European University Institute Florence Law Department

Thesis submitted for a LL.M in European, International and Comparative Law

Year 1995/1996

The Introduction of Digital Television in Europe: New Problems and Implications for Competition and Media Concentration

Supervisor Prof. Dr. Karl-Heinz Ladeur

1 October 1996

Michael König
Am Brünnenfeld 24
86356 Neusaess/Germany
B/C →
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I. Introduction

1. Digital Television in the Context of Multimedia

Digitalization is the term of the hour when one discusses the future development of the electronic media. Many observers see the electronic media as going through a phase of revolutionary changes caused by technological innovations, mainly the evolution of digital technology. The traditional notion of broadcasting and television has become strongly contested. Television finds itself in a process of reorientation in the new age of the much heralded and proclaimed information society. Triggered through technical change, a process of convergence between telecommunication and broadcasting is observed in the media sectors, which has been equated in its significance with the Industrial Revolution. The character of the broadcast media is expected to be changed fundamentally by the blurring of technical differences between video telecommunication services and interactive broadcasting services and between the different transmission media. The broader context in which the digitalization of the broadcast media appears is the ubiquitous debate about multimedia and information superhighways. Digital television, more or less interactive can be viewed as a segment of multimedia. Although there is a lot of confusion about the definition of the term multimedia, there are certain characteristics widely agreed upon by experts. These are the integrated use of different media as well as the possibility of

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3 Schrappe, Digitales Fernsehen - Marktchancen und ordnungspolitischer Regelungsbedarf, München, 1995, p. 3.
interactivity. However, perhaps one has to see the term rather as an expression of a common vision for the direction of new visual communication opportunities and markets, in which the barriers to communication and self expression in media have been removed.\textsuperscript{4} The bases for these applications are meant to be digital technology and digital compression.\textsuperscript{5} Besides the common vision of multimedia a larger, more natural process is underway, the conversion of all information into the digital realm. In these developments the emergence of a digital network for the television broadcasting can be regarded as a step on the road towards an expansion of the electronic superhighway.\textsuperscript{6} Many observers see interactive television as possible now through digitalization as the best chance to bring about the breakthrough of the multimedia revolution with far reaching effects for both the working world and the private home.\textsuperscript{7}

\section*{2. Why Digital Television?}

Only its significance for the realization of the common vision of multimedia and the information society can explain the immense proliferation of activities in the field of digital television. The market players broadcasting (media, telecommunication and computer companies) engage in alliances and joint ventures, they integrate them vertically and horizontally dissolve them and build new ones with different constellations.\textsuperscript{8} In the

\begin{footnotes}
\footnote{Aston/Schwarz, Multimedia: Gateway to the Next Millennium, Cambridge, Mass., 1994, p. 12.}
\footnote{Booz, Allen & Hamilton, Zukunft Multimedia: Grundlagen, Märkte und Perspektiven in Deutschland, Frankfurt am Main, 1995, p. 17.}
\footnote{Report to the Swedish Minister of Culture and the Head of Ministry: From Massmedia to Multimedia - Digitalization of Swedish Television, (SOU 1996:2), Stockholm, February 1996, p. 5.}
\footnote{Salomny, Multimedia - was ist das, wer will das, wie macht man das?, in: New Markets with Multimedia, edited by Eberspächer, Berlin, Heidelberg, 1995, p. 9.}
\footnote{See for the alliance between Bertelsmann AG, Rupert Murdoch's British Sky Broadcasting, Canal Plus and the French media company Havas, International Herald Tribune, 8 March 1996, p. 1; see also Neue Züricher Zeitung, 9/10. März 1996, p. 27; see the for alliance between Bertelsmann AG and the Compagnie Luxembourgoise de}
\end{footnotes}
meantime the regulators, mainly the governments on the national and European Community (EC) level, try to establish a sufficient regulatory framework in time before unwanted structures emerge. However, the market forecasts for multimedia applications are ambiguous. In the end the customer will decide how the future information society will look like, but his choices are hard to predict because of the complexity of the multimedia market. No one wants to be left out of the digital television scene: it is considered one of the entrance doors to the more promising multi-media market because of the possible introduction of interactivity; furthermore, some of its applications offer profits in the short term (expansion of pay-television, pay-per-view, special interest channels etc. In the USA digital television via direct broadcast satellite has been a reality since 1994. Since the beginning of 1995, with the positioning of a second direct broadcast satellite, 150 television channels have been available. In the final stage, 300 television channels are supposed to be offered via four satellites. However, the main legal debate regarding
television still evolves around traditional broadcasting and cable television. In Europe the development of digital television lagged behind, but is rapidly catching up now. In almost all major European countries digital television has in the meantime been or is to be introduced in the very near future.\(^{11}\) In France the pay-television channel Canal Plus entered the digital TV age at the end of April 1996 with its CanalSatellite offering a package of 24 channels via satellite. And there is also another joint venture *Télévision par satellite* (TPS) between TF 1, France Télévision, la Compagnie Luxembourgeoise de Télédiffusion (CLT), M6 and la Lyonnaise des Eaux to offer digital television in the very near future.\(^{12}\) In Great Britain the government presented a White Paper in August 1995 which foresees the introduction of at least 18 terrestrial digital channels until 1997. Before that date BSkyB already wants to have set up 120 digital television channels transmitted via satellite.\(^{13}\) In the meantime the British government has already introduced the new Broadcasting Act of 1996 which contains already provision regarding digital terrestrial television. The pay-television channel Telepiù owned by the German Kirch Group, Rupert Murdoch and the international pay-television provider Nethold, has started to provide digital television via satellite in Italy in March 1996 and claims to be the first broadcaster in Europe to launch a digital-direct-to-home satellite service.\(^{14}\) There exist also plans to launch digital television very soon in Spain with an expected involvement of the German

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Kirch Group and the Spanish telecom company Telefonica.\textsuperscript{15} Nethold, an international pay-television company with channels in Europe, Africa and the Middle East, already provides digital television to about 80000 subscribers in the Benelux countries.\textsuperscript{16} In Germany, the largest television market in Europe,\textsuperscript{17} the Kirch Group became the front-runner in starting with satellite transmitted digital television called Digitales Fernsehen 1 (DF1) at the end of July 1996.\textsuperscript{18} Its great counterpart in the German market, the European media giant Bertelsmann AG wants to follow as early as possible. It planned to offer 15 special interest channels through its the already existing pay-television channel Premiere and the recently founded joint venture with the media tycoon Rupert Murdoch, the owner of British Sky Broadcasting, Canal Plus and the French media company Havas.\textsuperscript{19} However, this alliance failed and the Bertelsmann AG found itself in such a weak position that it had to offer the Kirch Group a compromise concerning the introduction of only one instead of two digital decoder systems.\textsuperscript{20} The Kirch group and the Bertelsmann AG were heading two opposing alliances who each wanted to introduce its digital decoder and conditional access system essential for the realization of digital television to the German market.\textsuperscript{21} Now it looks like the Kirch Group has become the dominant player in digital television in Germany.

\textsuperscript{16} See The Times, 13 August 1996, p. 29.
\textsuperscript{17} See for a good description of the German television market, Der Spiegel, "Das entfesselte Fernsehen", 29/1996, p. 22ff.
television in Germany also due to a newly founded alliance with Rupert Murdoch.\textsuperscript{22} The Kirch Group and the Bertelsmann AG agreed on a cooperative scheme for the distribution of digital television through Kirch’s digital platform, also including the digital programs offered by Premiere, the only German pay-television channel co-owned by the Kirch Group, the Bertelsmann AG and Canal Plus.\textsuperscript{23} However, this created a lot of confusion, since Bertelsmann is also a member of the \textit{Multimedia Betriebsgesellschaft} (MMBG), a consortium of the German Telecom, the German public broadcasters ARD, ZDF, private broadcasters, RTL and program suppliers like UFA and others which plans to introduce its own digital platform.\textsuperscript{24} At the moment it cannot be predicted how the digital television landscape will look like in the near future or who the dominant market players will be.

\textbf{3. The Analytical Approach}

The transformation process of the electronic media spurred by digitalization as depicted above calls for a broad academic discussion in different fields, economics, political science, sociology and in particular law.\textsuperscript{25} The law is supposed to provide the framework for the development of the new electronic media landscape. Among the multitude of regulatory

\textsuperscript{21} The Kirch Group introduced as decoder its d-box, while the \textit{Multimedia Betriebsgesellschaft} (MMBG), where the Bertelsmann AG, the German Telecom, CLT, ARD, ZDF, RTL and Canal Plus hold shares favors its media-box, Der Spiegel, 9/1996, “Technik reinprügeln”, p. 102; Cable and Satellite Express, 7 March 1996, Vol. 13, No 5, p. 9; see also The Economist, “Sky lights”, July 13th 1996, p. 69.


\textsuperscript{24} See for an overview of the recent developments in Germany, Zimmer, Pay-TV: Durchbruch im digitalen Fernsehen?, p. 395ff.

problems connected with this change I deal only with the ones which seem most crucial and pressing in the start up phase of digital television in order to prevent the emergence of structures right from the start which might prove detrimental for the years to come. These are the implications for competition and concentration on the electronic media market triggered by the introduction of digital television. The analysis will focus on the specific new legal problems created by the introduction of digital television and the technical infrastructure and equipment it requires. Therefore the set-top-box, the crucial technical device for introducing digital television, will be thoroughly investigated in regard to its central position for potential impediments of competition and control of the new television market. The same applies to the new phenomena introduced by digital television like the need for a navigation system and the practice of packaging. The method of transmission and the networks in general will only be dealt with to the limited extent they pose specific competition or concentration concerns regarding digital television as for example the tendency to vertical integration between the cable network operators, the channel providers and the program suppliers. After describing the concrete problems along with some of the technical characteristics of digital television they will be put into context regarding more general concerns already quite familiar. The particular situation of public broadcasting will not be a special concern, since this would lead into a fundamental discussion about the general role of television that would have to go beyond the scope of this analysis and distract from its real focus.26 The further peculiarity of the approach followed in this paper will be its European perspective instead of a national perspective in

analyzing the problems. The potential legal and regulatory problems will be described and analyzed in an abstract way without reference to specific legal orders of Member States, although some examples of national characteristics and rules will be given for illustration. Instead the European Community legal framework will be assessed regarding the means it offers to deal with these problems and risks for competition and concentration. Here the decision of the European Commission\(^{27}\) to prohibit a concentrative joint venture, the Media Service GmbH which was aimed at providing technical and administrative services to organize digital pay television, will serve as a starting point for analyzing European competition law. I will also look at the competition problems related to the introduction of digital television in a more abstract and partly comparative way. Besides that the implications of digital television on the media concentration debate will be examined. The preparatory work and the proposal by the Commission regarding a Media Concentration and Pluralism Directive itself will be discussed.\(^{28}\) The overall European legal framework for that field will be assessed according to its capacity to deal with the described problems. The competence questions of which regulatory matters should be dealt with on a European and which on a Member State level will be left out. The same is true for the question of competence. The latter will be partly answered by the outcome of the analysis of the existing European legal framework. The former is at the end of the day rather a


political than legal question. However, the following analysis prefers a functional approach.

II. Television Goes Digital

In the following chapter the main features of the digital technology will be briefly described as far as it is relevant to understand the legal problems caused by the introduction of digital television. In addition the main applications of the technology to television will be outlined.

1. The Technology

a) The General Concept of Digitalization

Digitalization means the translation of information through standardized codes into the binary system, which only knows and recognizes ones and zeros. Digital entails one common standard that enables the data and information to be output onto any format and enables the different data types such as audio, video animated graphics and alphanumeric text to be combined and displayed in a seamless manner. The digitalization of information is well known in the context of modern computer and telecommunication systems and digital processing has also been used in the television system, in the studio and in the receiver. However, until recently all systems used analogue technology for transmission of the program over the air and in cable networks to the viewer. This was due to the immense capacity needed to transport the huge stream of digitized information.

in particular video. Only recently has digital technology become powerful enough to set the stage for a putting all information into a single digital format.

b) Digital Compression
Developments in digital compression techniques have now opened the possibility of fully digital television where the signal is digitized throughout the whole chain from the studio to the viewer. With digital compression techniques the digital information needed to transmit audio or video can be reduced to a margin of their uncompressed storage space. This is achieved through techniques which store and send not the whole picture information but only the information necessary to define the changes from one frame to the next. There exist already a couple of standards for video compression, the international most widely accepted are known as MPEGs, named after the Motion Picture Experts Group, an international standard setting body responsible for setting the criteria for compression of moving video and audio. In Europe the Digital Video Broadcasting Project Group, a private industry organization, deals with standard setting and has widely

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30 Schrape, Digitales Fernsehen, p. 11.
31 Aston/ Klein, Multimedia will carry the Flag, p. 11.
34 MPEG 1 is for coding tone and MPEG 2 for coding pictures, see Sandoval, La télévision interactive, p. 76ff.; see Westerkamp, Digitales Satelliten-Fernsehen in den USA, p. 12; Yadon, Broadcasting in the Information Age, p. 121; Seeger, Strukturveränderungen des Rundfunks in Europa, p. 124; see for the technical details Musmann, Stand der Quellencodierung für Bild und Ton, in: Digital Television - Digital Radio Technologies of Tomorrow, edited by Müller-Römer, Berlin/ Heidelberg 1994, p. 80ff.
adopted the MPEG standards with further sophistication. Most recently the European Community has passed a directive on standards for the transmission of television signals, which refers to standards brought forward by the DVB and standardized by a recognized European standardization body. The higher the factor of compression the less data has to go through the network, which lowers the transmission costs. However, there is a trade off between the picture quality and the degree of the compression. Until the function is integrated in new receiver sets the viewer at home needs a decoder, the famous set-top-box - dealt with in detail below - , to convert the digital signals again to analogue ones which can be received by the traditional television sets.

c) Digital Transmission Media
Another important technical aspect concerning the start of digital television in order to understand the competition concerns of the tendency to vertical integration between service providers like telecommunication companies and cable operators and content providers are the different models of distribution. The way of transmitting digital signals is not confined to one medium. Digital broadcasting can be distributed via a terrestrial network, satellite, television cable, glassfiber and also via the telecom network. In
Europe satellite broadcasting will be the front-runner for digital television. Already since mid 1995 the satellite provider SES ASTRA has offered satellites for the transmission of digital television.\(^{40}\) The next medium to follow is expected to be cable, although this differs from Member State to Member State according to the penetration of cable.\(^{41}\) There exists also the possibility of transmitting pictures via the telecom network.\(^{42}\) This is already widely discussed in the USA, where the telecommunication companies undertake great efforts to enter the video broadcasting business.\(^{43}\) However, because of the high amount of data still needed to transmit video in Europe the smallband of the telecommunication network is not considered to be an alternative in the near future for distributing television via broadband.\(^{44}\) Next to the costs, the decisive factor in choosing the right distribution model is whether it is capable of providing interactivity where the viewer can call up a program of interest, on demand, then becomes an active participant in that program.\(^{45}\) Interactivity is one of the added values that digital television is supposed to provide in the future. For this the network needs a return channel to give the viewer the possibility to communicate back to the content provider. Realistically a return channel can only be installed within a cable network. Satellite broadcasting is conceived to be a one way


\(^{41}\) Predicting a step by step development starting with satellite, then cable, see Booz, Allen & Hamilton, Zukunft Multimedia, p. 80; see for a graphical overview for cable penetration in Europe, Dries/Woldt, The Role of Public Service Broadcasting in the Information Society, p. 27, Annex B.

\(^{42}\) Yadon, Broadcasting in the Information Age, p. 130ff.; Report to the Swedish Minister of Culture and the Head of Ministry: From Massmedia to Multimedia - Digitalization of Swedish Television, p. 11.


\(^{44}\) Flatau, Aktivitäten der Europäischen Union auf dem Gebiet der Medien und ihre Auswirkungen auf die Film- und Fernsehwirtschaft - hier im besonderen Netzträgerschaft, p. 775.

\(^{45}\) Yadon, Broadcasting in the Information Age, p. 124.
communication medium and would need great efforts and investments to equip it with a return channel.\textsuperscript{46} If only a few data has to be transmitted, not video but voice and text the telephone network can be used. This is expected to be the solution at least for the beginning.\textsuperscript{47} For full scale interactivity an integrated broadband network with glassfiber would be necessary or the telecom network has to be upgraded.\textsuperscript{48} However, in the end the level of interactivity is just a question of costs and investment concerning the networks and the market and profitability forecasts will decide upon its speed and level of development.\textsuperscript{49}

2. The Applications to Television
To understand the implications of the digitalization of television for competition and concentration in the media market one has to know what this transformation means for television. The question is how will the change in the way of transmitting the video signals transform the structure of television, the way we have understood television until today? Here the main features will be the multiplication of channels, the emergence of new services connected with interactivity and as a minor point the improved picture and sound quality. In describing these changes the perspective will be the legal implications.

\textsuperscript{46} Booz, Allen & Hamilton, Zukunft Multimedia, p. 79.

\textsuperscript{47} Flatau, Aktivitäten der Europäischen Union auf dem Gebiet der Medien und ihre Auswirkungen auf die Film- und Fernsehwirtschaft - hier im besonderen Netzträgerschaft, p. 773; Booz, Allen & Hamilton, Zukunft Multimedia, p. 81; for the USA see Yadon, Broadcasting in the Information Age, pp. 124-125.

\textsuperscript{48} Here a lot of research is done to find new inexpensive solutions, see Booz, Allen & Hamilton, Zukunft Multimedia, p. 75; Wössner, Interaktives Fernsehen: Eine neue Dimension der Unterhaltung und Information, Einführungsstatement auf dem Multimedia-Kongress am 12. Jni 1995 in Heidelberg, p. 11.

\textsuperscript{49} See for the amount of investments needed to build the infrastructure for interactivity, Booz, Allen & Hamilton, Zukunft Multimedia, p. 80; see for market forecasts regarding digital television with interactivity Schrape, Digitales Fernsehen, p. 106ff.
a) The Multiplication of Channels

One of the main features of the introduction of digital television is the larger number of television channels that can be provided. The compression technology described above will allow the networks, cable or satellite to carry four to eight times the amount of channels possible with analogue technology. Within the frequency range required for broadcasting a single channel when using analogue technology with applying digital technology up to eight channels may be delivered. In Europe only via satellite with the two major operators SES ASTRA and Eutelsat an extension of the capacity to carry theoretically up to 1500 channels is expected by the end of 1997. The enlarged number of channels made available through cable in the future will depend on the cable television penetration in the respective European country and the digitalization of the cable system. Terrestrial digital television is still in its beginnings, though also here an enlargement of the capacities is expected.

Due to the increase in distribution channels more special interest and thematic channels are expected to fill market niches. The range of audiovisual programs will become more

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50 Report to the Swedish Minister of Culture and the Head of Ministry: From Massmedia to Multimedia - Digitalization of Swedish Television, p. 20; Yadon, Broadcasting in the Information Age, p. 121; Schrape, Digitales Fernsehen, p. 48.

51 Pitzer, Digitales Fernsehen, pp. 8-9.

52 See for statistics Dries/Woldt, The Role of Public Service Broadcasting in the Information Society, p. 27, Annex B; in Germany with a very high cable penetration the German Telecom as the main cable operator has already reserved capacities for digital transmission, see Eberle, Neue Übertragungs techniken und Verfassungsrecht, p. 250; for the future plans see Pitzer, Digitales Fernsehen, p. 11.

diversified which will increase the fragmentation of the market.\textsuperscript{54} Foreign channels will spread further over other countries, though the language barrier will still pose considerable obstacles.\textsuperscript{55} The new means of distribution also will make for more variety in modes of reception and payment possible. A promising future is predicted for different forms of pay-television, pay per channel, pay-per-view, near-video-on-demand, video-on-demand.\textsuperscript{56} More arguments for this prediction are the inexpensive decrypting of programs that digital technology provides as well as more sophisticated and less expensive subscriber management systems that become possible.\textsuperscript{57} Then the advertising financed commercial television will not be able to provide the great amount of thematic and special interest channels. Advertising financed television is widely seen as having reached its limits of expansion already. However, for pay-television, many European countries, in particular the German speaking countries, still offer a great market potential.\textsuperscript{58} These predictions are confirmed by the digital television enterprises now started or about to be started in Europe. They mainly focus on special interest channels and pay-television.\textsuperscript{59} In the long

\textsuperscript{54} Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 17.
\textsuperscript{55} Dries/Woldt, The Role of Public Service Broadcasting in the Information Society, p. 5.
\textsuperscript{57} see Hege, Offene Wege in die digitale Zukunft, p. 46; see also Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 17; Schrape, Digitales Fernsehen, p. 21f.
\textsuperscript{59} See the project of Canal Plus CanalSatellite, Le Monde, 27 Avril 1996, p. 24; see also for France, Meise, Steiniger Weg zur Datenautobahn, p. 440; see for the plans of Bertelsmann AG and its alliances, Der Spiegel, "Der
run the program contents will become more and more crucial to fill all the planned channels. There the debate emerges whether state regulation is indispensable to guarantee open access to programming rights when network providers increasingly integrate with program suppliers.60

b) The New Services
Concerning returns on investment the above described thematic and special interest channels show the way for the commercial broadcasting stations to make profits in the near future.61 However, the aspect which is considered the real added value and revolutionary one for the electronic media, is the possibility of new television services with different levels of interactivity possible through the introduction of digital technology.62 The viewer will have the possibility to participate actively in choosing programs and products. He will be able to compile his own personal program schedules by computer-aided pre-selection from his most preferred program categories. In the future it will possible for viewers to edit their own television program, e.g. by selecting the available cameras covering a football match or chose different viewing angles while watching a show. Audiences will be invited to address their opinion, and directly communicate with

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60 Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 20; Flatau, Aktivitäten der Europäischen Union auf dem Gebiet der Medien, p. 777; Niewiarra, Folgerungen aus den Aktivitäten der EU für die private Fernsehwirtschaft im Hinblick auf neue Angebote und Dienste, in: ZUM, 11/1995, p. 761; see rules in the USA which oblige vertically integrated companies to offer their programs with the same conditions to competing operators, see Sec. 12 Cable Television Consumer Protection and Competition Act of 1992, 102d Congress (2d session), P.L. 102-862, September 14, 1992.

61 Niewiarra, Folgerungen aus den Aktivitäten der Europäischen Union für die private Fernsehwirtschaft im Hinblick auf neue Angebote und Dienste, p. 761.

62 Schrape, Digitales Fernsehen, p. 38.
the producers of a program, take part in a quiz or join the jury in a contest. The realization of these applications depends on the introduction of interactivity to the television, which demands a return channel. The same is true for most of the applications that will only use the medium of television but have nothing in common with the traditional idea of television, like videogames to be delivered via television or teleshopping, telebanking or telelearning. Among these teleshopping has been offered already for quite a while in the USA, Great Britain, other European countries and since recently also in Germany. However, the level of interactivity is usually, except in pilot projects, rather low, relying on the telephone. For full scale interactivity the transmission infrastructure has to be adapted to two-way data traffic. This is possible today with the digital compression technology, since now networks can also be used as return channels, which would have had a too limited transmission capacity before the introduction of the compression technology. However, full scale interactivity realistically is only possible by cable and demands high investments for upgrading the infrastructure, as explained above. For that reason the development is expected to proceed step by step depending on the anticipated profitability of the application and the inclination by the market players to make risky investments for the networks.

63 Dries/Woldt, The Role of Public Service Broadcasting in the Information Society, p. 5; Report to the Swedish Minister of Culture and the Head of Ministry: From Massmedia to Multimedia - Digitalization of Swedish Television, p. 20; Seeger, Strukturveränderungen des Rundfunks in Europa, p. 125; see for examples of applications in the USA, Yodan, Broadcasting in the Information Age, 1994, p. 124f.

64 See for the different services that might be offered via television Booz, Allen & Hamilton, Zukunft Multimedia, p. 37; Schrape, Digitales Fernsehen, p. 35, 37; see for a market forecast for teleshopping, ibid., p. 111; in the USA interactive television is the fastest growth area of the advertising industry, though in a rather primitive application, see Yodan, Broadcasting in the Information Age, 1994, p. 127.

65 Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 17.

However, the services which can be already offered or are close to being delivered are pay-per-channel, and pay-per-view, where the viewer only pays either for a single channel or for a special program, and video-on-demand. With video-on-demand one has to distinguish two forms, near and true-video-on-demand. Near-video-on-demand means that digital movies are delivered repeatedly on different channels so that the user has the ability to start the movie at 15-minute intervals. With true-video-on-demand the ordered movie will be delivered from a local server which is connected to a central video library server and the viewer can start and stop the movie at any time. If a permanent return channel is installed the viewer can use it like a video recorder, winding forwards and backwards, slow motion etc. True-video-on-demand is still in the experimental stage. This service is technically very complicated and very demanding regarding the capacities of networks and servers. True-video-on-demand in a way shows the dilemma of the new services. A higher added value of a new service is usually connected to its level of interactivity which depends on a functioning return channel. To introduce the latter, high

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69 See for the demands on a media server, Fetterman, Multimedia and the Phone Company, p. 97; see also Booz, Allen & Hamilton, Zukunft Multimedia, p. 85, which considers the multimedia server as greatest problem for the realization of interactive/multimedia applications.


investments are necessary for the upscaling of the networks, which is risky considering the uncertain demand.\textsuperscript{72}

c) Better Picture and Sound Quality

The better picture and sound quality, digital technology can provide compared to the analogue transmission is an aspect of the introduction of digital television almost forgotten about with the discussion of the multiplication and channels and new services. In the past there has been a big discussion about HDTV (High-Definition Television) in Europe, in particular with the failure of introducing the MAC standard, which had only been partly digital. Instead the implementation of the 16:9 format was pushed ahead.\textsuperscript{73} However, the improvement of the picture quality seems not to be an added value which really captures the interest of the European television viewers.\textsuperscript{74} This is different in the US, where in particular cable television is notorious for poor picture and sound quality. There it is said that the picture quality presents the main marketing argument for digital television and most of the research directed at the advance of television is aimed at refining the display.\textsuperscript{75} Contrary to that in Europe the interest in digital television focuses mainly on the diversity of channels and new services. This fact is important for the future development of digital television because of the trade off necessary between picture quality and number of

\textsuperscript{72} See Schrape, Digitales Fernsehen, p. 103, there the costs for developing a countrywide network for interactive television are estimated at 374 billion US$ for the USA and around 150 billion US$ for Germany.

\textsuperscript{73} See for the abandonment of analogue HDTV by the European Community Negroponte, Being Digital, New York, 1995, p. 40; see for the efforts in implementing the 16:9 format Seeger, Strukturveränderungen des Rundfunks in Europa, p. 114f.

\textsuperscript{74} Seeger, Strukturveränderungen des Rundfunks in Europa, p. 116.

\textsuperscript{75} Negroponte, Being Digital, p. 37; Datenhighway, in: Kabel und Satellit, p. 10; the Federal Communication Commission (FCC), the main regulatory body for media and communication in the USA requires the television stations to move to a digital transmission scheme, the high definition television (HDTV) and a 16:9 format with a complete compliance requirement by 2015; see for that, Yadon, Broadcasting in the Information Age, p. 135 and Negroponte, Being Digital, p. 52.
channels with the digital compression technology. With the compression technology different levels of picture quality can be defined, however, the higher the picture quality the more transmission capacity is needed and the fewer channels can be delivered. For one program in high definition quality 16 programs in low definition quality can be delivered.\(^7\)

### III. The Set-top-box and Other Elements of the Digital Television Distribution System

In the following chapter I will introduce the three main elements of the new distribution system for digital television, which are bound to create problems for competition. Next to the main technical device for the introduction of digital television, the set-top-box, I will refer to the new electronic program guides, also called navigation systems and the marketing technique of packaging channels.

#### 1. The Set-top-box

The key device for the introduction of digital television at least for the starting years will be the set-top-box. However, its significance might even go beyond that. Experts predict that a sophisticated set-top-box has the potential to become the center of the multimedia world, as the connecting link between the different equipment, personal computer, television, video recorder, telephone, fax etc. and applications.\(^7\) It is likely to become the technological gateway to an array of enhanced services that will be provided by entertainment exhibitors, information service providers, and transactional service

\(^7\) Schrape, Digitales Fernsehen, p. 14; see also Flatau, Aktivitäten der Europäischen Union auf dem Gebiet der Medien, p. 776.

\(^7\) Westerkamp, Digitales-Satellitenfernsehen in den USA, p. 14.
providers. Control over the set-top-box is seen as crucial for obtaining a dominant position in the digital television market right now and in a possible even much greater multimedia market in the future. For this reason the set-top-box has become the subject of intense cross-industry interest, in the USA as well as in Europe. A range of legal problems surrounds this device, mainly concerning the impediment of free competition and the tendency to concentration between the different line of business units. Because of its central position for the introduction of digital television it is regarded as a bottleneck for the access to the new market, which allows for competition restraints by the market players who control it. Its linkage position between the distributors and the networks also provides incitements to integrate. To offer a better understanding of the relevant problems, I will first outline the different functions of the set-top-box. Closely connected with the set-top-box and its functions are the topics of the navigation system and packaging. The former helps the viewer to search through and select from the multitude of new channels, while the packaging is the probable way how the channels will be offered to the consumers. The issues will be illustrated by a practical example when the Media Service GmbH decision by the European Commission will be analyzed, where it prohibited

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78 See Negroponte, Being Digital, p. 45; Hege, Offene Wege in die digitale Zukunft, p. 15; Fetterman, Multimedia and the Phone Company, p. 100.

79 For Europe see the widely published battle over the introduction of a single standard set-top-box or two different systems on the German market between the Multimedia Betriebsgesellschaft (MBBG) and the Kirch Group, Focus, "Modell Teppichhandel", 8/1996, p. 164ff; The Economist, "Lion in winter", March 9th 1996, p. 73; Der Spiegel, "Ein Befreiungsschlag", 11/1996, p. 122ff.; for the conflict on the French market over two different systems introduced by CanalSatellite and Télévision par satellite (TFS) see Le Monde, 27 Avril 1996, p. 24; for an overview of set-top-box standard setting, joint ventures marketing and pricing in the USA, Fetterman, Multimedia and the Phone Company, pp. 98-99.
a concentrative joint venture aimed at providing technical and administrative services to organize digital pay television.  

a) The Functions
The set-top-box will combine different important functions for the provision of digital television. For the operator of the set-top-box they might offer different possibilities of manipulating and dominating the digital television market. This leads to a couple of legal problems like the incitement to integrate vertically which will be described afterwards.

aa) The Conversion of Digital Signals
The main function of the set-top-box in the starting phase of digital television will be to convert the transmitted digital signals into analogue ones which can be received and displayed by the traditional analogue television sets in the homes. For the beginning it is expected that the set-top-boxes will be leased out by independent distribution companies or by the operators of digital programs themselves. According to the predictions by some experts, in the long run, only television sets capable of receiving digital programs will be available. As a further development, is foreseen the convergence of the television set and the personal computer in one device. Engineers agree overwhelmingly that the differences between the television and the computer will be limited to peripherals and to the room of the house in which it is found. The different forms of using the equipment

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82 Schrape, Digitales Fernsehen, p. 23.
84 Negroponte, Being Digital, p. 46.
between the so-called couch viewer, the then former television viewer, and the desk viewer, the then former personal computer user, will call for two different sets, one for the living- and one for the working room. The modern open architecture television will be the personal computer, independent form the way it will be used. These scenarios seem to contradict other views which see the set-top-box as future central link between the various multimedia devices in the developing European multimedia world. However, there are other functions of the set-top-box described below, which might provide for a future existence of the device even after the conversion function for the digital signals need not be performed anymore by an additional device. In any case as long as there are mainly traditional analogue television sets used in the private homes the function of converting the digital signals fulfilled by the set-top-box will be essential for the transmission of all digital programs. This is true independent of the method of transmission, via satellite, cable or terrestrial.

**bb) The Unscrambling/Conditional Access Function**

The unscrambling/decrypting and conditional access function of the set-top-box are connected with each other and are the essential technical infrastructure to operate pay-
television. There are not a peculiarity of digital television. However, due to the foremost expected demand for special interest programs in the form of pay-television with the introduction of digital television these functions play an essential role. In addition the decryption of the programs and the conditional access system as a whole, like the billing of the subscribers become less expensive and more sophisticated with the introduction of digital technology. Since the viewer at home does not want to have to pile up a multitude of decoders, the decoder function for converting the digital signals and the decryption and conditional access functions should be performed by one box. Pay-television programs are invariably encrypted. The conditional access system ensures that only authorized viewers, i.e. subscribers to the particular encrypted channel can receive the channel. The system consists essentially of a decoder for the decryption of the encrypted television signals - this has to be distinguished from the above described function to convert the digital signals - , a subscriber management system (MSS), a subscriber authorization system (SAS) and an encryption system. The decoder decrypts the television picture, which is encrypted when the television signal is transmitted. Together with the television signal a data stream has to be transmitted, containing information on the channels or packages of channels subscribed to and on the entitlement of the subscriber to receive the programs. One can distinguish open and closed systems. Within a closed system usually only broadcasting companies who have signed an agreement with the owner or operator of the system are allowed to encrypt in this

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89 See above for the market forecasts, II.2.a).
90 See Hege, Offene Wege in die digitale Zukunft, p. 46.
91 Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 21; Eberle, Medien und Medienrecht im Umbruch, p. 797.
system. The use of closed systems forces consumers to purchase or hire a special decoder to receive television channels encrypted in this system. And if a household wants to receive television channels which are encrypted in another system they have to buy an additional decoder. An open system also called common interface approach means on the contrary that decoders are available from many sources. There the consumer can receive television channels in different open systems by using different smartcards. The smartcard is inserted into the decoder to scan through the datastream that comes along with the television signal to find out if its identity is present. When the smart card finds it unique key the decoder decrypts the television signal and passes it on to the television set. Most encryption systems in Europe provided up to today are closed ones. In the United Kingdom BSkyB uses a proprietary system called Videocrypt which is also used by Multichoice in over 30 European countries. Canal Plus in France and in Spain, Premiere in Germany and Austria and Teleclub in Switzerland use a closed system called Syster/Nagravision. As mentioned above, next to the decoder base and access to an encryption system a subscriber management system (SMS) and a subscriber authorization system (SAS) are essential parts of a conditional access system. The subscriber management system (SMS) is a computer system which serves to manage the subscriber.

94 See for open and closed systems Report to the Swedish Minister of Culture and the Head of Ministry: From Massmedia to Multimedia - Digitalization of Swedish Television, p. 20; Negroponte, Being Digital, p. 46; Perspectives, une issue technologique: le pay per view?, in: Dossiers de l’Audiovisuel, No 60, Mars/Avril 1995, p. 44; Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 21; Eberle, Neue Übertragungstechniken und Verfassungsrecht, p. 252.
The SMS contains vital information about the customers especially important for a pay-television broadcaster or a cable operator. This makes the control over it a very delicate issue. The SAS is software designed to open or close the authorization of the individual subscriber to receive pay-television channels.

**cc) The Programming of the Return Channel**

A function which the set-top-box is supposed to fulfill for the interactive future of the digital television is providing the software for the return channel. This is crucial for the ordering of films via video-on-demand, the selection of single programs within pay-per view, the demand of information or the purchase of goods via teleshopping. In the USA the set-top-box used for the digital satellite television includes a standard telephone interface. Subscribers can order movies, shop interactively or request information when the box automatically dials a toll-free 1-800 telephone number. As already described above, for full scale interactivity providing, text, voice and video the installation of a two way broadband network or the upgrading of existing telecom networks is necessary.

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96/177/EC), OJ 1995 No L 53/20, p. 22; see in particular for France, Meise, Steiniger Weg zur Datenautobahn, p. 441.

96 Kopp, Medienrecht und neue technische Entwicklungen - Reaktionen und Perspektiven, p. 389; Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 21; Eberle, Medien und Medienrecht im Umbruch, p. 797.


98 Eberle, Medien und Medienrecht im Umbruch, p. 797; Booz, Allen & Hamilton, Zukunft Multimedia, p. 84; Kopp, Medienrecht und neue technische Entwicklungen - Reaktionen und Perspektiven, p. 389.

99 Yodan, Broadcasting in the Information Age, p. 129; see for the possibility of video-on demand via telephone, Schrape, Digitales Fernsehen, p. 37.

100 See for the Orlando project, a state of the art, fully interactive system applying asynchronous transfer mode (ATM) technology, operated by a partnership between US West and Time Warner as pilot project, Yodan, Broadcasting in the Information Age, p. 125; see for the Orlando project and also for German pilot projects Wössner, Interaktives Fernsehen: Eine neue Dimension der Unterhaltung, p. 23f.
The set-top-box is expected to provide the programming for the return channel independent of the level of interactivity. However, this statement is based on the assumption that the set-top-box will survive as an independent device in the multimedia age.\textsuperscript{101}

b) The Problems
I now provide an abstract description of the legal problems surrounding the use of the set-top-box with its different functions outlined above. These combine potential impediments of competition as well as risks for the pluralism of opinions due to incentives contained in the system to concentrate, in particular vertically. Later on, in the analysis of the Media Service GmbH decision and the Nordic Satellite Distribution decision by the European Commission, some of the problems will be taken up again and it will be demonstrated how they emerged in real cases.

\textit{aa) The Gatekeeper Role}
As already mentioned above the set-top-box will obtain the role of a gatekeeper, first for the distribution of digital programs later, if the predictions come true, for the whole range of interactive multimedia applications at home.\textsuperscript{102} All the above described functions, in particular the conversion of the digital television signals and the encrypting and conditional access are supposed to be contained in one box. This is essential to make the whole system attractive for the consumer who does not want to buy a range of different boxes.\textsuperscript{103}

\textsuperscript{101} See discussion above III.1.a)aa) about the future scenarios regarding the existence of the set-top-box; sceptical about whether for full-scale interactivity still the set-top-box will be used, Westerkamp, Digitales Satellitenfernsehen in den USA, p. 15.
\textsuperscript{102} See above, III.1.a)(bb).
\textsuperscript{103} See Hege, Offene Wege in die digitale Zukunft, pp. 38-39; Eberle, Neue Übertragungstechniken und Verfassungsrecht, p. 251.
However, this gives the operator of the system, either the hardware producer of the set-top-box or a software producer, an immense influence on the distribution of the digital programs. This is at least true when he chooses a closed proprietary system, which is done by most of the providers in Europe.\textsuperscript{104} By controlling the decoder the same company then also controls the administrative and technical services for the provision of digital television.\textsuperscript{105} The system in this case fortifies itself, since by offering the administrative and technical services himself the set-top-box operator also forecloses the market for independent companies which might want to offer these services.\textsuperscript{106} For a successful marketing of the set-top-box it is widely considered necessary to introduce one common system for all digital programs. To induce the consumers to invest in the purchase of a set-top-box or pay the leasing rate they should be able to receive with their set-top-box all transmitted digital programs.\textsuperscript{107} This is also why standardization is such an important issue for the success of the set-top-box and digital television altogether.\textsuperscript{108} This aim poses difficulties with the above described closed systems. There the availability of programs offered by companies that are not linked with the owner or operator of the set-top-box

\textsuperscript{104} See above III.1.a)(bb).


\textsuperscript{107} Kopp, Medienrecht und neue technische Entwicklungen - Reaktionen und Perspektiven, p. 389; see for the problem in general and for the situation in GB with BSkyB in particular, Graham, Exchange Rates and Gatekeepers, in: The Cross Media Revolution, edited by Congdon/Green/Graham/Robinson, London, 1995, p. 44; see the discussion in Germany as well as in France where two different systems are about to be introduced and because of this the economic success of the whole national digital television industry is put into question, Der Spiegel, "Ein Befreiungsschlag", 11/1996, p. 122ff; Focus, "Modell Teppichhandel", 8/1996, p. 164ff; Le Monde, 27 Avril 1996, p. 24.

\textsuperscript{108} See Graham, Exchange Rates and Gatekeeper, p. 44-45; see for competition and standardization below V.3.; see for the economic reasoning Booz, Allen & Hamilton, Zukunft Multimedia, p. 84.
depends on a contract concluded between them and the latter. The owner of the system will be in the position to dictate the terms when he is willing to enter into an agreement at all. Independent not integrated program suppliers and broadcasting companies, especially smaller ones who cannot afford to set up their own system have to be protected from being discriminated against by the set-top-box and conditional access provider. Discrimination against certain broadcast companies and program suppliers would also limit the choice of the viewer in selecting these programs, since they would be only accessible via another system connected with additional costs or not at all. If certain content providers are limited in their access to the distribution system this has negative effects on media pluralism. Code of conducts obliging the decoder system providers to treat all broadcast companies and service providers equally are suggested as solutions for this situation.109 The question remains how effective the introduction of such a code would be, regarding the possibility to circumvent it and the burdens in proving its violation. The hailed solution for all access problems to the distribution of the digital programs is widely seen in the common interface approach.110 As described already above this approach presents an open system, where the decoder is not aligned with a certain encryption

109 The Digital Video Broadcasting Group has drafted a code of conduct, see The New Age of Television: DVB, p. 30; the European Community has adopted a Directive on the Use of Standards for the Transmission of Television Signals containing provisions on the treatment of broadcasters by conditional access providers, see below VII.4.b); see for the need for commercial agreements between broadcaster and conditional access provider and the discussion of code of conducts Schoof/Watson Brown, Information Highways and Media Policies in the European Union, p. 335; Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 22; Report to the Swedish Minister of Culture and the Head of Ministry: From Massmedia to Multimedia - Digitalization of Swedish Television, p. 20; Eberle, Neue Übertragungstechniken und Verfassungsrecht, p. 252; Nordic Satellite Distribution, (Comm. Dec. 96/177/EC), OJ 1995 No L 53/20, p. 22 (22); Enser, MSG Media Service Halted: Competition Policy on the Infobahn, p. 62.

110 See for the way the open system functions above, III.1.a)(bb); see for the lack of consensus within the European Digital Video Broadcasting Group (DVB) Schoof/Watson Brown, Information Highways and Media Policies in the European Union, p. 335 and there footnote 37; see for plans to make the inclusion of a common interface mandatory in digital decoders, European Broadcasting Union, Legal Committee, Information document No 9 (95), p. 2; see also below VII.4.d).
system, but works with smartcards. The smartcards provide the set-top-box with the intelligence to recognize the television signals it has to decrypt. However, possibilities for the impediment of competition and discrimination against competitors still remain. There probably will not be a single smart card for every channel, since this would be very inconvenient for the viewer considering there will be up to 500 channels available. Instead packages of programs will be offered together on one smartcard. These might turn out to be the channels and programs offered together within the different closed or proprietary systems before. Independent and smaller channels and multimedia service providers who happen not to be on one of these important smartcards, but have their own much less attractive card might have little chance to survive in the market. However, although problems remain, the open system would obviously be a great improvement compared with a situation of different incompatible set-top-boxes. This makes a big difference whether the viewer has to buy a new set-top-box to receive a certain program or get up and put a different smart card into his decoder.

\textit{bb) The Position of the System Operator}

The crucial gatekeeper role of the set-top-box justifies a closer look at the position of the owner or operator of the set-top-box. The system operator will be either the hardware manufacturer or the software producer of the decryption, conditional access and return channel programs. Above already some of the possibilities have been described for the owner of the conditional access system to discriminate against broadcast companies and program suppliers. These are considerably greater when operating a closed system.

\footnote{To make the application convenient to the consumer is regarded to be one of the keys for an economic success of the digital television, see Booz, Allen & Hamilton, Zukunft Multimedia, p. 18.}
However, the system operator will only discriminate against the content providers if he has a motive to do that. If the system operator is an independent company his interest will be to offer through his systems as many programs as possible to make it attractive for the viewers. However, the situation differs when either he achieves a dominant market position that allows him to act independently of small broadcast companies or program suppliers or he is linked to a large content provider.\textsuperscript{112} The development in Europe has shown that primarily content providers engage in setting up decoder systems for digital television, mostly joined by other companies often up- or downstream active in the line of business.\textsuperscript{113} These companies first of all have a great interest in pushing forward digital television as logical extension of their activities in traditional television. Secondly most of them have experience with the decoders and conditional access services for already existing non digital pay-television. The majority of these already operating systems are closed ones.\textsuperscript{114} These circumstances make it clear that there is a very high risk of discriminating conduct and anti-competitive behavior by the providers of the set-top-box and the administrative and technical services necessary for digital television. It is also not very probable at least for the near future, that independent providers for these services will enter the market as long as mainly closed systems are used. It can be expected even that if the system operators are forced by legislation to introduce a common interface there will

\textsuperscript{112} Graham, Exchange Rates and Gatekeepers, p. 44; Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 22.

\textsuperscript{113} See Hege, Offene Wege in die digitale Zukunft, p. 15; see for France the television channel Canal Plus, for Germany the media company Bertelsmann AG and the movie and sport licences provider Kirch Group, for the United Kingdom the television group BSkyB.

\textsuperscript{114} In France Canal Plus the organizer of the first digital television programs is a pay-television channel using a closed conditional access system; in Germany the Bertelsmann AG has a stockhold in Premiere, the German pay-television channel using a closed system; the potential organizer of digital television in the United Kingdom BSkyB has satellite pay-television channels using a closed system see for the competition risks there Graham, Exchange Rates and Gatekeepers, p. 44.
remains the risk of them trying to impede competition because of their clear interests in favoring their programs over the ones of their competitors.\textsuperscript{115}

\textbf{cc) The Incentive to Integrate}

A great risk for the development of the digital television market are the incentives it obviously carries with it for market players to integrate. Both horizontal and vertical mergers and joint ventures can be observed in almost every case where the digital television enterprise is started.\textsuperscript{116} While it can be considered as a natural behavior of companies to join forces in order to afford a greater investment, to achieve an competitive advantage or to control and foreclose markets, the introduction of digital television in connection with the new devices and technology applied shows here special features. The set-top-box and the administrative and technical services contained in it offers special incitements for companies to integrate in particular vertically. Concerning broadcasting there has always been the possibility for network providers, broadcast companies and program suppliers to merge.\textsuperscript{117} One of the reasons given for the newly arisen interest is the ongoing and partly already completed privatization and liberalization of the telecommunication sector which also includes cable and satellite as the future transmission

\textsuperscript{115} To make a common interface mandatory is seen by many as the obvious solution, however, neither in the EC (not included in the Directive on the Use of Standards for the Transmission of Television Signals) nor in GB (according to the government's proposal on Media Ownership, CM 2872. Media Ownership: the Government's proposals. London HMSO, 1995) do there exist concrete plans to implement such standards, see for this Graham, Exchange Rates and Gatekeepers, p. 45; see also below VII.4.d); see for the remaining risks with a common interface approach above III.1.b)(a).

\textsuperscript{116} See for the tendency in general because of the convergence processes, Green, Preserving Plurality in a Digital World, p. 34; see above for the alliances in France, Germany and Scandinavia between different channels, telecommunication companies and program suppliers.

media for digital television. These more general competition issues will be dealt with further below. However, the introduction of digital television with the technical infrastructure it demands offers special reasons for the tendency to integrate vertically. This is due to the special gatekeeper function of the set-top-box. As described above this will present the bottleneck in the distribution process of digital television. Here the network providers meet with the broadcast companies and program suppliers. However, the link in the middle, the operator of the set-top-box and the decoder and conditional access system had or in many cases still has to be established. This is a new function in the distribution process of television programs which had not existed until the introduction of digital television in that form including navigation systems and packaging mentioned below, though as described above conditional access systems have been used for non digital pay television already. To fill this vacuum, which also needed or needs a considerable investment, it is the obvious thing for the companies interested in building up a distribution chain to join forces. By this they can share the costs and the risks and profit from their different expertise. However, a cooperation like this easily turns out to encompass the whole line of business concerning the production and distribution of digital television.

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118 See Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 19, he gives as an example of arising problems the distribution of satellite programs via the Astra-system, where the satellite provider SES was accused of granting privileges to media companies with great market power in reserving transponder places, while ignoring other broadcast companies; see also Engel, Multimedia und das deutsche Verfassungsrecht, in: Perspektiven der Informationsgesellschaft, edited by Hoffmann-Riem/Vesting, Baden Baden, 1995, p. 170, who just mentions the tendency of networks and program suppliers to integrate vertically giving as reasons economies of scale gains and market control; however, he does not really give a reason for this sudden development, although one can guess from the context that he also refers to the liberalization of the networks.

119 See Hege, Offene Wege in die digitale Zukunft, p. 29; see for vertical integration and in particular the free access problems when network providers are involved, Devotech Conseil/Analysys, Rapport final pour DG XIII de la Commission Européenne: Besoins pour le Développement d'un Environnement Multimédia fondé sur les Infrastructures de Télécommunications et les Réseaux de Télévision par Câble, p. 202.

120 See for an analysis of the changes in the distribution process of television programs through the introduction of digital television, Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 21; see on the distribution process also Hege, Offene Wege in die digitale Zukunft, pp. 52-55.
television, which then poses a threat to free competition because of the tendency to favor the aligned companies and discriminate against outsiders. Here the much discussed question arises, to what extent one should accept this vertical integration, in order not to endanger the creation of a distribution network. Many favor a more tolerant approach at the beginning of a new market, however this might permit the emergence of structures which cannot be removed later on.\textsuperscript{121} Others recommend as a remedy, to strengthen the competition among the networks, cable, satellite, terrestrial and in the future perhaps the telecom networks. It has to be made sure that there is more than one way for a program maker to gain access to the viewer.\textsuperscript{122} However, it is questionable whether the networks are really intersubstitutable in their use and if there exist always the interest and the financial resources to build alternative networks if they are not already there.\textsuperscript{123}

2. The Navigation-System

In the age of digital television, with the arrival of hundreds of channels, new forms of presenting programs become essential to give the consumer some orientation in his selection process. For this electronic program guides are being developed mainly by software producers but also by others like computer companies and television channels.\textsuperscript{124}


\textsuperscript{122} Green, Preserving Plurality in the Digital World, p. 34.


\textsuperscript{124} See for the activities of companies like Microsoft, Apple and Lotus Development, Ganz einfach - warum die Benutzeroberflächen so wichtig sind, in: Kabel und Satellit, Fernsehen 2000 global, digital, interaktiv, München, 1994, p. 21; see for the plans for an electronic program guide by the German pay-television channel Premiere, Flatau, Aktivitäten der Europäischen Union auf dem Gebiet der Medien, p. 779.
It is expected that predominantly companies with strong links to broadcasting companies and program suppliers will emerge as providers of navigation-systems.\textsuperscript{125}

a) The New Program Presentation
In the future the channels available on digital television will be presented in a way known from the graphical user interfaces used in computer programs like Windows for example, however, it is supposed to be even more user friendly.\textsuperscript{126} On a screen the whole variety of channels will be presented and the viewer will be able to move around with a cursor through his remote control and click on the different channels to learn more about the offered programs. It will not be necessary any longer to know the specific numbers of the different channels, since they will be presented in a clear way on the screen.\textsuperscript{127} Next to providing information about the whole range of programs offered the electronic program guide will then help the viewer in finding and selecting the program he likes. There will be pre-selected program compilations to facilitate the choice for the viewer. The electronic program guide will also offer the possibility of searching programs according to special areas of interest, like news, sports or movies with special themes. Additional information to programs might be offered, merchandise products to popular shows presented and recommendations given.\textsuperscript{128} A further step in user friendliness are intelligent system that

\textsuperscript{125} Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 25.

\textsuperscript{126} See for a general explanation of the navigation systems, Hege, Offene Wege in die digitale Zukunft, p. 39; see for the emphasis put on user friendliness, Ganz einfach - warum die Benutzeroberflächen so wichtig sind, in: Kabel und Satellit, p. 21; see in general for the importance of user interface in the digital world Negroponte, Being Digital, p. 89ff.

\textsuperscript{127} This is how already existing systems in the USA work which are expected to be applied in a similar form in Europe; see Westerkamp, Digitales Satelliten-Fernsehen in den USA, p. 12.

\textsuperscript{128} Eberle, Übertragungstechniken und Verfassungsrecht, p. 252; Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 24.
recall which programs the viewer has watched the most in a certain time and start their program presentation by offering them first.\textsuperscript{129}

b) The Risk of Manipulation and Anti-Competitive Conduct
The particular significance of the new forms of program presentation lies in the fact that they will become essential for the program choice of the consumer. The first impression the viewer will be confronted with when he starts watching television will be the program presentation interface. For his choice an intelligent and tempting presentation might become more important than the program itself, at least it will be a crucial factor. Since the electronic television guide will present also already pre-selected program bouquets and programs compiled according to themes or special fields of interest, the focus will drift away from the particularity of the individual program or channel. An intelligent presentation might prompt the viewer to stay within a certain program bouquet or pre-selected program compilation.\textsuperscript{130} This illustrates the fact that in the future the reception of a program by the consumer might be determined more by the way it is presented in the context of the whole program variety than according to the individual program characteristics like content and structure. Within this development lies a high potential for the manipulation of the viewers. An intelligent system will be able to identify the taste of the viewer by recalling earlier choices and arrange the program presentation accordingly.\textsuperscript{131} However, it might contain even greater problems for free competition and concentration. For a broadcast company and a program supplier it will become essential

\textsuperscript{129} Westerkamp, Digitales Satelliten-Fernsehen in den USA, p. 12.

\textsuperscript{130} Eberle, Neue Übertragungstechniken und Verfassungsrecht, p. 252.

\textsuperscript{131} Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 24; see for the need to prevent manipulation through regulation, Hoffmann-Riem, Multimedia-Politik vor neuen Herausforderungen?, p. 137.
how her or his programs will be presented in the navigation system. If they lack a good placement or ranking within the electronic program guide or are not included there at all, they are bound to suffer a very low reception rate, if they are able to survive at all economically. Like above with the set-top-box and its decoder and conditional access systems it also here becomes crucial who operates the navigation system. As already mentioned above, it is expected that the providers of navigation systems will be companies linked to broadcasters and program suppliers, probably part of one big media giant, as it can be seen already in many European countries with the printed television guides. This contains the high risk for anti-competitive conduct by the navigation system providers in applying the manipulation potential of the system to favor the companies to which they are linked. In this context a couple of questions arise concerning the provision of these navigation systems. Will there be different systems or only one common system? Will there be different providers? Who should be allowed to provide the systems? Will there be a right for broadcast companies or program suppliers to have their programs presented in the electronic television guide? It becomes clear that measures have to be taken to protect independent and small broadcast companies and program suppliers from being discriminated against by vertically integrated navigation system operators. One idea would be for example to license the systems like the

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133 See for the general problem and the situation in GB with BSkyB in particular, Graham, Exchange Rates and Gatekeepers, p. 44; also for the risks of vertical links in this area Engel, Multimedia und das deutsche Verfassungsrecht, p. 169.
134 See for some of the questions, Eberle, Medien und Medienrecht im Umbruch, p. 797; the same author, Neue Übertragungstechniken und Verfassungsrecht, p. 253; see for some answers to these questions, Hege, Offene Wege in die digitale Zukunft, p. 39.
channels themselves. Next to the set-top-box the navigation system presents, with its crucial role for the program choice of the consumer, a second bottleneck for the distribution of digital television programs. Also here a high tendency for vertical integration and a move to concentration in general becomes apparent.

3. The Packaging

Originally a feature of cable television in the USA, the marketing of different programs in the form of packaging is expected to become a widely spread practice with the emergence of digital television and the multiplication of channels and programs. The topic is closely connected to the above discussed navigation systems, since the latter will be the medium to market the packages. However, this way of marketing the programs poses dangers for free competition and media pluralism in the way it limits the program choice of the viewers.

a) Packaging as a Marketing Instrument

Packaging was introduced by cable operators in the USA to market the programs and channels that were supposed to be distributed through their cable system. They arrange different packages out of the programs offered by the broadcast companies and program suppliers which then can be ordered by their subscribers. Usually the offer ranges from a basic package that only contains the most popular programs over a more special compilation which adds some special interest and theme channels, up to a premium

136 See for the plans of the media control agency in Berlin, Recke, Es geht auch ohne MSG, in: epd/Kirche und Rundfunk, Nr. 31, 22. April 1995, p. 3.

137 See also Pluralism and Media Concentration in the Internal Market European Broadcasting Union Reply to Commission Questionaire No III, 12 April 1995, p. 8.

138 See Hege, Offene Wege in die digitale Zukunft, pp. 40-41.
package whose content can be selected by the viewer himself.\textsuperscript{139} The different packages are priced according to that climbing scale. So usually the basic package is affordable for most consumers, while the premium package enjoys more exclusivity. One of the reasons given why packaging has not been that widely practiced in Europe is, next to the lack of programs, the fact that in many countries the cable operators were or still are state owned companies mostly incorporated in the state telecommunication monopolies who were constrained in their marketing activities by universal service obligations.\textsuperscript{140} However, the situation will change with the privatization of the cable networks foreseen by the European Community.\textsuperscript{141} The packaging depends on a great enough variety of channels ready for distribution and the possibility of the distributor to combine them freely and to control their access. Since the multiplication is one of the main features of the introduction of digital television it is destined for being marketed in packages. The packaging plays an important role for the financing of the cable programs, since the licensing fees are

\textsuperscript{139} Esser, Zugang zur Breitbandkommunikation - die USA als Beispiel für zukünftige Entwicklungen in Europa, p. 412, 415.

\textsuperscript{140} This is true in particular for Germany as largest cable television market in Europe, see Eberle, Neue Übertragungstechnik und Verfassungsrecht, p. 251; see also Hege, Offene Wege in die digitale Zukunft, p. 61; see for the universal service obligations Scherer, Frequenzverwaltung zwischen Bund und Ländern, Frankfurt/Main, 1987, p. 45; in the UK the cable sector has been open for private cable operators for more than ten years since the Cable and Broadcasting Act of 1984; however, only 4% of the households have cable, while 14% receive satellite television, see Doyle, Kabel- und Satellitenprogramme in Großbritannien; in France since the partly privatization of the cable networks on community level in 1986 there has existed an oligopol of three big cable operators; there are only 8% of the households actively using cable; however, here has existed a sort of packaging see Meise, Steiniger Weg zur Datenautobahn, p. 436, 439; in Italy the cable network is under state authority which reserves the right to set up and operate the cable installations on the national level on an exclusive basis, Andretta/Pedde, Broadcast Regulation in Italy, in: Entertainment Law Review, 1/1995, p. 11.

calculated according to the number of cable users.\textsuperscript{142} The packaging can be done not only by the cable network operator but also by the program suppliers, the provider of the technical and administrative services or a service company totally independent from the distribution chain.\textsuperscript{143} In the literature the packaging of programs has mainly been discussed for the transmission via cable and not via satellite, which will be the start up transmission medium for digital television in Europe.\textsuperscript{144} This is probably due to the fact that for the transmission via satellite the broadcast companies and program suppliers lease single transponders which then send the television signals and the satellite operators do not have the chance to combine the offered channels in the way they want. The situation is different if the packaging is already done by the program supplier, which is more the case in Europe than in the USA. Then the transmission medium does not make a difference, since it does not depend on the possibility for the network operator to offer the program via his network in packages.\textsuperscript{145} However, certainly when, as predicted, cable becomes the dominating transmission medium for digital television in the future, the packaging of the digital programs by the cable operators will be an important feature of their distribution and marketing.\textsuperscript{146}

\textsuperscript{142} Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 23.

\textsuperscript{143} See Hege, Offene Wege in die digitale Zukunft, p. 41, who gives the example of the US where the packages are not built by the broadcasters, but by the cable or satellite operators; however, it does not have to be like that, see the MSG decision paragraph 31.

\textsuperscript{144} See Hege, Offene Wege in die digitale Zukunft, p. 41 who also mentions packaging for satellite programs.

\textsuperscript{145} See the concept for the MSG, where the program organizers themselves were supposed to carry out the packaging, MSG decision, paragraph 29; see Hege, Offene Wege in die digitale Zukunft, p. 41, who expects a new dimension in packaging for digital television; see the plans of the Kirch Group that will offer its programs in packages, Kabel und Satellit, 9. April 1996, p. 1.

\textsuperscript{146} One of the reaons for this expected development is the return channel needed for interactive television, which can much easier be provided with cable, see above II.1.c).
b) The Concerns for Competition and Concentration

However, the offering of programs in the form of packages raises serious concerns for free competition and concentration on the future digital television market. First of all, the packaging will limit the choice of the viewers. They will not be free any longer to select the single channels they prefer. The program the consumer wants to choose might only be offered within packages he is not willing to subscribe to either because the costs are too high or it contains other programs which do not interest him. Smaller program suppliers who are not allowed to join in a package with more important programmers might be confronted with considerable market entry barriers. If the programs of the most popular broadcast and programming companies are marketed together and the smaller ones are excluded from these packages it will exacerbate the unequal division of market power and endanger the existence of the smaller suppliers altogether. The risks for such a development are much higher in case there exists some kind of vertical link between the big program supplier and the network provider, here the cable operators. The packaging provides another example for how crucial and detrimental for free competition vertical integration in the distribution chain of digital television can be. To avoid the just described effects one needs regulation which ensures that the consumer will be able to choose freely between individual channels and packages. Another suggestion aims at “must-carry” rules which obliges the network operators to include the programs of smaller and less important

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147 Eberle, Neue Übertragungstechniken und Verfassungsrecht, p. 251; Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 22; Hege, Offene Wege in die digitale Zukunft, 1995, p. 40ff.; see ibid., p. 63, where Hege compares the packaging of channels with the practice of the software provider Microsoft to offer packages of software that are aimed at excluding providers of single programs from the market.

148 Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 23.

149 See Hege, Offene Wege in die digitale Zukunft, p. 41.
suppliers in the usually popular basic package.\textsuperscript{150} However, as already mentioned above, the highest risks for the impediment of competition and the free choice of the consumer will be contained in possible vertical links between the network operator and the important program suppliers. As long as the cable operators remain independent they will at least aim at providing the viewers as large and free a choice as possible of programs in order to increase their revenues. To guarantee the survival of small program providers, however, special regulatory protection measures still will be necessary.\textsuperscript{151}

IV. The Media Service GmbH Decision and Related Aspects of the Nordic Satellite Distribution Decision

The above description of the legal implications connected with the introduction of digital television dealt with the subject in the abstract. However, there exists already a very important merger decision by the European Commission on the competition aspects of a concrete case. This decision is considered to be a cornerstone for the merger control and competition policy in the rapidly developing new media markets, and in particular the digital television market.\textsuperscript{152} This decision was followed recently by a related merger case concerning the pay television and satellite television market in Scandinavia, which is

\textsuperscript{150} Hoffmann-Riem, Von der Rundfunk zur Multi-Medienkommunikation, in: Jahrbuch Telekommunikation und Gesellschaft, edited by Kubicek/Müller/Neumann/Raubold/Roßnagel, Heidelberg, 1995, p. 101, 108; Eberle, Neue Übertragungstechniken und Verfassungsrecht, p. 251; see for "must-carry" rules in the USA for cable television, Sec. 3 ff. Cable Television Consumer and Protection and Competition Act of 1992, 102d Congress (2d Session), P.L. 102-862. September 14, 1992; they have not been abolished by the Telecommunications Act of 1996, see for cable services, Title III, Sec. 301.

\textsuperscript{151} See Hege, Offene Wege in die digitale Zukunft, p. 42.

widely based on arguments developed already in the Media Service GmbH decision.\textsuperscript{153} The analysis of the Media Service GmbH decision will focus on the relevant aspects concerning competition concerns connected with the introduction of digital television in Europe. Due to this, most of the general competition law aspects of the decision will only be dealt with very briefly. There are new plans for a joint venture which is supposed to replace the one forbidden in the Media Service GmbH decision. This is said to have been already informally approved by the European Commission.\textsuperscript{154} The differences between the two joint ventures will be analyzed to illustrate the dangers for free competition on the digital television market. Next to that new aspects brought up by the decision on a joint venture in the Scandinavian television market will be added.

1. The Facts and the Parties

The prohibited merger, the MSG \textit{Media Service Gesellschaft für Abwicklung von Pay-television und verbundenen Diensten mbH} was proposed as a joint venture by Bertelsmann AG (Bertelsmann), Deutsche Bundespost Telekom (German Telecom) and Taurus Beteiligungs GmbH (Kirch). MSG was to provide the decoders, the conditional access services and subscriber management in relation to subscribers to pay-television services (next to pay-per-channel and pay-per view, later also for other new television services like video-on-demand, teleshopping, telebanking etc.), particular digital ones, in the German speaking markets. The joint venture was to offer these administrative and technical services to the new suppliers of pay-television in Germany expected to emerge.


\textsuperscript{154} Frankfurter Allgemeine Zeitung, 10. Mai 1996, p. 25.
with the arrival of digital television. In the joint venture each of the three parent groups was to hold one-third of the shares and to appoint one third of the board. Key strategic decisions required approval by all three partners.

Each of the three partners is a powerful player in the German media markets. Bertelsmann is the common parent company of the leading German media group. It has activities in almost all areas of media, books, press, recording and including holdings in commercial television, with worldwide interests. Taurus is a holding company part of the Kirch Group. Kirch controls the largest catalogue of feature films and television programs for the German market and is also active in commercial television in Germany and has holdings in pay-television suppliers outside Germany. Together with Bertelsmann and the French pay-television provider Canal Plus the Kirch group controls Premiere, Germany’s only existing pay-television film channel. Telekom is the German public telecommunications operator active in all areas of telecommunication services. Next to still having the monopoly of the German telephone network it is also the owner and operator of nearly all the German cable-television networks.

2. Some General Legal Aspects
For a better understanding of the decision in general and the conclusions for the digital television market in particular some of its more general legal aspects which might be of significance for future similar cases will be explained.


156 Here one distinguishes between network levels; of the 19 million cable households only 4 million are directly connected with the German Telekom, while 15 million are provided with cable through private companies which have become active on the so called network 4 level, the one closest to the consumer; see for details, Flatau, Aktivitäten der Europäischen Union auf dem Gebiet der Medien - hier im besonderen Netzträgerschaft, p. 778.
a) The Applicability of the Merger Regulation

For the applicability of the European Community Merger Regulation instead of national competition law, the proposed merger has to have Community dimension according to Art. 1 (2) of the Merger Regulation.\(^\text{157}\) The second distinction which has to be made is with regard to the EC-Treaty competition provisions Art. 85, 86. A joint venture falls under the Merger Regulation and not under Art. 85 (1) EC-Treaty, which deals with agreements restricting competition, when it is concentrative according to Art. 3 (2) of the regulation.

The MSG was considered to be concentrative, since it would have operated as an autonomous economic entity on a lasting basis with each of the partners investing considerable sums.\(^\text{158}\) It was intended to be a full-function enterprise on the market and not merely have auxiliary functions for its parent companies. It also passed the second limb of the test for concentrative joint ventures contained in Art. 3 (2) of the regulation, since its establishment would not risk the coordination of competitive behavior between any of the parents or between the parents and the joint venture. The fact that Bertelsmann and Kirch were already cooperating in Premiere and MSG would not affect the situation. However, this statement proved in a way inconsistent with later findings that the establishment of the MSG would secure for Bertelsmann and Kirch a dominant position in the pay-television market, which strongly suggests a co-ordination of behavior between


\(^{158}\) See MSG decision paragraphs 11ff.
MSG and its parents.\textsuperscript{159} Also in the other fields of business of the MSG the Commission did not find any risk for the coordination of competitive behavior.

Although the joint venture mainly concerned the German television market, according to the Commission the turnover thresholds, to give it a Community dimension contained in Art. 1 (2) of the regulation, were easily met.\textsuperscript{160} The aggregate worldwide turnover of Bertelsmann, Kirch and the German Telecom is more than 5 billion ECU. Each of the three undertakings achieves an aggregate Community-wide turnover of more than 250 million ECU. And, as stated by the Commission, the undertakings concerned do not all realize more than two-thirds of their aggregate Community-wide turnover within one and the same Member State. With this decision it was emphasized again that the two-thirds turnover threshold in Art. 1 (2) of the regulation only takes effect when all undertakings realize more than two-thirds of their aggregate turnover within one Member State. This interpretation has been widely criticized by lawyers who support a wider application of national competition law.\textsuperscript{161}

b) The Market Definitions
In the MSG decision the European Commission gives explicit definitions for the relevant product markets regarding pay- and digital television. It has done this before, however, never in such an elaborated way. Since these definitions are of general significance and have to be taken into account in future decisions, they will be presented here.

\textsuperscript{159} See for this criticism Enser, Media Service Halted: Competition Policy on the Infobahn, p. 60 and footnote 3.

\textsuperscript{160} See MSG decision paragraph 18.

\textsuperscript{161} See for the criticism Ebenroth/Lange, Zukunftsmärkte in der europäischen Fusionskontrolle, p. 2 and Lange, Räumliche Marktabgrenzung in der europäischen Fusionskontrolle, Diss., Konstanz 1994, p. 113ff.; see for more below VII.2.bb)(2).
**aa) The Different Relevant Product Markets**

Concerning the organization of pay- or digital television the European Commission distinguished three markets in its MSG decision.

It analyzed a separate market for the provision of administrative and technical services to the suppliers of pay-television in general. These include the provision of the decoders, the providing of conditional access services, the subscriber management and the billing for the program providers. The functioning of conditional access systems has been explained above, as well as the role of the decoder to convert digital television signals into analogue ones. The defined market concerns the operating of the set-top-box which will include all the described functions. The European Commission stated that these services can be provided by the pay-television supplier itself, by the cable network operators or by totally independent specialized firms. In this market in Germany the European Commission found that MSG, in the proposed constellation, would be likely to hold a long-term monopoly because the mere setting up of it was likely to seal the market off from new competitors. In reaching this conclusion it was emphasized that the German Telecom has access to 13 million households through its broadband cable network, Bertelsmann has experience of managing 22 million book club customers worldwide and Bertelsmann and Kirch already have, through their ownership of the pay-television channel Premiere, a subscriber base from which to build for digital television. This was decided,

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162 See MSG decision paragraphs 20ff.
163 This is the case with Canal Plus in France, Premiere in Germany and BSkyB in Great Britain.
164 This is commonplace in the USA.
165 This was made possible after the agreement within the DVB on the parallel existence of several access control solutions; the Directive on the Use of Standards for the Transmission of Television Signals 95/47/EC, OJ 1995 No L 281/51 clarified it.
though at that point the market for this sort of services in Germany was just beginning to
develop. Here the European Commission applied a dynamic market interpretation in
assuming that such a market should develop quickly with the introduction of digital

As further relevant product market the separate market for pay-television was identified.
This market was distinguished from commercial advertising financed television and from
public television financed through fees and partly through advertising. Pay-television is
characterized by the trade relationship only between the program supplier and the viewer
as subscriber while in the case of advertising financed television, there is a trade
relationship only between the program supplier and the advertising industry. However,
next to this traditional distinction the European Commission also finds differences between
pay-television programs and free-access, advertising financed programs in terms of
content. It emphasizes that with the arrival of digital television a variety of new, payment
financed special interest programs will be expected meeting the demand of specific target
groups. This is due to the limits of further growth in the volume of television advertising
which makes the advertising financed television market appear mature. In addition inter­
active services such as pay-per-view, near-video-on-demand, video-on-demand, home
banking, home shopping and teleteaching will become possible. Here the European
Commission raises the crucial question which of the future payment-financed

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167 See MSG decision paragraphs 32ff.
168 See already the analysis of the European Commission in previous merger decisions, ABC/General des Eaux/Canal
Plus/ W.H. Smith TV (Comm. Dec. of 10 September 1991), OJ 1991 No C 244/5, paragraphs 11-13, and
communications services for picture-receiving appliances are to be included in one and the
same market. It considers a separate market definition for interactive services such as
home shopping and home banking. However, it concludes that at least pay-television in
the form of pay-per-channel, pay-per-view and near-video-on-demand constitutes a single
market.\textsuperscript{169} Concerning this market the European Commission found that MSG was likely
to give Bertelsmann and Kirch a lasting dominant position. This was justified with the
outstanding position of Kirch in the German television market as leading supplier of films
and television programs, as well as with the combined access to sports programming rights
of Kirch and Bertelsmann through affiliated companies. In addition the cross-ownership
and cross-promotion benefits though Kirch's ownership of 35 percent of the Axel Springer
Verlag the largest newspaper publisher in Germany, also the leading publisher of television
listing magazines at that point was emphasized. The fact that MSG was likely to achieve a
monopoly for conditional access services would have reinforced the programmer's strong
market position.

The third market identified by the European Commission in the MSG decision is the
market for cable television networks.\textsuperscript{170} With this assessment it rejected the submission of
the parties which argued following the introduction of digitalization, there will be no
longer a separate relevant market for cable television networks. The parties argued that
there would no longer be any shortage of transmission capacities and that by now the
transmission media would be considered as interchangeable by the consumers. For the

\textsuperscript{169} See MSG decision paragraphs 74ff.
\textsuperscript{170} See MSG decision paragraphs 39ff.
European Commission there exist considerable differences regarding the technical conditions and financing between the three means of transmission, terrestrial, satellite or cable. The characteristic of cable television is the presupposition of the maintenance of a cable network financed by the viewer through cable fees. Here one could question whether there is really a considerable difference in financing considering that in recent years the prices for satellite receivers have lowered considerably while the fees for cable television have remained the same and also the program variety is mostly greater via satellite.\footnote{Ebenroth/Lange, Zukunftsmärkte in der europäischen Fusionskontrolle, p. 3.} However, the European Commission argues that many households with television in Germany face difficulties that the acquisition of satellite dishes is prohibited out of aesthetic reasons by the landlord\footnote{See BVerfG, 10.3.1993, NJW 1993, 1252f.; ECHR, 22.5.1991, NJW 1991, 623ff.} and for many households in East Germany the choice between cable, satellite and terrestrial does not exist.\footnote{See MSG decision paragraph 41; see also Ebenroth/Lange, Zukunftsmärkte in der europäischen Fusionskontrolle, p. 3.} Concerning the argument of the abolition of the scarcity of transmission capacity the Commission argues that the decisive factor for the existence of a relevant market is not whether an economic item is offered to customers in limited or sufficient numbers, but whether trade relationships exists based on payment exist in respect of the good or service.\footnote{See MSG decision paragraph 43.} The German Telecom already controlled nearly all the cable networks in Germany. However, the Commission reasoned that if the present regulatory framework will be abandoned, cable companies would find it more difficult to enter the market with the German Telecom controlling the MSG.\footnote{See Wessely, Media Service GmbH: ein Fall für die europäische Fusionskontrolle, p. 219; see also Wessely, Media Service GmbH: ein Fall für die europäische Fusionskontrolle, p. 219; see also the discussion in Germany about the role of the German Telecom as dominant cable operator, Süddeutsche Zeitung, "Wir sind nicht der böse Monopolist", 29. Mai 1996, p. 22.}
bb) The Relevant Geographic Market
Concerning the relevant geographic market the Commission found, for all of the three product markets defined, it to be restricted to Germany.\textsuperscript{176} The Commission argued that this was due to the lack of interchangeability of the programs offered in Germany with programs offered in other countries. According to the Commission language barriers and regulatory differences will continue to exist even in the digital pay-television age.\textsuperscript{177} In addition there are further differences in the conditions of competition observable between the Member States. In virtually every Member State one particular supplier has a dominant market position or indeed a monopoly in the analog pay-television market. The Commission also emphasized great differences in the market penetration with in Germany only 2\% of the households subscribing to Premiere the pay-television channel, while in France and the United Kingdom the corresponding rates were 16\% and 15\%. This was due to differences in the attractiveness of the range of feature films shown on free access advertising financed television.\textsuperscript{178} In the assessment of the Commission the structure of the supply side is also not expected to change with the introduction of the digitalization. The leading pay-television suppliers of today will also play a leading role in digital television.

As far as the market for services is concerned, the Commission does not rule out the possibility that MSG will extend its service activities to other countries as well. However, since the services being offered by MSG are closely connected with the supply of pay-television, the Commission assumes that the market for these services too will in the

\textsuperscript{176} See MSG decision paragraphs 45-54.
\textsuperscript{177} See MSG decision paragraph 47.
\textsuperscript{178} See MSG decision paragraph 48.
foreseeable future remain confined to Germany. This is also due to the dependence of the success of MSG on the existence of a well developed cable network in Germany, which will have, like the telephone network, a significant role as a return channel for future interactive services. Because of the significantly smaller degree of connection to cable in most of the other Member States there will not be any homogeneous conditions of competition between Germany and other Member States, in particular France and the United Kingdom, at least not for the foreseeable future. However, the Commission conceded the possibility of the emergence of a German language service market, including Austria.

Concerning the market for operating cable television networks there is already a national German market resulting from German Telecom’s statutory monopoly on laying and operating cable networks in public roads. However, this might not be true anymore in the mid-term future with the abolition of the network monopoly also in Germany.

cc) The Significance of the Market Definitions
In its market analysis the Commission rightly takes into account the technological developments and the expected markets of the future. The case not only concerns a more or less limited television market for pay-television. Digital television is one of the future media which will, equipped with a return channel, provide interactive television services. It

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179 This becomes even more relevant with the introduction of the ISDN technology on the basis of the glass fibre broadband cable network allowing the development of a two-way data transmission network.
180 See MSG decision paragraph 53.
181 See MSG decision paragraph 92; see also Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 19.
182 Ebenroth/Lange, Zukunftsmärkte in der europäischen Fusionskontrolle, p. 4.
provides the basic technology for further future markets.183 This was acknowledged by the Commission in its decision. Although the relevant geographic market in the decision was found to be confined to Germany, the technological development of the digital television has to be seen in an international context.184 The digitalization of the television which is about to take place in all major European countries will revolutionize the attitude of the viewers to the medium.185 This setting gave the decision its outstanding significance. The market definitions will be crucial in assessing future upcoming media cases where the future development of television plays a role.186 In its decision the Commission not only analyses the status quo, but anticipates the future markets. The latter are very difficult to assess in the start up phase. However, if the Commission had applied a static interpretation it would have failed to grasp the potential of the future markets and their effects on the connected up- and downstream markets.187 To define the markets in such a newly developed and complex field is a difficult task. Digital television itself does not present a market on its own, since it is mainly a new form of transmission. However, its introduction creates an array of connected markets new ones and already existing ones. The market definitions have to be found step by step, though the MSG decision laid the ground work here. The Commission itself concedes the need for a flexible approach when it leaves the

183 See above II.2.b).
185 See above II.2.b).
187 See Ebenroth/Lange, Zukunftsmärkte in der europäischen Fusionskontrolle, p. 4.
question open which of the future payment financed communication services will fall under the market definition of pay-television.\textsuperscript{188}

3. The Conclusions Regarding Competition in the Digital Television Market

These conclusions will not follow the line of the decision in assessing each defined market separately and giving the reason for an impediment of competition by the proposed joint venture. Much more conclusions will be drawn in a more abstract way which will illustrate general structural and technological features of the introduction of digital television that pose problems for free competition. The MSG decision offers an ideal case for such an abstraction, since the constellation can be viewed as a prototype for the competition problems that surround the introduction of the digital television.

a) The Effects of Vertical Integration on the Markets

With the Bertelsmann AG, the Kirch Group and the German Telecom undertakings present on the different stages of the distribution chain of digital television programs came together in the proposed joint venture. As already mentioned above, the Kirch Group is the leading German supplier of films and television programming. Both Bertelsmann and Kirch have access to sports programming rights through stakes in other companies.\textsuperscript{189} Together they control Premiere, the only German pay-television channel at that time with a subscriber base they also can use for future digital pay-television. Both undertakings also have widespread activities in free-access commercial television, which gives them the

\textsuperscript{188} see MSG decision paragraph 38.

\textsuperscript{189} Kirch controls ISPR, the leading agency for sport broadcast licenses; Bertelsmann has access to attractive sports rights and film production activities through its subsidiary Ufa.
possibility of making multiple use of film or sporting rights. They also benefit from cross-ownership and cross-promotion with Bertelsmann being the leading book club operator, which might provide an important potential distribution channel for pay-television channels and Kirch holding a 35% share in Axel Springer Verlag, the largest German newspaper publisher and leading publisher of television program magazines at that time. The German Telecom owns a broadband cable network, with at that time, more than 13 million connected households. It will be in charge of its digitalization. In addition it is, with a 16.6% holding in SES, the second largest shareholder in the main European satellite operator. With the cable network the Telekom possesses a customer base which might become very important for the operation of pay-television. Next to that it has experience in network management and the technical know-how for communication services.

This description of the parties shows that, combined they form the complete business line for the provision and distribution of television programs. The only missing link to organize digital television was a unit to provide the decoders and to offer the necessary administrative and technical services, like conditional access and subscriber management. The Commission found that the creation of the MSG would create durable dominant positions for the parties in all three above described markets. Next to the already dominant position held by the parties in their markets the main reason for the negative competition assessment by the Commission were the emerging vertical links between the up- and downstream markets. Concerning the market for the administrative and technical services

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190 Together they control about 80% of television advertising revenue in Germany with channels like RTL, SAT1, PRO 7, RTL 2, VOX, DSF and Kabelkanal.
the Commission feared that already the mere setting up of the MSG was likely to seal the market off to new competitors and obtain a long term monopoly.\textsuperscript{191} In reaching the decision that competition will be inhibited the Commission emphasized the strong positions of the parties on the up- and downstream markets, with Telekom and its broadband cable network, the ownership of Bertelsmann and Kirch of the pay-television channel Premiere, and their preferential access to program software.\textsuperscript{192} Regarding the program resources of Bertelsmann and Kirch the Commission found a "suction effect" due to the fact that the service supplier will occupy a favored position who can provide the largest number of programs and the most attractive programs.\textsuperscript{193} This "suction effect" could be countered most easily by a cable operator taking over the services, however in Germany this function could only be performed by the Telekom, which is also part of the joint venture.

Regarding the pay-television market the Commission also found a durable dominant position for the parties created through the joint venture. This was also mainly justified with the effects of vertical integration which would have strengthened the already outstanding position of Bertelsmann and Kirch to an intolerable extent. The Commission argued that the fact that MSG was likely to achieve a dominant position on the market for technical and administrative services would reinforce the position of Bertelsmann and

\textsuperscript{191} See MSG decision paragraph 55.

\textsuperscript{192} See MSG decision paragraph 70; there also economies of scale benefits are mentioned; see also Enser, MSG Media Service Halted: Competition Policy on the Infobahn, p. 61; see also Wessely, Media Service GmbH: ein Fall für die europäische Fusionskontrolle, p. 219.

\textsuperscript{193} See Media Service decision paragraph 71.
Kirch on the downstream market for pay-television. The market situation in the United Kingdom and in France are given as examples, where the new suppliers of television programs are effectively dependent on the BSkyB’s or Canal Plus’s infrastructure. It was also found that Bertelsmann and Kirch could use their influence on MSG to slant the market in their favor. This could have been done by charging artificially high prices through the MSG from competitors, by influencing the relative prominence given to competing channels in terms of channel allocation, electronic program guides and slots on smartcards and by securing informational advantages. The Commission also did not trust the German Telecom to distribute its reserves of digital capacities on an objective basis rather than in the interests of its related program suppliers. This could be done for example by citing technical constraints where a verification would pose great difficulties.

For the cable network market the Commission found a strengthening of the dominant position of the Telekom due to the vertical link to Bertelsmann and Kirch as program suppliers. There would be a particular risk that private operators once the cable network market would be liberalized could not obtain the attractive programs of the leading pay-television suppliers Bertelsmann and Kirch which would be essential to provide attractive program packages.

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194 See Media Service decision paragraph 74; see also Enser, MSG Media Service Halted: Competition Policy on the Infobahn, p. 61.
195 See Media Service decision paragraphs 87ff.; see Ebenroth/Lange, Zukunftsmärkte der europäischen Fusionskontrolle, pp. 5-6.
196 See Media Service decision paragraph 85.
197 See Media Service decision paragraph 93.
b) Open Access to the Infrastructure
The MSG decision deals not only with an impending foreclosure of markets, but with the problem of securing free access to the whole infrastructure for digital television. Next to this tendency to vertical integration this is another important feature of the introduction of digital television to the television market. In the MSG decision two levels of access to the infrastructure for the provision of digital television are concerned. The one is the access to the cable network and the other the access to the set-top-box and conditional access and subscriber management system. An interest to deny the access or to create obstacles against it usually only emerges if there exist vertical links with the up- and downstream markets as described above. The case is a particular good example to demonstrate possible access problems, since with the creation of the MSG the parties of the joint venture would have controlled the whole line of business regarding the distribution and the marketing of digital television programs.

aa) Access to German Telecom’s Cable Network
Next to the already existing strong position of the parties in the pay-television market it was in particular the question of free access of competitors to the infrastructure that led to the negative competition assessment by the Commission. On the one hand it was feared that the German Telecom might take its partner’s interests into account concerning the input of programs into the cable network. The German Telecom has it in its power to

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control the digital development of the hyperband in its broadband cable network. It has set itself rather vague criteria regarding the digitalization of its free channels which according to the findings of the Commission allows it to base the further development of the hyperband on the pay-television interests of its partners. To confirm this suspicion the Commission quoted difficulties encountered in feeding programs broadcast via Astra satellite into the German Telecom’s cable network, which were justified by citing technical constraints. The Commission concluded that the German Telecom by citing technical constraints is in a position to influence access to the cable network without in any provable way infringing the neutrality requirement.

**bb) Access to the Set-top-box and the Services**

However, the even greater access problem the Commission found regarding the decoder and for the provision of digital-pay-television necessary services provided by the MSG. Due to the foreseen lasting monopoly position of the MSG as an operator of a digital infrastructure for pay-television, all pay-television suppliers that might enter the market following digitalization would be forced to take the necessary services from an enterprise controlled by the already leading pay-television suppliers. Through their controlling influence on MSG, Bertelsmann and Kirch would be in a position to set the conditions and terms of MSG in a way that would be advantageous to their programs and disadvantageous to those of their competitors. The Commission found numerous ways for

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201 See Media Service decision paragraph 86.

202 See Media Service decision paragraph 85; see Flatau, Aktivitäten der Europäischen Union auf dem Gebiet der Medien und ihre Auswirkungen auf die Film- und Fernsehwirtschaft - hier im besonderen Netzträgerschaft, p. 777; see also Ebenroth/Lange, Zukunftsmärkte in der europäischen Fusionskontrolle, p. 15; see for the general access problems to the networks Holznagel, Probleme der Rundfunksregulierung im Multimedia-Zeitalter, p. 19.
Bertelsmann and Kirch to benefit from this influence in a way that would inhibit free competition.\textsuperscript{203} This includes charging artificially high prices from which they would benefit as shareholders of MSG. They also have the possibility of influencing via MSG the location of their competitor’s programs. As described above new navigation systems will be necessary to help the viewer locate individual programs in the “program jungle”.\textsuperscript{204} As proposed by the parties the necessary on screen modulator would be included in the set-top-box and operated by the provider of the device. This would enable the operator to place competing pay-television suppliers in positions in the program menu which reduce their attractiveness, because it would need many operating steps to get access to them.

They decision also entered the discussion concerning the use of a common interface allowing any company to sell compatible smart cards for their own channel or a proprietary solution for the set-top-box.\textsuperscript{205} Regarding the latter the Commission found a possibility for Bertelsmann and Kirch to influence the marketing of competing programs, since if MSG would issue the smart cards itself the programs of competitors could be placed on less attractive smart cards. And it is not expected that the consumer will want to use a variety of different smart cards.\textsuperscript{206} The Commission clearly endorsed the common interface approach to be the better solution from a competition point of view for the conditional access problem, since it would “have a positive effect on the development of

\textsuperscript{203} See MSG decision paragraphs 84-89.

\textsuperscript{204} See for an abstract problem description of the navigation systems above III.2.b).

\textsuperscript{205} See the problem description above under III.1.b).

\textsuperscript{206} See MSG decision paragraph 88.
free and unfettered competition". However, it did not find an open interface of itself to be enough to ensure free competition.

cc) The Rejected Proposals by the Parties
In fact the parties proposed to use a common interface, also under certain conditions, like having to be approved by the DVB and not posing any piracy risks. Besides questioning the enforceability of this offer concerning the given conditions and reservations, the Commission decided that the common interface would not be sufficient after all to avoid the threat to competition posed by MSG. Due to its proposed shareholder structure the MSG would achieve a dominant market position even if a common interface with unlimited access were to be installed. This demonstrated that, for the Commission, the whole constellation of the joint venture already posed in itself a threat to competition and the open structure of the described future markets. The analysis was much more focused on the impact of the joint venture on future market structures than on aspects of anti-competitive behavior and conduct by the involved parties. Besides proposing the installation of a common interface, the parties also offered self-assurances concerning the behavior of the MSG towards its customers and competitors. The sold or leased decoders supplied to receive MSG managed programs would never be subject to restrictions on their use to receive programs not handled by MSG. The information obtained related to other channels would not be handed by MSG to its parent companies. Further the parties

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207 See MSG decision paragraph 95.
208 See for the proposals of the parties, MSG decision paragraph 94ff.
209 See MSG decision paragraph 97; see also Enser, MSG Media Service Halted: Competition Policy on the Infobahn, p. 62.
210 Ebenroth/Lange, Zukunftsmärkte in der europäischen Fusionskontrolle, p. 6.
proposed that the electronic programming guide and navigation software would be set out in a neutral and non-discriminatory way, to be overseen by a neutral advisory body. And the parties committed themselves to a non discriminatory pricing policy.\textsuperscript{211} The content of these proposals largely reflected the code of conduct for the operators proposed by the Digital Video Broadcasting group (DVB), a private organization of media, telecommunication and hardware companies interested in the implementation of digital television.\textsuperscript{212} However, the Commission found that the proposals were only an offer to comply with the legal obligations of a vertically integrated dominant supplier, that it does not abuse its market power. And in addition it would be rather difficult to prove that the MSG was not behaving neutrally vis-à-vis program providers considering the various possibilities of hidden discrimination in practice.\textsuperscript{213} This confirms again that the Commission's main objection against the proposed joint venture was the structural advantages the joint venture provides the parties with in the new emerging markets. For those imposed behavioral self-assurances do not present a real remedy.\textsuperscript{214} However, the terms of the offer give some guidance regarding fair and unfair activity in this field for future cases.\textsuperscript{215}

\textsuperscript{211} See MSG decision paragraph 94.

\textsuperscript{212} See for the DVB above; see for the similarity of offers and code of conduct, Enser, MSG Media Service Halted: Competition Policy on the Infobahn, p. 62

\textsuperscript{213} See MSG decision paragraph 98.

\textsuperscript{214} Ebenroth/Lange, Zukunftsmärkte der europäischen Fusionskontrolle, p. 7.

c) The Technical Progress Defense

An argument brought forward by the parties in favor of their proposed undertakings was the fact that its creation would contribute to technical and economic progress. This criterion is referred to in Art. 2 (1) (b) of the Merger Regulation. It might be used also in future cases involving digital television to justify concentration as being necessary to obtain the benefits of new technology. The Commission did not accept this defense in its MSG decision. It conceded that by providing the necessary infrastructure MSG would play an important part in the successful spread of digital television and by this contribute to technical and economic progress. However, the defense argument is subject to the reservation that no obstacle is formed to competition. Since it was found that the proposed concentration will lead to a sealing off of the future market for technical and administrative services and in addition create durable dominant positions for the parties in the pay-television and cable network markets, definitely major obstacles to competition will be formed. With regard to the hindering of effective competition the Commission even went further and questioned whether one can still consider the establishment of a digital-infrastructure for pay-television by MSG as a positive contribution to the development of technical and economic progress. Potential suppliers of digital pay-television might abstain from entering the market the way they would have with a service supplier whose shareholder structure would ensure strict neutrality.\(^{216}\) This fact makes the proposed joint venture seem to be detrimental rather than beneficial for the successful spread of digital television. The negative assessment by the Commission also illustrates that it is not willing to accept that through the technical and economic progress defense industrial policy

\(^{216}\) See MSG decision paragraph 101.
arguments will be introduced against the merger control.\textsuperscript{217} It is particularly remarkable that this was decided in the media and television sector, since in the EC so much emphasis is put on the development of the information society and its technical and economic benefits.\textsuperscript{218} However, the argument might become relevant in a case where the constellation of the involved parties in the joint venture is not as clearly anti-competitive as in the MSG case.


There are plans for a new joint venture with a similar aim like the MSG. The setting-up of such an undertaking, considering the necessary infrastructure investments is considered to be almost indispensable for the introduction of digital television in general by most of observers. Since therefore such an enterprise is also of interest for the digital television plans in other European countries, the concept of the new joint venture will be briefly discussed.\textsuperscript{219}

a) The New Constellation

In the new joint venture which will be called \textit{Multimedia-Betriebsgesellschaft} the constellation of the parties as well as the offered services will differ from the MSG. Also the co-operation agreed on by Bertelsmann AG, one of the core members of the MMBG and the Kirch Group that has left the MMBG to create its own digital platform has put the

\textsuperscript{217} See for this observation also Ebenroth/Lange, Zukunftsmärkte in der europäischen Fusionskontrolle, p. 8.


\textsuperscript{219} The necessity of such a joint venture is contested by Recke, Es geht auch ohne MSG, in: epd/Kirche und Rundfunk, Nr. 31, 22. April 1995, p. 3ff.
whole enterprise into question. Also Canal Plus has ended its strategic alliance with the Bertelsmann AG and might leave or have already left the MMBG. However, the project seems to continue, since there have not been any contrary press releases by the involved parties. Allegedly the undertaking has already obtained clearance from both the German cartel office and the European Commission assuring that there would not be any competition concerns justifying a prohibition. The parties are the German Telecom as biggest shareholder, Bertelsmann, CLT, the French pay-television channel Canal Plus, in case it has not left in the meantime, and the German television channels RTL, ARD and ZDF. Five percent of the shares are reserved for a MMBG Programm- und Diensteanbieter Beteiligungs GmbH, in which all interested companies are free to participate. With this new shareholder structure the problems regarding a foreclosure of the new markets shall be remedied. The joint venture will market digital pay-television and other new television and telecommunication services, however mainly focus on the provision of the technological infrastructure. Concerning the offered services the MMBG is said to abstain from offering the full range of administrative and technical services as it was planned for the MSG. Instead it intends to create a common decoder bases and to offer a digital decoding system. According to the involved parties the MMBG has not decided on a specific digital decoder system yet. The conditional access service and the

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subscriber management system will be left to the program providers and channels themselves. Also the way in which the decoder will be provided and financed will not be based on an exclusive system.\footnote{See Kayser, "Kampf der Standards nicht im Interesse der Verbraucher", p. 19; further sources were interviews with lawyers of the involved companies and officials of the EU Commission.}

b) General Demands for Competition Neutrality
The confinement of the "new MSG" to provide the network infrastructure and the decoder technology is also what is asked for by critics of the old MSG in order to avoid any obstacles concerning the development of a competitive digital television market. The conditional access and subscriber management services should be left to the organizers/providers of digital television programs or independent service companies. Concerning the shareholder constellation it was proposed to divide the ownership up into three blocks, one being the German Telecom as network provider, one hardware companies as producers of the set-top-box and a pool of program providers. To avoid any manipulations and misuse of market power certain rules regarding the voting rights in the shareholder meetings should be introduced, so no decisions can be taken against vital interests of one of the shareholder blocks. It is also proposed to introduce a code of conduct for the parties involved or even an obligation to contract in order to secure the free access to the decoder systems.\footnote{See for the necessary changes for a "new MSG", Kresse, Pluralismus, Markt, Konzentration: Positionen, Berlin, 1995, pp. 83-84.} In any case the main aim has to be to keep the distribution channels for digital television open and at the same time to avoid scaring away the big investors in the new technology which usually have a strong interest in market control.
5. New Aspects of the Nordic Satellite Distribution Decision

A more recent decision on a media merger by the European Commission the Nordic Satellite Distribution case\textsuperscript{226} dealt with competition questions quite similar to the MSG case.\textsuperscript{227} Although it does not concern directly the introduction of digital television, the case is concerned with the provision of the infrastructure for the provision of satellite, cable and pay-television, which will later on open up the possibility also to offer digital television.\textsuperscript{228} As in MSG the Nordic Satellite Distribution case also contains a move to vertical integration of different stages of the distribution chain of television programs. This analysis will focus on the aspects involving digital television. It does not claim to represent a complete analysis of the whole decision.

a) The Parties and the Markets

Involved in the joint venture were Tele Denmark, a Danish telecom operator, Norsk Telecom, a Norwegian telephone, cable and satellite company and Kinnevik a Swedish group of companies with diversified activities among them television, media and telecommunication. NT belongs to the state owned Telenor AS which offers telephone services in Norway, owns a large cable network in Norway and also controls satellite transponder capacities (Thor, Intelsat and TV-SAT). TD is the leading Danish telecom operator, 51% state owned, which next to offering telephone services also owns a


\textsuperscript{227} Another very recent and widely discussed decision RTL/Veronica/Endemol decision of 20 September 1995 is of minor interest regarding the introduction of digital television; however, it also deals with vertical integration here between a television channel, a television advertising agency and a program producer; see RTL/Veronica/Endemol (Comm. Dec. 96/346/EC), OJ 1996 No L 134/2; see for a summary, in: WuW, 12/1995, p. 1004ff; see also Schmittmann/de Fries, Blick nach Brüssel, in: AfP, 2/1996, p. 123; see also Twentieth Report on Competition Policy, (1995), point 134.

\textsuperscript{228} See, for the digital plans of the parties, Nordic Satellite Distribution decision paragraphs 147-148.
The national broadband distribution network currently used for the transmission of radio and television signals. Concerning the media and telecommunication sector the Swedish company Kinnevik is active in satellite television broadcasting of commercial channels and pay-television channels, in the distribution of satellite television, in providing conditional access systems and radio broadcasting.\(^{229}\) The joint venture Nordic Satellite Distribution was supposed to provide transponder capacities, to transmit and distribute satellite television channels to cable television operators and direct-to-home households in the Nordic market.\(^{230}\) The European Commission identified three markets where the joint venture would have obtained a dominant position. These were the markets for the provision of satellite transponder capacities and related services to broadcasters in Denmark, Norway, Sweden and Finland, the Danish market for cable television networks and the market for pay-television and other encrypted television channels for the direct-to-home distribution in Northern Europe.\(^{231}\)

b) Aspects Relating to the MSG Decision and the Introduction of Digital Television in Europe

Many references are made in the NSD decision to the MSG case, for example regarding the market definitions.\(^{232}\) Next to the main activities mentioned above the joint venture was also foreseen to promote and implement a digital transmission standard and a joint Nordic encryption system to be used for all transmission forms. The NSD would also have offered subscriber management systems and operated a subscriber access system. Another

\(^{229}\) See Nordic Satellite Distribution decision paragraphs 4-7.

\(^{230}\) See Nordic Satellite Distribution decision paragraphs 31ff.

\(^{231}\) See for more Williams/Denness, Summary of the Most Recent Developments, p. 30.

\(^{232}\) See Nordic Satellite Distribution decision paragraphs 57, 62.
activity would have been the creation of a program strategy based on a new package of
television channels for the Nordic countries.233 Considering the market positions of the
parties of the joint venture the NSD would have obtained a "gatekeeper function" similar
to the MSG. The vertical concentration would have strengthened the positions of the
parties on the down- and upstream markets as already observed in the MSG case.234 The
linkage of dominant positions on different markets of the distribution chain of television
programs also here leads the European Commission to prohibit the undertaking. It is
remarkable that the market power of the parties is considerably below the one found in the
MSG case.235 In particular regarding the cable network market the position of the German
Telecom was far more dominant than the one of the parties in the NSD case. The strong
position of the parties in the satellite sector, where the parties of the NSD hardly faced any
serious competition for the Scandinavian market, was dominant.236 However, also
Bertelsmann and Kirch as pay-television operators and program suppliers had far more
market power and resources that the Swedish Kinnivek company.237 This might indicate
that the European Commission considers the danger for unimpeded competition very high
when such vertical structures are created and is ready to prohibit also joint ventures with
less dominant positions in the linked markets. In the NSD also the economic and technical
progress defense was put forward by the parties.238 This was discussed in more detail in

233 See Nordic Satellite Distribution decision paragraphs 31ff.
234 See for the similarities with the MSG decision, Williams/Denness, Summary of the Most Recent Developments, p.
31; see for the vertical concentration aspect, ibid., p. 30.
235 See the review of the judgement, in: WuW, 10/1995, p. 815; see also Schmittmann/de Vries, Blick nach Brüssel,
p. 125.
237 See Schmittmann/de Vries, Blick nach Brüssel, p. 125.
238 See Nordic Satellite Distribution decision paragraphs 145ff.
the NSD decision than in MSG. The parties argued that with the introduction of the digital technology, they will use the joint venture to create an integrated infrastructure for the distribution of satellite television and other related services. They also mentioned the plans for the joint venture to implement, in the new digital environment, a joint Nordic encryption system which would mean that the individual television household would need only one decoder box. However, because of the dominant position of NSD as provider of television channels from the Nordic transponders the Commission found that most direct-to-home households and independent cable operator will be forced to use an encryption system offered by NSD. This contains all the manipulation and anti competitive behavior risks regarding the treatment of other not aligned broadcasters as discussed in the MSG case. The Commission acknowledged the benefits of the infrastructure proposed by the parties as being highly efficient and beneficial to the consumers. However, it still insisted on an open infrastructure accessible for all interested parties. And it finally showed its will to prevent widespread vertical integration in the media sector by stating that after all it does not view the vertical integration as being necessary for the creation of such an integrated infrastructure.

V. General Competition Concerns

Above possible competition problems created through the introduction of digital television in Europe have been illustrated, first describing the new technological infrastructure and then with concrete media competition cases decided by the European Commission. In the
following chapter the problems will be subject to an abstract positioning/evaluation regarding general competition questions and put into context with well-known competition concerns from the past and related sectors.

1. **Vertical Integration**

The phenomenon of increased vertical integration connected with the introduction of digital technology to television can be seen as part of a major trend in the media industry. Besides that the technological development which causes convergence processes between different industries, like broadcasting and telecommunications and general technology and content also plays a crucial role for this increased tendency to vertically integrate. However, digital television still has its own peculiarities which might in particular contribute to this development and its negative consequences for competition in that field.

a) **Effects on Competition through Vertical Integration in the Electronic Media Industry**

After presenting a general analysis of the motives and effects of vertical integration in the television or broadcasting industry the example of the US cable television industry will be explained. Finally the findings will be put into context with the competition concerns connected to the introduction of digital television.

aa) **Vertical Integration in the Television Industry in General**

Integration and concentration is a wide spread and well known phenomenon in the media and in particular the broadcasting and television industry, if the sector is left to the private sector. See, as example, the US where broadcasting has been private since its origins; see for a brief summary of the historical development, Barendt, Broadcasting Law, Oxford, 1995, p. 28ff; see for a brief overview of the vertical integration developments, Korn, US-amerikanisches Mediekonzentrationsbestimmungen, in: ZUM, 11/1994, p.
integrating the different stages from producing, marketing and distributing television programs. This is at least true for links between network providers and program providers and broadcast companies. For broadcast networks one can distinguish between backwards and forwards vertical integration. The strategy of backwards vertical integration concerns the acquisition of control of program production activities. It proves to be profitable if there are economies from vertical integration or if the supply of network programs will have an exclusionary or cost raising effect on competitors. The strategy of forward vertical integration involves the acquisition of control of retail distribution outlets, such as broadcast stations, cable or broadcast satellite systems. This strategy also will be profitable, if the vertical integration provides cost savings, or if the control over the distribution systems will have an exclusionary or cost raising effect on competitors. In general it is said that vertical relationships may increase efficiency since they reduce the costs of conducting the transaction or allow up- and downstream producers to make more efficient production or distribution decisions. However, vertical integration may also


244 See Owen/Wildman, Video Economics, p. 203; see for exclusionary practices OECD, Competition Policy and a Changing Broadcasting Industry, p. 139ff.
result, in the right market circumstances, in decisions that cause disadvantages to rivals and increase market power to a dangerous extent.\textsuperscript{245}

*bb) The Example of the US Cable Television Industry*

A well known example of vertical integration in the television industry, which could serve as a model for the trend in the emerging European digital television market, are the cable system operators in the USA integrating with the cable networks.\textsuperscript{246} Cable operators need a great supply of programming to attract and retain subscribers, while the cable networks need access to cable subscribers in order to compete. For the cable operator these ownership stakes guarantee the continued availability of programming. And for the cable networks, the ties with a cable system operator provides a secure base of subscribers "that can be held hostage to threats by competing integrated networks to deny access".\textsuperscript{247} The ownership of program services by Multiple Cable System Operators (MSOs) raises considerable competition concerns. The MSOs might discriminate against competing program service providers by refusing carriage, by charging higher retail prices, by providing less favorable channel positions or by including obligations in their contracts for independent program providers not to compete with their affiliated ones.\textsuperscript{248} Another concerns is that the MSOs might refuse to offer the program services controlled by them to competing distribution outlets, like direct broadcast satellite (DBS), multichannel...

\textsuperscript{245} OECD, Competition Policy and a Changing Broadcasting Industry, p. 125.


\textsuperscript{247} See Owen/Wildman, Video Economics, p. 245.

\textsuperscript{248} Esser, Zugang zur Breitbandkommunikation - die USA als Beispiel zukünftiger Entwicklungen in Europa, p. 426.
multipoint distribution system broadcasting (MMDS) or satellite master antenna system (SMTV). 249 In the USA the 12 largest Multiple Cable System Operators (MSOs) account for the overwhelming proportion of equity ownership in nationally distributed cable networks. Altogether the vertical integration between cable television networks and cable system which is usually realized by common corporate ownership ties between MSOs and Cable networks can be called extensive, with 56 of 106 nationally distributed programming services having vertical ties with MSOs in 1994. 250 The reason for the increased vertical integration in the US cable television industry during the last twenty years was mainly seen in the deregulation of cable television with the Cable Act of 1984. 251 When the above described concerns became reality, Congress reacted with 1992 Cable act, 252 in which the FCC established regulations intended to encourage competition for established cable operators by ensuring that alternative multichannel video programming distributors have access to programming. 253 Congress was in particular concerned to prevent the MSOs from preferring their own programs in a discriminating and anti-competitive way. 254 The 1992 Cable Act also introduced "must-carry" rules for local broadcasting stations which came under strong criticism concerning their limits on

249 See Owen/Wildman, Video Economics, p. 245.

250 See Waterman, Vertical Integration and Program Access in the Cable Television Industry, p. 515; see for the figures 1994 Cable First Report, supra note 13, paragraphs 73-74, quoted after ibid. p. 515.

251 See Esser, Zugang zur Breitbandkommunikation - die USA als Beispiel zukünftiger Entwicklungen in Europa, p. 424, who quotes the Federal Communication Commission, the main telecommunication and media regulatory agency in the USA; see also Korn, US-amerikanisches Medienkonzentrationsrecht aus der Sicht des Praktikers, p. 627.


the editorial freedom of the cable operators. However, in the USA vertical integration is a common phenomenon in the industry. It is viewed in general, and in particular concerning cable television, as being pro-competitive and promoting efficiency. That the motives and effects of exclusive dealing between cable operators and cable networks often promotes efficiency was expressly mentioned by the FCC in its 1990 Cable Report. There exist also analysis which seriously doubt that vertically integrated cable operators engage more in anti-competitive behavior than nonintegrated ones. It is also mentioned that discriminating against competitors is costly and that the circumstances in which such a discrimination is profitable would be rare in the cable television industry. However, it is acknowledged by most observers that vertical integration can facilitate foreclosure attempts in the cable television industry, concerning program access and access to distribution outlets. And Congress saw the competition rules as insufficient to prevent

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254 See Esser, Zugang zur Breitbandkommunikation - die USA als Beispiel zukünftiger Entwicklungen in Europa, p. 434.


256 See Waterman, Vertical Integration and Program Access in the Cable Television Industry, p. 520; see for recent developments in the USA regarding vertical mergers, Hawk, Recent Antitrust Developments in the United States, speech delivered at the European Lawyers Union and made into an article, May 5-6, 1995, p. 37ff., he states that after years of per se legality the main concern of the agencies is the lessening of competition in up- and downstream markets through foreclosure and discrimination.

257 1990 FCC Cable Competition Report, supra note 3, paragraphs 116-117.

258 See Waterman, Vertical Integration and Program Access in the Cable Television Industry, p. 528; there he summarizes his analysis.

259 See Owen/Wildman, Video Economics, p. 245-246; a cable system which refuses to carry a program service must give up the additional subscribers the program would have attracted, and deny its own program service to a competing distribution system means to lose the sales.

260 See Waterman, Vertical Integration and Program Access in the Cable Television Industry, p. 528.
the constraints and distortion of competition and foreclosure of the market due to the vertical concentration processes. Because of this it introduced the Cable Competition Act of 1992, which contained provisions to limit the possibility to favor associated companies and by this strengthen the competition and promote the diversity in the provided programs. However, this is contrary to the recent developments in liberalizing ownership restrictions regarding broadcasters and networks. The new Telecommunication Act of 1996 allows a wide range of vertical and horizontal integration which makes the described rules seem to be just a isolated anti-vertical integration move limited to the special situation in the cable television industry.261

c) Lessons for the Introduction of Digital Television
Compared with the competition concerns of the introduction of digital television the problems of the combination of content and network ownership are quite similar. However, the additional and specific problem of the distribution of the digital programs which is at the center of this analysis is the set-top-box with its decoder and conditional access and subscriber management functions. The cable ownership in most European countries has just started to be privatized, if there are any cable networks and most operators, in one way or the other, are still state controlled,262 although the problem in


262 Many European countries have a very low cable penetration; see Dries/Woldt, The Role of Public Service Broadcasting in the Information society, p. 27 Annex B; the big exception concerning the privatization of cable is the UK, where the cable industry is liberalized already since the introduction of the Cable and Broadcasting Act of
countries with high cable penetration is already present.\textsuperscript{263} However, the fact which makes vertical integration so dangerous for free competition is if there is a monopoly gatekeeper at the end of the vertical chain. In the US cable industry, the cable system operators enjoy, for the most part, local monopolies.\textsuperscript{264} For the introduction of digital television this gatekeeper position might be taken by the set-top-box and administrative and technical service providers. Vertical integration might have to be considered unacceptable when the chain reaches up to this last distribution stage and the companies involved in addition also obtain a gatekeeper position. The comparison with the situation of the US cable television industry also might suggest that one should not forget about efficiency aspects regarding vertical integration which led to a much more lenient attitude in assessing the anti-competitive effects. However, this would involve a discussion about the generally negative European attitude about considering more efficiency aspects. In general, in Europe, line of business restrictions in the telecommunications and media industry are not uncommon.\textsuperscript{265}

In the UK the TO's are not allowed to offer entertainment services under their

\textsuperscript{263} See in Germany the recently privatized German Telecom and the discussion to transmit programs of program providers which are not part of the digital television consortium MMBG, Süddeutsche Zeitung, 29. Mai 1996, "Wir sind nicht der böse Monopolist", p. 22; see for the academic discussion, Holznagel, Probleme der Rundfunkregulierung im Multimedia - Zeitalter, p. 19; he predicts the risk of anti-competitive conduct after the privatization and liberalization of the German Telecom; see for proposals on how to deal with the cable monopoly of the German Telecom after the privatization, Engel, Multimedia und das deutsche Verfassungsrecht, p. 167; he suggests taking the cable network away from the German Telecom and handing it over to one or a couple of newly founded companies.

\textsuperscript{264} "Cable's local monopoly pipeline multiplies the power of vertical integration", complaint put forward by independent broadcasting companies and program providers in the congressional hearing for the 1992 Cable Act, quoted after Esser, Zugang zur Breitbandkommunikation - die USA als Beispiel für zukünftige Entwicklungen in Europa, p. 425; see also for the local monopolies, Hammond, Regulating Broadband Communication Networks, in: Yale JReg., Vol. 9, 1992, p. 185.

Telecommunications Act license.266 The same is true for Denmark. And in the Netherlands cable companies are not allowed to enter into the business of producing TV programs.267 Accordingly it would not be revolutionary to introduce such restrictions for digital television, as for example prohibiting companies who own network facilities or broadcast companies from providing the set-top-box, the administrative and technical services or the navigation systems.

b) Processes of Convergence as Incentive to Vertically Integrate
Digital television is part of the digital revolution which is connected with convergence processes. By many observers it is stated that the new convergence processes spurred through the new technological developments provide incentives for the companies involved in the related industries to integrate also horizontally, though mainly vertically. In the following section some of these convergence processes will be identified and explained and their effect on the tendency to integrate vertically will be analyzed. At the end the findings will be put in relation to the competition environment surrounding the introduction of digital television.

aa) The Discussed Convergence Processes
What are these convergence processes so much talked about in the recent literature? Is there one big convergence process including many smaller ones or are there a couple totally different ones? One of the much written about convergence processes is the one between content and technology or better transport of the content, also called “conduit-


267 See for Denmark and the Netherlands, Coudert Brothers, An Overview and Analysis of the Legal and Regulatory Barriers to the Take-off of Multimedia Applications, EC study (December 1994).
Other observers see the convergence of media as allowing market actors to cross sector boundaries and making new services possible. They give as one example the possibility of integrating audiovisual communications and publishing with information and telecommunications. Another convergence process is found to take place generally between communication technologies, in particular between telecommunication and broadcasting. On the latter also the European Commission started a debate in part II of its Green Paper on infrastructure which contains a chapter entitled "Future evolution of the regulatory environment to meet the challenges of convergence". The main driving force behind this development is said to be technical change, in particular the trend towards processing information in digital format. Technical change also transforms the traditional telephone system into an information highway, digitized broadband networks with the capacity for the faster transport of information and more power to process information transmitted over the network. Since the information will be digitized it becomes irrelevant whether computers communicate or speech, data, still or moving pictures are transmitted. The unity between a certain network connected to a certain transmitted signal as it used to exist, for example, different networks for

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270 See OECD, Telecommunication and Broadcasting: Convergence or Collision, p. 93.
telegraphy and telephone, becomes obsolete.\textsuperscript{273} In the USA and the UK cable operators are able to provide telephone services and US telephone companies insist on their first amendment rights to provide video services over their networks.\textsuperscript{274} Through the introduction of the new US Telecommunication Act of 1996 these possibilities have been acknowledged and investment in the other market has been permitted.\textsuperscript{275} In Europe only the cable operators have been allowed by European Community legislation to provide already liberalized telecommunication services, but not the other way around.\textsuperscript{276} With the introduction of interactive broadcast services and the blurring of its technical differences with telecommunication services the differentiation in mass and individual communication no longer applies.\textsuperscript{277} Also the different services converge as well as the networks, services and the sets with each other.\textsuperscript{278} The convergence of the sets has been discussed already above with the predicted convergence of the television set and the personal computer. However, the most important convergence processes concerning the introduction of

\textsuperscript{273} Mestmäcker, Über den Einfluß von Ökonomie und Technik auf Recht und Organisation der Telekommunikation und der elektronischen Medien, p. 34; Engel, Wege zur Bewältigung der Konflikte in der globalen Informationsgesellschaft, p. 187.


\textsuperscript{275} See Part V of the US Telecommunication Act of 1996 which deals with video programming services provided by telephone companies.

\textsuperscript{276} See the Directive 95/51 EC of 18 October 1995, OJ 1995 No L 256/49 that concerns the abolition of the restrictions in the use of cable television networks for the provision of already liberalized telecommunication services; see also on that subject Preiskel/Higham, Liberalization of Telecommunications Infrastructure and Cable Television Networks, in: Telecommunications Policy, Vol. 19, pp. 381-390; see also Wittmann, Freigabe der Kabelnetze für Telekommunikation, in: Medien und Recht, 1/1996, p. 14.

\textsuperscript{277} Schoof/Watson, Information Highways and Media Policies in the European Union, p. 325; Mestmäcker, Über den Einfluß von Ökonomie und Technik auf Recht und Organisation der Telekommunikation und der elektronischen Medien, p. 34; see in particular for the blurring of the differences between mass and individual communication, Hoffmann-Riem/Vesting, Ende der Massenkommunikation, in: Media Perspektiven, 8/1994, p. 383ff.

\textsuperscript{278} Engel, Wege zur Bewältigung der Konflikte in der globalen Informationsgesellschaft, p. 188; he gives as an example for the convergence of network, service and set, the telefax where the services are integrated in the set.
digital television are the one between content and conduit and between telecommunication and broadcasting.

**bb) The Incentive to Integrate**

The convergence processes are said to spur integration among the different market players, and induce them to horizontal and in particular (as a rather new phenomenon of these processes) vertical integration. However, the argumentation for this point is in the most cases rather superficial. The statement is probably considered self explanatory.

The literature speaks of a parallel convergence process on corporate level which follows the convergence processes spurred by the technical development. This is due to new communication service providers and potential new market entrants who see the creation of potentially profitable new growth markets through the technical convergence, as in data broadcasting, personal mobile communications, interactive video based services, digital television and other hybrid services. They would combine with hardware manufactures who are ready to provide the network and terminal equipment to supply the new markets.\(^{279}\) However, the latter is not the main line of integration when looking at the introduction of digital television. A more interesting phenomenon for the introduction of digital television concerning the convergence processes, in particular between the telecommunication and electronic media, is the extension of monopoly positions to usually vertically related markets. These efforts can be observed in the example of privatized former state owned telecom operators, which try to profit from their former, and in most cases still existing monopolies to position themselves well in the future multimedia

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\(^{279}\) OECD, Telecommunication and Broadcasting: Convergence or Collision, p. 93.
The main argument for the connection of the convergence processes and vertical integration is however a different one. It is argued that the development towards convergence of telecommunication and broadcasting encourages increased integration among companies, since, with the entering of totally new markets there are also high investments and risks involved. The convergence processes create new markets which companies from the different sectors only dare to enter being integrated, preferably vertically. It is also argued that the convergence process of conduit and content provides arguments used in the media for vertical integration and so supports the existing tendency.

c) Particularities of the Digital Television Sector
Although in the above sections I always tried to link the arguments about the vertical integration tendencies observed with the introduction of digital television, there still exist some peculiarities of digital television, which deserve special consideration. Regarding vertical integration, it is interesting to observe that digital television introduces this new stage of distribution of television programs, the set-top-box and the included services. The problems with the access to networks when vertical links exist are quite common, and also apply for on-line services and conventional and non digital cable television. However,

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280 See for this argument, Mestmäcker, Über den Einfluß von Ökonomie und Technik auf Recht und Organisation der Telekommunikation und der elektronischen Medien, p. 35, 38; he also mentions the automatic extension of monopoly positions to new technologies; this could be said of the German Telecom which now also tries to dominate the distribution of digital television programs because of their strong position as cable operator and stockholder in satellite enterprises.


282 Engel, Multimedia und das deutsche Verfassungsrecht, p. 170.

283 See for the services above III.1.a), III.2., III.3.; see for the new distribution stage, Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 21.
the new dimension with the digital television is that with the provision of the set-top-box and the indispensable services suddenly all companies which are part of the digital television distribution chain come together and want to have an ownership stake, since its control is so crucial for the success of the marketing of the programs.\textsuperscript{284} This is the real competition concern of digital television which does not come up when one looks at the discussion over the competition problems created through vertical integration in the US cable television industry. Certainly also the general argument applies that with the introduction of this new technology and the new services offered, high investments and risks are involved which induce companies to concentrate. However, the special distribution structure which demands the setting-up of a new technically quite demanding distribution stage,\textsuperscript{285} where none of the involved companies really has experience, is an important additional factor to integrate in particular vertically, to use the different know-how on the upstream and downstream markets. This is exemplified in the MSG decision where the parties wanted to use the know-how of the German Telecom concerning networks and network administration and the expertise and experience of Bertelsmann in managing more than 20 million book club customers worldwide and the knowledge of the Bertelsmann and Kirch owned pay-television channel Premiere regarding pay-television subscription management. Digital television offers, because of the additional special distribution infrastructure that had and still has to be created and the importance of this

\textsuperscript{284} See above III.1., III.2., III.3.

\textsuperscript{285} This concerns the technology of the set-top-box, next to the less complicated conversion function the sophisticated subscription management and conditional access systems and also for example the software for the navigation-systems.
new distribution level for control over the new markets, incentives to integrate that go beyond the general motives for vertical integration mentioned above.

2. Open Access

Open access is one of the most discussed terms in telecommunications. The following section, however, will concentrate not as much on the access to networks to distribute television programs, as on the idea behind it and its application to the problem of the set-top-box and its related services. The access to the ways of transmission naturally also poses difficulties for the introduction of digital television, since in the future its main way of transmission will be cable. However, this is not a problem specific for the introduction of digital television, although it appears to be more serious than in other fields, since there is this tendency of vertical integration which includes telecommunication companies and other network providers.

a) The Set-top-box and its Services as Essential Facility
First I will present the idea of essential facilities in a general way with some examples of its application. Following that, the set-top-box and its connected services will be put into context with that idea and doctrine.

aa) Essential Facilities and Bottlenecks
The notion of essential facilities usually refers to access to infrastructures, like airports or ports, networks like telecommunication and railroad networks, or other major distribution facilities like electricity networks or gas pipe systems. Already in 1912 the US Supreme Court decided in a railroad case that a dominant undertaking can be obliged to grant a
competitor access to an essential facility. In European competition law the doctrine was for the first time expressly mentioned in the Three Ports decisions of 1992 and 1993, though hints could be found already before. The European Commission found a violation of Art. 86 of the EC-Treaty if an undertaking that has a dominant position in the market because of the ownership of a facility or infrastructure, without access to which a competitor cannot offer his services and which uses the facility or infrastructure itself and denies other undertakings access to it or grants it only under discriminatory terms without reasonable justification. Typical examples for essential facilities are also the gas- or the electricity industry where the tube or wire/cable system is under the ownership of one company which can decide which other providers may use its distribution system. If the owner of the distribution system at the same time also provider of the content that is supposed to be transported then the concerns for competition increase. The providers not linked to the network owner are in danger of being discriminated against. The essential facility doctrine deals with the question whether the monopolist under such circumstances

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288 See Sealink II, paragraph 66.


290 See for a comparison with vertical integration in electronic media, Engel, Multimedia und das deutsche Verfassungsrecht, p. 170; he also mentions EC legislation, which introduced “must-carry” rules for gas- and electricity providers to offer their networks also to not aligned providers, OJ 1991 No L 47/37; see also for this comparison, Kopp, Medienrecht und neue technische Entwicklungen - Reaktionen und Perpspektiven, p. 390.
is allowed to refuse to deal. He is not allowed to exploit his monopoly position over the essential facility in an anti-competitive way. The leading case where the doctrine was applied by US courts to the telecommunication sector was MCI Communications v AT&T. There AT&T refused to connect the network of its new competitor in the telephone sector to its own network. MCI argued that the only way to compete with AT&T would be if there were a connection between the networks. The courts agreed with MCI and ordered an interconnection of the networks, since the refusal by AT&T would have presented a monopolization according to section 2 of the Sherman Act. The court of appeal summarized the essential facility doctrine as following:

"A monopolist's refusal to deal under these circumstances is governed by the so-called essential facility doctrine. Such a refusal may be unlawful because a monopolist's control of an essential facility (sometimes called a 'bottleneck') can extend monopoly power from one stage of production to another, and from one market into another. Thus, the antitrust laws have imposed on firms controlling an essential facility the obligation to make the facility available on nondiscriminatory terms."291

The essential facility doctrine in the meantime has been applied to an array of other cases not limited anymore to the traditional cases cited above. In a more recent case by the European Commission and subsequently the European Court of Justice the application of the essential facility idea was discussed for a case dealing with the publishing of Television

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guide and intellectual property rights. In that case three television broadcasting companies refused to license a TV Guide to reprint their respective advance weekly program listing. With their licensing policy the television companies restrained undertakings seeking to publish a weekly TV guide. As a result a viewer who wished to obtain advance weekly program information was forced to buy three separate guides published by the three companies respectively. The example illustrates how diverse the sectors are where the essential facility doctrine can be applied. The question of guaranteeing access under the essential facility doctrine arises when certain conditions are met: one undertaking has a monopoly over a facility which is essential for the activities of competitors; the competitors cannot duplicate the facility; and the monopolist refuses to deal or offers discriminatory terms. In the US there is a strong tendency to limit the doctrine's application. It has been criticized on the grounds that courts and legal experts could not even agree on what the so-called essential facility really easy, and much less on what it encompasses. Also it was argued that it has the potential to frustrate rather than promote competitive behavior and economic efficiency.

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294 See Furse, The 'Essential Facility' doctrine in Community Law, pp. 470-471; see for the conditions for a claim before a court in the US, MCI Communications Corp. v. AT&T, 708 F. 2d, p. 1081, 1132-33 (7th Cir. 1983), cert. denied. 464 U.S. 891 (1983).

295 See for the criticism Rau, Open Access in the Power Industry: Competition, Cooperation, and Policy Dilemmas, p. 283, with further references in particular footnote 15.
bb) The Set-top-box as Essential Facility

To what extent can the set-top-box be seen as an essential facility? It has already been mentioned above that the set-top-box will constitute a kind of bottleneck, since all digital programs have to pass through it. However, the constellation with the set-top-box and the offered services is much more complex than in the typical essential facility examples described above. It is not one single element like the transport of content with networks which gives the set-top-box an essential facility status, but the combination of the different services and functions connected with the device. For example, the function of converting the digital television signals into analogue ones, which can be received by the traditional television sets, will only be of minor importance. Much more relevant are the conditional access services and the subscriber management functions. The same is true for the navigation systems which do not have necessarily to be linked to the provider of the set-top-box and the other services; however, this is very probable. In particular the conditional access function can contribute to the bottleneck/essential facility character of the set-top-box, since if a proprietary conditional access system is used, its operator can control which services are receivable through the decoder boxes at the customers' homes. To assess to what extent the set-top-box is an essential facility it is indispensable to know who provides which services, whether all of them are organized by the set-top-box provider or they are offered by independent undertakings. Links between the providers have to be analyzed very closely in that respect. The incentives for concentration described above naturally

296 See above III.1.b)(aa); see for many other authors, Graham, Exchange Rates and Gatekeepers, p. 43; Eberle, Medien und Medienrecht im Umbruch, p. 797.

297 See for conditional access systems as bottleneck, Schoof/Watson Brown, Information Highways and Media Policies in the European Union, p. 335.
also are likely to support a concentrated service provider unit as seen above with the examples of MSG and Nordic Satellite Distribution. For the set-top-box the bottleneck problem has to be seen as a multi-layer constellation, since there are so many different constellations possible. There would not exist any risk of the emergence of a bottleneck if every function would be performed by one independent company. However, this is very unrealistic considering the economic and financial risks and interests involved. That the separation of the functions is a way to guarantee a competition neutral role of the set-top-box provider is shown by the plans for the new joint venture following the prohibited MSG, the MMBG. The provision of different incompatible set-top-box systems does not present a solution to the bottleneck problem, since it would probably not be affordable for the competitors, nor would it be appealing to the customers who want to be able to receive all available programs with one box.

However, there is second level concerning bottleneck problems with the introduction of digital television, only in indirectly caused by the new technical developments. The set-top-box and the concentration tendencies and vertical integration activities surrounding its introduction also exacerbates the competition problems regarding the distribution networks, like cable or satellite. Suddenly the cable operators or satellite providers through ownership or other vertical links with the set-top-box system providers might be induced to discriminate against programs which are run on a different system. This is

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299 See above Ill.1.b); see Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 22; Eberle, Medien- und Medienrecht im Umbruch, p. 797; see also Graham, Exchange Rates and Gatekeepers, p. 44.
300 See as an example the discussion in Germany on whether the German Telecom will transmit the digital programs of Kirch who did not join the MBBG, which is an undertaking planning to provide set-top-box systems and decoder technology and in which the German Telecom has a major ownership stake; see Süddeutsche Zeitung, "Wir sind nicht der böse Monopolist", 29. Mai 1996, p. 22.
the well-known essential facility situation with a network provider refusing to deal with a competing content provider, although the construction here is more complex.301

b) Open Access v. "Must-Carry" Rules Regarding the Digital Television Infrastructure

In discussing open access v. "must-carry" rules for the digital infrastructure the above found two different levels of access problems have to be taken into account. The first level is the well known access to the networks like cable and satellite and the second level, specific for the introduction of digital television, is the access to the set-top-box infrastructure. Ideas exist to extend the regulatory principles of the telecommunications sector regarding open access, like the rules applicable under the Open Network Provision framework, to the networks in the broadcasting sector, which have been excluded so far from such rules.302 Concerning cable television the "must-carry" approach has evolved in order to provide broadcast service providers’ access to the cable networks. A regulatory approach specifies which broadcasters must be included under "must-carry" rules.303 A restricted "must-carry" approach should be sufficient. However, it must be secured that the access is also granted in nondiscriminatory fair terms also considering the single terms of the agreements.304 Declaring the networks to be common carriers seems to be

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301 See Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 19; he also gives the example of problems with satellite providers, however he does not really connect the problem to the introduction of digital television and the new concentration incentives, but mainly gives as an explanation the upcoming privatization and liberalization of the telecommunication sector, which would bear the risk of private operators exploiting their gatekeeper positions.


unrealistic considering the predicted differentiation of the networks. The best solution would be competition among the networks. However, mostly they are not inter-substitutable and regarding the cable and satellite penetration of many European countries any competition of networks is still far away in time.

Regarding the access to set-top-box infrastructure one could view open access as being the common interface solution and “must-carry” as being a proprietary system with a code of conduct. The advantages and disadvantages of both have been widely discussed above. From a competition standpoint the common interface solution which would mean open access was seen as being far superior. Technically its general introduction does not pose any difficulties. Mainly the interests of companies which already use a proprietary system and do not want to give away their competitive advantage speak against it. However, here this technical solution provides a much easier and clear cut solution than could be found for the network access problem.

3. Competition and Standard Setting
An aspect which has not been discussed yet, which, however, is of great importance for competition, is the role of standards. The setting of standards has far-reaching implications for the competition conditions in a market for products or services. Within the

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306 See for a graphical overview, Pitzer, Digitales Fernsehen, p. 9; pay attention in particular to France, Portugal, Spain, Italy and Greece.

307 See above III.1.b).

308 See for many Graham, Exchange Rates and Gatekeepers, pp. 45-46.

309 See, for example, Canal Plus in France and in Spain and BSkyB in the UK.
introduction of digital television, standards play a crucial role. These standards include those for the digital television signals, the compression technique, the conversion technique and the conditional access system. In the following section, after a brief general introduction to the economics of standard setting I will analyze the role of standards within the introduction of digital television.

a) The Economics of Standard Setting and the View of Competition Law

In the high technology and information technology areas the two most important standards are quality and safety standards and interface standards. The latter are of primary interest for the telecommunications and information industry. They specify whether and how one type of product or service will be able to fit or communicate with other products or services (for example television transmission standards or computer operating system interfaces with applications programs). There is a general consensus that standards provide a variety of pro-competitive benefits. The form of the standardization benefits varies across markets and industries. The standardization and compatibility benefits connected with high-technology industries are found when network or consumption externalities are associated with a product. Usually a variety of technologies exist that can be employed to accomplish a similar objective and the value of a technology to each user increases with the size of the user base. Then each user of a standard confers benefits on other users of the standard with the decision to use the standard by which he becomes the source of a "positive externality" in connection with

joint use of technologies referred to as "network externalities". The relationship between the users is regarded as an interdependent network caused by their reliance on a common set of standards. The usual presumption that competition among self-interested economic agents has to promote market-wide efficiency in consumption and production may not be true if an activity involves externalities. There exist various sources for the network externalities. The users may benefit from system wide economies that emerge independently of any activities of the users. This might be due to the fact that many products which are components of a systems of products or services are coordinated by the adherence to one common technological standard. This is true for example for video-recorders and tapes and personal computers and software and would apply in our case to the set-top-box and available digital television programs. Both producers/providers and customers may profit from system economies through lowered production costs. A larger user base also promotes economies of scale effects. With economies of scale the per unit costs of production decline as the volume of production increases. Benefits of experience may occur which may improve the quality of products and services. These are usually benefits conferred on later users by earlier users of a new technology; however, earlier users might also benefit. The number of users in a network also increases benefits which might arise out of communication among the users.

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312 See for the standardisation and network externalities in general, Owen/Wildman, Video Economics, p. 264ff.
313 See for further examples of benefits, Anton/Yao, Standard-Setting Consortia, Antitrust, and High-Technology Industries, p. 249, he gives as example among others the telecommunication market regarding telephones the externality is due to the fact that communication is more valuable as the network increases; see also Owen/Wildman, Video Economics, p. 264ff.
Competition law acknowledges the possible benefits of standardization. Besides its function of improving a sector by rationalizing the production, it is also credited with benefiting the consumer by improving the interchangeability of the products in question.314 The European Commission does not oppose standardization agreements as long as competition between the parties to the agreement or access to the agreement by other producers is not excluded.315 In US competition law the benefits of standards are also appreciated and the vast majority of standard-setting activities in particular taking place in the high technology industry are seen as posing only slight anti-competitive concerns, though continuous vigilance is considered to be needed. The substance of a standard has the potential to produce a number of anti-competitive effects. A standard may disadvantage some subgroup of existing competitors by raising costs or excluding the technology of rivals without any technical rationale. Standards may also be used to exclude current rivals or to raise entry barriers.316

b) Standard Setting and Competition within the Introduction of Digital Television
The above cited benefits of standardization, in particular in the high technology and communication and information industry, also apply to the introduction of digital television. The theory of network externalities promises also here benefits for the producer and service provider as well as the consumer. A common standard and subsequently a common and compatible system are supposed to provide less expensive set-top-boxes,
lower subscription fees and a greater variety of programs for the consumer, while they would give the producers and the service providers economy of scales, system economies and would enable them to offer the audience more attractive programs which would be an important factor in turning the introduction of digital television into a success.317 Great efforts have been made by the Digital Video Broadcasting Group (DVB), a private organization of companies interested in the implementation of digital video broadcasting to come up with standards for the distribution of digital television programs.318 It succeeded for the most part. For the conditional access system there does not exist a standard yet, though the standardization process is under way.319

However, the conditional access system is, as already seen above, the crucial part of the digital television distribution chain.320 Besides losing the described benefits and risking the overall success of the introduction of digital television, there loom great dangers for free competition on the digital television market if a common standard will not be used. Ultimately there will be either one dominant set-top-box system provider with potential monopoly in his hands or several providers of incompatible ones. Both situations are undesirable socially and economically. Several smaller providers would fragment the market and might lead to what economists call “a low equilibrium market” where choice

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317 See for the advantages and the necessity of common standards, Report to the Swedish Minister of Culture and the Head of Ministry: From Massmedia to Multimedia - Digitalization of Swedish Television, p. 9; see Graham, Exchange Rates and Gatekeepers, p. 46; see Pieper, Medienrecht im Spannungsfeld von Broadcasting und Multimedia, p. 558; Flatau, Aktivitäten der Europäischen Union auf dem Gebiet der Medien, p. 779; Niewiarra, Folgerungen aus den Aktivitäten der Europäischen Union für die private Fernschwirtschaft, p. 761.

318 See for details regarding the standards already set, the DVB and the coordination with the European Commission, below, VII.4.c).


320 See above under III.1.b(aa),bb).
will be reduced, costs raised, the demands lowered and investment reduced.\textsuperscript{321} Even if the standard by the DVB arrives it is questionable if it will be used, since the operator of conditional access system want to keep their old system which for the most part is proprietary and not even using a common interface.\textsuperscript{322} The often raised argument against a common standard, that it delays investment, contradicts the network externalities described above. It is also argued that pressure will exist on suppliers to collaborate and they finally will come up with common standards. However, this is not certain as the example of IBM and Apple in the personal computer sector demonstrated. Also the struggle going on in Germany between two media giants providing two different systems shows a common standard does not have to emerge naturally.\textsuperscript{323} And even if the pressure will exist it might come too late and the individual consumer will already face monopoly suppliers or a fragmentation will have taken place which would be costly and lengthy to reverse.\textsuperscript{324} Because of this many observers favor the introduction of a mandatory common standard for a conditional access system.\textsuperscript{325}

\section*{VI. Implications for the Concentration Debate}

The debate about concentration in the media, in particular in broadcasting seems to go on continuously and to repeat itself in most European countries. The questions discussed are

\begin{flushleft}
\textsuperscript{321} See Graham, Exchange Rates and Gatekeepers, p. 44.
\textsuperscript{322} See as examples in France Canal Plus and in UK BSkyB with their proprietary systems.
\textsuperscript{323} See Frankfurter Allgemeine Zeitung, "Digitales Fernsehen", 2. Juli 1996, supplement Technik und Motor, pp. 1-2; the differences are much greater than expected, since even using smartcards one could only see the program, but not use all the functions of the set-top-box; to show a program from one group on the decoder of the other group would be like "Loading the data of windows PC on a macintosh" an internal paper says.
\textsuperscript{324} See Graham, Exchange Rates and Gatekeepers, p. 47.
\textsuperscript{325} Ibid., p. 45.
\end{flushleft}
the level of ownership one undertaking should be allowed to have in the media, to what extent media cross ownership should be permitted, how one should define pluralism, which are the right models to measure media influence. On which governance level, regional, national or European the problems should be tackled is also the subject of widespread discussion. The aim of the following section will not be to describe this debate in all its details and with its differentiated peculiarities found in the different Member States. Rather the focus will be the new implications for the debate that the arrival of digital television brings about, in particular through the multiplicity of channels. For this also the state of the discussion in the USA will be highlighted. The presentation of the general concentration debate in the Member States and at European Community level will be rather brief and mainly introductory.

1. Introduction to the General Concentration Debate

In the following section I give a brief introduction to the general concentration debate. Some of the underlying principles of regulating broadcasting and television will be explained, like pluralism, and the main regulatory approaches outlined. Also a brief overview of the media concentration discussion at the European Community level will be presented.

a) The General Debate

The debate mainly deals with the question to what extent and what kind of regulation is necessary and sufficient to secure a plurality of opinions and a wide degree of information in the media. The different concepts of regulations include ownership rules in all variations like restrictions on multiple ownership in the same medium, restrictions on multimedia cross ownership, and so on.
ownership, restrictions of ownership because of the type of activities of the potential licensee, transparency provisions, special competition provisions or licensing rules.326 Two crucial points of the concentration debate are the justification for the different treatment of the electronic media compared to other media regarding the level of regulation, the general concept of pluralism and the role of the state in upholding the principle of pluralism in the electronic media.

aa) The Special Treatment of Electronic Media

The much stricter regulatory framework (not only regarding concentration but also licensing and content) imposed on the electronic media compared to the more or less free press market is justified with a number of rationales whose validity has become more and more criticized in the recent years.327 This controversy can be also viewed under the pretext of a free market versus a state approach.328 There is much less tendency to leave the electronic media to the play of market forces. A history of the different treatment of the two media can be observed both in Europe and in the USA. The most quoted arguments used to defend the extensive regulation of the electronic media are the pervasiveness of the medium and the scarcity rationale. The pervasiveness of the media


argument refers to the special character of the media as a justification for the strict regulation. According to this theory the electronic media have more influence on public opinion than do, for example, the press. According to the US Supreme Court the broadcasting media intrude into the home and are "uniquely persuasive". Because of the power of television and its unique influence on the public opinion the free market for television would, unlike the range of press and magazine titles provided by the print media, not produce the same variety of programs. This makes stricter regulation necessary in order to guarantee pluralism and program variety. The other predominantly used argument is the scarcity rationale. According to this argument the frequencies for broadcasting are said to be very limited. Not everyone can acquire a license to broadcast or air their views, therefore the government may regulate the access and the content of broadcast programs. Connected with that is the argument of the high investments necessary to start up a broadcasting channel or any other outlet of electronic media, which held the numbers of outlets down compared to the number of newspapers and magazines. It is obvious that this argument has come under serious attack with the new technological developments that are said to abolish the spectrum scarcity, in particular the digitalization of television.

329 See for the whole argument Barendt, Broadcasting Law, pp. 6-7.
330 See FCC v. Pacisico Foundation, 438 U.S. 736 (1978); also see the German Constitutional Court in the Lebach case, BVerfGE 35, 202.
331 See German Constitutional Court, BVerfGE 57, 322-323; see also Brugger, Freiheit der Meinung und Organisation der Meinungsfreiheit. Eine liberale Konzeption der geistigen Freiheit des Article 5 Abs. 1 und 2 GG, in: EuGRZ, 1987, p. 230.
332 See for the scarcity rationale in general Barendt, Broadcasting Law, pp. 4-6; see for the USA, Red Lion Broadcasting Co. v. FCC, 395 U.S. 367, 388, 1967; see for Europe the German Constitutional Court, BVerfGE 12, 205, 263; Italian Constitutional Court, Decision 59/1960 Giur. cost. 759; see for the economic considerations, German Constitutional Court, BVerfGE 12, 205, 261 (first television judgment); 31, 314, 326 (second television judgment); 73, 118,154 (third television judgment).
bb) The Concept of Pluralism

The other essential element of the debate is the concept of pluralism in general and the role of the state in securing pluralism of opinions within the electronic media. This is not the place to elaborate on the dogmatic founding and origins of this principle mostly developed by constitutional courts. However, some definitions and descriptions of the concept will be given to illustrate on what ideas the concentration debate is based. The concept of pluralism wants to ensure a plurality of sources of information and opinion and a plurality of editorial control over them. There are a numbers of dimensions to the term pluralism, which include political and commercial influence, audience access to a range of products and services, and diversity of content.\(^{333}\) Pluralism as a constitutional principle means the duty of the state to create a regulatory framework that prevents one-sidedness in the media, ensures they are free of state influence and guarantees the greatest plurality of opinions possible.\(^{334}\) The principle of pluralism also includes restrictions of the freedom of speech and expression of individuals to secure a plurality of opinions for the public which encompasses ownership rules to prevent concentration in the media.\(^{335}\)

b) A Common European Approach to Concentration and Regulation

An interesting question in the context of the concentration debate and of regulations to secure pluralism concerns the existence of a common European approach. Can such a

\(^{333}\) See Robinson, Market Share as Measure of Media Concentration, pp. 50-51.

\(^{334}\) See for that definition and for more concerning the constitutional background in Germany, France and Italy, Schnellenberg, Pluralismus: Zu einem medienrechtlichen Leitmotiv in Deutschland, Frankreich und Italien, in: AoR, 1994, pp. 427-449.

\(^{335}\) See Brühann, Pluralismus und Medienkonzentration im Binnenmarkt, in: ZUM, 12/1993, p. 600; this idea is in line with the view of the European Commission expressed in its Green Paper on Pluralism and the decisions of the European Commission and of the European Court for Human Rights; see for the latter the decision Groppera Radio AG v. Switzerland, Ser. A, No 173; (1990) 12 EHHR.
general common approach be identified in contrast for example to the American attitude
towards regulating the media? This European approach might exist and play an important
part in the debate independently or in spite of the new technological developments like the
digitalization of the media. The starting point for finding such a common denominator may
be the principle of pluralism. This concept is wide-spread in European countries, and not
limited to countries with a constitutional court.336 Closely connected with the pluralism
principle is the idea of giving an objective dimension to the right of freedom of
broadcasting and to regard it as an instrumental freedom. This includes the duty of the
state to protect broadcasting in so far as its exercise promotes the goals of free speech,
namely an informed society and a lively discussion of a variety of views. The
constitutional guarantee of freedom of expression requires the enactment of legislation to
safeguard free speech in the context of broadcasting in order to prevent it being dominated
by the state or by any commercial group.337 Although the interpretation is most strongly
supported by the German constitutional court, France, Italy, and Spain also have a similar
understanding of freedom of speech.338 Even the UK, though without a manifestation on

336 See for the quite similar interpretation of the principle in Germany, France and Italy, with slight differences in the
dogmatics of constitutional law, Schellenberg, Pluralismus: Zu einem medienrechtlichen Leitmotiv in Deutschland,
Frankreich und Italien, pp. 427-449; see for the UK Robinson, Market Share as a Measure of Media Concentration,
pp. 50-51, who quotes pluralism as being the fundamental aim of both the Broadcasting Act of 1990 and the White
which have become with some changes the Broadcasting Act 1996; see for the changes the Department of National
Heritage, The Broadcasting Act 1996, A guide to the provisions of the Act and Main Changes since Publication,

337 Its clearest expression is the interpretation found in the case law of the German Constitutional Court, see
BVerfGE, 57, 295, 320; 73, 118, 152; see for the constitutional background of the concentration debate in
Germany, Dörr, Konzertationstendenzen im Bereich des Rundfunks und ihre Rechtsprobleme, in: ZUM, 1/1993,
p. 11.

338 See Holznagel, Probleme der Rundfunkregulierung, p. 18; see also Schellenberg, Pluralismus: Zu einem
medienrechtlichen Leitmotiv in Deutschland, Frankreich und Italien, p. 18; see also for Italy, Rundfunkpolitik,
Partei- und Konzerninteressen - ein italienisches Zusammenspiel, p. 117; see for France, Barendt, Broadcasting
Law, p. 13ff.
the constitutional level, shares a similar approach in regulating broadcast.\textsuperscript{339} This approach is identified as quite different from the way freedom of broadcasting is treated in the USA, where it is mainly regarded as an immunity from government intervention. The European approach, by introducing this second dimension, seeing the freedom of broadcasting as a set of institutional rather than individual rights, provides for additional arguments for regulation which in the USA do not exist.\textsuperscript{340} This difference becomes crucial for the concentration and regulation debate if the traditional rationales for regulation come under attack as it is happening with the arrival of digital technology and other developments.

c) The Relationship with Competition Law
Another much discussed point of the concentration debate which might be important analysis of the implications of the digitalization of television is the role of competition law. The crucial question asked in that context is to what extent competition law is adequate to maintain pluralism.\textsuperscript{341} There exists a general agreement that a convergence of the objectives of maintaining pluralism and maintaining competition can be identified, or at least that they are complementary. However, considerable limitations have to be acknowledged. The limiting factor in relying on general competition law to protect pluralism will be that some market behavior which raise issues for pluralism will not be

\textsuperscript{339} See Barendt, Broadcasting Law, p. 34.

\textsuperscript{340} See for a comparison of the European approach and the US-American view-point, Barendt, Broadcasting Law, p. 34.

\textsuperscript{341} See for this question the European Commission's Green Paper on Pluralism and Media Concentration, pp. 82-83; see for an assessment of that Hitchens, Media Ownership and Control: A European Approach, p. 593; see also European Commission, Communication from the Commission to the Council and Parliament on Audiovisual Policy, 21 February 1990, Com (90) 78 final, p. 21 where the Commission doubted the sufficiency of competition law to deal alone with media concentration; for an analysis whether the European Competition Law is adequate to maintain pluralism in the Common Market, see Wagner, Konzentrationskontrolle im Medien-Binnenmarkt der EG, in: AfP, 1/1992, p. 1ff.
regarded as impeding competition. Pluralism and competition are different criteria and the protection of pluralism often needs tighter control than the protection of competition. Competition law aims at preventing economic dominance and while this might prevent certain media concentration tendencies, it does not guarantee pluralism in itself.342 Another problem in just applying competition law to a media case might be the issue of what constitutes the market. In the case of a multimedia merger the companies might be a newspaper publisher and a television channel. If the market is defined as the television market and not as a common media market, no competition question would arise, but the merger could raise serious concerns for pluralism. This might even be true for a one media market when the markets, for example, are defined according to the technical nature of services (e.g. in a merger between a terrestrial television operator and pay-television channel).343 Competition law in the end cannot be sufficient on its own because of the peculiar characteristics of media products and services which always will escape the market definitions of competition law.344 However, it is also acknowledged that in fields where no specific safeguards for media pluralism exist, like with cross ownership or with vertical integration including bottlenecks or technical gateways, effective application of competition rules is very beneficial to media pluralism.345


344 See Robinson, Market Share as a Measure of Media Concentration, p. 54.

345 Pluralism and Media Concentration in the Internal Market, EBU Reply to Commission Questionnaire No III, p. 4.
d) The Concentration Debate at the European Community Level
On a broad scale the public discussion on media concentration at the European Community level was started by the Commission with the publication of its Green Paper on pluralism and media concentration within the internal market. However, the initiative for the Green Paper stemmed from a resolution by the European Parliament of 15 February 1990, in which it had requested the Commission to "put forward proposals for establishing a special legislative framework on media mergers and takeovers".346 The Parliament made itself heard again with a second resolution passed on 16 September 1992 entitled "Resolution on media concentration and diversity of opinions."347 There it pointed out the danger of the emergence of powerful European media giants which may start to divide the European media market up among each other.348 In both cases the European Parliament was concerned with the needs to protect the freedom of expression and to encourage pluralism and a diversity of opinions.

The approach of the European Commission is interesting and illustrating for an assessment of the Green Paper and the media concentration policy and debate on the European Community level in general. Although the Green Paper arose out of Parliamentary concern about the need to safeguard pluralism, the European Commission assessed the need for action in the context of its task of completion of the internal market. It acknowledged the fundamental importance of the protection of pluralism, and despite this task not falling

347 See OJ 1992 No C 284/44.
348 See also Dörr, Konzentrationstendenzen im Bereich des Rundfunks und ihre Rechtsprobleme, p. 14.
expressly within its portfolio, it was in itself a Community objective. Because of this, the main issue of the study became the question whether regulation of ownership and control of the media interferes with the internal market and not what regulatory framework would be desirable to ensure pluralism. It is also significant that the Green Paper was written in DG XV which deals with the internal market and not by DG XI which is in charge of media and audiovisual policies. The study was criticized on the grounds that the need to balance the real aim of completing the internal market with the needs of pluralism, limited the study's scope. According to this critical view this intrinsic conflict has contributed to and compounded the failure of the Green Paper to look at the complexities of media ownership and control and the scope for regulation broadly and creatively. This is of particular significance, because the starting point for the regulation of media concentration at Community level has stayed the same up until the later discussed proposal for a Media Concentration Directive. The economic study which was undertaken for the Green Paper found strong tendencies for concentration in the television sector with cross border activities being still rather low, but predicted to develop in the near future. The Member States introduce national concentration rules to counter this concentration tendencies

349 Green Paper on Pluralism and Media Concentration, pp. 59-61; see also Brühann, Pluralismus und Medienkonzentration im Binnenmarkt, p. 601; see for this approach and the different attitude of the European Parliament, which supports the idea of a European media concentration control with the main aim of securing pluralism Kresse, Pluralismus, Markt, Konzentration: Positionen, Berlin, 1995, p. 88, see also there for the question of the competence of the European Union, p. 89ff.

350 See for this criticism in particular Hitchens, Media Ownership and Control: A European Approach, p. 601; this tension is not seen as such by v. Wallenberg, Das Grünbuch der EG-Kommission zu Pluralismus und Medienkonzentration im Binnenmarkt, in: WuW, 11/1993, pp. 910-911; also not by Brühann, Pluralismus und Medienkonzentration im Binnenmarkt, p. 601.

which contains the risk of creating obstacles for the internal market. The Green Paper concluded that there might be a need for action at Community level to ensure the proper functioning of the single market given these potential obstacles. In this context the Green Paper states further that action on Community level would be the only way to proceed for a removal of these obstacles, since voluntary harmonization of national laws could not sufficiently achieve this. The Commission put forward three options for discussion. Option one was that no specific action should be taken at Community level. The second option proposed co-operative action to ensure greater transparency of media ownership and control. Option three suggested eliminating differences between national restrictions on media ownership rules, which could be achieved either by a harmonizing directive or by means of a Council regulation. Among the interviewed media associations and companies the first and the third proposal aroused the biggest interest. However most of the answers were predictable because of self interests and the study did not really develop a clear picture of the general attitude. An argument put forward very strongly by numerous media organization was the need for greater flexibility on a European regulatory level, since the European audio-visual industry encounters great

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333 See the Green Paper on Pluralism and Media Concentration, p. 99.

334 Ibid. p. 103

335 Ibid. pp. 113-114

336 Ibid. pp. 115-116

337 Ibid. p. 117


external competition from the American and Japanese industries. The same point is made by media companies within their own countries who want to be allowed to grow large enough to compete effectively with major integrated rivals from other Member States.360

On the 5 October 1994 the Commission approved a communication on the action to be taken following consultations over the Green Paper.361 As a result of the consultation, the Commission found that a Community level initiative might be necessary, but wished to carry out a second phase of work and consultation, before coming to a final decision. This second phase of consultation took place in 1995, being based on a questionnaire and two studies.362 Its results tended to be open or positive to a Community initiative. The finding indicated a general consensus over the need to reform the existing patchwork of ownership rules across Europe and fairly wide support for co-ordination of European Community media ownership policy.363 This encouraged the Commissioner for the Internal Market to launch a project calling for a directive from the Council on access to media ownership.364 The content of the proposal which is the result of the discussion process around the Green Paper and the follow up communication will be analyzed below.

361 Follow-up to the consultation process relating to the Green Paper on “Pluralism and Media Concentration in the Internal Market an Assessment for Community Action”, Communication from the Commission to the Council and the European Parliament, Com (94), 353.
362 "Feasability of using Audience Measures to assess Pluralism", November 1994, and “Audience measurement in the EC”, September 93 by the GAH group and “Transparency in Media Control”, November 1994 by the European Institut for the Media.
364 See for a brief summary of the developments on the EU level regarding media concentration, Kresse, Pluralismus, Markt, Konzentration: Positionen, p. 85ff.; see also Club de Bruxelles, Media in Europe towards the Millennium, Book 1: Regulations and Policies, p. 40ff.
2. New Implications

After having outlined the background of the concentration debate in the previous section, I will now examine the implications of the digitalization of the electronic media on this debate. Firstly I analyze which of the changes in the electronic media caused by digitalization might have an impact on pluralism and media concentration. Secondly I investigate if these effects might lead to a change in perception of the traditional rationales for regulating the electronic media. Finally I look at remaining risks for pluralism and a possible need for regulation on the European Community level.

a) The Impact of Digitalization

The digitalization of television can be said to have two main features concerning the way television will change which have become an issue in the media concentration debate. The first, discussed above, is the digital compression technology.365 This new technique will allow broadcasters to transmit up to eight times as many channels with the same spectrum capacity as today. Due to this a multiplication of channels is predicted for the future, financed mainly through fees. The form of television as it has been generally perceived is said to be likely change fundamentally.366 The emergence of a multitude of special-interest channels is expected and these expectations have already been partly verified by the plans of the companies who are about to enter or have already entered the digital television market.367 Bouquets' of themed services are predicted to play an important role in the

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365 See for an explanation of the technology II.1.b).
367 See for many in the academic literature, Eberle, Neue Übertragungstechniken und Verfassungsrecht, p. 250; Kresse/Heinze, Rundunkdynamik am Morgen des digitalen Zeitalters, p. 574; Holznagel, Probleme der
marketing of multichannel digital broadcasting and are already offered by the pioneers of
digital television.\textsuperscript{368} Besides the new diversity of much more specialized channels,
interactivity is supposed to become the main feature of the digital television world in the
long term future.\textsuperscript{369} Multiplexing, which will very soon allow the provision of near video
on demand services, will place viewers in a position to start watching the same movie
every 15 minutes. The notion of the evolution of television into an electronic kiosk, where
the viewer or consumer can choose among multitude of programs and service whenever
he wants to is wide spread.\textsuperscript{370} This idea supports the view of an approximation of
television to the press market. Summing up the changes introduced to television through
the digitalization which seem to be relevant for the concentration debate one can state a
development to more segmentation and individualization of the offered programs and
services.\textsuperscript{371} Although a general agreement on this tendency exists the degree and impact of
this development are quite controversial.\textsuperscript{372} This can be also seen as the dividing line
between the proponents of a more liberalized approach to television regulation and
supporters of the traditional strict regulatory line.

\textsuperscript{368} See Schoof/Watson Brown, Information Highways and Media Policies in the European Union, p. 338; see for the
bouquets offered by CanalSatellite the subsidiary of Canal Plus, Le Monde, 27 Avril 1996, p. 24; see for the
packaging in general above III.3.

\textsuperscript{369} See above for interactivity, multiplexing and near video on demand II.2.b).

\textsuperscript{370} See for that notion for many authors, Seeger, Strukturveränderungen des Rundfunks in Europa, p. 119ff.; see also
Eberle, Neue Übertragungstechniken und Verfassungsrecht, p. 250.

\textsuperscript{371} See already in 1984, Bullinger, Strukturwandel von Presse und Rundfunk, Rechtliche Folgewirkungen der
elektronischen Medien, p. 387.; this analysis was taken up again by Engel, Multimedia und das deutsche
Verfassungsrecht, p. 162; for segmentation and individualisation see also Scholz, Zukunft von Rundfunk und
Fernsehen: Freiheit der Nachfrage oder reglementiertes Angebot?, p. 358.

\textsuperscript{372} See for a sceptical view concerning the individualisation and segmentation of the offered programs by the future
television, Hoffmann-Riem/Vesting, Ende der Massenkommunikation?, p. 382ff; see also Stipp, Welche Folgen hat
die digitale Revolution für die Fernsehnutzung, p. 392ff.
b) The Diminishing of Traditional Regulatory Rationales

The changes described above shed new light on the traditional rationales for the strict regulation of broadcasting. The two main principles outlined in the section before, justifying the special treatment of the electronic media, are the scarcity rationale and the pervasiveness argument. The scarcity rationale clearly becomes questionable because of the use of the digital compression technologies which increases the capacity of the electromagnetic spectrum up to the eightfold. Although dependent on the picture quality desired, which influences the number of channels transmittable, this increase in capacity weakens the scarcity argument.\textsuperscript{373} Many believe that this should signal the end or at least a considerable retreat of government involvement in broadcasting regulation. It is argued that regulation will become unnecessary. With the advent of hundreds of channels delivering all kinds of programs, information and services there will be less need to ensure balanced and fair access to viewers. The monopoly power of existing networks will be destroyed by the advent of new television stations.\textsuperscript{374} The securing of pluralism and the multitude of opinions can be left from now on to the market and the economic law, in particular competition law. With the multiplicity of channels, an approximation to the press market is seen, and a similar regulatory treatment of the electronic media advocated. The digitalization of electronic media diminishes the reasons for the special protection of the communication-related goods. According to this views the freedom of speech has to be interpreted in a unitary way for both media in the future, as a so-called freedom of

\textsuperscript{373} See for the relationship of picture quality and number of channels, II.2.c).

\textsuperscript{374} See Green, Preserving Plurality in a Digital World, p. 27; see also Schoof/Watson Brown, Information Highways and Media Policies in the European Union, p. 337, who call for a close review of the regulations based on the scarcity rationale.
communication right. To strengthen their argument its proponents refer to the unstoppable convergence processes of different forms of media and of technology and content. The increase of the capacity of the electromagnetic spectrum will lower the costs for providing television services, since it will be now possible to offer very specialized pay-television channels. This fact also renders also the argument about the high costs necessary to enter the market of electronic media, which is closely connected to the scarcity rationale, questionable. This will make it equally difficult to publish a magazine or to start up a television channel.

Although the influence is not visible at first sight, with the advent of digital television also the pervasiveness argument becomes contested. The multiplicity of channels and the following segmentation of the market into a vast number of special interest channels is said to diminish this special effect the medium television has on the consumers. Most viewers already today rarely stay for a long time period with one program and this tendency will

375 See Engel, Multimedia und das deutsche Verfassungsrecht, pp. 161-163; he demands an unitary freedom to communicate "einheitliche Kommunikationsfreiheit", p. 163; see also Scholz, Zukunft von Rundfunk von Fernsehen: Freiheit der Nachfrage oder reguliertes Angebot, p. 359; see also Bullinger, Strukturwandel von Presse und Rundfunk, p. 388ff.; see for the unequal treatment of press and electronic media, Congdon, The Multimedia Revolution and the Open Society, in: The Cross Media Revolution, edited by Congdon/Graham/Green/Robinson, London, 1995, p. 21; see for the same from a German perspective, Stockmann/Zigelski, Novellierung des Rundfunkstaatsvertrages, in: ZUM, 8/9/1995, p. 542; see for the debate in the USA, where many communication regulations have been challenged in Congress and in the courts and where these constitutional attacks have played a considerable role in the reform of the telecommunication regulation with the lifting of many restrictions regarding ownership, cross ownership and business restriction rules, see Lively, Modern Media and The First Amendment, p. 623; see also Vick, The First Amendment Limitations on Media Regulation in the United States after Turner Broadcasting v. FCC, in: Media Law & Practice, Vol. 16, No 3, 1995, p. 94.

376 See Engel, Multimedia und das deutsche Verfassungsrecht, p. 163; see for the same argument, Stockmann/Zigelski, Novellierung des Rundfunkstaatsvertrages, p. 543; see for the USA, Hammond who proposes new regulatory models for the converging media relying more on access rights, Hammond, Regulating Broadband Communication Networks, pp. 223-224; arguing in the same direction, however, from a British or European perspective and not as elaborated, Doyle, The Cross Media Ownership Debate, p. 38.

377 See Engel, Multimedia und das deutsche Verfassungsrecht, p. 161, who refers to pay-television special interest channels, which in his view will compete with special interest magazines; he sees in a pay-television movie channel only a different way of distribution compared to a videotheque.
increase with the multiplication of channels in the future, so its effect on them cannot be very high. The rest of the consumers select the program they want to watch beforehand and are resistant to manipulative effects anyway. The other development which is brought forward for as weakening the pervasiveness rationale is the individualization of the medium. With the introduction of multiplexing and later real video-on-demand the real time reception will diminish more and more. The viewer will be able to chose the time of watching a television program as he decides when he wants to read the newspaper or a magazine.\textsuperscript{378}

c) Remaining Risks for Pluralism
Contrary to the views outlined above, many also, see after digitalization, considerable risks for pluralism in the electronic media remaining or arriving. The arguments for continuing strict regulation of television in order to prevent detrimental concentration and secure pluralism can be divided in three different strands. First of all it is argued that the development to a more segmented and individualized market will not occur in the near future or at least not to the degree expected by the proponents of a more liberalized regulatory framework. This is reasoned on the assumption that the habits and preferences of the viewers and consumers will not change radically with the advent of new television services and program variety, but rather remain the traditional way and transform very slowly. According to that view television will also, after digitalization, stay for the most part traditional broadcasting with its described effects, since programs with a media content are transmitted to a non-individualized circle of viewers via the traditional ways of

\textsuperscript{378} See for this development Bullinger, Strukturwandel von Rundfunk und Presse, p. 388; see Engel, Multimedia und das deutsche Verfassungsrecht, pp. 161-162.
transmission. The above identified trend of developing from a mass communication medium to a more individualized medium is acknowledged only for real interactive television services, where less strict regulations may be considered.\textsuperscript{379} Another argument simply states that the European tradition of giving an objective dimension to the freedom of broadcasting and safeguarding of pluralism will continue to exist after the digitalization and the abolition of the spectrum scarcity. The duty of the state will remain to protect broadcasting in so far as its exercise promotes the goals of free speech, namely an informed society and a lively discussion of a variety of views. General competition law is mainly concerned with securing economic objectives. By many this is not considered to be sufficient to secure free and varied media.\textsuperscript{380} However, the most convincing argument brought forward is the new risks arising out of the introduction of the new technology for the free access to provide television services. The bottleneck problem of the set-top-box

\textsuperscript{379} Many of the given arguments stem from the German media and constitutional law discussion on the scope of the definition of broadcasting, which decides whether the offered form of television still falls under the strict regulatory framework or not; however, leaving the German constitutional law dogmatics aside, the arguments put forward represent the general conflicting views held in this debate which are relevant for the other European countries as well; see for doubts regarding the development of segmentation and individualisation as predicted by the advocates for a liberalization of the regulatory framework and the position for maintaining strict regulation also for the new forms of television introduced through digitalization, Hoffmann-Riem/Vesting, Ende der Massenkommunikation, in: Perspektiven der Informationsgesellschaft, edited by Hoffmann-Riem/Vesting, Baden-Baden/Hamburg, 1995, pp. 16-18, 19-22; sharing this view, Holzer, Das Marktanteilsmodell auf dem Prüfstand - ein Problemaufriss, in: ZUM, 8/9/1995, p. 584, footnote 15; for a broad application of traditional broadcasting regulation see also Eberle, Neue Übertragungstechniken und Verfassungsrecht, p. 254; see also, Kiefer, Konzentrationskontrolle, Bemessungskriterien auf dem Prüfstand, in: Media Perspektiven, 2/1995, p. 62; see for the general constitutional debate in Germany over the definition of broadcasting, Pieper, Der Rundfunkbegriff, in: ZUM, 2/1995, p. 82ff.; see also, Müller-Using/Lücke, Neue Teledienste und alter Rundfunkbegriff, in: ArchivPT, 1/1995, p. 32ff.; see also Bullinger, Der Rundfunkbegriff in der Differenzierung kommunikativer Dienste, in: AIP, 1/1996, p. 1ff.; see from the same author, Ordnung oder Freiheit für Multimediendienste, in: JZ, 8/1996, pp. 385-391; see also Hoffmann-Riem, Der Rundfunkbegriff in der Differenzierung kommunikativer Dienste, in: AIP, 1/1996, p. 9ff.; for the attitude of the Conseil Supérieur de l'Audiovisuel (CSA) the regulatory body in France which tends to apply the traditional regulatory framework to new television services, see Meise, Frankreich: Steiniger Weg zur Datenautobahn, p. 446, who cites from CSA: Rapport d'activité pour 1994, Paris 1995, p. 144; see for the different legal regimes Huet, Problèmes juridique relatifs aux autoroutes de l'information et au multimédia, in: Droit de l'Informatique & des Télécoms, 2/1995, p. 9ff.

\textsuperscript{380} See for the special status of the media industry which will exist also after the introduction of the digital technology, Green, Preserving Plurality in a Digital World, p. 30; see also Doyle, Großbritannien: Deregulierung für den Medienmarkt, in: Media Perspektiven, 3/1996, p. 169.
and the vertical integration incentives of the new distribution system of digital television programs pose great new dangers not only for competition but also for pluralism. The different subtle ways of influencing and controlling the market described above might demand even stricter regulation than applied until now. Certainly in the present stage of the division of the new market, heightened attention has to be paid to the concentration processes by the regulators. Considering the increasing activities in the electronic media market regarding joint ventures, alliances or mergers triggered by the introduction of digital technology to television it is questionable why now less media concentration regulation should be needed than before.

d) Demand for Regulation at European Community Level
The question whether the current rules on media concentration have been overtaken by events in the media world are asked all over Europe and as well in the USA. The USA has already reacted with a reform of telecommunication and broadcasting legislation allowing cross ownership between cable and telecommunication companies and liberalizing the ownership restriction on the big broadcasting networks. The latter is meant to be a response to the continuing diversification of the programs and the development of new special interest channels. In the UK and in Germany new media concentration

381 See Graham, Exchange Rates and Gatekeepers, pp. 46-47; see also Holznagel, Probleme der Rundfunkregulierung im Multimedia-Zeitalter, p. 19; Eberle, Neue Übertragungstechniken und Verfassungsrecht, p. 251; see Holzer, Das Marktanteilmödl auf dem Prüfstand - ein Problemaufriss, p. 584 who still considers necessary large investments a high market entry barrier.
382 See above III.1.b); III.2.; III.3.
383 See Dör, Die Entwicklung der Medienrechts, in: NJW, 25/1995, p. 2264 who states that considering the concentration movement caused by the development of the internal market and the technological developments a need for securing pluralism on the European level cannot be doubted.
regulations have been discussed for the last couple of years. The proposals are directed to a more liberal framework and seek to introduce new more effective models of measuring media influence, like market share or audience share models.\textsuperscript{385} Also in France after a liberalization of some concentration rules in 1993 a new debate and new proposals are expected for media concentration rules.\textsuperscript{386} The plans for new regulatory frameworks show that the governments in Europe are not ready yet to leave the regulation of the media over to the market and competition law.\textsuperscript{387} However, in many cases the motivation for the new regulatory frameworks seems not to be a serious consideration of the technological developments and the resulting changes in the form and character of the media, like the above described convergence processes, but rather the enlarging of the competitiveness of the national media companies in the arising multimedia markets.\textsuperscript{388} And too often the debate just repeats the traditional free market versus state discussion regarding regulation using the changes brought about by technological innovation just as spurious arguments to


\textsuperscript{386} See for the liberalizing legislation in 1994, "Loi Carignon" of 1 February 1994, Meise, Medienverflechtungen und andere Allianzen, in: ZUM, 3/1995, p. 129 which allowed a company to own up to 49% of a television program provider; see for the more recent debate in France which takes into the account the technological developments, Meise, Frankreich: Steiniger Weg zur Datenautobahn, pp. 446-447.

\textsuperscript{387} See for the reluctance of the UK government, which is considered to be the leading country in Europe regarding the liberalization and privatization of industries, towards a total deregulation of the market for electronic media even with taking technological developments into account, Doyle, Großbritannien: Deregulierung für den Multimediemarkt, p. 169.

\textsuperscript{388} See for competitiveness of German media companies as motive for the agreement by the Länder in Germany on a more liberalized regulation regarding media concentration in the new Rundfunkstaatsvertrag, Der Spiegel, "Das entfesselte Fernsehen", 29/1996, p. 34; see for France, Meise, Medienverflechtungen und andere Allianzen, p. 129; see for the UK, Doyle, The Cross Media Ownership Debate, p. 38; see also, Doyle, Deregulierung für den Multimediemarkt, p. 168; see also, Green, Preserving Plurality in a Digital World, p. 29.
support already existing deeply rooted convictions. The approaches concerning the development and application of new more sophisticated models and tools to measure media influence are interesting. However, the impact of digitalization on the electronic media industry would need more attention in the debate about new regulatory frameworks. The proposals by the UK government, which with some minor changes have become law with the adoption of the Broadcasting Act 1996, stand more or less alone in considering the transformation process in television from analogue to digital transmission in the reform plans for the media concentration regulation. They are concerned with digital terrestrial broadcasting and regulate already which numbers of digital channels are allowed to be held by the companies which is adapted to the general media concentration reform proposals. The most interesting question in the European context is, however, whether the introduction of digital television provides new arguments for a regulation of media concentration on the European Community level. An abstract discussion on what influence the introduction of digital television has on the debate on

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389 See for proposals for a market share model to measure media concentration in the UK, Robinson, Market Share as a Measure of Media Concentration, p. 50ff.; see for proposals of a market share model in Germany, Holzer, Das Marktanteilsmodell auf dem Prüfstand - ein Problemaufriß, p. 577ff.; see for the same Kübler, Argumente für ein Werbemarktanteilmodell, p. 48ff.; see for the same Kiefer, Konzentrationskontrollen: Bemessungskriterien auf dem Prüfstand, p. 62ff.; see for a market share model and for the "one man - one show" model, the latter permits the ownership of only one television channel; however, there the ownership then can reach up to 100%, Stockmann/Zigelski, Novellierung des Rundfunkstaatsvertrages, p. 540ff.

390 See for the special regulatory demands concerning concentration rules for digital television in Germany, Hege, Offene Wege in die digitale Zukunft, pp. 44-46.

391 The UK has introduced new broadcasting regulation with its Broadcasting Act 1996 making it the first country in Europe to deal with the arrival of digital television in its broadcasting law; see Part I Digital Terrestrial Television Broadcasting; with the new legislation it demonstrates its commitment to full transformation process from analogue to digital; in general it holds the view that the principle of pluralism applies in the same way to the new form of transmission, see, Steemers, Digitale Medienpolitik in Großbritannien, pp. 402-404; see Doyle, Großbritannien: Deregulierung für den Multimedi amarkt, p. 169, see the White Paper on digital terrestrial broadcasting, Cm 2946. Digital Terrestrial Broadcasting: The Government's Proposals (London HMSO) 1995, 4 Competition and Ownership (i) principles; see also the White Paper on media ownership, Cm 2872. Media Ownership: The Government's Proposals (London HMSO) 1995.
media concentration regulation on European Community level can hardly be found. Considering that the future of television is predicted to be digital this question should be an important issue if one does not want to reduce an upcoming regulation to obsolescence. The debate on a European regulatory framework as described above mainly revolves around the assumption of expanding media giants and conglomerates which are prone to dominate the European media market. Certainly also aspects like the convergence processes between telecommunication and broadcasting and technology and content were mentioned. However, the most imminent development of the transformation process of the broadcasting landscape through the new digital transmission technology hardly ever paid or plays a role in this debate.\textsuperscript{392} The incentives to vertical integration and concentration, in general almost indispensable because of the high investment necessary and the different know-how demanded, certainly are aspects of the introduction of digital television which favor European wide rules. The subtle ways of manipulating competitors and exercising market control offered by the new means of distribution of the digital television programs will increase for a media giant who can act on the whole internal market. Also the fact that the special interest channels expected to emerge are more apt to be marketed Europe wide, than full program channels which are much deeper rooted in the national cultures of the different Member States, seems to argue for a European regulatory framework. The same is even more true for new television services like video-

\textsuperscript{392} See as a good example for this the debate in Germany about the reform of the \textit{Rundfunkstaatsvertrag}, which was mainly concerned with discussions on the competences of the federal government and the states; the new legislation coming into force 1 January 1997 will introduce more liberal regulation regarding concentration, though it does not to refer to the problematic questions concerning the introduction of digital television, for example, how to secure open access to the market of digital television and how to guarantee equal chances for all providers in the digital television age; see Süddeutsche Zeitung, \textquoteleft\textquoteleft Gesetze ohne Grenzen\textquoteright\textquoteleft, 22. August 1996, p. 17; also the debate in Italy on the reform of the media concentration rules focuses on other issues; see Financial Times, \textquoteleft\textquoteleft Italian government set to rule on TV ownership\textquoteright\textquoteleft, 27 August 1996, p. 2.
on demand, telebanking or telelearning or video games. To sum up, a possible effect of the digital technology in Europeanizing the television landscape in bringing together the providers and the consumers of television services, could serve as a strong argument for Europe wide rules on media concentration. Even if one is skeptical towards the described development concerning its scope and time dimension it should be at least a greater issue in the debate on new regulation not only on the European level, but also in the Member States. This development might make a new national regulation on media concentration outdated before it has been introduced.

VII. The European Community Legal Framework
In the following chapter the existing regulatory framework of the European Community for broadcasting and television will be examined. However, the analysis will be focused on the aptness of the existing rules to deal with the above described problems, arising out of the introduction of digital television, for competition and concentration in the European electronic media market. The legislation examined will be the Television Directive and the discussed amended proposal, the application of the competition law to the electronic media, the proposal for a Media Concentration Directive and the policy of the European Commission regarding standards. The legislation concerning the network infrastructure like cable and satellite, which is mainly aimed at liberalizing the telecommunication sector will only be dealt with to the extent it contains implications for the digitalization of television. The aim is to find out whether the existing framework is sufficient to deal with the new problems. If the outcome is negative, the analysis wants at least to show whether the existing rules offer the potential for an extension to a functioning, fully fledged
regulatory framework in the future that would be advantageous to different national regulations by the Member States.

1. The Television without Frontiers Directive

The main regulatory framework for television and broadcasting on the European level is still represented by the Television Without Frontiers Directive adopted on 3 October 1989. The Directive is based on the idea of the free movement of television programs throughout the European Community. It wants to bring about a Community wide audio-visual arena, or to couch it more in economic terms, it sought the establishment of a single broadcasting market, which the Commission claimed was a requirement of the Treaty of Rome. This should be achieved by guaranteeing that a program broadcast in one Member State could be received in the other Member States. A television broadcast made in a Member State which complies with the minimum standards determined by the directive must be freely received and transmitted in every other Community State. The common basic rules introduced to forestall unfair and unregulated competition concern the areas of advertising and sponsorship, program content (mainly the protection of minors),

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397 See Article 2 (2).
and the production, promotion and distribution of television programs. In particular the
last contained the famous quota which fueled and still fuels the debate.398 Since the
foreseen Directive forced the Member States to major changes in their legislation on
television, it included in Article 26 a provision that the Commission was to submit a report
to the European Parliament, the Council and the Economic and Social Committee on the
application of the Directive within five years of adoption and make further proposals to
adapt it to the developments in the field of television broadcasting if necessary. The
discussion of proposals for the adaptation of the Directive launched almost two years ago
because of the expiration of the time limit has reached in the meantime the level of a
fundamental debate on reform which touches all aspects of the Directive in force.399
Although there are many interesting questions involved in the analysis of the doubtful
harmonization success of the existing directive400 as well as in the lively and wide spread
discussion on changes and amendments, the following analysis will focus only on the
aspects relevant for the introduction of digital television and the connected problems.

a) The Scope Regarding Digital Television and New Television Services
Essential for the regulatory framework of digital television is the scope of the Television
Directive. To what extent does digital television fall under the rules concerning
advertising, program content and programming laid down by the Directive? Here again it
has to be emphasized that the digitalization of television mainly concerns the way of
transmitting the television signals. The above described expected changes of the television

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398 See Dehousse F., Le marché unique de l'audiovisuel, in: Journal des tribunaux, 4 février 1995, p. 78; see Club de
Bruxelles, Media in Europe towards the Millennium, Book 1: Regulations and Policies, p. 5.
400 See for examples, ibid., p. 735f.
medium will merely be the result of the possibilities created by the new way of transmission. However, also traditional free or public television can be transmitted without any changes of its program form or its usage visible for the viewer except a better picture and sound quality, which still would depend on a more advanced television set. Consequently a general valid statement on the application of the Television Directive on digital television cannot be made. This is true independently of the agreed definition of broadcasting and television deciding the scope of the Directive. Whether the Directive will apply to digital television depends on the form of television provided by the broadcaster.

The Directive in force defines television broadcasting as the initial transmission by cable, over the air or by satellite, in encoded or decoded form, of television programs intended for reception by the public. On of the most controversially discussed points in the reform debate is the question to what extent new television services shall be included in the definition. New television services that are all interactive and on demand services are not contained in the definitions of Art. 1 (a). The proposal by the Commission for an amended Directive does not include a new definition. This would mean that the provisions of the Directive on advertising, program content and programming would also in the future not apply to new services. An exception is teleshopping which was

401 See Article 1 (a).
402 See Pieper, Medienrecht im Spannungsfeld von "Broadcasting und Multimedia", p. 555; see also, Schardt, Novellierung der Richtlinie "Fernsehen ohne Grenzen": Quoten ohne Ende, p. 736; Niewiarra, Folgerungen aus den Aktivitäten der Europäischen Union für die private Fernsehwirtschaft im Hinblick auf neue Angebote und Dienste, p. 760f.; Kresse/Heinze, Rundfunk-Dynamik am Morgen des digitalen Zeitalter, p. 579ff.
regulated in the existing Directive, although in a way that does not at all live up to the developments, and it is part of the proposal for an amended Directive. Since the new services are the main feature of digital television, next to the multiplication of channels and the expected surge of special interest pay-television, such a regulatory lacuna on the European level would have a major influence on competition in the European television market. This could lead to an even greater concentration within the development of digital television, in order to take advantage of the freedom of normally strict regulation in television, in particular regarding advertising and the program content. Many experts advocate an overall regulation in order to prevent a discrimination against the providers of traditional full program television and overall distortions of competition. Within this overall regulation less strict rules could be laid down for the new services according to their impact in the process of shaping public opinion. The European Parliament has demanded in the meantime, that the new Directive should apply also to new television services, at least with its provisions on advertising and program content. However, the Council has already refused its approval for an extension of the scope of the Directive when it reached its common position on the proposal. Another view suggests that there is no need for a final definition, since it cannot be said at the moment whether and to what extent different definitions in the Member States would lead to a hindrance in the free circulation of services in the internal market. Besides that, a final judgment on the

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405 See Schardt, Novellierung der Richtlinie "Fernsehen ohne Grenzen": Quoten ohne Ende?, p. 737; in the proposal by the Commission for an amended Directive it states that teleshopping is not advertising, but television programming; for full teleshopping channels the time limit of the present Directive will be abolished.


European level can hardly be made before the regulatory frameworks in the Member States have come up with a final solution.\textsuperscript{409} Regulation for the new television services will arrive in any case.\textsuperscript{410} So it can be asked whether it will make a difference if less strict rules, on which also the proponents of an all encompassing definition agree, are included in the Television Directive or they will be the subject of a special regulation. However, embedded in the strict broadcasting regulatory framework, rules on new television services might tend to be stricter than if laid down in a separate legislation. The most important feature of the expected digital television world, pay-television, falls under the definition of the Television Directive, since it also includes transmitting television programs in encoded form as long as they are intended for reception by the public.\textsuperscript{411} A different treatment of the new television services (like video on demand as the most promising example) would certainly have an impact on the development of digital television. Whether it would lead to more concentration and distortion of competition can hardly be judged now. The long term investments necessary for the introduction and implementation of digital television need first a clear and stable regulatory framework. This might be a greater factor for the success of digital television than short term advantages because of the lack of regulation.

\textsuperscript{409} See Schardt, Novellierung der Richtlinie "Fernsehen ohne Grenzen": Quoten ohne Ende?, p. 737; see for the controversial discussion in Germany Pieper, Der Rundfunkbegriff, p. 82ff.; see also, Müller-Using/Lücke, Neue Teledienste und älterer Rundfunkbegriff, p. 32ff.; see also Bullinger, Der Rundfunkbegriff in der Differenzierung kommunikativer Dienste, p. 1ff.; see also Hoffmann-Riem, Der Rundfunkbegriff in der Differenzierung kommunikativer Dienste, p. 9ff.

\textsuperscript{410} In Germany there exist different proposals for multimedia regulation because of unclear competence between the federal and the states governments; see for a proposal by the states, "Erste Überlegungen" der Länder über einen Staatsvertrag der Medienstelle, in: epd/Kirche und Rundfunk, Nr. 21, 20. März 1996, p. 27ff.; the federal government presented also a proposal for multimedia regulation, BTDr. 13/3609: Entwurf eines Telekommunikationsgesetzes.

\textsuperscript{411} See Article 1 (a); see Kresse/Heinze, Rundfunk - Dynamik am Morgen des digitalen Zeitalters, p. 579.
b) The Quota Rule and Digital Television

Probably the most debated point when adopting the Television Directive was the programming, or better, the rules on introducing quotas for programs out of European production. The quota rules included in the Directive were the result of a political compromise after prolonged discussion. The Directive contains two rules for the purpose of generating a European television production industry and stimulating new sources of television production. The first rule says that Member States must reserve the majority of their transmission time for European works. The second rule is that broadcasters must reserve at least 10% of their transmission time for European works which are European productions. However, because of the harsh opposition from many Member States and the television industry the duty to legal enforcement of these provisions was made rather flexible and imprecise, leaving considerable discretion to Member States as to interpretation. Under Article 4 Member States must ensure “where practicable and by appropriate means” that broadcasters obey the quota obligation. A statement issued with the Directive made it clear that the Council of Ministers did not intend these provisions to be legally enforceable. In any event a violation could only be found in the plainest cases, when a satellite channel would show nothing else but Hollywood productions and American soaps.

412 See for this debate, Barendt, Broadcasting Law, p. 273f.; see for details on the quota rule, Winn, European Community and International Media Law, p. 232ff.
414 See Article 4 (1).
415 See Article 5.
416 See Dehousse F., Le marché unique de l’audiovisuel, p. 78.
417 See Barendt, Broadcasting Law, p. 235.
418 Ibid.
In the discussion on an amended Television Directive the question of the quotas has become again the most contentious topic. In its proposal for a new Television Directive the Commission has suggested eliminating the above quoted provision that quotas should be applied where practicable. For newcomers in the market there is a transitional period of three years planned before they have to fulfill the quotas. However, many people consider this time period much too short.\textsuperscript{419} According to the proposal the quota rule will expire within ten years. There is also a special provision planned for channels with a share of more than 80\% in movies in their programs, which would give them the option to spend 25\% of their programming budget on European production instead of observing the existing rule. Because of the strong opposition of Germany, Great Britain and other Member States the plans for stricter rules are not expected to pass the Council;\textsuperscript{420} however, the European Parliament after having agreed to a compromise has again demanded binding rules for the quotas.\textsuperscript{421}

Whatever the outcome will be in the discussion on stricter rules on quotas, it can be stated that strict quotas would have a considerable influence on competition and concentration concerning digital television. Since its main features are special interest pay-television channels or theme channels, the providers would need more attractive European programs that viewers would be ready to pay for in order to fulfill the quotas than the European film and television would be able to produce.\textsuperscript{422} In their efforts to fulfill their quotas with

\begin{footnotesize}
\begin{enumerate}
\item See Schardt, Novellierung der Richtlinie "Fernsehen ohne Grenzen": Quoten ohne Ende?, p. 737.
\item See Niewiarra, Folgerungen aus den Aktivitäten der EU für die private Fernsehwirtschaft im Hinblick auf neue Angebote und Dienste, p. 759.
\item See Schmittmann/de Vries, Blick nach Brüssel, p. 124; European report no. 2113 - March 6, 1996, IV, p. 13.
\item See Niewiarra, Folgerungen aus den Aktivitäten der EU für die private Fernsehwirtschaft im Hinblick auf neue Angebote und Dienste, p. 759.
\end{enumerate}
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attractive programs broadcasters can be expected to look for vertical links with European program providers which would lead to more concentration. Smaller broadcasters not presenting attractive partners to the program industry would be left out. Also newcomers expected to enter the television market after digitalization would hardly be able to provide themselves with enough attractive programs of European production.\textsuperscript{423} Since the access to program and film licenses is already identified as an additional great bottleneck problem in the future for the digital television with the multiplication of channels, additional rules prescribing the origin of the programs would aggravate the situation.\textsuperscript{424} Quota rules combined with the still open question of the scope of the Directive might lead to paradox distortions of competition. Future digital Home Cinema services might be delivered by broadcasters through "near video on demand" or by telecommunication operators through video on demand. If the near video on demand is subject to quotas as a broadcast service, but video on demand is not, the result would be a considerable discrimination against the provider of near video on demand, so the difference would only lie in the way of delivery.\textsuperscript{425} For the future of digital television strict quota rules can be expected to distort the market and lead to more concentration and discriminate against smaller broadcasters.\textsuperscript{426}

\textsuperscript{423} See Schardt, Novellierung der Richtlinie "Fernsehen ohne Grenzen": Quoten ohne Ende?, p. 737.
\textsuperscript{424} See Niewiarra, Folgerungen aus den Aktivitäten der EU für die private Fernsehwirtschaft im Hinblick auf neue Angebote und Dienste, p. 761.
\textsuperscript{425} Schoff/Watson Brown, Information Highways and Media Policies in the EU, pp. 331-332.
\textsuperscript{426} See for a more comprehensive presentation of the media relevant EC competition law, Winn, European Community and International Media Law, p. 70ff.
2. The European Community Competition Law

The following overview of European Community competition law will focus on its aptness in dealing with the above described problems for competition and concentration in the European media market connected with the introduction of digital television. This perspective will lead to a rather sketchy and selective presentation, since the width of anti-competitive conduct covered by the European Community competition law is immense and the media industry is an industry particularly rich in case law. Since this thesis leaves out the special situation of public broadcasters I also will not deal with the old discussion of the applicability of competition law to public broadcasters.\textsuperscript{427} The following section will first analyze the application of the different rules of European Community competition law, Article 85, 86 of the EC-Treaty and the Merger Regulation to media and television, in particular to constellations relevant for the anti-competitive conduct related to digital television. Then its effectiveness and limitations for the media and in particular the digital television sector will be analyzed.

a) The Application to Media

In the following I analyze how the competition rules are applicable to media cases. The focus will be on how they have dealt with and abstractly can deal with the competition and concentration problems connected with the introduction of digital television. First I will look into Article 85, 86 of the EC-Treaty, their scope for media and television and some relevant cases.

aa) Article 85 and 86 of the EC-Treaty
Although the big and important media cases, in particular joint ventures to start and control the digitized television market, were dealt with by the Merger Regulation, that does not mean Article 85 and 86 would not be relevant. There exists abundant media case law regarding these two provisions, though not in particular on anti-competitive behavior concerning the start up of digital television. However, it is quite possible that in the near future there will be such cases, since the parties have negative experiences with the application of the Merger Regulation and might try to have either Article 85 or Article 86 applied to their undertaking. The following analysis of these two provisions will focus on their relevance for the above described problems in regard to the introduction of digital television. The latter comprise mainly problems of vertical concentration, concentration in general, but also all other forms of cooperation between parties to foreclose or control the emerging digital television.

aaa) The Relevant Scope of Article 85 of the EC-Treaty
Article 85 (1) of the EC-Treaty essentially prohibits consensual activity which partitions the market. It covers all agreements and concerted practices between undertakings which present a prevention, restriction or distortion of competition within the Common Market. In a) to e) of the Article different forms of restraining or distorting competition are mentioned, which might be relevant for agreements within the start up phase of digital television. in particular, like the fixing of prices, the limiting or controlling of production, markets, technical development or investment, or the sharing of markets and supplies. Art. 85 (2) declares all agreements or decisions prohibited pursuant to this article to be automatically void. Exemptions are contained in Article 85 (3). Among these in particular
the exemption of agreements that promote technical or economic progress, while allowing consumers a fair share of the resulting benefit, are of interest for competition concerns arising out of the introduction of digital television. However, the exempted agreements cannot impose restrictions on the undertakings which go beyond what is necessary to achieve this objective and cannot lead to the elimination of competition for a substantial part of market. The prohibition of agreements which restrain competition in Article 85 is not directed against horizontal or vertical concentration in the sense of merging companies, since it presupposes that the participating companies are independent. Article 85 does not aim to preserve the quantity of planning centers and centers of decision, but the quality of the planning and decision making processes of the market players. However, a state of vertical integration and line of business from the program supplies, to the networks, the provision of the decoders, the conditional access systems and the navigation software leading to the foreclosure and control of the new digital television markets as described above can also be achieved by agreements which are not concentrative. In particular the form of joint ventures falling under the application of the Merger Regulation, like the recent cases, could as well be in the scope of Article 85 of the EC-Treaty. That the separation between the application of the two regimes is rather delicate is shown by the notice published by the Commission giving guidelines in assessing

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428 See as an example for a joint venture which was granted an exemption for its promotion of new technology, the one between BBC Enterprise Ltd, (a subsidiary of BBC), Morgan Grenfell & Co Ltd., a merchant bank, and Harold Holt Ltd., a concert promoter and musical agent who set up a new satellite broadcasting company; see, Fourteenth Report on Competition Policy, (1984), point 86.


430 However, for a while there was some discussion about its applicability to concentrations after the Court's judgement in British American Tobacco Co. Ltd and R J Reynolds Industries Inc. v EC Commission (1987) ECR 4487; see Wagner, Konzentrationskontrolle im Medien-Binnenmarkt der EG, in: AFIP, 1/1992, p. 2; see also Van Bael/Bellis, Competition Law of the European Community, p. 363, 366ff.
cooperative joint ventures pursuant to Article 85 of the EC-Treaty against concentrative joint ventures falling under the Merger Regulation.\textsuperscript{432} That makes it as likely that in the future companies who want to join forces in the digital television market and assure themselves an advantage through an anti-competitive alliance will act in the form of cooperative joint ventures instead of concentrative ones. This might prove true, in particular considering the background of two prohibitions under an application of the Merger Regulation in a row.\textsuperscript{433}

\textbf{bbb) The Relevant Scope of Article 86 of the EC-Treaty}

Article 86 prohibits undertakings abusing their dominant position within the common market. The provision is violated when an undertaking in a dominant position in the Common Market abuses its position of dominance and the abuse has an effect on trade between Member States. Examples of abuses are given in the second paragraph. These would fit very well the anti-competitive measures probable and possible within the implementation of digital television, like imposing unfair trading conditions, which would cover granting access to the network or the decoder and conditional access system, or applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage, which would apply for vertically integrated undertakings who disadvantage competing program suppliers or broadcasting companies within the distribution system of digital television. The examples of abusive conduct listed


\textsuperscript{432} See Commission Notice concerning the Assessment of Co-operative Joint Ventures pursuant to Article 85 of the EC-Treaty, OJ 1993 No C 43/2; see for cooperative agreements Van Bael/Bellis, Competition Law of the European Community, p. 294ff.

\textsuperscript{433} See above the MSG decision and the Nordic Satellite Distribution decision under IV.
in Article 86 correspond largely to the examples of illegal agreements mentioned in Article 85. The main distinguishing feature of Article 86 is that for it to apply the undertaking concerned must hold a dominant position in the market already. Market dominance is not prohibited as such, but its abuse.\textsuperscript{434} The case law of the Commission defines "dominant position" as a degree of market control which enables a firm to behave to an appreciable extent independently of its competitors and customers.\textsuperscript{435} For the application of this definition it is essential first to establish the relevant product and geographic market within the boundaries of which the market power of the undertaking concerned is to be measured.\textsuperscript{436} To apply Article 86 to cases involving the start up phase of the digital television market poses difficulties since it presupposes the existence of a dominant position in the relevant markets. Dominant positions can only exist in stages of the digital distribution chain which were already there in providing traditional television. Concerning the anti-competitive effects of concentrations, in particular vertical ones, foreclosing the markets of the different stages of the distribution chain of digital television, an application of Article 86 is not excluded. Following the Continental Clan decision, concentrations which strengthen an existing dominant position are caught by Article 86.\textsuperscript{437} However, the practical significance of the Continental Clan doctrine remained minor. There have been only two formal decision in which the Commission has considered the Continental Clan

\textsuperscript{434} See Van Bael/Bellis, Competition Law of the European Community, p. 68.


\textsuperscript{436} See Van Bael/Bellis, Competition Law of the European Community, p. 69.

\textsuperscript{437} See Europemballage Corp and Continental Can Co. v. EC Commission, Case 6/72 (1973) ECR 215.
The question whether a concentration which created a dominant position could be caught by Article 86 was not considered. Subsequently it was assumed by the Commission in its case law, that it could not.439

(c) Examples of Relevant Media/Television Cases
Although there exists a very rich case law on the media industry in general, cases related to the introduction of digital television until now have only been dealt with under the Merger Regulation. As already mentioned above this is due mainly to the construction the parties chose for their planned anti-competitive conduct. For example had the Media Service Gmbh been arranged as a cooperative instead of a concentrative joint venture it would have fallen under Article 85 and not under the Merger Regulation. However, there exist a couple of cases falling under Article 85 and 86, which might be of relevance for the competition concerns connected with the introduction of digital television and illustrate the awareness of the Commission about anti-competitive conduct in the electronic media sector.

(1) Article 85 Cases
Concerning television there have been important decisions on programming rights.440 The Commission analyzed an exclusive film exhibition agreement concluded between an association of German public broadcasting organizations and a subsidiary of Metro-Goldwyn-Meyer/United Artists.441 The agreement consisted of three agreements, a library

439 See Wagner, Konzentrationskontrolle im Medien - Binnenmarkt der EG, p. 3; see Van Bael/Bellis, Competition Law of the European Community, p. 365.
agreement granting the rights to 1350 feature films from the MGM/UA film library, a
James Bond agreement for the rights of 14 James Bond films and a third agreement
containing an entitlement to exhibit all new James Bond films produced or acquired by
MCA /UA. The Commission found a breach of Article 85 (1) in the agreement. According
to its analysis the large number of films acquired went beyond the needs of program
acquisition and the duration of the license. Fifteen years exceeded by far the industry
standards and the previous practice of the ARD broadcasting organizations. In the
following an exemption was granted because the ARD among other terms agreed on
allowing the licensing of library films, new films, James Bond films, television products
and cartoons to third parties by the means of windows during which the ARD would not
broadcast those products.\textsuperscript{442} The Commission has also objected to a purchase agreement
of exclusive sports programs licenses. The European Broadcasting Union (EBU), the
association of public broadcasters in Europe, had acquired exclusive broadcasting licenses
to sporting events for its members.\textsuperscript{443} Next to acquiring those licenses an important task of
the EBU lies in organizing the exchange of sports programs between the European public
broadcasters. The Commission found that an agreement on the common and exclusive
purchase of sports programs licenses would constitute a breach of Article 85 (1).
However, an exemption was granted, since the EBU and its members agreed on
purchasing those licenses only under terms which would grant third parties access to
them.\textsuperscript{444}

\textsuperscript{442} See Winn, European Community and International Media Law, p. 110; see also, Eberle, Das europäische Recht
In Screensport/EBU Members the Commission intervened to prevent a joint venture sports channel.\textsuperscript{445} According to the terms of the joint venture the new channel would receive material from programs recorded by EBU members. The Commission found that the arrangement had the object and effect of restricting competition and was thus in breach of Article 85 (1). This was due firstly to the composition of the members of the agreement which were actual or potential competitors in the market for sport events. Secondly the agreements restricted competition between Eurosport and third parties seeking to broadcast sport events, in particular transnational dedicated sports channels. The Commission also refused to grant an exemption.\textsuperscript{446}

(2) Article 86 Case Magill
An important media case concerning an application of Article 86 was the Magill case. It dealt with the abuse by three national broadcasters in the UK and Ireland, the BBC, ITV and Radio Telefís Éireann of their copyright in programming listings.\textsuperscript{447} The broadcasters, who had enjoyed a joint monopoly over television broadcasting received by Irish viewers, were using their copyright in the programming listing which they produced as part of their broadcasting activities to secure a monopoly in the derivative market of weekly television guides. The interesting aspect, for our analysis of the scope of Article 85 and 86 for the competition concerns arising out of the introduction of digital television, is not the controversial interpretation of the use of intellectual property rights, but the


\textsuperscript{446} See for a closer analysis of the Screensport decision, Winn, European Community and International Media Law, p. 95.

\textsuperscript{447} The original Commission decision, Magill TV Guide/ITP, BBC and RTE (Comm. Dec. 89/205) was adopted on 21 December 1988 and was published in OJ 1989 No L 78/43.
emphasis put on the close analysis of the interplay between the television market and the ancillary market of television program guides. Such an interplay might also become relevant within the different stages of the distribution chain of digital television programs, for example concerning discrimination against the providers of navigation systems. The decision was upheld by the Court of First Instance as well as in the appeal to the Court of Justice.⁴⁴⁸

The decisions illustrate the concern of the Commission to keep the television and derivative markets open and to prevent barriers to market entry.⁴⁴⁹ Although the cited decisions referred mainly to programming licenses and access to content, it is clear that the Commission indicated its readiness to intervene also in other cases of market foreclosure in the television sector, like the ones relating to the introduction of digital television, with an application of Article 85 and 86.

**bb) The Merger Regulation**

The Merger Regulation has been dealt with already to a great extent above within the analysis of the MSG decision and the Nordic Satellite decision. In the following section I will only look at relevant aspects of its scope and application to cases concerning anti-competitive conduct within the introduction of digital television, neglected in the case analysis above. The number of media cases dealt with by the European Commission under


⁴⁴⁹ See Communication from the Commission to the Council and Parliament on audiovisual policy, 2.2.2.(b), Com (90) final.
the Merger Regulation has grown considerably the last couple of years. Next to the two prohibitions dealt with above in detail, a number of mergers in the television sector have been permitted by the European Commission. However, they mainly deal with competition problems concerning traditional television and do not relate to the introduction of digital television.

aaa) The Relevant Scope of the Merger Regulation
The Merger Regulation applies to concentrations. The concept of concentrations covers only operations intended to bring about a lasting change in the structure of the undertakings concerned. Mergers and sole or joint acquisitions of control are covered. Concentration is defined in Article 3 of the Regulation. According to Article 3 (1) a concentration arises when two or more previously independent undertakings merge; or the control of the whole or parts, of one or more other undertakings is acquired by one or more undertakings or one or more persons already controlling at least one undertaking.

The term acquisition of control refers only to external growth of an undertaking, that means growth through the purchase of other companies. Internal growth, for example the establishment of a subsidiary, does not fall under Article 3 (1) of the Merger Regulation. For a media company with enough resources this would mean that it could acquire

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450 See for the growth of only three decisions until the end of 1993 to five decisions alone in 1994 and four decisions and one pending in 1995, Williams/Denness, Summary of the Most Recent Developments, p. 32; see for the increase also, Twentyfifth Report on Competition Policy, (1995), point 132.

limitless licenses for television or radio channels and launch newspapers and magazines without falling under a provision of the Merger Regulation.452

(1) Concentrative Joint Ventures
The treatment of joint ventures, as already mentioned above, poses difficulties. They are the most common form of operation notified to the Commission. At the same time they are also the most difficult to classify as either concentrative or co-operative.453 This is also relevant for the media and television industry, since due to the need of high investment and the long time to reach the break even point, broadcasting and television companies are usually founded as joint ventures.454 In particular this is true if new technologies and new markets are involved as is the case with the introduction of digital television.455 A Commission notice gives guidance on the problematic distinction between concentrative and co-operative joint ventures.456 For a joint venture to be concentrative it must be jointly controlled, perform on a lasting basis all the functions of an autonomous economic entity, and not give rise to the risk of co-ordination. According to the Commission’s broadly economic rather than legal approach, the precise legal mechanism by which a joint venture arises is not important.457

452 See Wagner, Konkonzentrationskontrolle im Medien-Binnenmarkt der EG, p. 6.
454 See Wagner, Konkonzentrationskontrolle im Medien-Binnenmarkt der EG, p. 6.
455 See for examples of alliances and joint ventures for the start up of digital television above 1.2.
(2) Community Dimension
The Merger Regulation only applies to concentrations that have a Community dimension. The latter is reached where the combined aggregate worldwide turnover of all undertakings concerned is more than ECU 5,000 million and the aggregate Community-wide turnover of at least two of the undertakings concerned is more than ECU 250 million, unless they achieve more than two-thirds of their aggregate Community-turnover in one Member State. Regarding the second threshold, the Commission sees the Merger Regulation only not taking effect, when all undertakings involved realize more than two-thirds of their aggregated turnover within one Member State. This interpretation has been widely criticized by lawyers who favor more an application of national competition law. It might prove crucial for the application of the Merger Regulation for future European media mergers, vertical or horizontal. It is very probable that at least one undertaking in a media merger will be involved which is globalized enough or better Europeanized to realize less than two thirds of its turnover within one Member State. This is true in particular for vertical mergers where usually network operators, media companies or broadcasters join forces.

(3) Compatibility Test
According to Article 2 (2) of the Merger Regulation, a concentration will be incompatible with the common market if it creates or strengthens a dominant position which results in an impediment of effective competition in the common market or in a substantial part of it.

458 See Article 1 (2) of the Merger Regulation.
459 See for criticism of that interpretation Ebenroth/Lange, Zukunftsmärkte in der europäischen Fusionskontrolle, p. 2; see also Lange, Räumliche Marktabgrenzung in der europäischen Fusionskontrolle, Diss., Konstanz, 1991, p. 113ff.
The Commission will examine the effects of a concentration in three ways. It will look at horizontal relationships between at least two competing parties in the same market. These are its primary concerns. Also it will consider the effect of relationships between parties competing on up- and downstream markets. These are the vertical relationships found above in the merger decisions concerning the introduction of digital television. Next to that the Commission may examine the combination of parties of the position they hold in unrelated markets. These are the conglomerate features of a concentration. Article 2 (1) sets out the factors which the Commission should take into account in assessing whether a concentration creates or strengthens a dominant position as a result of which effective competition is significantly impeded. This includes, among other factors, the market position and the economic and financial power of the parties of the concentration, the access of suppliers to markets, and users to supplies, any legal or other barrier to entry, and the development of technical and economic progress provided that it is to the advantage of consumers and does not obstruct competition. In order to be able to analyze the effects of a concentration on competition it is essential to define the relevant markets. Within the analysis of the MSG decision above, it has been shown how the definition of the relevant product market and the relevant geographic market works. Due to the complex competition relations this poses major difficulties in the media sector. This will be discussed later, when analyzing the effectiveness and limitations of the application of competition law to the media.

461 See Wagner, Konzentrationskontrolle im Medien-Binnenmarkt der EG, p. 7.
Problems in Applying the Merger Regulation to Media/Television Cases

Next to general deficits of competition law in its application to the media, the main problem seen by many in the application of the Merger Regulation are the thresholds.\textsuperscript{462} There are generally viewed as being far too high for media cases. Compared to the special merger control for the press in Germany, for example, the threshold of the Merger Regulation is 400 times higher. The problem becomes also evident if one looks at the turnover figures of European media and broadcasting companies. Only in recent years, due to the consolidation process in the media industry, have more companies than only a few media giants like Bertelsmann, surpassed the prescribed numbers. However, looking at the introduction of digital television, which involves very high investments, it is more probable than in other parts of the media sector, that the parties involved will be over the threshold turnover figures. Since the media markets, due to language and cultural barriers, are quite often confined to one Member State, it is still quite likely that in large countries the two-thirds rule applies. This says that the Merger Rule does not apply if, according to the contested interpretation of the Commission, all parties achieve two-thirds of their European Community-turnover in one Member State.\textsuperscript{463} If the Member State then responsible for the merger does not have a merger control the transaction remains unchecked. If there exists a merger control it still leaves the possibility for Member States to promote their national champions. Such a reaction of Member States would not be unlikely in a future industry like digital television and multimedia, which promises

\textsuperscript{462} See Kresse, Pluralismus, Markt, Konzentration: Positionen, p. 87; Fröhlinger, EG-Wettbewerbsrecht und Fernsehen, p. 62.

\textsuperscript{463} See for more details on the two-thirds rule and the case that only one of the parties has two-thirds of its turnover in one Member State, Van Bael/Bellis, Competition Law of the European Community, p. 377.
employment and tax revenues. However, the Commission has come up in the meantime with proposals to lower the thresholds of the Merger Regulation. It adopted a proposal to lower the aggregate worldwide turnover thresholds from 5 to 3 billion ECU and an average EC turnover of 250 to 100 million for each company involved. Many Member States, however, fiercely oppose such plans which makes a lowering rather unlikely.

ccc) The Relationship with Special Rules Safeguarding Pluralism
In Art. 21 (3) of the Merger Regulation a special provision allows the Member States to apply national legislation to protect their legitimate interests. The plurality of media has expressly been recognized as such an interest. According to a joint statement, by granting this right, the legitimate concern of Member States to maintain diversified sources of information for the sake of plurality of opinion and multiplicity of views is recognized. This permits the Member States to apply special media legislation in order to regulate concentrations which may otherwise undermine the diversified nature of their media. Many States, not just those in the Community, apply specific media ownership regimes which go beyond normal competition laws. However, there have been hardly any cases reported where this provision has been applied. One case was Newspaper Publishing in which the UK applied its national legislation to protect plurality of opinion in

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464 See for an assessment of the thresholds and their application to media, Wagner, Konzentrationskontrolle im Medien-Binnenmarkt, p. 7.
466 See for more details on Article 21 (3) of the Merger Regulation Van Bael/Bellis, Competition Law of the European Community, p. 424.
467 See accompanying statement entered in the minutes of the EC Council concerning Regulation 4064/89, Nineteenth Report on Competition Policy, p. 267.
its media.\textsuperscript{469} This provision would also allow the application of the proposed Media Concentration Directive after having been implemented into national law in the Member States. With this provision the Community conceded that the Merger Regulation cannot cover all concentrations posing a threat to pluralism.\textsuperscript{470}

\textit{cc) Technical and Economic Progress}

One factor, which is to be considered in assessing whether a concentration or a vertical agreement is impeding competition, deserves particular attention in the context of the introduction of digital television. This is the aspect of taking into account technical and economic progress in considering an exemption according to Art. 85 (3) of the EC-Treaty or assessing the compatibility of a concentration according to Art. 2 (1) of the Merger Regulation. The concept stems from Art. 85 (3) which had been there before and the Commission itself has stated that the concept has to be understood in the light of the principles enshrined in Article 85 (3), as interpreted in the case law of the Court of Justice.\textsuperscript{471} However, this does not mean that a concentration which fails the compatibility test on pure competition grounds could none the less be granted an exemption on technical and economic grounds.\textsuperscript{472} The development of technical and economic progress is to be seen as one factor to be applied in determining the effect of the concentration on competition.


\textsuperscript{470} See Communication from the Commission to the Council and Parliament on audiovisual policy, 2.2.3., Com (90) final.

\textsuperscript{471} See accompanying statements entered in the minutes of the EC Council concerning Council Regulation 4064/89, interpretative statement by the Commission concerning the application of Article 2 (1) (b), Nineteenth Report on Competition Policy, p. 266.

I have dealt with the technical and economic progress defense in Art. 2 (1) of the Merger Regulation extensively when discussing the MSG and the Nordic Satellite decisions. There the Commission emphasized the foreclosure effect of the joint ventures which could not be made up by providing technical or economic benefits. In case the provision had been seen as possible entrance to introduce industrial policy arguments in the two decisions the Commission clearly rejected such an interpretation. However, this aspect might obtain more weight in assessing the anti-competitive effect of a concentration if the constellation is less clear than in the two decisions dealt with. In particular, this might prove true, since the Commission, in its policies, is putting so much emphasis on the development of the Information Society.

Concerning an exemption for an agreement infringing on Article 85 (1) there have already been exemptions for agreements promoting technical progress in the media sector according to Article 85 (3). The Commission granted an exemption to a joint venture between BBC Enterprise Ltd., Morgan Grenfell&Co. Ltd., a merchant bank and Harold Holt Ltd., a concert promoter and musical agent, to set up a satellite broadcasting company which intended to broadcast live music, opera and ballet by satellite from major European venues to be delivered through a subscriber cable network. The parties agreed that for a period of three years they would keep information relating to a joint feasibility study and its results confidential and that they would not engage in competing activities. However, they were entitled to carry on their normal telecommunications or

473 See Ebenroth/Lange, Zukunftsmärkte in der europäischen Fusionskontrolle, p. 8.
satellite business. The undertaking did not create barriers to market entry for third parties. Also for future agreements concerning the start up of digital television an exemption due to the promotion of technical and economic progress might become relevant.

b) The Effectiveness and Limitations of the Application of Competition Law

Competition law, on the one hand, seems to be able to deal quite effectively with the concerns regarding competition and concentration arising out of the introduction of digital television. On the other hand, there are limitations due to the special character of the media market and the scope and objective of competition law.

aa) The Appraisal of the Merger Decisions

The merger decisions discussed above analyze the problems connected with the introduction of digital television in a very thorough way. The risk of vertical integration for a foreclosure of the market was correctly identified. Also the gatekeeper function of the set-top-box with its decoder and conditional access function has been pointed out very well. Considering these two decisions competition law or rather the Merger Regulation, proved to be a very effective device for securing that the markets remain open and no barriers to entry were created. The affected markets have been examined with great care, expertise and insight concerning the technical and economical background of the market developments in television and the introduction of digital television, in particular. The decisions were also free of any policy considerations which might have compromised the goal of securing free competition. It can be concluded that the application of the Merger

475 See for a summary of the case Winn, European Community and International Media Law, p. 96.
Regulation to these cases proved to be successful and effective. It can also be expected that comparable cases in that field in the future will be dealt with in a satisfactory way. However, the two cases were quite clear concerning the anti-competitive danger. So it first has to be seen how the Commission will treat future cases with less obvious anti-competitive potential. Without already giving a final judgment, the Merger Regulation, considering its objective and limited scope can be said to deal in satisfactorily with the competition and concentration concerns arising until now out of the digitalization of television. This assessment only refers to cases where the Merger Regulation is applicable. The deficits in its applicability concerning the high turnover threshold have already been discussed above.

bb) The Complex Markets

Above it has been pointed how essential the definition of the markets is for an assessment whether an agreement, the holding of a dominant position, or a concentration are anti-competitive. However, the definitions of the product and the geographic market are often difficult due to the complex competition relationships within the media sector. The offered services and products are structured in very different ways. This concerns the technology used as well as the economic and legal framework. A good example of this phenomenon is the distinction between free advertising financed television and pay-television. Here the distinction in two separate markets leads to a totally different competition assessment. The same is true for a distinction between satellite, cable television and terrestrial television. In the future there will be a separate market defined for interactive television services next to traditional television. Digital television has not been considered as a separate market, since
it consists mainly in a different way of transmitting the television signals, however, it does not offer the consumer anything different from either free or pay-television. These market definitions might be useful and valid for pure economic objectives, but do not take into account any aspects of pluralism in the programs for the viewers.\textsuperscript{476} In particular, this is true for crossmedia relationships, e.g. between press and television, in the future between television and interactive services, interactive services via television and via computer, online services and CD-ROM's. In the digital age the same content will be marketed in many different media. One market can only be assumed if the products are interchangeable, which would not be the case in most of the examples given.\textsuperscript{477} Although the ownership of television channels in different geographical markets is compatible with competition law, it poses severe risks concerning pluralism and media concentration. In the European media market the language barriers lead to an even greater market segmentation.\textsuperscript{478} The geographical markets are to a great extent defined according to the language borders. Due to this also, the market positions of multinational media companies will be measured according to single markets defined by one common language. However, this underrates by far their real market power and resources which give them a great advantage against only nationally active competitors.\textsuperscript{479} Many of the described deficits will increase in the digital age. With the emergence of multiple special interest pay-television channels in the

\textsuperscript{476} See Wagner, Konzentrationskontrolle im Medien-Binnenmarkt der EG, p. 7; see also Kübler, Argumente für ein Werbemarkanteilsmodell, p. 54.

\textsuperscript{477} See about the difficulties of defining the markets, Robinson, Market Share as as Measure of Media Concentration, p. 54; see for the collapse of the previous segmentation of the media market caused through technical change, Graham, Exchange Rates and Gatekeepers, p. 40.

\textsuperscript{478} See above the geographical market definition in the MSG decision, which was limited to Germany, although Kirch and Bertelsmann have business activities in many other European countries, like shares in pay-television channels, IV.2.b).

\textsuperscript{479} See Wagner, Konzentrationskontrolle im Medien-Binnenmarkt der EG, p. 7.
age of digital channels, the crossing of language barriers will become more likely, since the contents become more easily interchangeable than traditionally with the very much in its societal and cultural environment rooted conventional television. Also the expected emergence of interactive television services in the digital environment will lead to a more segmented and less transparent market.480

**cc) The Limited Objective of Competition Law Regarding the Media Markets**

Many of the deficits pointed out above regarding the application of competition law to media cases are due to the special character of the media market and the limited objective of competition law. The main objective of competition law is to ensure economic competition. Media safeguards and competition law safeguards are complementary with different objectives, not overlapping scopes. However, pluralism and competition are different criteria. The protection of pluralism often needs tighter control than the protection of competition.481 There are fields where the specific safeguards for media pluralism are lacking, in particular cases which involve cross ownership and vertical integration. The same applies to the above described constellations of companies having de facto gatekeeper positions. In that cases the application of competition law is essential and beneficial to media pluralism, too.482 However, it is widely agreed that European competition law, as well as national competition law, do not contain provisions to prevent all concentration in the media sector which might be relevant for securing pluralism in the

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480 See Kiefer, Konzentrationskontrolle: Bemessungskriterien auf dem Prüfstand, p. 62, who demands new rules to control the concentration regarding the new media like interactive services.

481 See for an abstract discussion on how competition law secures also pluralism, above VI.1.c) with more literature quoted.

482 See European Broadcasting Union (EBU) Reply to Commission questionnaire No III on Pluralism and Media Concentration in the Internal Market, pp. 3-4.
media. This has also been conceded by the Commission. It acknowledged that the application of Community competition law, Articles 85 and 86 of the EC-Treaty, combined with the Merger Regulation, is not able to cover all situations in which a threat to pluralism is posed, notably in the case of multimedia ownership.

Concerning the introduction of digital television in the cases analyzed, competition law dealt very effectively with the problems of technical gatekeepers and vertical integration. However, competition law has inherent limitations in dealing with the peculiar characteristics of media products and services. In dealing with media concentration the concern is to ensure that firms do not have excessive influence as well as to prevent abuses of market power and anti-competitive behavior. Competition law is primarily negative being concerned with preventing monopolies or controlling anti-competitive practices. Internal growth of companies is not dealt with at all. A media company can acquire an endless number of television channel licenses without competition law intervening. While competition law permits limitless internal growth, this could lead to a dominant position unacceptable for the pluralism aspect attached to the media market. Competition law is not concerned with setting standards nor with the need to intervene positively to reap the full benefits of network externalities. Regarding the set-top-box and the conditional access systems there might be different systems arising from a competitive market, however, a

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483 See Kübler, Argumente für eine Werbemarktanteilsmodell, p. 53.
484 See Communication from the Commission to the Council and Parliament on audiovisual policy, 2.2.3, Com (90) final.
485 See Robinson, Market Share as a Measure of Media Concentration, p. 55.
problem remains if they are incompatible with each other. Then the consumers who can only afford one system might well face an undesirable monopoly of media influence even when no such concentration was apparent at the level of the industry as a whole.\textsuperscript{487} The media industry will not just be another industry, even after digital technology eliminates many of the problems of bandwidth restrictions. Even though monopoly power endowed by access to scarce bandwidth will disappear, it has become clear already that other monopolistic powers may emerge which are not caught by the competition rules.\textsuperscript{488}

3. The Media Concentration Directive Proposal

The development of the debate on pluralism and media concentration in Europe has been described already above. The proposal of a Media Concentration Directive represents the outcome of this long ongoing discussion. In the subsequent chapter this proposal, its chances to become law and its possible influence on the national rules will be presented. The analysis will focus on how the proposal takes digital television and new television services into consideration.

a) The Approach

The proposed Directive is based on the goal to achieve the objectives of the Internal Market in the field of the media.\textsuperscript{489} It seeks to ensure the principle of free circulation and the creation of a border free area in that sector. Due to their disparities the various national legislative systems relating to pluralism and media ownership have set up a

\textsuperscript{487} See Graham, Exchange Rates and Gatekeepers, p. 47.

\textsuperscript{488} See Green, Preserving Plurality in a Digital World, p. 31; see in general for the risks remaining for pluralism after the digitalization, above VI. 2. c).

\textsuperscript{489} See for more on the background on the planned Directive above VI. 1.d); see for the discussion of a European regulation above VI. 2. d).
number of obstacles to the free circulation of services and the right of establishment. To maintain pluralism the Member States were legitimized in taking measures which restrict the freedom of the Internal Market. A frequent example was the restriction of free circulation between Member States, of television channels in cases where attempts were made to circumvent national media ownership laws by broadcasting by satellite from a neighboring Member States. The disparity in the different regulatory systems is bound to incite the market players to “forum shopping”. They are tempted to take their investment decisions rather according to the national regulatory framework than along market prospects. The differences in the national regimes tends to create distortions of competition. In some more liberalized Member States the national operators will become takeover targets for media giants of other Member States, or other countries. The planned Directive sets out to remove these obstacles. This shall be achieved by harmonizing the existing national legislation to obtain an equivalent level of protection between the Member States.

b) The Concept of Audience Measurement and Media Controller

The proposal for a Media Concentration Directive sets out the conditions for media ownership that should be applied by the national Member States when granting a license for a new television or radio station or for an existing one coming under new ownership.

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490 See ECI Case C-23/93, TV 10SA v. Commissariaat voor de Media, judgment of 5 October 1994.
492 The same development can be observed in the cable television or in the telecommunication sector; see the high investments of US-American companies in the liberalized market for cable television network operators in the UK. Doyle, Kabel- und Satellitenprogramme in Großbritannien, p. 449.
The planned Directive gives two criteria to apply the given conditions. These are the audience measurement which consists in the actual audience figures, and the concept of the media controller that determines which entity actually has control of a media corporation. The measured audience figures would then be attributed to this entity. In case the proposal becomes law the national supervisory body would have to decide whether in the case of an application for a new television or radio station the combined actual audience of all the media controlled by this entity in part or all of the broadcasting area covered by the new channel does not go beyond the thresholds laid down at Community level. The threshold laid down in the proposal is 10% of the audience in the area of distribution of a radio or television service for each of the media. In addition a multimedia threshold is given that also includes newspaper circulation and prescribes a 10% audience threshold on the multimedia market. The measurement of the real audience figures is seen to be superior to taking the number of channels controlled by a single entity as a basis for restricting the concentration of media ownership. In the age of the multiplication of television channels the audience measurement is considered to be a more significant criterion than the numbers of stations. Concerning pluralism the audience figures are expected to be a more equitable method which also would be fairer to the operators. According to audience figures also one channel with a very high percentage of viewers could pose a threat to pluralism. A number of Member States discuss the use of

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495 See internal proposal on a Media Concentration Directive in French, Article 3 (1) and (2) which has not been published officially yet.
496 Ibid., Article 3 (3).
the audience measure methods in their reformed media concentration legislation or have already included them.497

The concept of the media controller seeks to provide a qualitative definition for the identification of who controls media. With such a definition the real and not just the formal influence of a single person or an entity in a media corporation could be determined. The study of the European Institute of Communication found four criteria to determine the influence of a media undertaking.498 There can be contractual links with media corporations in both upstream and downstream markets. There can exist financial links between the controller and the media corporation. Another criterion are personal links which can be used to exercise influence in a media undertaking, like the power to make staff appointments. The traditional links of media concentration are the ownership links, like holding shares in a media corporation.

c) The Scope Concerning New Television Services
The authors of the proposal claim to take the technological developments into account.

The Information Society is supposed to have played a key role in the drafting of the proposal. The introduction of new technologies will increase cross-border activities which will exacerbate the negative effects of the patchwork of national laws governing media ownership. Furthermore the current national regulations have to be reformed to allow for

497 See for Germany and different forms of audience measurements, Holzer, Das Marktanteilsmodell auf dem Prüfstand - ein Problemauftritt, p. 577ff.; see for the same Kiefer, Konzentrationskontrollen: Bemessungskriterien auf dem Prüfstand, p. 62ff.; the new Rundfunkstaatsvertrag coming into force in 1 January 1997 foresees a 30% audience share as threshold; see for that Der Spiegel, "Das entfesselte Fernsehen", 29/1996, p. 24; see for the UK, the new Broadcasting Act 1996 Part III, Section 73, which introduces a 15% audience share threshold for television; see also Robinson, Market Share as a Measure of Media Concentration, p. 55; see also Doyle, Deregulierung für den Multimediemarkt, p. 168.

new technologies, like digital television. This legislative reform in the Member States needs co-ordination at a pan-European level in order to prevent the current disparity to grow even bigger.499

However, the definition used for television and broadcasting is said to be taken over from the Television Directive.500 This seems to leave out the new television services. The debate described above on the inclusion of these services under the Television Directive could find here its continuation.501 If these services do not fall under the other media which are considered by the concentration Directive proposal they will remain excluded. The exclusion is justified by their need for different level of protection. The debate on how these services are supposed to be regulated will hamper also the regulation concerning media concentration. If they are not included, at least a concept should exist how they should be dealt with from a media concentration view point. Taking this lacuna into account it cannot be said that concerning the introduction of digital television the proposed Directive presents a satisfying regime. Probably here one has to wait until the Member States have proposed national legislation which deals with the new television services. However, if Member States propose legislation which implements different regimes, then harmonization will meet even more opposition afterwards.

499 See for these arguments Crabit, "Pluralism and Media Concentration": 10 Questions and Answers on the Commission’s Work, p. 13.

500 This was told to the author in talks with EU Commission officials involved in drafting the proposal.

501 See for the debate concerning the scope of the Television Directive above under VII. 1. a); see for an overview of the different limited definitions in Germany, Spain, France, Italy, Netherlands and the UK, Institut Européen de la Communication, La transparence dans le contrôle des médias, p. 188.
d) The Relationship with National Rules and the Chances to Become Law

If the proposal becomes law it would not leave any room for the application of the existing national rules. Its comprehensive regime would be incompatible with any maintenance of national media concentration regulation. The implemented rules would deal with ownership constellations and transactions confined to single Member States as well as with cross border transactions and pan European media activities. However, the precise way of the method how to measure the audience will be left to the Member States. The possibly emerging different systems should then become subject to the principle of mutual recognition. Also regarding the definition of the media controller the Member States are said to receive some discretion concerning its interpretation. A European media agency to control the enforcement of the media concentration thresholds or at least to co-ordinate the national enforcement efforts and to deal with larger cases is not foreseen, although it had been discussed and asked for by many observers.\textsuperscript{502}

To what extent these concessions to the Member States will win their support for the proposal is uncertain. Many Member States have already opposed the planned Directive. This might be due to the fact that a number of Member States are in the course of reforming their national media concentration legislation.\textsuperscript{503} These states are likely to object to the approach by the Commission which would nullify their own legislative efforts. This


\textsuperscript{503} See the UK, which has just passed its Broadcasting Act of 1996; see for the plans in Germany on new media ownership rules and the most recent agreement of the states, Süddeutsche Zeitung, "Gesetz ohne Grenzen", 22. August, p. 16; in Italy the government has to introduce new legislation to deal with the ruling by the constitutional court which declared that the current Italian law allows too much concentration of ownership in television, see Financial Times, 27 August 1996, p. 2.
might prove true in particular when their legislation seems to be more progressive and apt to deal with the new technological developments, like digital television.\footnote{See the UK Broadcasting Act 1996 and its special provisions on digital terrestrial television, Part I.} However, the resistance to the proposal can hardly be assessed at the moment. The preservation of pluralism and the risks of media concentration are closely connected to the maintenance of the cultural and national identity of countries and seen as essential for a functioning democratic society. This might speak for a reluctance of Member States to leave legislation to the European Communities.

The state of the proposal in the legislative process of the European Community is not very advanced. The proposal has not been adopted yet by the Commission. The discussion on adoption has been postponed until September 1996.\footnote{See Europe Agence Internationale D'Information Pour La Presse, No 6786, 7th August 1996, 44th Year, p. 5.} Since the adoption of a proposal by the Commission is only the first step in a long and complicated legislative process the outcome can by no means be assessed yet. However, if a proposal for a Directive meets already resistance in becoming adopted by the Commission one might conclude that the chances of such a proposal are rather dim.

e) The Relationship with European Community Competition Law
I have discussed the relationship between media ownership rules and competition law in the abstract above.\footnote{See above VI.1.c.} If the proposed Directive becomes law the influence it might have on European competition law is difficult to predict. However, the broad scope regarding the media controller concept which would include contractual up- and downstream links, financial, personal and ownership links, indicates a possible broad area of conflict with

\footnote{306 See above VI.1.c.}
competition law. Within the Merger Regulation the application of the Directive provisions then implemented in national law would function through Article 21 (3) of the Merger Regulation. This provision foresees the application of national legislation in cases of legitimate interests, like preserving pluralism in the media. However, it is questionable whether this provision was foreseen to introduce a full Community based regime into European competition law. Certainly there will arise conflicts with the application of Article 85 and 86 of the EC-Treaty concerning the contractual links which might fall under the Media Concentration Directive proposal. Even though the arising conflicts are difficult to predict, there should at least be some consideration regarding the influence of this new regime on competition law. It is questionable whether the simple assumption that, since the pluralism and media concentration provisions are stricter, they just apply on top of competition law will serve as an overall solution. Cases will be taken away from the competition authorities to be dealt with by national media supervisory bodies. This needs co-ordination and co-operation. Will the cases first be dealt with by the competition authorities and then handed over to the national media supervisory bodies? There might also be an imbalance, since competition law has a European body to enforce it and the media concentration provisions will have to be enforced by national bodies. A European media agency which could prove essential in coordinating competition law and the media concentration provisions as well as the European and the Member States level is not foreseen. My conclusion is that the Media Concentration Directive proposal, as it stands, is a rather isolated legislative attempt which does not really take into account the legal framework which surrounds it.
4. Standard Setting
Standards play an important role for competition in a sector where new technologies are introduced. The following section will give an overview of the standardization in the field of digital television. The focus will be on the role of the European Commission in these standardization measures and the importance of the new Directive on the transmission of television signals as the only legislative measure by the European Community in that field.

a) The Approach of the Commission in Standard Setting for Television
The approach of the Commission in the technical standard setting for television has changed in recent years from being directly involved to exerting a less visible influence from the background. This change is mainly due to the negative experience made of the Commission with the introduction of the MAC (multiplexed analogue components) standard for satellite transmitted high definition television (HDTV). The MAC standard was based on digital transmission of sound and analogue transmission of images with a digital decoding. It was meant to provide a step-by-step development for the D2-MAC standard with digital sound transmission, a picture with 625 lines and a 16:9 format. However, since the development of the technology was too much focused on the transmission and on Europe, affordable decoders and television-sets were lacking as well as sufficient program supply in the 16:9 format. Also the attitude and goals of the political environment and of the market players changed and the new principle became more channels, instead of better quality pictures. When it became clear in 1993 with the

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507 See V. 3. on standards and competition.
508 See Nationale HDTV-Plattform Deutschland, Presseinformation 93/3.
developments in the USA that the analogue transformation stage would be skipped, the European Community stopped its support for the MAC technology. However, the industry stresses that the learning effects and the experiences in cooperation benefits their efforts to find agreements in the Digital Video Broadcasting group (DVB). As a consequence of the failure, the Commission adopted a different role in the standardization process. It left the standard setting to the private industry organization the Digital Video Broadcasting group (DVB) and confined itself to support their work. The standards the DVB agrees on then have to enter into the approval process of the European Standardization Organizations. They then obtain the support of the Commission to become the European standard. However, the Commission does not propose a standard itself anymore but leaves it to the industry and influences the process in a more subdued way.

b) The Directive on the Use of Standards for the Transmission of Television Signals
The Directive on the use of standards for the transmission of television signals is the legislative act introduced by the Commission concerning standards for digital television. The Directive is supposed to create a regulatory framework of standards for the transmission of advanced television signals. According to the Commission the Directive recognizes standards as an important element in establishing market confidence, both on

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510 Its work will be described briefly below.
511 The main European standardisation bodies in this field are the European Telecommunications Standards Institute (ETSI) and, concerning television receiver standardisation, its partner organisation CENELEC.
512 The information stems from interviews with European Commission officials, 27/28 March 1996.
the part of market players, and on the part of consumers. At the same time the Directive seeks to enable the widest range of advanced services to be offered as the market develops. It does not seek to support the introduction of particular services and technologies, but prefers a studied neutrality across the board. It also aims to create a common framework throughout the Europe for conditional access to digital television services.514

aa) The Introduced Standards for Digital Television and Wide Screen Television
The Directive prescribe standards to be used for television services in wide format and 625 lines, and for services in high definition which are not fully digital.515 For the former the 16:9 D2-MAC transmission system has to be used, and for the latter the HD-MAC transmission system. If the services are fully digital the provider has to use a transmission system which has been standardized by a recognized European standardization body. The prescribed standards apply to every transmission mode, be it cable, satellite or terrestrial. However, the new Multi Video Distribution Systems (MVDS) are not mentioned. The MVDS is typically transmitted from the top of tall buildings and can be received by inexpensive receivers which are located within the transmitter’s line of sight. It might become an important means of delivering a large number of channels to private households especially in areas where the installation of cable is not commercially viable. If it does not fall under one of the transmission modes mentioned in the Directives the provisions would not apply to it.

515 See Article 1 of the Directive.
The Directive also mentions wide screen television services. In Art. 1 (2) it states that Member States shall see to it that, the transfer of wide-screen television services already in operation to digital transmission networks open to the public, is made easier. However, in the accompanying declarations the Council adopted apparently, at the request of the German government, a statement (ii) that endorses the Commission's interpretation of Article 1 (2). According to this interpretation there should be no binding obligations on Member States regarding the transfer of existing wide screen television services to digital transmission networks.\footnote{See EBU Legal Committee, Information document No 9(95), p. 2; see also Council, press release 9012/95 of 24 July 1995.} Article 2 (c) of the Directive rules that fully digital transmission networks open to the public for the distribution of television services must be capable of distributing wide-format services.

According to Article 3 manufactures must incorporate an open interface socket on all TV's with screens larger than 42 centimeters. This provision intends to guarantee that all citizens of the European Community investing in new equipment will be able to connect digital TV decoders without problems.

bb) The Conditional Access

The most important of the new provisions concern conditional access. They contain legal safeguards for access to the conditional access systems.\footnote{See Article 4 of the Directive.} As discussed already above the conditional access system poses many competition problems for the market of pay-television in general and for digital television which in the beginning will mainly consist in pay-television in particular. It provides the operator with means to manipulate competition
and discriminate against competitors and favor his own channels and programs in a way detrimental to free competition. The Directive now requires operators of conditional access systems to offer their technical services to all broadcasters on a fair, reasonable and non-discriminatory basis. They also have to keep separate financial accounts regarding their activity as conditional access providers. It is questionable whether this general provisions will prove sufficient to secure a non-discriminatory treatment of all broadcasters. The DVB has drafted a code of conduct for the access to digital decoders applying to all conditional access providers. This could have served for more detailed provisions. However, in general from a competition view point, an open system is seen as being the better solution.

However, since the industry represented within the DVB could not agree on a proprietary or open system, the Directive also does not take a decision on that issue.518 To at least display a certain preference for an open system the Directive prohibits holders of industrial property rights to conditional access systems to subject the granting of licenses to manufacturers of consumer equipment on conditions which would prevent or discourage the inclusion of a common interface.519 Member States have to provide special procedures that allow fair, timely and transparent resolutions of disputes arising from the application of the provisions concerning conditional access. This shows that the Commission expects conflicts concerning conditional access and might indicate that it does not consider the laid

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518 See for the lack of a consensus within the DVB on one system, Schoof/Watson Brown, Information Highways and Media Policies in the European Union, p. 335.

519 See Article 4 (d) of the Directive.
down provisions as an ideal solution but rather as the compromise of an hard fought over conflict of interests.

c) The Standard Setting of the DVB
The Digital Video Broadcasting group comprises some 180 manufacturers, broadcasters, infrastructure providers and national administrators and adopts specifications for digital video broadcasting. DVB has produced a family of specifications for the transmission of digital television over terrestrial, satellite, cable, SMATV (Satellite Master Antenna Television) and MDS (Multipoint Distribution Systems). The specifications are supposed to provide all the tools necessary to convey MPEG-2 coded video, audio and data signals from the broadcaster’s studio to the user’s home. As already mentioned above these specifications then enter the process of adoption as formal European standards by the standardization bodies ETSI and, concerning television receiver standardization, its partner organization CENELEC. Many of the specifications are already European standards. Others are presently undergoing the formal procedures like the specifications for terrestrial digital broadcasting. The same can be said of the specifications for a digital broadcasting system using MVDS (Multipoint Video Distribution Systems) which was agreed by the DVB steering board already in December 1995. The standard developed for a common interface is at the moment undergoing standardization in CENELEC.

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520 See for the origins of the DVB, Seeger, Strukturveränderungen des Rundfunks in Europa, p. 123.
521 See for how the standards are developed, DVB, The New Age of Television, p. 32.
522 At least until June 1996 they had not become a European standard.
However, although the DVB achieves convincing results in its standardization efforts, it is doubtful whether the strategy of leaving this task to the industry itself represents the right answer to all problems involved with the introduction of new industries and standardization. Standardization performed by the industry itself guarantees that the technology agreed on is close to the market and promises to be economically a success. However, looking at it from a competition viewpoint it looks quite probable that the already dominant companies will also prevail with their proposals in such an organization. It is unlikely that they will give up their competitive advantage without being forced to do so, which will not happen in such a voluntary organization and procedure. There might be standards proposed that benefit the more powerful companies who also enjoy a greater influence in the DVB more than smaller ones. The best example for this assertion is the conditional access where the choice between a proprietary system and an open system remained optional. On that issue the DVB could not find a consensus to make the common interface mandatory, although it is widely regarded to be the better system to guarantee an open market and free competition.\textsuperscript{524} This is due to the fact that most of the large providers of conditional access systems (themselves broadcasters) use proprietary systems which give them a competitive advantage over other broadcasters. This might be the stage where the European Community has to interfere with the introduction of legislation. Standard setting by an industry organization is important for the introduction of a market orientated technology. However, to secure free competition interference by the legislator in many cases seems to be indispensable.

\textsuperscript{524} See for the difficult and lengthy discussion within the DVB, The New Age of Television, p. 30.
d) Remaining Problems for Competition: The Common Interface
The standardization process for digital television is quite advanced. Only for a few areas are standards still missing, which are right now undergoing the standardization process or at least a specification is agreed on. However, next to the hidden competition concerns connected with the standardization by an industry organization indicated above the conditional access remains a heavily discussed issue. Many still believe that a common interface represents the only solution for the competition concerns linked to conditional access systems. The debated question is whether to make the inclusion of a common interface in digital decoders mandatory. However, such a provision was not included in the Directive, since an agreement could not be found. The Commission also does not have plans in the near future to introduce legislation foreseeing such a mandatory inclusion. In mid 1997 the Directive on the transmission of television signals is up for review.\textsuperscript{525} Probably then the need and the political climate for a mandatory inclusion of a common interface will be re-examined. At the moment the Commission has accepted the proprietary system to be the system for the first generation of decoders. However, for the next generation it hopes the common interface approach will prevail.\textsuperscript{526} It is doubtful whether the common interface approach will find a majority then. Next to the opposition of providers of proprietary systems who will continue to support their system, the common interface approach is also criticized concerning its consumer friendliness. It is said that consumer will not find the use of many different smart cards convenient. In addition it has been shown above that the use of smart cards leaves ways to dominant

\textsuperscript{525} See Article 6 of the Directive.

\textsuperscript{526} The information stems from a telephone interview with a Commission official of DG XIII, 9 August 1996.
providers to discriminate against competitors by placing them on very unattractive smart cards. The question will be which system can be better controlled.

VIII. Conclusions
The aim of this thesis has been to give a description and an analysis of the problems and implications connected with the introduction of digital television in Europe for competition and media concentration. This problem description has discussed the European Community legal framework for this sector in order to assess its capacity to deal with the newly arising risks for competition and media concentration. The regulatory systems in the Member States have only been dealt with to give examples and illustrate different approaches and deficits. The conflict of competences between the European Community and the Member States has been left out intentionally as well as an abstract discussion of assigning the different problems to the different levels of governance. The focus has been on the problems arising out of the introduction of digital television and the solutions foreseen for them by the European Community legal framework. A further step would have been to propose regulatory measures or a whole framework. However, this would not have been possible without entering into the above described discussion of competences. In the following final section the main points of the different chapters will be highlighted and the connecting line between them, as far as it has not become visible until now, will be drawn. Although the thesis has not proposed a certain regulatory policy, the problem description and the legal framework analysis by illustrating the deficits give

527 See above III.1.b).
indications in what direction to go. The concluding remarks will try to concretize these hints though without proposing a new regulatory framework.

1. Concerns and Implications for Competition and Concentration

In the following section the main points of the chapters above will be summarized. However, it will go beyond that in showing connecting lines between the chapters which might not have been evident up to this point. Also some additional reflections are added which try to clarify certain more complex aspects of the analysis delivered above.

a) Competition Concerns

The analysis showed that the main cause for competition concerns concerning the introduction of digital television presents the special distribution system for digital television programs. The new technology which is necessary for the transmission and the reception of the digital television programs provides possibilities to discriminate against competitors and incentives to integrate vertically. The analysis found, in the set-top-box, with the different essential functions combined in one device, the gatekeeper joint of the distribution chain of digital television. The conditional access systems have been in use in existing pay-television channels and have posed competition concerns already there. However, they will reach new dimensions regarding their significance and the sophistication of their use in digital television. The navigation systems probably integrated in the set-top-box will also provide possibilities for vertically integrated operators to discriminate against competitors. An additional element of the distribution chain containing competition concerns is the marketing of the new multiplicity of channels in the way of packages. The risk for free competition depends on the state of vertical integration.
in the distribution chain. The set-top-box only poses a real danger for free competition mainly if the operator is vertically integrated and has an interest to favor certain broadcasters and programs and discriminate against others. However, since the digital television also as gateway to an interactive media world promises an immense future market, companies from all different stages of the distribution chains of television programs want to take part and have a stake in its realization. Since high and risky investments are necessary the incentive to join together is very high. Also the general convergence processes taking place between the broadcasting and telecommunication industry as well as between content and technology providers leads to a higher concentration tendency. In particular, the financial powerful telecommunication companies have become active, and for the sake of free competition, dangerous players in new field of digital television, since they for the most part still control the transmission networks in Europe. To summarize the competition concerns one can conclude that the new way of distributing digital television programs provides for a wide range of possibilities to manipulate and impede competition and at the same time these abstract possibilities become acute, since the incentives to integrate vertically due to high investments and promising future markets are very high. An additional incentive to integrate vertically can be seen in the possibility to obtain a dominant monopoly like position itself. The competition concerns connected with the introduction of digital television have been put into context with well-known competition problems from other sectors or countries. This comparative analysis has shown that parallels can be found. The gatekeeper position of the set-top-box is equivalent to the essential facility discussion of the public utility industry,
energy, gas and other sectors. In the television sector a similar trend to vertical integration could be found in the US cable television industry with foreclosure effects regarding program access and access to distribution outlets. Also the problem of standards for competition has already been widely discussed in other fields. Many of the remedies used in these other sectors could be transferred to the digital television industry, like line of business restrictions, open access or “must-carry” rules. However, the analysis illustrated that in the complexity of its distribution chain and the different markets involved, the arising digital television industry stands alone, compared to other sectors discussed. Because of this it will prove insufficient to tackle its competition problems with the single solution found for one less complex industry, but rather a combination of different remedies will be necessary.

b) Implications for the Concentration Debate
Regarding the debate on media concentration the introduction of digital television has led to the revival of an old discussion with the new arguments. At first sight digital television, with the expected multiplication of channels, delivers arguments for the supporters of the liberal view who advocate less regulation for television and an abolition of the special treatment of broadcasting compared to other media, in particular the press. The anticipated segmentation and individualization of the television programs, it is argued, would finally invalidate the rationales traditionally mentioned to justify the special treatment of the broadcasting media. However, the opponents see new risks arising out of the introduction of the new technology which provides incentives for more concentration. It is also difficult to draw the line between traditional television, for which the majority
still foresees regulation, and the new television services, where less regulation is acceptable. Digital television will provide both, starting with rather traditional television (however, already with a focus on pay-television, like pay-channel television and pay-per-view television) and in the future providing new interactive television services. So, digital television has, to some extent already, and will even more so in the future, be the touchstone for the different theories. However, the discussion in many Member States is still limited to traditional broadcasting problems and outdated dogmatic debates. The main issue, to find an encompassing regulatory framework for the new diversity in television, does not receive adequate attention. In many cases the motive to introduce new, for the most part more liberal regimes seems not to be a change in the nature and the character of television; rather the aim seems to be to strengthen the competitiveness of national champions. The analysis showed that a new approach regarding media concentration is necessary, that takes into account the transformation process of the medium of television. Since the providers, the consumers and the equipment used mainly stay the same also, the regulatory system should stay unitary, just including different levels of regulatory intensity.

2. Deficits of the European Community Legal Framework
The analysis of the EC legal framework was extended also to legislation not directly connected to competition and media concentration problems. This was done in order to find out whether, looked at from the perspective of digital television, a coherent system in the European Community legal framework could be identified. The Television Directive which is now in the state of becoming amended does not contain any references to digital television and the transformation of television in general. The proposal of the European
Parliament, which had asked for the inclusion of new television services, was turned down by the Council. As an isolated aspect, new forms of television provisions on teleshopping are contained in the Television Directive. An aspect which has been much discussed already, and which might become an essential issue for digital television in the future with the multiplication of channels, are the quotas for European programs. The introduction of stricter quota provisions would have a considerable influence on competition in digital television. Smaller channels, and channels in the start up phase which do not have the financial resources to buy the then fought over attractive European programs would be disadvantaged, since they would not be allowed to offer affordable US-American programs instead. However, this foreseeable development connected to the digitalization and transformation of television does not seem to receive much attention in the quota debate.

European Community competition law has dealt with the digital television cases subject to its application quite well. The merger decisions MSG and Nordic Satellite Distribution can be seen as cornerstones in the analysis of the introduction of digital television from a competition view point. The Commission has identified the gatekeeper potential of the set-top-box and the dangers for competition by vertical integration of dominant actors of up- and downstream markets, in particular with the involvement of providers of transmission networks. In Article 85 and 86 of the EC-Treaty it has also additional instruments at its disposal if the market players choose anti-competitive constructions different from concentrative joint ventures in the future. However, also limitations regarding the application of the competition law to media cases, in particular the new forms of television
were identified in the analysis. It is questionable whether the growing market complexity in the media sector which is due to the diversification of the television and the arrival of multimedia applications from the computer side, still can be sufficiently dealt with by conventional competition rules. Another often mentioned aspect regarding the limitation in the application of the European Community competition law to media cases, is confined to the Merger Regulation and concerns its high turnover thresholds. For digital television this argument is less applicable, since the high investments necessary to start up digital television usually will involve larger companies. However, the main limitation of competition law in dealing with media cases lies in its limited objective of securing economic competition. Media safeguards and competition law safeguards are complementary, with different objectives, not overlapping scopes. In dealing with media concentration the concern is to ensure that firms do not use excessive influence, as well as to prevent the abuses of market power and anti-competitive behavior. Being primarily negative in preventing monopolies or controlling anti-competitive practices, competition law does not give a framework for taking into account the special needs of a developing industry, like digital television. In particular, it does not consider internal growth and does not consider the importance of standards.

Because of the limitations of competition law a special media concentration regulation is called for, in particular considering the concentration movements in the area of digital and pay television. With the concept of a media controller and audience measurement the proposal of the Commission for a Media Concentration Directive is a reasonable and modern approach. However, the problem once again is the lack of scope. New television
services are not included, although through digital television they will be provided via the same medium as traditional television. There has also not been any alternative legislation for new television services proposed yet. Regarding the rapid developments in this field and in particular the convergence processes taking place, the proposal being restricted to traditional media, like traditional television, radio and newspaper does not seem capable of dealing with the recent market developments. The chances of the proposal to become law are rather dim because of the opposition of many Member States, in particular the ones which have just passed themselves new media concentration legislation.

The move by the Commission to leave the standard-setting regarding digital video broadcasting, to the Digital Video Broadcasting Group (DVB) can be regarded as more or less successful. Most of the standards for the different ways of transmitting digital television signals have been set. The Directive on the Use of Standards for the Transmission of Television Signals, provides a legal framework to get started with digital television in Europe. However, an agreement on one conditional access system, proprietary or common interface could not be found. This illustrate the problems of standard-setting by the industry. If the powerful companies, here the ones who already provide conditional access though proprietary systems, want to keep their competitive advantage the voluntary association cannot force them to give it up, even if it would be beneficial for the industry as a whole. Because of this the Commission might interfere in the future and impose the mandatory inclusion of a common interface in digital decoders, if it can reach the approval of the Council for such a legislation. However, the abstract problem analysis has shown that the common interface does not always have to be the best
solution considering the potential for distortion of competition with the smart cards. First it has to be examined how the provisions foreseeing non-discriminatory treatment of the users of conditional access systems by the operators will work. Here the television signals Directive clearly contains competitive aspects. Concerning these the Commission evidently considered competition law insufficient to deal with them alone.

The analysis showed that coherent European Community approaches towards digital television, and in general new forms of television, are missing. There are bits and pieces in different legislative fields which make a good start, however, most of the time they remain isolated and do not go together. The main deficit lies in the lack of scope of the new legislation concerning media concentration and the amended Television Directive. However, here probably the European Community is influenced by the limitations and stagnation in the approaches of the Member States and does not have the impetus to come up with an independent encompassing framework.

3. Concluding Remarks
The aim of this thesis was a problem description combined with an assessment of the existing legal framework supposed to deal with the problems. The purpose has not been to propose an alternative regulatory framework. However, the deficits in the examined framework already imply some suggestions for a different approach. Above I concluded that the legal framework provided by the European Community for digital television is not coherent or complete. It is hardly understandable that newly proposed legislation does not take into account at all some of the recent developments in the television and broadcasting industry. The European Community legal framework has been chosen as subject of an
analysis not merely out of an interest in European law. The main motive has been to look at a legislator who can deal with the new developments without being entangled in an overgrown, fixed and static broadcasting legislation. At the European Community level one could have expected the room and the freedom for a more functional and technical and less dogmatic approach. This assumption leaves out the very dogmatic and complex questions of the competences of the European Community. As mentioned above, good beginnings can be observed. Also regarding the limited scope of the proposal for an amended Television Directive it has to be mentioned that the European Parliament argued for an inclusion of the new television services. This was denied by the Council which means by the Member States. However, more adaptations would have been necessary than just extending the application of the current provisions of the Television Directive to new television services. Also the mandatory inclusion of a common interface in the digital decoders failed because of the opposition of Member States, next to the resistance of parts of the industry. This shows that the European Community is obstructed, by the Member States, in its attempts to establish a broader framework. And this is so, although almost none of the Member States themselves have legislation which seems able to cope with the new developments concerning the transformation of television and the convergence processes which take place between telecommunication and broadcasting, and technology and content. What Community law can achieve in leading the way has demonstrated the success of European Community competition law in Member States that did not have competition rules and authorities in the stricter sense until recently. The same could be performed for the media concentration and competition regulation in the fields of new
media like digital television. This is an argument independent of the fact that much of the developments in the media field can only be controlled now on a supranational level. With the Directive on the Use of Standards in the Transmission of Television Signals one can see a good start. The same is true for the approach of the Media Concentration Directive, ignoring its limited scope. However, for European Community legislation to become more daring and more effective the Member States would have to become conscious of their limitations. They would have to realize the opportunity the European Community offers to advance a new regulatory system and develop a more favorable attitude towards encompassing regulation in that field by the European Community.
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