

The end of the broadcasting era

What constitutes broadcasting and why does it need to be regulated?

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Technological changes¹

Television programme services are one out of many different types of electronic content services. For their delivery to consumers they require a transportation medium. Traditionally, the terrestrial radio frequency spectrum was the only available transportation medium for these services. When using radio frequencies as a transportation medium, a television programme service² is modulated onto one or more of those frequencies, which carry the service to the television sets of consumers. Their television sets demodulate the signal (ie, separate the television programme service from the transportation medium) so that the service can be consumed (or rather 'watched' in the case of television programme services). The modulation technique used is not really standardized. The best known techniques are: PAL, SECAM, MeSECAM and NTSC (these are all analogue broadcast protocols). The frequency bandwidth required for the transportation of television programme services using one of the broadcast protocols mentioned above varies from 6 to 8 MHz.

In recent years, however, new techniques have been developed which make it possible to make more efficient use of the radio frequency spectrum. The frequency space that used to be required for the transportation of one television programme service can nowadays accommodate 6 to 8 of these services. This is due to the development of a new broadcast protocol, the DVB-T (digital video broadcasting – terrestrial) protocol which was developed by the DVB consortium³ and which is based on digital compression techniques.

Moreover, providers of television programme services no longer depend exclusively on terrestrial frequencies for the transportation of their services to consumers. Alternatives exist. Hybrid fibre optic/coaxial cable systems⁴ and satellite systems are currently the best known and most widely deployed alternative transportation media for television programme services. Broadband cable and satellite operators also rely (in whole or in part) on radio frequencies to transport the content services (such as television programme services) that they deliver to consumers and therefore they can also benefit from the new technical protocols for the transportation of these services. Especially for their purpose, the DVB-consortium developed the DVB-C (for cable) and the DVB-S (for satellite) standards. Thus, they too can now accommodate 6 to 8 television programme services on the frequencies on which they could previously modulate only one service.

Furthermore, television programme services can nowadays also be transported to consumers using version 6 of the internet protocol (IPv6):

- Cable modem technologies provide for an enormous increase in capacity of the local loop⁵ of existing broadband cable systems (Eurodocsis 2.0 and beyond),

as does Ethernet-to-the-Home (EttH)⁶; both can be used to transport content services on the basis of IPv6.

- Some European programme packagers offer their services to their subscribers over fixed telephone lines using DSL as an access protocol and IPv6 as a transport protocol;
- Wireless local loops (WLL) are being created using the radio frequencies which have been designated for this purpose. They will also use IPv6; and
- UMTS, an access protocol for the high speed delivery of data to mobile devices (such as cell phones) can also transport services on the basis of IPv6.

Finally:

- encryption and addressing technologies make it possible to no longer offer all television programme services indiscriminately to everyone, but to offer these services on an 'on demand' basis; and
- return channels offer two-way capability, thus providing a basis for the creation of interactive television programme services. Return channels are available for all wire-based and wireless electronic communications networks, including for satellite and digital terrestrial (the latter on the basis of the DVB-RT protocol).

In order to make more efficient use of the radio frequency spectrum, network operators transporting television programme services on the basis of old-fashioned analogue broadcast protocols (such as PAL and (Me)SECAM) will need to migrate to more advanced digital transportation technologies. This poses at least two problems. First of all, a terrestrial transmitter can either transmit signals on the basis of one of the current analogue protocols, or on the basis of the new DVB-T protocol. The same transmitter cannot do both at the same time. Secondly, current television sets cannot process incoming digital signals. This means that operators of networks transporting television programme services can only migrate to a new technical transportation protocol if they make digital to analogue (D/A-) converter boxes available to consumers in their service area. One converter box will not be sufficient, since most households have two or more television sets and/or a VCR; for each of those pieces of equipment a converter box needs to be installed.

In regard to this migration process, broadband cable operators have less problems than operators of terrestrial transmitters, provided that they have enough bandwidth available. They can simultaneously transport television programme services in the traditional analogue formats as well as in the DVB-C format (and if so desired, also on the basis of IP). Therefore, for broadband cable operators, there is no immediate *technical* need to switch off the analogue signals.

Consumers who receive their television programme services via broadband cable could therefore decide to purchase a D/A converter box for the reception of digital signals in their living room, whilst continuing to receive the traditional analogue signals for a second television set in the bedroom.

Most television programme services which use satellite transponders as a transportation medium have already switched over from analogue to digital; however, there may still be a few television programme service providers which simulcast their services in analogue and digital via satellite.

New business strategies

Traditionally, voice telephony services would only be transported via twisted pair copper wires, whilst television programme services would be transported by either terrestrial transmitters, broadband cable or (later) satellite. Content services on the internet could only be accessed via traditional telephone lines.

Due to technological convergence the traditional link between the provider of a content service and a network operator is broken. Broadband cable operators offer voice telephony services; voice telephony services are also offered by operators of terrestrial transmitters (cell phones), satellite operators and internet service providers (using the Voice over Internet Protocol – VoIP); DSL-based operators offer television programme services via (upgraded) telephone lines; broadband cable operators offer high speed internet access.

Technological convergence leads network operators to new business strategies resulting in economic convergence, which leads to competition.

Developments in the business of content packaging

The packaging of electronic content used to be mainly an activity of broadcasting organisations. Broadcasters such as television programme service providers, package content produced by external production companies into a television programme service. They may or may not include their own productions in this package.

Traditionally, broadband cable operators assumed the role of mere providers of transportation services to broadcasters for their programme signals, but nowadays they may also assume the role of content packagers themselves. In the latter case, they either:

- purchase complete television programme services from broadcasters on the wholesale market; or
- purchase content on the wholesale market from external producers and produce one or more television programme services of their own. They may or may not include their own productions in those programme services; or
- sell capacity in certain thematic content packages to interested thematic broadcasters on the wholesale market and then resell those packages to end users on the retail market. In this case, the cable operator only offers ‘shelfroom’ in a content package on a wholesale market to providers of television programme services who want to purchase a transportation service from the cable operator in a certain type of content package to which the cable operator offers subscriptions to consumers on the retail market.

Satellite operators may merely offer transport capacity (transponders) to television programme service providers, but they may also choose to offer different packages of television programme services wholesale to, for example, broadband cable operators⁷.

Canal Digitaal in the Netherlands⁸ and TPS⁹ in France (may) package content services in the same way as broadband cable operators do (or can do). The difference with broadband cable operators is that they do not deliver their packages to their subscribers by wire, but through the air (wireless) via satellite. They do not own an electronic communications network; instead, they purchase an electronic communications service (a transportation service) from a satellite operator and offer their programme packages via satellite to satellite receivers equipped with D/A converters.

Those satellite receivers/converters can either:

- be centrally located in an apartment building, a hotel, hospital or bungalow park’s headend from which the signals are distributed to individual households or rooms (in which case their activities are very similar to those of broadband cable operators); or
- be rented by these establishments to their tenants or guests on an individual basis and be installed in individual apartments or in the guest’s or patient’s individual room.

DTT operators (may) also package content services in the same way as broadband cable operators do (or can do). The difference with broadband cable operators is that, like Canal Digitaal and TPS, they too do not deliver their packages to their subscribers by wire, but through the air (wireless), albeit not via satellite but on terrestrial frequencies (using the DVB-T protocol as a modulation technique). Moreover, owners of apartment buildings, hotels, hospitals or bungalow parks may negotiate a discount rate for a set of subscriptions and then rent DTT receivers/converters to their tenants or guests on a commercial basis.

DSL providers have also started to package content services in the same way as broadband cable operators do (or can do). The difference with broadband cable operators is that they transport those services via traditional twisted pair copper wires using the internet protocol (IP). For example, France Telecom and TPS offer DSL-TV in France¹⁰; T-online offers DSL-TV in Germany¹¹; and, in Italy, FastWeb, a service provider best known for its Ethernet-over-fibre services offers a 120-channel TV-over-DSL service to all of its 120,000 DSL subscribers.

Furthermore, it is expected that cell phone operators will also enter into the business of content packaging by purchasing exclusive distribution rights for, for example, pop concerts or sports events and by offering these services to advanced cell phones and laptop computers via GPRS/UMTS technologies¹²; similar services can be offered to the homes of subscribers via a wireless local loop (WLL).¹³

Developments in the business of delivering packages of content services to end users

For the moment, each content packager deals exclusively with its preferred network operator. Technically, however, nothing prevents content packagers from offering their packages to competing network operators. However,

because of the fact that content packagers and network operators are often vertically integrated, most content packagers will continue to offer their packages exclusively to their related network operator and network operators tend to offer transportation services exclusively to related content packagers.

One reason for this is that the content services offered on a network create value to the network. Where competition arises, as a consequence of convergence, it can be expected that competing network operators will start making exclusive deals with programme service providers (broadcasters) of their choice so that they can offer a better deal to their subscribers than their competitors. Thus, it seems that broadcasters and other providers of electronic content can expect the rise of a golden age for them.

Another reason is that network subscribers may not only be interested in the content services offered by or through the network; they may also be interested in other network services, such as internet access and voice telephony. Subscribers who choose to subscribe to all these different services no longer need to subscribe to different networks for different services (eg, if they subscribe to a cable telephony service, they no longer need a telephone line from the incumbent telecom operator). Thus, the vertically integrated network operator has an interest in pursuing a triple play policy whereby subscribers purchase not only television packages, but also internet access and voice telephony services from it and consequently, no longer need to subscribe to different electronic communications networks in order to be able to get all those services. In order to convince its subscribers to purchase all types of services offered, a subscriber will get a better deal if he

subscribes to more of the different network services offered by the network operator. Vertical integration and triple play thus not only benefit network operators, but end users (the consumers) as well.

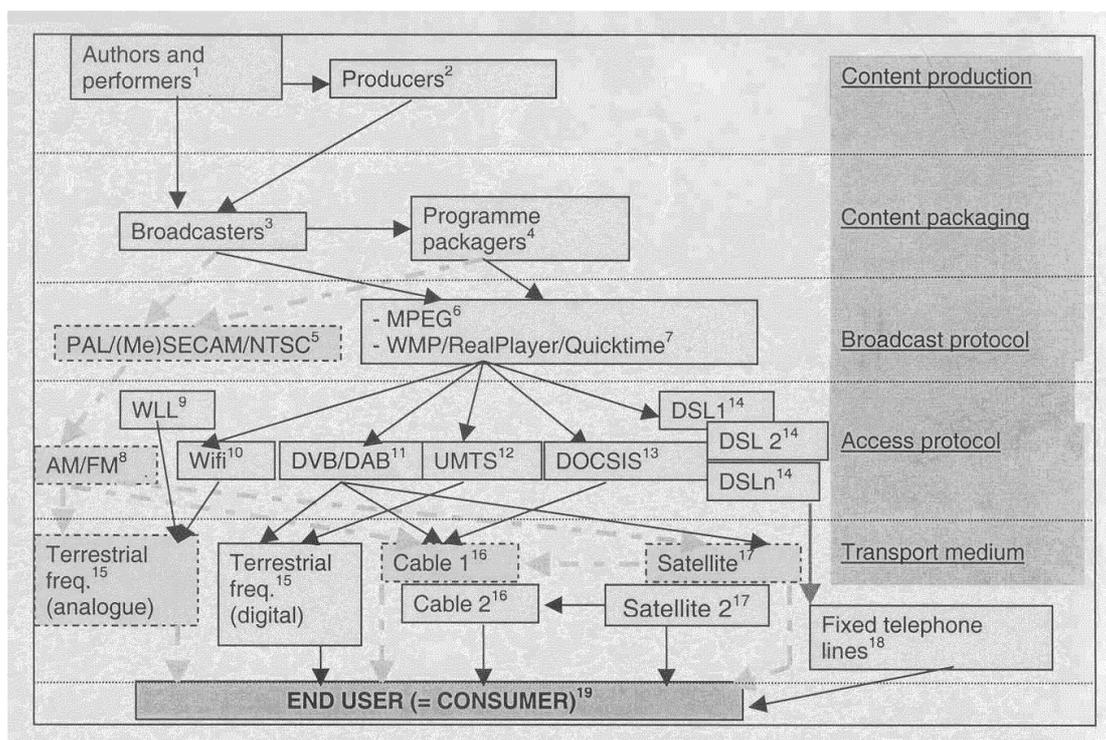
Traditional broadcasting services turn into on-demand services

Traditionally, those who had access to an electronic communications network (terrestrial, broadband cable, satellite, the internet) also had access to all the content services offered on this network.

Technological development has made it possible, however, to encrypt these content services. This means that it has become possible for service providers to decide on a case by case basis who should be granted access to a particular service. Consumers can access the services of their choice by purchasing a decryption key from the service provider(s). The service provider can either be a network operator offering content packages or premium channels to network subscribers or a third party offering content packages or premium channels to subscribers to the network(s) on which the service provider has leased transportation capacity (ie, from whom the service provider has purchased electronic communications services).

As a consequence, in the near future, consumers will have to make more choices than they have been used to. They will, first of all, have to choose the network which offers access to the encrypted services to which they want to subscribe. Secondly, they will need to purchase a key from the service provider offering the content service(s) of their interest.

Schematic overview of the electronic delivery of content services in the 21st century



General

- 1 --- = analogue distribution.
- 2 In order not to unnecessarily complicate the overview, reference is made only to the access protocol. As the relevant access protocol, only the protocol as it is transported by the transport medium concerned is mentioned. In reality, however, there are usually different additional layers (IP; ATM; SDH; etc) as well as 'security protocols' (for rights management and/or access control) are used. Because of the fact that these are not specifically related to the transport medium used, they were ignored in this overview.
- 3 For the same reason, interactive applications were also ignored. An example of such an application is the intervention by end users in live television shows by means of SMS or MMS messages using (digital) terrestrial frequencies as a transport medium (with the use of mobile phones) or using fixed telephone lines.
- 4 Providers of radio and television programme services do not appear to regard the different transport media as substitutes. They rather see them as supplements to each other. This is because they have an interest in disseminating their services as widely as possible using all possible transport media in order to reach the widest possible audience. For programme packagers this is not, at least not yet, the case. Individual programme packagers often use only one particular transport medium. This is probably due to the fact that most packagers of programme services are vertically integrated with an operator of a transport medium, because if they wished, they could ask for access to the conditional access systems which operators of other transport media use to offer digital services of their own (on the basis of art 6 para 1 of the EC Access Directive (Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities, OJEC L 108 , 24/04/2002, p 7–20) and s (b) of Part I of Annex I to the Access Directive).

Specific

- 1 Authors create original works and performers deliver artistic performances. Those works and performances are protected under copyright law.
- 2 With the use of copyright protected works and performances, producers produce *inter alia* entire programmes or parts of programmes for programme service providers. Authors and performers also deliver their creative services directly to programme service providers without the involvement of an external producer. In these cases, the programme service provider also assumes the role of producer.
- 3 With the use of works produced by themselves and works purchased from third parties (external producers), programme service providers assemble a programme service, an activity which, in itself, is also protected under copyright law (International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations (Rome Convention), done at Rome on 26 October 1961) and, in addition, they are the owners of the copyright in the works which they produced themselves. Often, providers of individual programme services grant permission to programme packagers to include their programme service in a package of programme services in order to communicate the programme service to the public in a package with other programme services (of the same programme service provider or of other programme service providers).
- 4 Programme packagers conclude agreements with programme service providers for the communication of the programme service provider's programmes in a package containing different programme services, on a subscription basis to a public of end users (ie consumers). Examples of programme packagers are broadband cable operators in general, but also Canal Digitaal (<http://www.canaldigitaal.nl/>), Digitenne (<http://www.digitenne.nl/>) and KPN (<http://breedbandportal.kpn.com>) in the Netherlands, Canalsatellite (<http://www.canalsatellite.fr/>), TPS (<http://www.tps.fr/>), free.fr (<http://www.free.fr/>) and malignetv in France (<http://www.malignetv.fr/>), Sky in the UK, (<http://www.sky.com/>), T-online in Germany (<http://www.t-online-vision.de/>) and FastWeb in Italy (<http://www.fastweb.it/>).
- 5 After the assembling a programme (by a programme service provider) or the assembling of a package (by a programme packager), one or more broadcast protocols need to be chosen with a view to the dissemination of content services (such as programme services and programme packages).
- 6 MPEG is a technical protocol (a standard) for digital distribution.
- 7 Windows Media Player, RealPlayer and Quicktime are examples of codecs which also enable the digital dissemination of content services.
- 8 Amplitude modulation and frequency modulation are access protocols which are used for the analogue dissemination of content services (television or radio programme services).
- 9 'Wireless Local Loop' is an access protocol on which basis digital content services can be disseminated through the air using terrestrial frequencies and often a proprietary transport protocol.
- 10 'Wifi' is an access protocol on which basis digital content services can be disseminated through the air using terrestrial frequencies and IP as a transport protocol.
- 11 Digital Video Broadcasting (DVB) is also an access protocol on which basis digital content services can be disseminated through the air using terrestrial frequencies. It was especially developed for this purpose, with European support, by the DVB-consortium. This access protocol can be used by different transport media (terrestrial transmitters: DVB-T; satellite: DVB-S; cable: DVB-C; cellular telephones: DVB-H). In addition, there is DVB-IP which provides the technology for the dissemination of content services via the DVB access protocol on the basis of IP. It is also possible

to create a return channel for DVB-T on the basis of the DVB-RT protocol, so that it becomes possible to provide internet access and interactive television services.

- 12 The 'Universal Mobile Telecommunications System' is an access protocol on which basis digital content services can be disseminated through GSM-networks using IP as a transport protocol, but soon also with the use of DVB-T as a transport protocol (the necessary small chip which can be built into cellular phones is currently being developed).
- 13 DOCSIS is an access protocol on which basis digital content services can be disseminated on the basis of the IP transport protocol via broadband cable. In the same way as xDSL protocols have been developed for digital transportation of signals via twisted pair copper wires, DOCSIS has been developed for the transportation of digital signals via broadband cable networks. Nowadays, it is also possible to use 10BaseT Ethernet as an access protocol for individual access points (Ethernet-to-the-Home). This is why this protocol is mentioned separately in the overview. Nevertheless, DOCSIS is still used for the transportation of digital signals through the local loop from the point where individual access points come together and are bundled.
- 14 'Digital Subscriber Line' (DSL) is also an access protocol on which basis digital content services can be disseminated. There are many DSL providers which either use the networks of the incumbent telecom operators or create alternative networks of their own.
- 15 In many cases, radio and television programme services which are disseminated by means of terrestrial transmitters still use an analogue broadcast protocol. Currently, digital content services disseminated via terrestrial transmitters only use the DVB access protocol. However, alternative transmitters are being built for this purpose using either the WLL access protocol or the UMTS access protocol.
- 16 Via broadband cable, content services can be disseminated simultaneously in both analogue (Cable 1) and digital (Cable 2) formats, by means of different access protocols (AM and FM; DVB, DOCSIS and Ethernet-to-the-Home). For this purpose, the cable operator can either use a coaxial cable, fibre or create a hybrid fibre-coax network (the latter is normally the case: the largest part of a broadband cable system is fibre; only the last 200 to 300 metres consists of coaxial cable).
- 17 For the dissemination of programme services via satellite either the analogue AM access protocol is used or the digital DVB(-S) access protocol. Providers of radio and television programme services can either offer their services directly to end users (the consumers), or they can, in addition or instead, use satellite transmission capacity to deliver their programme services to the headends of broadband cable operators or to satellite master antennas. In addition, programme service providers may use satellite transmission capacity to deliver their programme services to a satellite programme packager like, for example, Canal Digitaal. This programme packager packages a number of programme services and offers this package by wireless means, via satellite, on a subscription basis to its subscribers.
- 18 DSL is an access protocol which enables the dissemination of programme services via the fixed telephone network of telecom operators. In a number of European countries this is already done on a commercial basis (see above under point 4).
- 19 Providers of programme services and programme packagers can, if they want, offer their services in different broadcast protocols using different access protocols to many different transport media for dissemination purposes. As soon as the programme service providers and the programme packagers are prepared to do this, the end users (the consumers) will be able to choose between many different transport media for the reception of the content services of his or her interest.

How to define broadcasting services in the new environment?¹⁴

Given all these technological developments and changes in business strategies, the question arises what, in today's world, can still be classified as 'broadcasting' and, consequently, to which service traditional broadcasting regulation would still apply. The next challenge is then to assess whether the justifications for regulatory interference with traditional forms of broadcasting are still valid today.

Current relevant definitions of 'broadcasting' and their regulatory implications

Relevant European definitions

Under the 'Television without Frontiers' Directive¹⁵, each member state of the European Community¹⁶ is obliged to 'ensure that all television broadcasts transmitted by broadcasters under its jurisdiction comply with the rules of the system of law applicable to broadcasts intended for the public in that Member State.'¹⁷ The Directive co-ordinates the content of these rules at the European level.

In art 1 under (a) of the Directive, 'television broadcasting' is defined as:

'... the initial transmission by wire or over the air, including that by satellite, in unencoded or encoded form, of television programmes intended for reception by the public. It includes the communication of programmes between undertakings with a view to their being relayed to the public. It does not include communication services providing items of information or other messages on individual demand such as telecopying, electronic data banks and other similar services.'¹⁸

Article 1 under (b) of the Directive defines a 'Broadcaster' as:

'... the natural or legal person who has editorial responsibility for the composition of schedules of television programmes within the meaning of (a) and who transmits them or has them transmitted by third parties.'¹⁹

What constitutes 'transmission' is not defined by the Directive.

Apart from the above Directive, there is another relevant European legal instrument albeit at the level of the Council of Europe.²⁰ This instrument is an international treaty called the 'European Convention on Transfrontier Television'.²¹

The provisions of this Convention apply to 'any programme service transmitted or retransmitted by entities or by technical means within the jurisdiction of a Party, whether by cable, terrestrial transmitter or satellite, and which can be received, directly or indirectly, in one or more other Parties.'²²

Under the Convention, the notion of 'Broadcaster' is defined as:

'... the natural or legal person who has editorial responsibility for the composition of television programme services for reception by the general public and transmits them or has them transmitted, complete and unchanged, by a third party'.²³

Unlike the 'Television without Frontiers' Directive, the European Convention on Transfrontier Television does define what constitutes a:

'Programme service':

'... all the items within a single service provided by a given broadcaster ...'²⁴

and a:

'transmission', namely:

'... the initial emission by terrestrial transmitter, by cable, or by satellite of whatever nature, in encoded or unencoded form, of television programme services for reception by the general public. It does not include communication services operating on individual demand.'²⁵

This definition, however, is not very helpful since it is similar to the above definition of 'television broadcasting' under the Directive.

In addition, the Convention defines what constitutes a 'retransmission', namely:

'... the fact of receiving and simultaneously transmitting, irrespective of the technical means employed, complete and unchanged television programme services, or important parts of such services, transmitted by broadcasters for reception by the general public.'²⁶

From the definitions of 'television broadcasting' under the Directive and 'transmission' under the Convention, it becomes clear that, at the European level, broadcasting services should be distinguished from 'communication services operating on individual demand', ie, 'communication services providing items of information or other messages on individual demand such as telecopying, electronic data banks and other similar services.'²⁷

When the European Convention on Transfrontier Television was amended in 1998, the Explanatory Report to the original Convention was also amended and supplemented. The amended Explanatory Report²⁸ stipulates that a large majority of the European States which are Parties to the Convention were against the inclusion of 'communication services operating on individual demand', for the following reasons:

- the Convention's underlying philosophy and assumptions were inappropriate for dealing with these services;
- the rapidity of technological change, including the evolution of Internet services;
- communication services operating on individual demand were still at the embryonic stage of development;
- the global dimensions of the issues raised.

Despite of this, the Committee of Ministers of the Council of Europe when adopting the Convention and its amending Protocol were of the opinion that 'communication services operating on individual demand' raised 'con-

tent problems similar to those which needed to be addressed in the context of traditional programme services, and in particular violence, racism, pornography and other matters of public interest.²⁹

According to a Political Declaration which was adopted at the 5th European Ministerial Conference on Mass Media Policy (Thessaloniki, 1997), 'the introduction of new technologies and new communications and information services, in particular online services, as a result of digitisation and the prospects for progressive disappearance of technological boundaries between broadcasting, telecommunications and informatics, will lead to the development of the Information Society, which may require a new approach concerning the regulation of the media sector.'³⁰

In 1998, 'Communication services operating on individual demand' were brought under another European notion, that of 'information society services'.

What constitutes an 'information society service'? Again, a definition of this type of services can be found in legal instruments at both, the level of the European Union (an EC Directive³¹) and the level of the Council of Europe (a European Convention³²). This time, however, the definitions match. An 'Information Society Service' is 'any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services.'

The EC Directive (often referred to as the 'Transparency Directive' or the 'Notification Directive') specifies that, for the purposes of this definition:

- 'at a distance' means that the service is provided without the parties being simultaneously present;
- 'by electronic means' means that the service is sent initially and received at its destination by means of electronic equipment for the processing (including digital compression) and storage of data, and entirely transmitted, conveyed and received by wire, by radio, by optical means or by other electromagnetic means; and
- 'at the individual request of a recipient of services' means that the service is provided through the transmission of data on individual request.

Both the Directive and the Convention stipulate that the provisions shall not apply to:

- radio broadcasting services; and
- television broadcasting services covered by the 'Television without Frontiers' Directive or the European Convention on Transfrontier Television respectively.

As explained above, the definition of 'television broadcasting' in the 'Television without Frontiers' Directive stipulates that it 'does not include communication services providing items of information or other messages on individual demand such as telecopying, electronic data banks and other similar services'; thus, it is still not very clear what exactly constitutes an 'information society service' as opposed to a 'television broadcasting service'.

In addition, however, the Notification Directive has an Annex containing an *indicative* list of services *not* covered by the definition of 'Information Society Services'. On this list are, *inter alia*, services not supplied 'at the

individual request of a recipient of services', such as:

'Services provided by transmitting data without individual demand for simultaneous reception by an unlimited number of individual receivers (point to multipoint transmission):

- (a) television broadcasting services (including near-video on-demand services), covered by the 'Television without Frontiers' Directive;
- (b) radio broadcasting services;
- (c) (televised) teletext.'

All in all, however, the exact distinction between a 'television broadcasting service' and an 'information society service' remains unclear.

Recently, a court in the Netherlands also came to the conclusion that the definitions are unclear. A request for a preliminary ruling on a number of questions was referred to the European Court of Justice by the *Raad van State* (the highest administrative law court) of the Netherlands. The *Raad van State* raised the questions in a case in which the provider of a video-on-demand service (*Filmtime*), Mediakabel, challenged a decision by the Media Authority (*Commissariaat voor de Media*), which was upheld by a lower court. The Media Authority had decided that, from a technical point of view, *Filmtime* constituted a *near* video-on-demand service and that consequently, unlike *real* video-on-demand services, *Filmtime* as a *near* video-on-demand service was to be considered as a television broadcasting services. As a result, the Media Act would apply to *Filmtime*, which meant that Mediakabel had to apply for a broadcasting licence and that the provisions of the 'Television without Frontiers' Directive (notably the European quota and independent production quota provisions)³³ as implemented into Dutch law by the Media Act, would apply to Mediakabel's *Filmtime* service.³⁴

For Mediakabel, the classification of its *Filmtime* service is highly relevant, because if it would have to fulfil the European quota requirements, it would be forced to invest heavily in films for which it expects little or no demand from members of its target group and which would therefore not lead to a return on investment.

Therefore, Mediakabel argued that its *Filmtime* service should not be classified as a television broadcasting service at all for reason that it was a service similar to the rental services offered by a video store. According to Mediakabel, its *Filmtime* service was to be classified under European law as an 'Information Society Service'.

The nature of the service is as follows. Subscribers to digital cable can order a film from the *Filmtime* catalogue by sending an individual request to the service provider. This request can either be sent through the subscriber's remote control or by telephone. In the request, the client indicates which film (s)he wants to watch and at what time. Consequently, the client is charged a fee for the film (s)he wants to watch at the time chosen by him/her. Upon reception of the amount due, Mediakabel makes the film available to the individual client by sending him/her an individual decryption key.

Thus, technically speaking, the *Filmtime* service consists of two separate signals:

- (ii) the encrypted signal containing films from the Filmtime catalogue in encrypted format, which is fed into the cable network(s) at regular time intervals (typically several times per hour). None of the cable subscribers can actually receive the signal content (because of its encryption) and thus it cannot be regarded as a television broadcasting activity: it is neither 'television broadcasting' within the meaning of the 'Television without Frontiers' Directive nor a 'programme service' within the meaning of the European Convention on Transfrontier Television;
- (iii) the signal by which a key, determined on an individual basis, is sent to an individual subscriber upon the subscriber's individual request. This key can be used to decypher and watch a specific film on an individual basis at a specified time. It might be possible to uphold that sending a key, determined on an individual basis, upon the individual request by an individual subscriber is an interactive service and not a 'programme service'. Sending a key, determined on an individual basis entails that a film is available only upon individual request and therefore does not fall under the definitions of 'television broadcasting' within the meaning of the 'Television without Frontiers' Directive or a 'programme service' within the meaning of the European Convention on Transfrontier Television.

Technically, it is quite possible to build the service in such a way that a film chosen by an individual subscriber from the Filmtime library is sent via the cable network exclusively to that particular individual subscriber. It is generally recognised that if this would be done, it would constitute a video-on-demand service which qualifies as an 'information society service' and not as 'television broadcasting' or a 'programme service'. However, from the point of view of efficient use of network capacity it would not be very wise to build the service in this way. It would be extremely costly and inefficient from an economic point of view to do so. Due to the specific technical architecture of a cable network, it is much more efficient to circulate available films in encrypted format on the cable network at regular intervals and not to start sending the film to an individual subscriber at the moment an individual request is received. When films are already circulating on the network, it suffices, once an individual request is received, to send an individual key to decypher one of the films which are already circulating on the cable network.

The way in which the service is built technically seems to be irrelevant to subscribers. The perception is the same: in both cases they can order a specific film on a specific date at a specified time.

The question could even be raised as to whether not all services offered by content packagers in a digital environment should be classified as 'information society services'. In a converging environment television programme services and other content services may circulate on different transportation media (ie, on different electronic communications networks) in an encrypted format, waiting for a subscriber to purchase an individual key (eg, a smartcard) with which s/he can decypher the content services of his or her choice. Alternatively, when compression technology advances and network capacities increase even further, it will become possible for the providers of these services to

only start using the services of a transport medium at the moment an individual request from a subscriber comes in. Once an individual request is received, the television programme service or other content service will be streamed on the basis of IPv6 to the subscriber concerned.

In both cases, all content services are made available to the public, but they can only be 'consumed' after the purchasing of an individual electronic key. In this situation, consumers choice would be maximal.

However, the realisation of this situation is not solely dependent on technological development. The business models of private commercial broadcasters do not foresee in a situation whereby an individual consumer can choose whether or not to purchase access to the programmes of these broadcasters. The business models of private commercial television broadcasters are based on the selling of the widest possible audiences to advertisers. Each percentage decrease in audience reach may cost them millions of euros of advertising revenues.

Also, governments would most probably not like to see that their citizens can decide on an individual basis whether or not they want to have access to the programmes of the national public service broadcasters.

In both cases, the solution is relatively simple. The private commercial broadcasters could negotiate with the programme packagers who issue smartcards, that their programmes will automatically be available for all those who purchase a smartcard for digital reception, no matter to what other (paid) service packages they would choose to subscribe. To guarantee that the programmes of the public service broadcasters remain available to everyone in a digital environment, governments could determine that their programmes should also be automatically available for all those who purchase a smartcard for digital reception.

Perhaps one should conclude that in the new digital and converging environment, traditional broadcasting regulation should only apply to content services which are disseminated indiscriminately to everyone, while the rules relating to information society services, which are much less strict, should apply to all content services for which the end user needs to purchase a key and to establish a contractual relationship with the provider of the content service of his choice.

The Notification Directive referred to above, is not the only Directive dealing with 'information society services'. It is complemented by another EC Directive: the e-commerce Directive.³⁵ This Directive 'seeks to contribute to the proper functioning of the internal market by ensuring the free movement of information society services between the member states.'³⁶ To achieve these objectives, it aims at approximating certain national provisions of the member states on information society services relating to the internal market, the establishment of service providers, commercial communications, electronic contracts, the liability of intermediaries, codes of conduct, out-of-court dispute settlements, court actions and co-operation between member states.

Paragraph 1 of art 12 of the Directive stipulates that:

'Where an information society service is provided that consists of the transmission in a communication network of information provided by a recipient of the service, or the provision of access to a communication network, member states shall

ensure that the service provider is not liable for the information transmitted, on condition that the provider:

- (a) does not initiate the transmission;
- (b) does not select the receiver of the transmission; and
- (c) does not select or modify the information contained in the transmission.'

According to the 16th recital of the Directive on the harmonisation of certain aspects of copyright and related rights in the information society:³⁷

'Liability for activities in the network environment concerns not only copyright and related rights but also other areas, such as defamation, misleading advertising, or infringement of trademarks, and is addressed horizontally in Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the internal market ('Directive on electronic commerce'), which clarifies and harmonises various legal issues relating to information society services including electronic commerce.'

Thus, from the point of view of liability for content services transported over his network, it becomes highly relevant for a network operator to know whether the services which he transports over his network are to be classified as 'information society services' or as 'television broadcasting services'. For the first type of services he cannot be held liable, while he can be held liable for the latter type of services.

Relevant national definitions

Apart from the definitions in European legal instruments, other relevant definitions of what constitutes a broadcasting service can be found at the national level in European states.³⁸

- Germany

Germany, for example, distinguishes between *Rundfunk* (Broadcasting services), *Mediendienste* (Media services) and *Teledienste* (Teleservices).

Rundfunk (Broadcasting services) is defined as:

'the provision and transmission for the general public of presentations of all kinds of speech, sound and picture, using electromagnetic oscillations without junction lines or along or by means of a conductor. The definition includes presentations which are transmitted in encoded form or can be received for a special payment. This Agreement is not applicable to Media Services as defined in s 2 of the Interstate Agreement on Media Services...'³⁹

while *Mediendienste* (Media services) referred to in the above definition of 'Broadcasting services' are defined

as distribution and on-demand services with emphasis on editorial arrangement and as having certain relevance for the public opinion-making process (in contradistinction to personal opinion-making in private, interactive, information services, ie, teleservices).⁴⁰

Teledienste (Teleservices) are defined as individual (ie point-to-point) communication services without any editorial arrangement (ie no programme schedule (in the broadcasting sense of the term) exists). Teleservices are not subject to any licensing or registration obligations. Typically, such services would include Internet access, interactive database services, online banking and video-on-demand. They would not, however, include broadcasting or telecommunications services, or even broadcasting-like services.⁴¹

- Ireland

What constitutes a 'Broadcaster' in Ireland, is:

'a person who supplies a compilation of programme material for the purpose of its being transmitted or relayed as a broadcasting service (whether that person transmits or relays that material as such a service or not)'.⁴²

A 'Broadcasting service' is defined as:

'a service which comprises a compilation of programme material of any description and which is transmitted or relayed by means of wireless telegraphy, a cable or MMD system or a satellite device, directly or indirectly for reception by the general public, whether that material is actually received or not, but does not include such a service that is provided by means of the Internet'.⁴³

- The Netherlands

In the Media Act of the Netherlands, 'Broadcasting' is defined as:

'an electronic media service engaged in the provision and broadcasting of programmes',⁴⁴

whilst 'Television broadcasting' is defined as:

'an electronic media service engaged in the provision and broadcasting of television programmes'.⁴⁵

In addition, the Media Act of the Netherlands also defines the following notions:

'Programme service':

'an electronic product with visual or audio content intended to 'be broadcast to and to be received by the general public or a part thereof, with the exception of data services, services available only on individual demand, and other interactive services.'⁴⁶

'Programme'

'a clearly distinct and as such recognisable part of a

programme service.⁴⁷

'Television programme':

'a programme service with visual content, with or without audio content.'⁴⁸

'programme service for general purposes':

'a programme service intended for reception by the general public.'⁴⁹

'programme service for special broadcasting purposes':

'a programme service broadcast in encrypted format and intended for reception by members of the general public who have concluded an agreement to receive the programme service in question with the broadcaster which provides the programme service.'⁵⁰

'Provision of a programme service':

'a broadcasting service, consisting of the preparation, compilation and carrying out of a programme service'.⁵¹

and,

'Programme service transmission':

'a broadcasting service, consisting of the encrypted or unencrypted distribution of a programme service to the general public or a part thereof by means of a broadcasting transmitter or broadcasting network.'⁵²

- *The United Kingdom*

The UK is the only European state which has already made an effort to adapt its legislation to the new economic and technological realities as described above in para 1 and 2. It follows closely the distinctions made by the European regulators in their new regulatory framework for electronic communications and the technology neutral approach of this framework.⁵³ Therefore, it distinguishes between the notions of 'electronic communications networks', 'electronic communications services' and 'content services'.⁵⁴

What constitutes a 'content service' does not follow from the new European regulatory framework; the framework merely excludes 'content services' from its scope. The UK legislator determined that 'a 'content service' means so much of any service as consists in one or both of the following:

- (a) the provision of material with a view to its being comprised in signals conveyed by means of an electronic communications network;
- (b) the exercise of editorial control over the content of signals conveyed by means of such a network.⁵⁵

According to the Act, the conveyance of signals includes, in this regard, 'references to the transmission or routing of signals of parts of signals and to the broadcasting of signals for general reception.'⁵⁶

'Signals' include, according to the UK legislator:⁵⁷

(a) anything comprising speech, music, sounds, visual images or communications or data of any description; and

(b) signals serving for the impartation of anything between persons, between a person and a thing or between things, or for the actuation or control of apparatus.'

Regrettably, however, the legislator did not go one step beyond and clarify what is the role of television broadcasting versus information society services in this new regulatory environment.

Definitions – disparity – uncertainty – liability

From the above the conclusion must be drawn that despite attempts to harmonise certain key definitions of relevant services at the European level, the EU states have maintained or strengthened their national definitions. The result of this is that it has become uncertain to which services the rules of the 'Television without Frontiers' Directive will be applied and to which services the rules of the e-commerce Directive, notably the liability exemption, will be applied in the different states of the European Union.

A provider of a video-on-demand service via broadband cable may be classified as a broadcaster in member state A, while in member state B that same service provider may be classified as a provider of an information society service. Moreover, a provider of a video-on-demand service may be classified either as a broadcaster or as provider of an information society service, depending on the broadcast and/or access protocol used. Which set of rules will apply if the service provider distributes the same service simultaneously on the basis of several broadcast and/or access protocols?

It becomes clear that the lack of clear and harmonised European definitions of the different regulated services may hamper the functioning of the internal market. Current regulation does not respond adequately to economic realities such as new forms of exploitation due to technological and economic convergence. Consequently, the existing European and national sets of rules applicable to television broadcasting services and information society services respectively need to be evaluated in the light of the new environment.

The rationales behind the regulation of broadcasting services

Why do states want to regulate broadcasting services so badly? Why do they accept less strict regulations for information society services such as communication services operating on individual demand?

In his 1993 comparative overview of broadcasting regulation in different European States, Eric Barendt identifies four different rationales behind broadcasting policies:⁵⁸

- *Airwaves are a public resource;*

Barendt comes to the conclusion that this is not a valid justification for broadcasting regulation:

'The case is unconvincing, for it infers that it is right for government to regulate broadcasting from the fact that it has the opportunity to do this.'⁵⁹

Although he recognizes that, where terrestrial frequencies are a scarce good, some sort of co-ordination of spectrum allocation may have to take place by a government or an independent licensing authority, but such allocation could be based on a competitive tender and does not need to involve programme requirements.

- ***Frequency scarcity;***

Barendt identifies three different types of scarcity: actual scarcity, artificial scarcity and economic scarcity. Actual scarcity is the numerical scarcity of frequencies, while artificial scarcity is created by governments which allocate different parts of the available frequency spectrum to different services such as the military, emergency services and broadcasting services. In both cases he argues, referring to what is contended by economic liberals, that:

'if broadcasting licences were sold to the highest bidders (as happened in Britain in 1991), and they were then free to sell them, there would probably be not an excess of those wishing to broadcast over the supply of frequencies.'⁶⁰

The argument of economic scarcity implies that it is so expensive to start up a broadcasting service that many are unable to afford it and therefore, the supply is inadequate. Barendt, however, argues that:

'(...) it is now probably as difficult to finance a new newspaper as it is a private channel, if not more so. (...) Yet anybody rich enough to afford the former is free to publish what he wants, while there are (in most countries) limits on what the latter may broadcast.'⁶¹

Moreover, in the past two decades, the number of available terrestrial frequencies for broadcasting have multiplied. In addition, cable and satellite distribution have greatly enhanced the number of programme services which have become available to consumers. Finally, new transportation techniques (digital instead of analogue transportation; compression) have even further enhanced the availability of broadcasting services.

- ***The pervasiveness of broadcast media;***

Barendt's counter argument for this type of justification of broadcasting policies is as follows:

'It cannot be right to subject more persuasive types of speech to greater restraints than those imposed on less effective varieties.'

- ***To remedy the deficiencies of an unregulated press.***

According to Barendt, this justification for broadcasting policies was developed by the American scholar Lee

Bollinger⁶², who argued that:

'society is entitled to remedy the deficiencies of an unregulated press with a regulated broadcasting system.'⁶³

Barendt does not agree with Bollinger, as he writes that:

'If regulation of the press is always wrong (and perhaps unconstitutional) and if there is no significant difference between its position and that of the broadcast media, it follows that the latter should also be wholly unregulated.'⁶⁴

Thus, Barendt has valid arguments for overthrowing the four justifications used by governments for their broadcasting policies. However, as Barendt recognizes, the justification arguments mentioned by him are not exhaustive.

Other arguments to justify broadcasting policies have been put forward by the European Court of Human Rights, by national experts appointed by their national governments to one of the official intergovernmental committees of the Council of Europe, and by the US Supreme Court. In its decision in the *Lentia* case⁶⁵, the European Court of Human Rights held (referring to earlier case law) that:

'States are permitted to regulate by a licensing system the way in which *broadcasting* is organised within their territories, particularly in its technical aspects.'

In addition, however, the court held that:

'Technical aspects are undeniably important, but the grant or refusal of a licence may also be made conditional on other considerations, including such matters as the nature and objectives of a proposed station, its potential audience at national, regional or local level, the rights and needs of a specific audience and the obligations deriving from international legal instruments.'⁶⁶

The weakness of the judgement is that it does not specify what constitutes 'broadcasting'. In fact, this is also a weakness of art 10 of the European Convention for the protection of human rights and fundamental freedoms on which the judgement was based. The first paragraph of art 10 of the Convention protects everyone's freedom of expression and everyone's freedom to receive and impart information and ideas without interference by public authority and regardless of frontiers. The third sentence of the first paragraph, however, stipulates that the states which are Parties to the Convention have the right to require the licensing of *broadcasters*.

The *Lentia* decision by the European Court of Human Rights can only be applied to 'broadcasters'. This means that if a state wants to set rules regarding the nature and objectives of a proposed station, its potential audience at national, regional or local level, the rights and needs of a specific audience or in order to fulfil the obligations deriving from international legal instruments, it should first of all be established whether the rules set target 'broadcasters'. As set out above, in the present age of convergence, it

is not at all obvious what constitutes a broadcasting service and what does not.

If a State would set such rules for service providers of which it would be established later that they cannot be classified as 'broadcasters', the state may have difficulties in justifying its interference with the freedom rights of this service provider as protected by the first paragraph of art 10 of the Convention. For the justification of the interference, the State would have to invoke arguments based on para 2 of art 10. Justifications for interference on the basis of art 10, para 2 almost always come down to the question whether it was necessary in a democratic society to interfere. To answer this question, the European Court of Human Rights leaves a certain margin of appreciation to the individual states which are Parties to the Convention, but it will assess marginally whether this margin of appreciation was not overstepped.

The questions which need to be answered in this respect are:

- is the objective aimed at a legitimate one?
- was the interference as such capable of reaching the objective aimed at?⁶⁷
- were alternative, less far-reaching measures available to reach the objective aimed at (proportionality requirement).

The Council of Europe's Advisory Panel to its Steering Committee on the Mass Media (CDMM) on questions of media concentrations, pluralism and diversity put forward additional justifications for broadcasting policies:⁶⁸

- to promote diversity of sources;
- to avoid uniformity in the information supply; 'Uniformity occurs when it is impossible to check information using other sources.'⁶⁹
- to promote diversity of content;
- to protect and promote minority cultures;

'The ability of the media to reflect the cultural diversity' in Europe.

'Freedom of information implies that citizens will have the possibility to access a variety of information, primarily different opinions and ideas, but in a wider context also a variety of cultural aspects and expressions. Culture in a broad sense influences society in subtle ways, building the basis on which we form our opinions. Uniformity in the media strengthens the tendency to conformity and weakens the ability to assess other perspectives and alternative opinions. Europe has the advantage of having many cultures. The reflection of this cultural diversity in the media strengthens the sense of European identity and the citizen's ability for democratic participation.'⁷⁰

'... culture and cultural expressions transcend the notion of being a merchandise, and (...) cultural diversity contributes profoundly to European identity and democracy.'⁷¹

- To avoid that a single or few companies control all opinion-forming media and the media culture within

a given country;⁷²

- To protect public service broadcasters.

'... public service broadcasters should have a visible and easily accessible presence on as many delivery platforms and navigations systems as possible.'⁷³

Traditionally, Europe has a system of public service broadcasters whose public service remit is to cater for all groupings in society (social, political, religious, etc) and to ensure that their opinions are adequately represented within the public broadcasting system as a whole.

These are all possible justifications for broadcasting policies of which it remains to be seen whether and to what extent they can be upheld in the framework of the right to freedom of expression and the right to receive and impart information as protected under art 10 of the European Convention for the protection of human rights and fundamental freedoms. Again it will first of all be necessary to establish whether the service provider who is targeted by the rules is a 'broadcaster' from whom a licence can be required. If it is established that the service provider in question is indeed a broadcaster, then it needs to be assessed whether the justifications are acceptable for the European Court of Human Rights on the basis of the criteria which it developed in the *Lentia* case. If the service provider who is targeted by the rules eventually turns out not to be a 'broadcaster', the justifications for broadcasting policies developed by the Advisory Panel will have to be assessed by national courts and, eventually, by the European Court of Human Rights on the basis of the criteria to be found in para 2 of art 10 of the European Convention for the protection of human rights and fundamental freedoms.⁷⁴ It will have to be determined whether it is really 'necessary in a democratic society' for the authorities to interfere with the service providers' freedom rights in the way that they did.

The US Supreme Court⁷⁵ has accepted that the government has the right to pursue broadcasting policies in order to mitigate negative effects of vertical integration for reason that vertically integrated companies tend to favour their own affiliated content providers; and to mitigate negative effects of horizontal integration for reason that such integration results in greater barriers to entry for newcomers. Indeed it may be possible to impose restrictions on broadcasters and/or providers of information society services. In Europe, this would, however, usually be done on the basis of an assessment by the Competition Authorities on the basis of general competition law. General competition law in Europe prohibits cartel agreements and concerted practices and prohibits the abuse of a dominant position.⁷⁶ In addition, there is a merger control procedure.⁷⁷

Moreover, as already referred to above⁷⁸, Europe has developed in recent years a new regulatory framework which applies equally to all electronic communications networks and services.⁷⁹ Under this new regulatory framework, national regulatory authorities (NRAs) have been established in all EU states. These NRAs can impose *ex ante* obligations on operators of electronic communications networks or suppliers of electronic communications services (ie, electronic transportation services). Those companies which deploy a conditional access system are obliged to give access to third

parties who request such access. The NRAs are under the obligation to analyse the structure of a number of relevant product markets identified by the European Commission. They need to establish the geographical scope of those markets and whether one of the players on the relevant market has significant market power (SMP). If the latter is the case, a whole set of possible remedies is available in the form of *ex ante* obligations to be imposed on the SMP operator. Although the regulatory framework does not apply to providers of content services, access obligations in particular may have an impact on network operators whose business is integrated with the business of content services.

Other possible justifications for broadcasting policies may be, as seen in para 3.1.1 above, 'content problems', in particular violence, racism, pornography and other matters of public interest. However, such 'content problems' are not broadcast specific. They would require a horizontal, ie technology neutral, approach.

In addition, however, as also seen in parag 3.1.1 above, the Explanatory Report to the European Convention on Transfrontier Television puts forward arguments for not regulating services which meet the following characteristics:

- where it is established that the underlying philosophy and assumptions are inappropriate for dealing with such services;
- where technology changes rapidly;
- where services are still at the embryonic stage of development;
- where the issues raised have global dimensions.

The conclusion must be that the traditional rationales for broadcasting policies are no longer valid and that new rationales may be hard to justify in the light of convergence. It may be easier to justify the new rationales if the rules target 'broadcasters' only. This is due to the wording of art 10 of the European Convention for the protection of human rights and fundamental freedoms as interpreted by the European Court of Human Rights in the *Lentia* case. However, as explained above, it is already a major challenge today, to establish what constitutes 'broadcasting' in the age of convergence. This is especially a challenge where the Committee of Ministers of the Council of Europe has already indicated in the Explanatory Report to the European Convention on Transfrontier Television that services which are still at the embryonic stage, in regard to which technology changes rapidly etc, should not be regulated.

Is the end of the broadcasting era near? Do we still need broadcasting regulation?

As explained above, there is definitely a shift from traditional broadcasting services disseminated to everyone indiscriminately to television programme services which are made available upon individual demand through the purchasing of a decryption key.

The result of technological convergence is that electronic services which were traditionally confined to transport media (electronic communications networks) which were specifically designed for the service in question can now be

transported over different media (networks). Broadcasters package television productions in a programme service; specialised packagers of content services package different television programmes. Depending on the broadcast and access protocols which they choose to use, they can offer their programme services or packages of programme services to end users (consumers) over all sorts of wire-based or wireless electronic communications networks (transport media).

In the new converging environment most services will be encrypted either for reasons of copyright protection or in order to determine the conditions on which basis the provider is willing to provide access to his service(s) for individual consumers.

The new environment will offer great advantages for consumers: they will not only be able to choose on an individual basis which content services they do and which ones they don't want to have access to (and pay for); in addition, they will be able to choose via which network they want to receive the service(s) of their choice (broadband cable; satellite; telephone line; Wireless Local Loop; etc).

The new environment will pose challenges to traditional broadcasters (public and private) who are used to disseminating their programmes to everyone indiscriminately. They will either have to change their business models or they will have to find ways to ensure that their services remain accessible for everyone, also in a digital environment.

In the converging environment, competition will arise between network operators. Their interest will be to bind as many subscribers as possible to their networks. Therefore, soon all network operators who are going to be in competition with each other will start making exclusive deals with content service providers. This will greatly benefit content producers and packagers.

Competition, however, has to be fair. Parties who are going to compete with each other in a particular market should be subject to the same set of rules. It should be the mission of the European and of national legislators to create a level playing field fit to serve the new environment. In concrete terms, this means that the rules on liability should be the same for all service providers who perform the same activities. An internet service provider cannot be held liable for a third party's content service which he transports over the internet to end users, as long as he

- does not initiate the transmission;
- does not select the receiver of the transmission; and
- does not select or modify the information contained in the transmission.

Why should this not apply in the same way to cable operators and other network operators if these conditions are met?

In addition, why should cable operators be obliged to obtain permission for the retransmission of programme services which are available free to air for everybody via satellite, while other content packagers (such as, for example, Canal Digitaal) do not seem to have this obligation?

Due to the ongoing convergence as described in this article, the present definitions at the European and national levels of what constitutes 'broadcasting' do no longer make sense. It is high time for a policy debate as to which rules

should be applied to which services and why. Is it desirable to apply the European quota rules to services operating on individual demand (even if this stands in the way of the development of a new on demand service)? Should the rules against violence, racism, pornography and the rules to protect other matters of public interest of the 'Television without Frontiers' Directive and the European Convention on Transfrontier Television which currently only apply to television broadcasters, perhaps apply to all types of content services on a technology neutral basis? What are the rationales behind regulating broadcasting services in one way and other, similar content services in another way?

The different definitions at the level of the member states and the lack of clarity in the European definitions as to what makes a broadcasting different from an information society service, in particular in a converging environment, lead to legal uncertainty. At times, it may hamper invest-

ment (as illustrated above by the *Filmtime* case) and it frustrates the functioning of the internal market in Europe. Thus, a harmonisation of definitions and clarification of which rules apply to which services is the bare minimum of what the content packaging and distribution industry should expect from the European organs. It would, however, be preferable if the whole current set of rules affecting investment in these sectors directly or indirectly, would be evaluated and re-formulated in the light of the new requirements of the converging environment. This also means, perhaps even first and foremost: re-thinking the rationales behind the regulation of content services, taking into account what the drafters of the European Convention on Transfrontier Television had already realised, namely, to be careful not to regulate emerging markets in such a way that it would hamper their development.

Ad Van Loon

Notes

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1. Job Wehrmeijer, Manager Technology and Innovation at VECAI kindly assisted in the drafting of this section.
2. In this article, traditional broadcasting services are consistently referred to as radio and television programme services. The reason for this is that the very notion of 'broadcasting service' as it is currently understood, is called into question in the framework of this article.
3. <http://www.dvb.org/>
4. A system whereby the backbone of a broadband cable system is constructed using fibre optic cable where in the local loop coaxial cable is utilised. In the Netherlands, for example, only the last 200 to 300 metres of the broadband cable systems consists of coaxial cable; the rest of the systems is based on fibre optic cable.
5. As a result of these technological developments, there is no imminent need to also replace the local coaxial cable loop with fibre optic cable. As long as technology makes it possible to upgrade coaxial cable so that it can at all times deliver the capacities demanded, investments in fibre optic cable for the local loop can be postponed until it becomes commercially more viable to make these investments.
6. Whereby the existing coaxial cable system is equipped with an ethernet layer (see: http://www.teleste.com/index.phtml?page_id=1216&navi_id=1066& and http://www.teleste.com/index.phtml?page_id=1103&navi_id=1103&).
7. Eutelsat offers such a service to broadband cable operators under the name 'Vis A Vision'.
8. <http://www.canaldigital.nl/>
8. <http://www.tps.fr>
10. http://www.pennnet.com/Articles/Article_Display.cfm?Section=OnlineArticles&SubSection=Display&PUBLICATION_ID=13&ARTICLE_ID=186696.
11. <http://www.t-online-vision.de>.
12. <http://www.infosyncworld.com/news/n/2784.html>; <http://www.3g.co.uk/PR/December2002/4564.htm>; <http://www.strategyanalytics.com/press/PR00097.htm>.
13. <http://www.iec.org/online/tutorials/wll/>; <http://www.sss-mag.com/wll.html>.
14. See also: McGonagle, T; 'Does the Existing Regulatory Framework for Television Apply to the New Media?', in: *IRIS plus*,
15. A Directive is one of the legal instruments of the European Community Once a Directive is adopted, all member states have to transpose its provisions into their national legislation.
16. The European Union is not an organisation but rather an international legal framework in which 25 European States work together. Part of this framework is a supranational organisation with legal personality

and exclusive competences of its own, called the European Community. The European Community can bind its member states through legislation. This legislation takes the form of Directives. Once a Directive is adopted, all 25 member states are under the obligation to transpose the provisions of the Directive into their national laws.

17. Article 2, para 1 Council Directive (89/552/EEC) of 3 October 1989 on the coordination of certain provisions laid down by law, regulation or administrative action in member states concerning the pursuit of television broadcasting activities, *OJEC* 17.10.1989 No L 298: 23–30, as amended by Directive 97/36/EC of the European Parliament and of the Council of 19 June 1997, *OJEC* 30.07.1997 No L 202: 60–70.
18. Article 1(a).
19. Article 1(b).
20. The Council of Europe is an intergovernmental organisation of which all 45 European states are members. Within the framework of this organisation states negotiate international treaties (called 'European Conventions') which eventually bind the States who choose to become Parties to a Convention which has been adopted by the Committee of Ministers of the Council of Europe. The Committee of Ministers may also adopt Recommendations to the member states.
21. European Convention on Transfrontier Television, CETS No 132 and Protocol amending the European Convention on Transfrontier Television, CETS No. 171.
22. A 'Party' is a member state of the Council of Europe which ratified the Convention.
23. Article 2(c).
24. Article 2(d).
25. Article 2(a).
26. Article 2(b).
27. Article 1 under (a) Council Directive 89/552/EEC of 3 October 1989 on the coordination of certain provisions laid down by Law, Regulation or Administrative Action in member states concerning the pursuit of television broadcasting activities, *OJEC* No L 298 , 17/10/1989, p 23–30 as amended by Directive 97/36/EC of the European Parliament and of the Council of 30 June 1997 *OJEC* No. L 202 , 30/07/1997 p 60–71.
28. Explanatory Report as amended by the provisions of the Protocol amending the European Convention on Transfrontier Television (CETS No 171) which entered into force on 1 March 2002 para: 41–47.
29. Para 45 of the Explanatory Report to the European Convention on Transfrontier Television as amended by the provisions of the Protocol (ETS No 171), which entered into force on 1 March 2002.
30. Id. Para 47.
31. *Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations*, *OJEC* 21.07.1998 No L 204: 37–48; Directive 98/48/EC of the European Parliament and of the Council

- of 20 July 1998 amending Directive 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations, *OJEC* 05.08.1998 No L 217: 18–26.
32. Convention on Information and Legal Co-operation concerning 'Information Society Services', CETS No. 180.
 33. Council Directive 89/552/EEC of 3 October 1989 on the coordination of certain provisions laid down by Law, Regulation or Administrative Action in member states concerning the pursuit of television broadcasting activities, *OJEC* No L 298 , 17/10/1989, p 23–30 as amended by Directive 97/36/EC of the European Parliament and of the Council of 30 June 1997 *OJEC* No. L 202 , 30/07/1997 p 60–71:
Article 4, para 1
'Member states shall ensure where practicable and by appropriate means, that broadcasters reserve for European works, within the meaning of art 6, a majority proportion of their transmission time, excluding the time appointed to news, sports events, games, advertising, teletext services and teleshopping. This proportion, having regard to the broadcaster's informational, educational, cultural and entertainment responsibilities to its viewing public, should be achieved progressively, on the basis of suitable criteria.
Article 5
'Member states shall ensure, where practicable and by appropriate means, that broadcasters reserve at least 10 % of their transmission time, excluding the time appointed to news, sports events, games, advertising, teletext services and teleshopping, or alternately, at the discretion of the Member State, at least 10 per cent of their programming budget, for European works created by producers who are independent of broadcasters. This proportion, having regard to broadcasters' informational, educational, cultural and entertainment responsibilities to its viewing public, should be achieved progressively, on the basis of suitable criteria; it must be achieved by earmarking an adequate proportion for recent works, that is to say works transmitted within five years of their production.'
 34. Decisions by the Media Authority (*Commissariaat voor de Media*) of 15 March 2001 and 20 November 2001, followed by the decision of the District Court (*Rechtbank*) of Rotterdam of 27 September 2002 and on appeal by the *Raad van State* (the Hight Administrative Law Court) of 18 February 2004, Case No 200205951/1 in the case of *Mediakabel v Commissariat voor de Media* (see: <http://www.rechtspraak.nl>).
 35. Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce'). *OJEC* 36
 36. E-commerce Directive, art 1, para 1.
 37. Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society, *OJEC* 22.06.2001 No L 167 , p 10–19.
 38. *See also*:
McGonagle, T; 'Changing Aspects of Broadcasting: New Territory and New Challenges', in: *IRIS plus*, supplement to IRIS Legal Observations of the European Audiovisual Observatory', issue 2001–10, Strasbourg 2001.
 39. Article 2(1) *Rundfunkstaatsvertrag* (Interstate Agreement on Broadcasting, as amended on 7 February 1997).
 40. Article 2 *Mediendienstestaatsvertrag* (Interstate Agreement on Media Services).
 41. Article 2 *Teledienstegesetz* (Act on the Utilisation of Teleservices).
 42. Section 2(1) Broadcasting Act 2001.
 43. Section 2(1) Broadcasting Act 2001.
 44. 1(c).
 45. 1(d).
 46. 1(f).
 47. 1(g).
 48. 1(h).
 49. 1(k).
 50. 1(l).
 51. 1(m).
 52. 1(n).
 53. This new European regulatory framework consists of a series of directives, recommendations, decisions and guidelines which can be found at: http://europa.eu.int/information_society/topics/ecom/all_about/todays_framework/index_en.htm.
 54. *See*:
Communications Act 2003, Chapter 21, Part 2 'Networks, Service and the Radio Spectrum', Chapter 1 'Electronic Communications Networks and Services', s 32...
Section 32 (7).
 56. Section 32 (8).
 57. Section 32 (9).
 58. Barendt, E.M; *Broadcasting law: a comparative study*, Oxford 1993: Clarendon Press, pp 1–10.
 59. Barendt 1993: p 4.
 60. Barendt 1993: p 5.
 61. Barendt 1993: p 6.
 62. Bollinger, L; 'The Rationale of Public Regulation of the Media', in: J Lichtenberg (ed.), *Democracy and the Mass Media*, Cambridge 1990: p 355.
 63. Barendt 1993: p 8.
 64. Id.
 65. European Court of Human Rights, Case of *Informationsverein Lentia v Austria*, Series A Vol. 276.
 66. *Lentia* case, para 32.
 67. The objective aims at must be one of the legitimate aims listed in para 2 of Art 10 of the European Convention for the protection of human rights and fundamental freedoms. These legitimate aims are: the interests of national security, territorial integrity or public safety, for the prevention of disorder or crime, for the protection of health or morals, for the protection of the reputation or rights of others, for preventing the disclosure of information received in confidence, or for maintaining the authority and impartiality of the judiciary.
 68. 'Media diversity in Europe', report prepared by the Advisory Panel to the CDMM on media concentrations, pluralism and diversity questions (AP-MD), Council of Europe, Dec 2002.
 69. AP-MD, p 8.
 70. AP-MD, p 7.
 71. AP-MD, p 8.
 72. AP-MD, p 24.
 73. AP-MD, p 24.
 74. Article 10 of the European Convention for the protection of human rights and fundamental freedoms (CETS No. 5) stipulates that,
1. Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers. This article shall not prevent States from requiring the licensing of broadcasting, television or cinema enterprises.
2. The exercise of these freedoms, since it carries with it duties and responsibilities, may be subject to such formalities, conditions, restrictions or penalties as are prescribed by law and are necessary in a democratic society, in the interests of national security, territorial integrity or public safety, for the prevention of disorder or crime, for the protection of health or morals, for the protection of the reputation or rights of others, for preventing the disclosure of information received in confidence, or for maintaining the authority and impartiality of the judiciary.
 75. *Turner Broadcasting System, Inc v FCC* (Turner I), 512 US 622 (1994).
 76. Articles 81 and 82 EC Treaty.
 77. Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation), *OJEC* 29.01.2004, No L 24: 1–22.
 78. In para 3.1.2 Relevant national definitions – United Kingdom.
 79. The regulatory package consist of:
Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive), *OJEC* 24.4.2002 No. 108: 33–50;

Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive), *OJEC* 24.4.2002 No 108: 7–20;

Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) *OJEC* 24.4.2002 No 108: 21–32;

Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), *OJEC* 24.4.2002 No 108: 51–77;

Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications), *OJEC* 31.7.2002 No 201: 37–47;

Commission Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services, *OJEC* 17.9.2002 No 249: 21–26;

Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision), *OJEC* 24.2.2002 No 108: 1–6.