



Cable TV in Austria

Between telecommunications and broadcasting

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In this paper the development of the Austrian cable television (CATV) sector is discussed, focusing on its delicate interconnections with telecommunications and broadcasting, the blurring borderlines and resulting regulatory problems. The policy network is identified and recent changes in the CATV policy and strategy are highlighted, in particular, developments towards a stronger convergence within the electronic communications sector. The case study illustrates peculiarities and shortcomings of Austrian media and communications policies on the way toward a future-oriented information infrastructure. Copyright © 1996 Elsevier Science Ltd

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Historical development

Austria's first cable TV system was installed in 1956, in Feldkirch in western Austria. The reason for this was that the Austrian public channel, started in 1955 and broadcast from eastern Austria, could not be received, whereas the public broadcasting channels from neighbouring countries, Germany and Switzerland, could be received. Hence, they were made available via cable TV.¹ Nevertheless, it took until the 1970s for cable TV to spread to the eastern part of Austria. For this endeavour, technical progress in the transmission network of the PTT and support of the city government of Vienna was crucial. The city of Vienna founded the Kabel-TV-Wien cable company in 1975, originally to analyse the cable TV market. On the regulatory side, the legal basis for countrywide cable TV activities was passed by parliament in 1977.

One major factor in the development path of cable TV was the Austrian PTT decision to follow the Swiss example not to enter the cable TV business. On the one hand, the PTT was busy with the reconstruction and modernization of the telephone network. Hence, there was no free capacity, and the rigid employment regulations for public administrations² did not permit a flexible solution to the capacity shortage. On the other hand, there was no clear political or societal vision on the political level about the possible socio-political role of cable TV. Consequently, the PTT did not find a convincing justification for engaging in entertainment services alongside its core business. Moreover, as opposed to private companies, the PTT as a public entity had to fear at least informal pressure to offer cable TV as a universal service in the event of its involvement. Such conceivable obligations would have increased the risk of going into deficit, as cable TV was and is not considered a profitable business on a countrywide basis.

Consequently, *private companies* were granted licences and started to build their own coax cable networks. The above-mentioned Kabel-TV-Wien, together with Philips (95%), founded the Telekabel company in

¹Senger, F 'Entwicklung des Kabel-TV' in Kunz, J (ed) *Die (des)informierte Gesellschaft*, Vienna (1987) 4–43

²The Austrian PTO, ÖPTV, forms an integral part of the public administration.

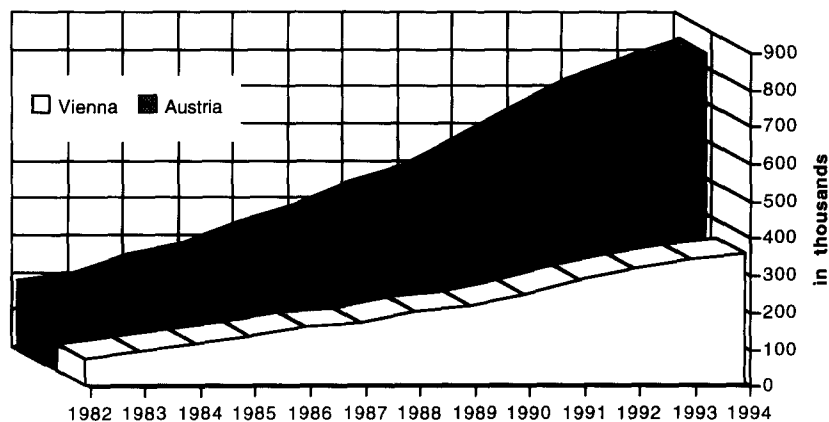


Figure 1. Cable TV subscribers, Vienna and total of Austria, 1982–1994.

Source: Bundeskammer der gewerblichen Wirtschaft, ÖSTZ, Optima

1977. Kabel-TV-Wien, responsible for the content, and Telekabel, responsible for the technical infrastructure, jointly started cable TV in Vienna and developed by far the biggest Austrian regional cable market.

Market development

In the beginnings of Austrian cable TV, only public broadcasting channels from neighbouring countries were redistributed. The liberalization of the international broadcasting sector and the emergence of new satellite channels in the mid 1980s increased the attractiveness of cable TV. The cable TV boom was strong as long as satellite dishes remained too big and expensive for private households. However, during recent years, with falling prices for satellite dishes, direct broadcasting services (DBS) increasingly emerged as a strong competitor to cable TV. The highly competitive situation between cable TV and DBS in recent years is caused by the price structure and rigorous restrictions on programming (public monopoly), which do not allow a diversification on the supply side (local programmes, etc). Hence, cable TV and DBS are currently offering more or less the same channels to the consumer. The lower cost of DBS is its major advantage in this regulatory setting.³ A comparison shows that the penetration rate of cable TV in Austrian households of 26% in 1993 is already closely followed by the satellite TV penetration rate of 23% (see Figure 2). Within two years, the diffusion of satellite dishes increased from 7% of households in 1991 to 23% in 1993. Competition from DBS is the major reason for declining growth rates of cable TV since 1991.⁴

Figure 1 shows the development of cable TV subscribers, and Figure 2 its penetration rate in Austria compared to the diffusion of satellite dishes.

The Austrian cable TV market is characterized by one large, a few medium-sized and many small operators (see Figures 3 and 4). The major participant is the *electronics industry*, with Philips and Siemens holding a market share of over 60%. *Public utilities* (energy companies) are active in Burgenland, Salzburg and in Tyrol (minor share); the PTO, as mentioned above, is not active as an operator but is nevertheless active as a regulator until 1993 and in the transmission of video signals to and between cable systems.

The cable TV market is *concentrated regionally*, with 42% of the subscribers in Vienna. In 1994, Vienna had the highest cable TV

³No monthly subscription fees; the equipment price equals the installation fee of cable TV.

⁴Growth rate 1991: 14%; 1994: 6%.

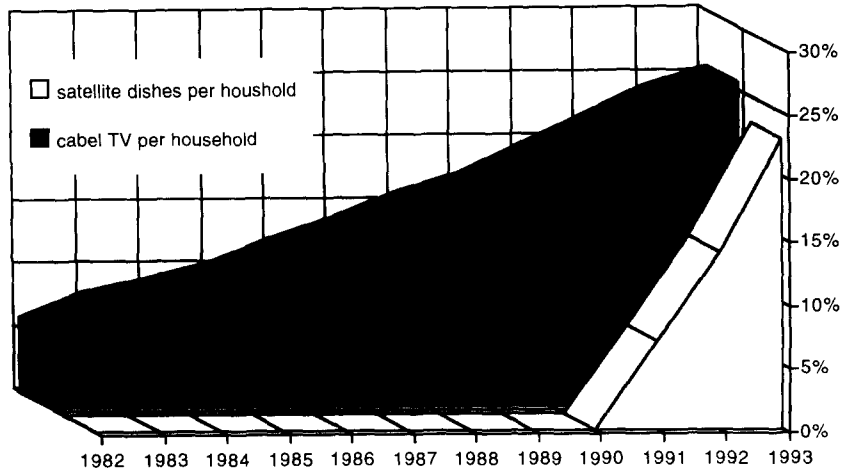


Figure 2. Cable TV and satellite dishes in Austria, penetration rate per household, 1982–1993.

Source: Bundeskammer der gewerblichen Wirtschaft, ÖSTZ, Optima

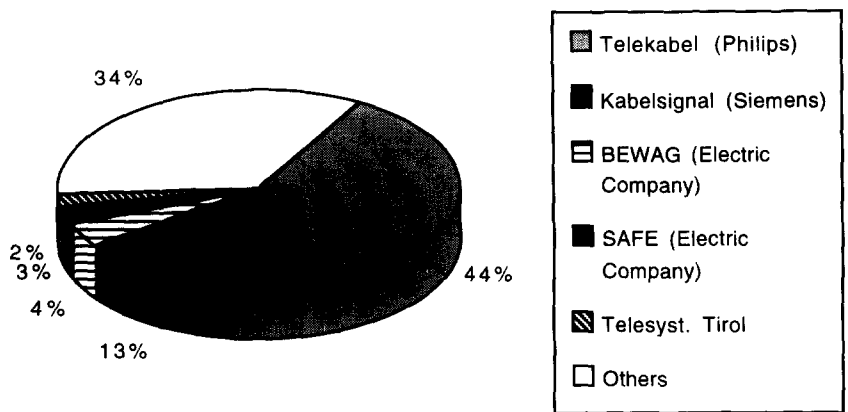


Figure 3. Market shares of major cable companies in Austria, May 1993.

Source: Telekabel, quoted in ERH 1994 3 26

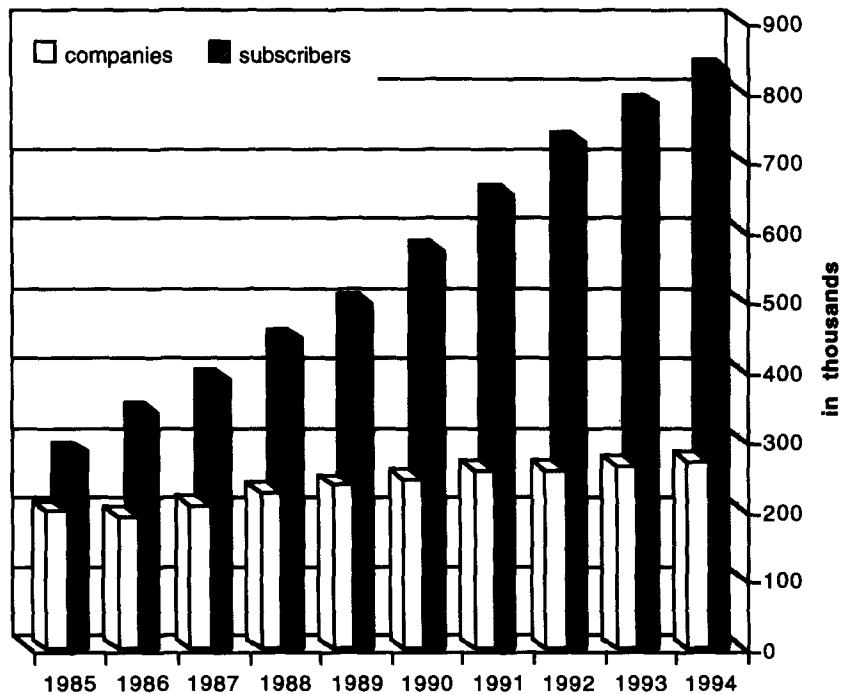


Figure 4. Cable TV companies and subscribers, 1985–1994.

Source: Bundeskammer der gewerblichen Wirtschaft, ÖSTZ, Optima

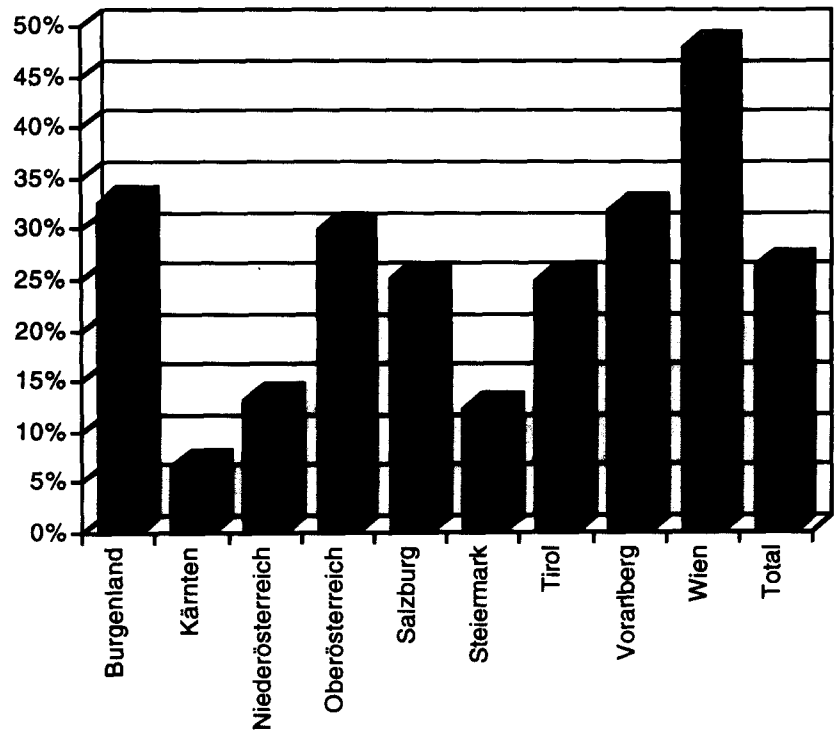


Figure 5. Cable TV in Austria, penetration rate per household, 1994.
 Source: Bundeskammer der gewerblichen Wirtschaft, ÖSTZ, Optima

penetration rate with 48% and Kärnten (Carinthia) the smallest with 7% of the households connected (see Figure 5). Countrywide, the penetration rate per household was 26%.

Because of the local *de facto* monopoly in Vienna, the industry is dominated by Telekabel—a very large company even by international comparisons. The Telekabel Holding held a countrywide market share of 49% at the end of 1994. However, the rest of the market is *extremely fragmented* with a total of 271 cable companies; 169 of these had less than 500 subscribers in 1994.

Total *investment* by the cable TV industry between 1977 and 1993 was 3.1 billion ATS.⁵ In general, 20–30 TV *channels* are offered by the regional cable companies, using coax cables with 300–860 MHz technology.

Major players

The Austrian market leader in cable TV is Telekabel Wien, owned by Philips (95%) and the City of Vienna (5%). The Telekabel Holding has five cable TV companies with 130 employees in Vienna, Klagenfurt, Graz and the Wiener-Neustad/Baden region. Up to 31 TV channels and 18 radio channels are offered. Since 1994, a Kabeltext channel has been offered with teletext function. It includes general information, classified ads and housing information. Telekabel is (since July 1994) the only company with fibre-optic connections for its five header stations. In Vienna, there are 353 667 subscribers in the end of 1994, and the highest penetration rate in Austria with 48% (see Figures 5 and 6); 62% of TV households potentially connected to the existing infrastructure subscribed.

The second biggest player, with a market share of 13% in May 1993, was Kabelsignal GmbH, a holding company 100% owned by Siemens

⁵Telekabel News

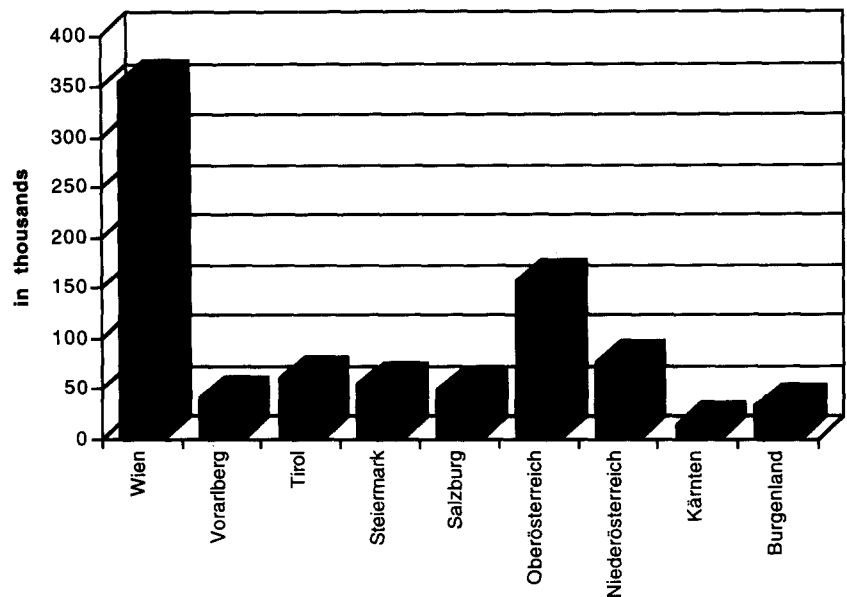


Figure 6. Cable TV subscribers in Austria, 1994.

Source: Bundeskammer der gewerblichen Wirtschaft, ÖSTZ, Optima

Austria. Kabelsignal controls five regional cable companies in Austria with altogether 120 000 subscribers in mid 1994. The average penetration rate (percentage of potentially connected households that have already subscribed) is 63%. Kabelsignal is active in St Pölten, Linz, Salzburg, the Baden and Vöcklabruck region. Furthermore, with its majority share in SKT, it is operating the only cable TV network in Bratislava (SK) with about 64 000 subscribers in mid 1994. Mostly 450 MHz technology is used; the 300 MHz cables had already reached the capacity limits and have now been upgraded to 600 MHz. There are 28 TV channels and 26 radio programmes provided. The current upgrading of the network includes centralization within the regional companies (towards one feeder station); the next step will be the interconnection of the various local networks of the subsidiaries.

Even though the Austrian PTO, ÖPTV, decided not to operate cable TV networks, it was and is active in the market in different roles. Until 1993, when the regulatory function of the PTO was divested,⁶ the ÖPTV was operator and regulator at the same time. Hence, it had to decide whether companies were to be granted licences or not. It is in the business interest of the PTO to avoid overcapacity in cable TV networks that could be a source of future competition and cream-skimming, if free capacity is sold to other companies. Conflicts with the PTO occurred when companies laid or wanted to lay fibre-optic cables, for instance in the case of Ascom in Vorarlberg.

Since the beginnings of cable TV in Austria, the PTO has distributed the public channels of the neighbouring countries, Germany (ZDF, ARD, Südwestfunk) and Switzerland (SRG), to the cable companies throughout Austria. The majority of channels are, however, distributed by cable companies themselves. The reason for this separation is that these channels can be received by satellite. Even though there is now the possibility of receiving German public channels by satellite as well, unsolved licensing problems (there is no licence to broadcast these channels in Austria) are the reason the cable industry sticks to the traditional solution. Nevertheless, as soon as a solution to the licensing problem is found, the big cable companies may be interested in

⁶For an analysis of recent changes in Austrian telecommunications sector see Latzer, M 'Paradigmenwechsel in der Telekommunikationspolitik' in Martinsen, R and Simonis, G (eds) *Paradigmenwechsel in der Technologiepolitik?* Leske and Budrich, Opladen (1995) 173–192

distributing the channels without the PTO. This is understandable, considering the rate structure: cable TV companies have to pay the ÖPTV 2 ATS monthly per subscriber for each channel (the same price since the beginning of the 1970s). With this rate structure the PTO asks different prices for the same service (depending on the number of subscribers and irrespective of distance). It also implies that big companies, in particular the market leader Telekabel, subsidize the smaller companies. If Telekabel were to quit the PTO distribution service, the service would face financial ruin.

Other important players in cable TV are the *communities*. The 'right of way' and the construction permission from the communities is crucial for the cable business. The powerful position of the communities is one of the reasons that in many cases communities are at least minor partners in cable companies. The major incentive for their involvement is to control the selection of channels distributed, especially as there is no control mechanism provided in the cable TV regulations.

With the rising discussion of video on demand (VOD), there are *new potential entrants* into the market. Alcatel, which is active in VOD abroad, is trying to enter the market and aiming for cooperation with the PTO, using the telephone network and ADSL technology. One of the arguments for video on demand over the telephone network is that there are only 834 000 cable TV subscribers compared to 3.5 million telephone subscribers in Austria.⁷ Telekabel intends to start interactive teleservices in 1996.

Regulatory aspects

In Austria, the legal basis for countryside cable TV development was created in the second half of the 1970s. The 1977 Amendment of the Broadcasting Directive,⁸ in particular Section VI regarding licences for cable TV, is still the central cable TV regulation. Despite its name, the Broadcasting Directive is basically a *telecommunications law* regulating broadcasting equipment, not content. The Ministry of Public Economy and Transport, the regulatory authority for telecommunications, is responsible for the implementation of the Broadcasting Directive. The central Austrian broadcasting law of 1974, which defines broadcasting as public task and grants the public Austrian broadcaster a monopoly position, does not mention cable TV. To sum up, from a legal point of view, cable TV in Austria is telecommunications. From a functional point of view, however, it is broadcasting. With the recent liberalization of telecommunications in Austria, it can be both broadcasting and telecommunications.

The *borderline* between telecommunications and broadcasting legislation is *blurring* in many respects, causing problems in the policy arena. For example, the Broadcasting Directive also includes broadcasting regulations as it stipulates in §20(1), that the signals received have to be transmitted to the receivers instantly and without any change of content. In other words, cable TV companies are only allowed to passively retransmit channels from various terrestrial and satellite broadcasters. Cable TV operators are not permitted to produce their own programmes. It is the telecommunications authority and not the broadcasting authority that has to control these content regulations. Another example of overlaps is that the telecommunications authority is responsible for the Austrian frequency plan and the frequency allocation, which is

⁷Kurier 24 June 1994

⁸BGBI. Nr. 33 (1965)

especially relevant as the broadcasting sector is currently being liberalized. Altogether, politically unintentionally, the telecommunications authority is playing a more and more important role in media politics.

Cable TV fees are not regulated, because the medium is not considered a common carrier, and there are no cross-ownership regulations in the Austrian media sector, nor are there any regulations regarding foreign ownership.

The separation of contents and conduit in the cable TV business in Austria is not imposed by law. However, in some cases it formally exists, notably in Vienna, where Telekabel is the network provider and Kable-TV-Wien the contents provider. Nevertheless, the effectiveness of this separation is limited, given the considerable overlap of the two companies at board level.

Altogether, many regulations that are common abroad are absent in Austria, giving the Austrian cable sector considerable leeway on the one hand and no guidance or promotion on the other.

Recent changes

In 1993, two new regulations improved the market position of cable TV in info-communications.

The 1993 *Fernmeldegesetz* (central telecommunications law) brought a liberalization on the contentside. It allows companies into the value-added services market. On the infrastructure side, the 1993 *Fernmeldegesetz* brought a compromise: §49(49) allows cable operators to modernize their already existing networks from coax to fibre optics. However, from July 1993, newly erected connections have to be licensed. Moreover, the regulations of §8(6) of the new law, as in the old law, grant the regulatory authority the power to force the cable TV operators to use PTO broadband networks (starting from 2 Mb/sec). This regulation was designed to avoid possible harm to the economic interests of the public network. Nevertheless, it is not possible to force cable TV operators into the PTO network regardless, unless it is considered reasonable regarding the time and costs for the cable TV company in question. The legal interpretation of this paragraph will be crucial to the further infrastructure development in Austria.

Another legislative change, the amendment of the Broadcasting Directive in 1993, brought an improvement for cable TV companies as well: since summer 1993, cable companies are allowed to offer their own Kabeltext, even though with a limited service, which can be considered a first step in the direction of private programming.⁹ The law allows only freeze-frame pictures, text and limited commercials. Commercial advertising is not allowed. However, local commercials and information on job and housing markets, etc, are permitted. Various cable TV companies have already started Kabeltext and are at least heading in the direction of local programmes.

The genesis of the amendment of the Broadcasting Directive illustrates Austrian media and communications policy in this subsector. It was not publicly discussed. Even insiders and major players such as the public broadcaster were surprised by this new legislation. The amendment was included in a package of laws, consisting of the long-debated *Regionalradiogesetz* (regional radio law), the first major liberalization in the broadcasting sector, and an amendment of the broadcasting law, which was also much debated as it fulfilled the long-standing wish of the public broadcaster ORF to extend the time allowed for commercials.

⁹See Wittmann, H 'Kabeltextgesetz: informationskanäle in den Kabelnetzen legalisiert' *Medien und Recht* 1993 8 (3) 84

Prospects and future strategies

As shown above, cable TV development has slowed down in recent years, basically due to competition from DBS. As a reaction to this situation, the industry is pushing into additional fields of business, not least to achieve a competitive edge against DBS. The initiatives are heading in two directions. The cable companies intend to enter telecommunications services market, which has been liberalized since April 1994. However, no telecommunications licences had been submitted, so no countrywide two-way services are being offered yet. The second initiative is aimed at own-programming. Kabeltext, provided since mid 1994, was a first step in this direction. Another initiative by the CATV industry aims at a cable broadcasting law that allows local cable radio and cable TV programmes, homeshopping, pay TV, etc. A draft of the new law was presented in October 1994. Under this law, own-programming would be allowed, and the monopoly regulation in broadcasting would be broken.

With the development in the direction of fibre optics and the possibilities of offering two-way data-communication services (*Fernmeldegesetz* 1993) on the one hand, and Kabeltext plus the intention of own-programming on the other hand (Cable Broadcasting Law), the cable TV industry is increasingly emerging as a serious competitor to the dominant players in telecommunications and broadcasting, the ÖPTV and ORF. Cable companies have already started challenging the ORF monopoly. For example, one small company offered its own local cable programmes and was consequently threatened with closure by the regulatory agency.¹⁰ A group of 10 CATV companies that intended to offer local broadcasting programmes challenged the negative stance of the telecommunications authority in the Austrian Constitutional Court.¹¹ By its decision, the Court forces the government to allow cable companies to transmit own-programmes by August 1996 at the latest. Another CATV company successfully challenged the restrictions on Kabeltext in front of the European Court of Human Rights in Strasbourg, arguing that it now interferes with freedom of opinion, which is demanded by Strasbourg.¹² Parts of the newly offered Kabeltext could already be interpreted as own-programming.

One possible *solution* to the conflicts of interest could be the formation of alliances between competitors. The cable TV industry and the ÖPTV are holding coordination talks to negotiate cooperative solutions for interactive cable TV and telecommunications services. In this option for interactive TV, telephone lines are used as a narrowband connection from the households to the cable TV companies.¹³ However, no specific cooperative service plans have been revealed so far. Cooperation would basically imply a compromise that the companies would not encroach extensively into each others' core business area.

A structural problem of the Austrian market is the small size of virtually all cable companies with the exception of Telekabel. Hence, the cable companies are seeking to coordinate policy in order to strengthen their position in negotiations with contents providers, policymakers and competitors. Furthermore, the fragmented market is a roadblock for the provision of new telecommunications services and own-programmes. Currently, the critical mass of consumers needed to make additional services profitable is in most cases not present. First steps toward a stronger coordination and cooperation within the cable TV industry are being taken under the auspices of the Chamber of

¹⁰See *Niederösterreichische Nachrichten* 1993 49

¹¹*News* 1994 35; *Standard* 31 Dec 1994 and 1 Jan 1995

¹²Furthermore, the European Court had already decided in November 1993 that the Austrian broadcasting monopoly violates Article 10 of the European Convention on Human Rights. The Austrian government announced to allow private TV within the next few years.

¹³The CATV company Telesystem Tirol together with the ÖPTV started a pilot project in the beginning of 1995 (*Standard* 21 Feb 1995).

Commerce (*Bundeswirtschaftskammer*). Altogether, cooperation within the cable industry has improved in recent years. For the next big goal of the cable industry, a *cable-broadcasting law*, a well-coordinated policy and political support will be crucial.

Summary and conclusions

Public policy: from market-driven to publicly-led strategy; industry: from isolation to cooperation

The beginnings of cable TV in Austria were market-driven. The absence of public media- and communications-policy concepts are also reflected in the cable TV sector. There was, and basically still is, no vision of the social, cultural or political function of cable TV. Hence, there is *no coherent public policy* at the political level either promoting or restricting the medium. Altogether, the absence of a framework for cable TV has left the industry with considerable leeway on the one hand and no guidance or promotion on the other.

Not surprisingly, the publicly-owned competitors, ORF and ÖPTV, are trying to defend their turf. Hence, they tend towards a *restrictive* policy, that is, a controlled growth of cable TV. The activities of the public broadcaster regarding cable development, however, are not particularly great. The ORF, for instance, argued against the distribution of commercial channels (Sky Channel, etc) as being possibly harmful to the national, cultural identity.¹⁴ Intensified conflicts of interest can be expected as cable companies push the limits of Kabeltext in the direction of own-programming, and with the cable broadcasting law initiative to break formally the ORF monopoly on TV programming.

For competitive reasons, the publicly-owned PTO was and is interested in restricting the capacity of cable TV networks. It is particularly sensitive when it comes to fibre optics. The PTO fears a situation of harsh competition and cream-skimming in profitable areas on the one hand, and universal service obligations in unprofitable areas on the other. So far, the above-described regulations have allowed the PTO—that is, the telecommunications policy—to control the growth and capacity of cable networks. In particular, the PTO is trying to keep control of the interconnections of regional cable networks. Only transmission services are offered to the cable companies but no leased lines, which could be used for other applications as well. However, the EU strategy in the direction of infrastructure competition makes a change of the PTO strategy necessary towards increased *cooperation*. This strategy is to avoid competition in core areas and to gain entry to new service markets.

The general public policy in Austria may change into a *publicly-led* strategy, *promoting* cable TV.¹⁵ A precondition for this would be that the cable industry gained more political support. However, because of the traditionally strong political ties of ORF and ÖPTV, the political backing for public promotion of cable TV might be bound to cooperation—that is, arrangements or compromises with the dominant public competitors in the electronic info-communications sector.

In order to increase their (international) competitiveness and the effectiveness of their lobbying, the strategy of the cable companies is changing in the direction of intensified cooperation within the industry, coordinated by the Austrian Chamber of Commerce. The trend toward

¹⁴Fiala, A 'Das Programmangebot des Wiener Kabelfernsehens und seine Nutzung' in Kunz, J (ed) *Die (des)informierte Gesellschaft*, Vienna (1987) 46–56

¹⁵By its decision regarding own-programming, the Constitutional Court forces the government into a more publicly-led strategy.

cooperation has various incentives, for instance, the rather small market size of the 271 Austrian cable companies, with the exception of Telekabel, and rising international competition.

Convergence problems: between telecommunications and broadcasting

An analysis of cable TV illustrates the Austrian specifics of convergence problems of telecommunications and broadcasting. As shown above, cable TV is legally a telecommunications service but functionally a broadcasting service. However, due to recent liberalization, since 1994 cable TV has been able to offer both telecommunications and broadcasting. Telecommunications and broadcasting are overseen by different institutions. The existing cable TV regulations increase unwanted overlaps of ministries' policy fields, which further complicates the formulation and execution of a coherent, integrated info-communications policy and thus an integrated media policy. The formal division of competences is: broadcasting—media policy—in the Chancellery, and telecommunications policy in the Ministry of Public Industry and Transport. The ministries increasingly interfere in each others' policy fields; for example, the telecommunications authority is responsible for contents regulation of Kabeltext and for frequency allocation, a very sensitive and central part of national media policy.

Regulatory problems are increasing with the emergence of new services like video on demand. Comprehensive public policies addressing the growing convergence of telecommunications and broadcasting are absent in Austria. *Institutional* and *regulatory* solutions that could help resolve the widely criticized crisis of Austrian media policy (for example, a single, autonomous regulatory authority for electronic communications, the centralization of competences for media and electronic info-communications policy in one ministry, or a new, separate regulation for converging services, etc) are not yet being discussed. The time for a comprehensive regulatory and institutional reform in Austria would be perfect, as both sectors are currently in a period of major change. However, on past experience, a step-by-step reform, driven by EU recommendations and directives regarding time schedule and content, seems more likely. So far, the convergence of telecommunications and broadcasting has not had a noticeable influence on the design of the reforms.

Regulation: unsatisfactory

In order to offer cable TV, a telecommunications licence from the regulatory agency and the 'right of way' from the respective community are required. The telecommunications regulation, *Fernsprechordnung* §21(3), provides licence holders with monopoly rights; furthermore, the licences have no time limit. In all, the cable companies hold local *de facto monopolies* for cable TV. However, no obligations, except a 'must carry regulation' for the two Austrian public channels,¹⁶ and no control mechanism regarding the content of the chosen channels are attached to the monopoly position.

A reconsideration of this regulatory situation seems necessary, considering the growing national importance of the countrywide broadband infrastructure, which will be used for more and more services. As described above, data telecommunications services are already liberalized, voice services will follow by 1998 at the latest, and there are initiatives and pressure by the Constitutional Court to lift the ban on

¹⁶*Fernsprechordnung* §21(3)

own-programming. With this new role as infrastructure provider of an integrated broadband network in competition to the PTO, the current situation cannot continue: no cross-ownership regulations, no control of misuse, no participatory possibilities for users, no regulation of (monopoly) prices, no binding separation of content and conduit, etc.

New regulation of the sector, however, requires a societal vision of the future design of the electronic media sector and the role of cable TV, not only regarding the content conveyed but also strategically. Should cable TV be publicly supported in order to increase competition in the sector to limit the power of the dominant carrier? Who should own and control the future interactive broadband network to households? To what extent should cable TV companies be treated as common carriers? Should there be content, price, advertisement and open-access regulations?

Currently, a common understanding of and answer to these questions on a politically relevant level, and on an industry level, seem to be the missing prerequisites for a comprehensive cable TV regulation in Austria. It will be necessary to work on answers if the new regulation is not just to promote sectional interests, but rather to help form the basis of an economically and socially efficient, info-communications infrastructure.