information strategy intended to teach citizens digital literacy skills.⁴

The digital switch-over in Poland was long overdue, compared with other European states. This should be attributed not only to financial constraints, but first and foremost to the absence of long-term media policy provisions.

In Poland the first efforts to develop plans on the digital switchover of radio and TV were made in the second half of the 1990s by the National Broadcasting Council (hereafter referred to as KRRiT) – the Polish regulator of the media market, and the Ministry of Communications. Later, the Regulatory Telecommunications Authority⁵ (i.e. the national regulator of the telecommunications market in charge of the radio spectrum management) became involved together with the Interdepartmental Group for Digital Radio and TV Transition [23, p. 156; 18, pp. 965-969], specially appointed for this purpose. The large number of governmental units responsible for the digitalisation process of radio and terrestrial television paradoxically led to delays in implementing new technological solutions. From the very beginning, the media policy on digitalisation was overshadowed by political conflict over the media sector, and particularly over the KRRiT and public radio and television. Therefore, in the following years various governmental bodies, one after another, prepared separate strategies, contradicting previously-adopted guidelines, for radio and television digitalisation. In fact, digitalisation in this sector was presented as a *fait accompli*.

⁴ Consideration might be given to creating certain mechanisms targeting people who need technical assistance when using new technology.

⁵ From October 2000 to March 2002, the President of the Regulatory Telecommunications Authority was the competent authority, *inter alia*, on telecommunications matters and spectrum management. Prior to this there existed the National Inspectorate of Telecommunications and Post and National Radiocommunication Agency. From April 2002 to January 2006, their competency was vested in the President of the Office of Telecommunications and Post Regulation which was a body of central government. Since 2006, the duties have been discharged by the President of the Office of Electronic Communications.

It needs to be admitted that the absence of a vacant spectrum proved to be a great problem when implementing the digital switchover in Poland. Early in the process, the Institute for Communications suggested using bands IV and V. At that time there was a plan to create only two Polish DVB-T systems with multi-frequency network (MFN) available on channels 21-60. This proposal stemmed from the fact that nearly 28% of the above-mentioned channels were at the disposal of the Ministry of National Defence, and a part was used by the military services of former Soviet Union states. Each multiplex was meant to accommodate eight national channels and eight cross-region channels. At that time, two options were under consideration. The first option involved creating two national, central multiplexes, one of which was intended for public television stations for both general and dedicated channels, and the other for licensed national broadcasters. Moreover, two regional distributed multiplexes were planned: one for regional and cross-regional general and dedicated public broadcasters, the other for regional licensed broadcasters. Under the provisions, a network divided into regions was also to be created. The other, more expensive option, involved one network covering the whole territory of the country divided into regions corresponding to the regional departments of TVP, the public broadcaster in Poland. This multiplex would carry only the national and regional channels of public TV. A second, also national multiplex was intended for licensed broadcasters. In turn, dedicated channels, with a view to eventually becoming national, were to be developed through one of the distributed networks, while the other was intended for regional and cross-regional channels controlled by the licensed broadcasters [10, pp. 23-24].

On the 29th of November 2000 KRRiT adopted a resolution imposing the end of 2002 as the deadline for launching digital terrestrial TV. This time limit proved to be totally unrealistic. Moreover, the analogue switch-off was scheduled for 2012 [10, p. 172] – this deadline was not met either. In February 2001, the KRRiT, following the provisions stipulated in the above-mentioned resolutions, produced a document called *Strategy for the Development of Digital Terrestrial Radio and TV in Poland (Strategia rozwoju naziemnej radiofonii i telewizji cyfrowej w Polsce* [10, p. 20]⁶). In February 2002, the KRRiT presented the President of the then Office of

⁶ The document was later (in June 2003) titled *Initial Guidelines for the Strategy of the Development of Digital Terrestrial Radio and TV in Poland*.

Telecommunications and Post Regulation (URTiP) with the principles for constructing terrestrial networks of digital TV in Poland; advocating the use for this purpose of channels 21-60 and partially 61-69, choosing standard-definition television (SDTV), developing two separate plans – one of them concerning the period of simultaneous analogue and digital broadcasting, while the other concerning the period after the analogue switch-off. It was assumed then that during the simulcast period two national multiplexes would be constructed, with the possibility of dividing them into regional networks. In larger agglomerations the plans also allowed for as high a number of broadcasting stations as possible, which – once the spectrum used for analogue broadcasting was freed up – would become regional and then national [10, pp. 20-21].

Pursuant to the ministerial order of 26th January, 2004, the Interdepartmental Group for Introduction of Digital Radio and TV in Poland⁷ was set up, and pursuant to order no. 105 of the 19th of November 2004, the Group for the Strategy for Development of Radio and Television was established. On the 25th of January 2005, the Interdepartmental Group for Introduction of Digital Radio and Television in Poland⁸ issued a document titled *Strategy for the Transition from Analogue to Digital Technology (Strategia przejścia z techniki analogowej na cyfrową)* and consequently on the 4th of May 2005, the Council of Ministers adopted the *Strategy for the Transition from Analogue to Digital Technology of Terrestrial TV Broadcasting (Strategię przejścia z techniki analogowej na cyfrową w zakresie telewizji naziemnej)* based upon it. Technically, the document outlined the DVB-T standard as the intended one, as it was deemed by the European Communications Standards Institute (ETSI) as complying with the decisions made during the Regional Radiocommunication Conference in Geneva in 2004.

It was declared that the first two multiplexes were intended for channels currently available through terrestrial broadcasting as well as selected channels presently offered on satellite platforms. Only the subsequent multiplexes were to be intended for a completely new range of channels. It

⁷ On the 26th of January 2004 the Prime Minister issued a directive establishing the Interdepartmental Group for the Introduction of Digital Radio and Television in Poland. On the 27th of April 2004 the Council of Ministers approved the law called *Guidelines for the Strategy for the Analogue-Digital Switchover*.

⁸ The group was established pursuant to the Prime Minister's directive of 26th January, 2004 in order to develop a strategy for the analogue-digital transition, including specifying the conditions for the analogue switch-off.

was decided that there was no need for a new award procedure as regards the first two multiplexes [10, p. 9]. The strategy advocated adopting a model of fast transformation, executed in accordance with several basic technical principles. In the first stage, there was a plan to create two national multiplexes. The plan was to be based on specific assignments (i.e. established technical conditions of broadcasting in a specific location rather than in reserved areas, as stipulated in the target plan) in multiple frequency networks (MFN).⁹ According to this concept, the whole territory of Poland was divided into four zones. The first one allowed an immediate digital switchover. The second covered the areas where the digital switchover would be possible, provided, however, international agreements were honoured and possible collisions with low-power analogue signals were averted. The third group encompassed areas where launching digital television would be possible provided that broadcast bands were freed by the Ministry of National Defence. Finally, the last sector included areas where, due to existing analogue broadcasting, the digital switchover would not be possible until the analogue switch-off was completed.

The principles of the 2005 strategy were criticised by the National Broadcasting Council. It particularly argued that the approved document should be complemented with solutions that guarantee transparency and predictability when creating a complex information campaign; a smooth transition manifested in an unobstructed process of analogue switch-off and implementing protective measures for households, as they needed to purchase new reception devices; programme neutrality and pluralism, understood as the state's impartiality towards the actors of the media market which enables the preservation of the pluralistic quality of the channels available. Moreover, it indicated the need for advocating an open standardisation model for consumers' receivers, the shortest possible period of simultaneous broadcasting and a wider strategy for receiving digital broadcasts, including internet and cable broadcasts [20, p. 10-11; 19].

In September 2005, the National Broadcasting Council approved another document titled *The Activity of the National Broadcasting Council in Implementing the Digital Terrestrial Television in Poland (Działalność Krajowej Rady Radiofonii i Telewizji w zakresie wprowadzania naziemnej telewizji cyfrowej w Polsce)* [3; 24, p. 11]. The document stated that as regards cable television, the digital conversion would be governed by the

⁹ A network in which all the transmitters operate on multiple frequencies [21, p. 40].

principles of the free market, i.e. operators would offer their services and the subscribers would bear the costs. It was predicted that the triple play service – access to TV, telephone and internet for one flat-rate fee – would act as an incentive. The digital satellite TV market was regulated in the same way.¹⁰ In this case, all the objectives were fully met. Broadcasters themselves assumed all the responsibilities resulting from the digital conversion. As regards digital terrestrial TV, ultimately MPEG-2 compression was chosen. However, the use of a newer but already well-known standard MPEG-4¹¹ was made possible in the future. Free access to the first two multiplexes, which were supposed to carry seven channels in total, was called for.

On the 27th of February 2007, the then Ministry of Transport (disbanded in 2007) issued a document titled *The Plan for Implementation of Digital Terrestrial TV in the DVB-T Standard (Plan wdrażania naziemnej telewizji cyfrowej w standardzie DVB-T)* [15; 24, p. 11].¹² The launch of digital broadcasting was scheduled for the 1st of January 2010, a date which then was deemed overly conservative. In practice, the deadline proved to be too optimistic. In turn, the analogue switch-off was to take place not later than by the 31st of December 2012, however, with the proviso that the deadline could be extended until the 17th of June 2015. Moreover, it was stipulated that only one multiplex would be created, but using the MPEG-4 compression standard, which would carry three public channels and other channels such as Polsat, TVN, TV4, TV Puls [24, p. 158]. It was decided that the operator of the first multiplex would be appointed following an administrative decision; however, such an entity would have to commit to including all the above-mentioned channels. At the same time, it was stressed that the multiplex operator must not be related by capital with a broadcaster whose channel would be carried by the network. As regards the operators of multiplexes launched subsequently, they were to be se-

¹⁰ It is important that back then it was possible to offer interactive services (by the two then biggest operators i.e. Canal+ Cyfrowy and Cyfrowy Polsat which enjoyed 1.2 million subscribers at that time). The access to foreign digital platforms was obviously possible and did not come within the purview of the Polish regulatory authorities.

¹¹ The document allowed for one more possibility i.e. letting the operators of multiplexes choose any of those standards while the state would impose the use of multi-standard STBs [3, p. 13].

¹² As it was stressed in the document, it sets out to update and complete the guidelines adopted in the 2005 Strategy. It was clearly stated, however, that should there be any divergence between the two documents, the latter will be decisive [15, p. 2].

lected through open tender. Moreover, public financial support for specific social groups was considered – the money was meant to be earmarked for the purchase of access devices. Additionally, the need to conduct an informative and educational campaign for citizens [15, p. 5; 19] was emphasised.

In mid-2007 the president of the Office of Electronic Communications (UKE) also presented his own document on digitalisation strategy. It stipulated that two multiplexes would be created using the MPEG-4 compression standard and that the digitalisation would start in 2008. In turn, the idea of adopting a separate law regulating the most important aspects of that process was rejected. It was argued that implementing the legislative process would unjustifiably prolong the implementation of the technological process [23, p. 158].

Surprisingly, on the 20th of September 2007 the presidents of the public television broadcaster TVP S.A., Polish Radio (PR S.A.) and the telecommunications service company Polkomtel S.A. signed a letter of intent in the Prime Minister's office to construct the digital terrestrial TV using the broadcasting infrastructure of a mobile phone operator, which was in contradiction to the previously adopted principles [24, p. 12].

On the 14th of July 2009¹³ the Interdepartmental Group for Digital Radio and Television¹⁴ announced the *Project for TV Broadcasting Digitalisation Strategy (Projekt strategii cyfryzacji nadawania sygnału telewizyjnego)*.¹⁵ Firstly, it stipulated that digital terrestrial television would be implemented adopting the DVB-T standard with H.264/AVC (i.e. MPEG-4) video coding. Secondly, the road map for the switchover was drafted. It was then planned to be initiated in September 2009 and analogue broadcasting was intended to be terminated on 31st July, 2013. Thirdly, it was suggested that it might be necessary to start a satellite platform providing free or inexpensive access to a basic digital TV package. Fourthly, it was decided that the digital dividend would be earmarked for enriching the programming of both free and pay services of terrestrial TV

¹³ The same document was published on the website of the Ministry of Infrastructure and is dated of 16th of September 2009.

¹⁴ A team established pursuant to the Prime Minister's directive no. 3 dated the 2nd of September 2009, which was amended by the Prime Minister's directive no. 74 dated on the 2nd of July 2008 and changed the directive on appointing the Interdepartmental Group for Digital Radio and Television. The text available on http://bip.kprm.gov.pl/rm/organy/dzialajace/przy/prm/24_1011.html.

¹⁵ The text is available on <http://transmisja.net.pl/p/pliki/13.pdf> henceforth referred to as the Projekt Strategii 2009.

in standard (SDTV) and high (HDTV) definition; developing mobile TV and finally creating mobile communications services. The document clearly stated that there is a plan to introduce a scheme of financial aid for the least privileged. Moreover, the intention to carry out an informative and educative campaign was declared. Its purpose was to present benefits of digitalisation and to instruct the users on what steps needed to be taken to use the new technology [16, p. 31; 19]. The document planned four stages of the digitalisation process. Firstly, multiplex no. 1 would be launched delivering TV services currently available as terrestrial broadcasting i.e. TVP1, TVP2, TVP3, TVN, Polsat, TV4, TV Puls. Multiplex no. 2 was intended to include at least seven thematically oriented TV channels of certified broadcasters. However, there was a stipulation that four of those offers would be selected by the KRRiT and at least three of them would be chosen by the multiplex operator from the channels which are available countrywide. It was also stressed that criteria guiding the multiplex operators should include TV ratings for channels available on satellite platforms and cable networks. As regards both multiplexes, the clearly favoured position called for free access to their broadcast until the analogue service was discontinued. After the switch-off, however, the programming included in the second batch of channels would provide pay or partially paid television services [16, p. 16]. Importantly, in the strategy drafted in September 2009, it was declared that in order to encourage commercial broadcasters to shoulder the financial costs of the digital conversion, they needed to be offered some additional benefits. Hence the suggestion to allocate a data transfer rate,¹⁶ made available following the act of freeing the spectrum by public TV, to increase the resources of other broadcasters operating on this multiplex i.e. TVN, Polsat, TV Puls, TV4. This would allow stabilising their market standing following a significant rise in competitiveness, resulting from a threefold increase in the number of channels without altering the depth of the advertising market [16, p. 16]. Regarding subsequent multiplexes, the idea of imposing a broadcast fee has not been discarded. This type of service will also provide the option to offer video on demand [19].

On the 30th of September 2009, the president of the Office of Electronic Communications issued a decision granting TVP, Polsat, Polskie

¹⁶ The term refers to the speed at which data can be transmitted, measured in bits or bytes (or their multiples) per second.

Media, TVN and Puls the right to jointly use the frequencies on the multiplex no. 1. On the 4th of June 2010 the Council of Ministers approved the strategy for the development of digital television outlined above.¹⁷

In practice, the actions taken diverged slightly from those stipulated in the document. On the 30th of September 2010 the TP Emitel partnership signed a contract with the commercial broadcasters, namely Polsat, TVN, TV Puls, TV4, under whose terms the second terrestrial TV multiplex (MUX-2)¹⁸ would be launched. It was agreed that it would carry the four above-mentioned channels and another four, each suggested by those broadcasters.¹⁹ On the 27th of September, the operator of MUX2 presented the Office of Electronic Communications with a plan for launching the permanent broadcast of channels, not only experimental as it was then, within the second multiplex [19].

In January 2010, when in fact the TV digitalisation process was already underway, a draft law on the implementation of the DVB-T²⁰ digital terrestrial television was presented and subsequently approved on the 30th of June 2011 [17]. The law specified a series of questions related to the digital conversion of radio and television in Poland and in particular it clarified the term ‘analogue switch-off’ and the modalities for the appointment of the network operators who would provide the DVB-T multiplex operator with digital broadcasting service and add new channels. It also defined the responsibilities of the operators of a DVB-T digital terrestrial television multiplex and the responsibilities of TV channel broadcasters regarding the information campaign about digital terrestrial TV.²¹

The law in question bound the public broadcaster, as well as other certified entities which benefited from the allocation of digital dividend spectrum, to

¹⁷ See the information posted on http://www.kprm.gov.pl/centrum_prasowe/wydarzenia/id:4880/ on the 7th of June 2010.

¹⁸ It was intended to be launched on the day of signing the contract.

¹⁹ As announced, TVN planned to include TVN7, Polsat – Polsat Sport News, TV4, a new channel TV6, while TV Puls – a channel called TV Puls 2. *Tak Rusza naziemna telewizja cyfrowa* – the text is available on <http://www.wirtualnemedia.pl/artykul/rusza-naziemna-telewizja-cyfrowa>.

²⁰ The text is available on the website of the Ministry of Infrastructure http://bip.mi.gov.pl/bip/projekty_aktow_prawnych/projekty_ustaw/ustawy_telekomunikacja/proj_ust_wdrozenie_dvb_t/px_cyfra_29122009_08_01_10.pdf.

²¹ As explained in the draft, on the grounds of the field of application of the Telecommunications Act and the Radio and Television Act, it was necessary to adopt a new law addressing exclusively this issue.

broadcast their channels simultaneously in analogue and digital version in the transitional period, at the same time covering at least 95% of the allocated area with a digital TV signal. It was indicated *expressis verbis* that the analogue switch-off was to be completed not later than on the 31st of July 2013. Also, regulations on the sales of television sets were introduced pursuant to this law. They stipulated that televisions should come fitted with tuners enabling the reception of free channels of digital terrestrial television in the HDTV and SDTV standards (video coded in MPEG-4) [17].²²

On the 23rd of July 2013 the last analogue transmitter of terrestrial TV was switched off (in Giżycko in north-east Poland). In fact, the process of digital conversion went without difficulty, in the sense that the percentage of the population who were left without access to TV broadcasting was relatively negligible (MUX1 – 1.3%, MUX2 – 1.5%, MUX3 – 0.57% of population). Currently about 13.6 million viewers use digital terrestrial TV, 4.6 million of whom receive simultaneously pay cable and satellite TV channels. In 2012, 37.9% of viewers received TV service through satellite dishes, 32.6% through cable networks and 29.50% received the digital terrestrial signal [9]. In the last three years, over half of all households have purchased new receivers able to pick up the DVB-T signals.

It needs to be stressed, however, that spectrum allocation on the multiplexes sparked social debate. Currently three such networks are in operation. One of them, namely MUX2 was the so-called opening one, i.e. certain frequencies were granted to those broadcasters who were also part of the analogue TV landscape. Moreover, those broadcasters were given an option to include additional channels. As regards MUX1 and 3, as they failed to fully cover the country, the spectrum was allocated, *inter alia*, to public TV channels. It was not before 2014 that the public TV ‘moved’ its offer onto MUX3.

Since January 2011, the KRRiT has carried out two proceedings concerning the spectrum allocation on MUX1. The outcome of one of them in particular sparked strong social protests, due to the fact that the Lux Veritates Foundation, the broadcaster of a Christian TV channel TV Trwam, was not granted a licence. In the course of long proceedings the entity was eventually given an MUX I concession, however, it had to wait a relatively long time until the actual broadcasting of its programmes was possible. Currently there are three multiplexes offering tens of TV channels including MUX I (launched on the 14th of December 2011), which in-

²² It is argued that currently such TV receivers are most commonly purchased in Poland.

cludes TV Trwam – a socially and religiously involved channel, TVP ABC – a dedicated channel targeting children aged 4-12, Stopklatka TV – a dedicated film channel, ESKA TV – a dedicated music channel, TTV – a dedicated news and current affairs channel, POLO TV – a dedicated music channel, ATM Rozrywka TV – a dedicated film and entertainment channel and a future offering: Fokus TV – a dedicated music and education channel. MUX2 (launched on the 30th of September 2010) offers the following channels: channels belonging to the POLSAT group (Polsat, TV4, TV6, Polsat Sport, Polsat News), the TVN group (TVN, TVN7) and the Telewizja Puls group (TV Puls, Puls 2). In turn, Mux3 (launched on the 27th of October 2010) carries the channels offered by the public broadcaster (TVP1HD, TVP2HD, TVP Regionalna, TVP Info, TVP Kultura, TVP Polonia, TVP Rozrywka, TVP Historia).

MUX 5 and 6 are still awaiting certain final decisions which will enable the broadcast of another 16 channels. On condition, however, that the country is adequately covered with the signal for those channels which may be subject to the so-called second digital dividend. Moreover, it is necessary to ensure the presence of the local terrestrial broadcasters on the multiplexes, as well as introduce proper technical standards including DVB-T2 and HD.

In Poland, several different strategies of digitalisation were elaborated in various decision-making centres and the process of conversion was based on *ad hoc* decisions. The digital TV conversion proved successful. Paradoxically, the delay in comparison with other European states benefited Poland as regards, for instance, the choice of the better MPEG-4 standard. The next step for Poland surely seems to be the digital conversion of terrestrial radio broadcasting, even though for the time being, talks and trial broadcasting in DAB+ are still underway. This does not mean, however, that the history of the media is drawing to an end. Quite the opposite, it will continue, and most certainly further ‘mediamorphosis’ is just a matter of time.

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Резюме

Основная цель текста – короткая презентация политики СМИ в области внедрения наземного цифрового телевизионного вещания в Польше.

Тезисы текста: переход на наземное цифровое телевизионное вещание в Польше был сильно задержан по сравнению с другими европейскими государствами. Это вытекало не только из финансовых возможностей, а, прежде всего, из-за отсутствия долгосрочных оснований политики СМИ. В Польше подготовлено несколько разных стратегий оцифровки, появившихся в разных центрах, а процесс перехода на цифровое вещание проходил на основании решений ad hoc. Тем не менее, процесс завершился успешно. Задержка по сравнению с другими европейскими государствами парадоксально принесла пользу, хотя бы в виде выбора лучшего стандарта MPEG4.

Ключевые слова: *Политика СМИ, наземное цифровое телевидение, переход с аналогового вещания на вещание цифровое, стратегии оцифровки*