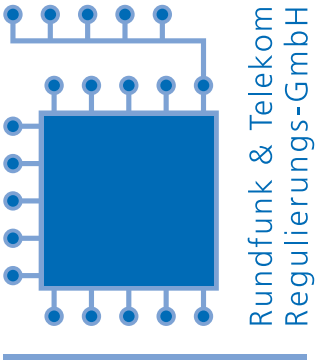
Communications Report 2009



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Preface

This year's Communications Report serves to fulfill all of the legal reporting requirements defined for the regulatory bodies RTR, KommAustria, the TKK and the PCK for the year 2009, as well as providing the reader with an overview of our regulatory work in broadcasting, telecommunications and postal service regulation. In the field of broadcasting, one especially noteworthy development was the establishment of the Non-Commercial Broadcasting Fund and the Private Broadcasting Fund, both of which will make a major contribution to strengthening the dual broadcasting system in Austria. In the field of telecommunications, one of our main focus areas was (and still is) the replacement of traditional telecommunications networks with high-speed fiber infrastructure as well as the accompanying fundamental changes in the economic, technological and regulatory landscape.

In addition, the 2009 Communications Report provides insights regarding developments and trends on Austria's communications markets, as well as an overview of RTR as an organization managed in such a way as to minimize total expenditure through the targeted deployment of available resources.

One key issue RTR has dealt with extensively in the last year was the "digital dividend," that is, the frequency spectrum which has become available due to the digitization of broadcasting transmission. Broadcasters, telecommunications providers and other organizations have expressed high – and sometimes conflicting – levels of interest in using those frequencies. In addition, frequencies are scarce resources which have gained additional importance due to their wide range of current and potential uses. This made it necessary to take a broad, comprehensive look at the possible uses of the digital dividend, with due attention to international aspects. In the year 2009, these efforts resulted in a study commissioned by RTR to address the various usage scenarios which would best serve the interests of the Austrian economy.

Based on the example of the digital dividend, it has become clear that our convergent regulatory authority's expertise in multiple fields and the interdisciplinary collaboration between our employees have once again proven their value in the proper and effective handling of such complex regulatory challenges.

In this way, RTR has made an additional contribution to fulfilling its mission of creating a forward-looking legal and regulatory framework for Austria as well as ensuring media diversity and competition.

We sincerely hope that this year's Communications Report makes for interesting and enjoyable reading.

Vienna, June 2010

Alfred Grinschgl
Managing Director
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1. Management summary: We stand for competition and media diversity

RTR committed to competition and media diversity

The Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR) is committed to enhancing competition and media diversity. To this end, RTR makes efforts to promote and strengthen competition in broadcasting, telecommunications and postal services, as well as promoting the efficient use of scarce resources, electronic communications infrastructure and services, the production of media content, and the interests of consumers and users. In this context, the regulatory authority focuses on the objectives of ensuring innovative, high-quality and secure communications at reasonable prices for everyone and maintaining the diversity of opinions and media as well as a forward-looking general framework for these activities in Austria.

The 2009 Communications Report serves to fulfill RTR's legal reporting requirements under the Austrian Communications Act (KommAustria Act, or KOG) and the Austrian Telecommunications Act 2003 (TKG 2003).

In accordance with Art. 7 Par. 2 KOG, this report also provides RTR's owner (i.e., the Austrian federal government) with an account of the company's business activities as well as the operational fulfillment of regulatory objectives in the interest of all market participants and for the benefit of consumers. For RTR's management, striving for efficiency in execution, effectiveness in attaining regulatory objectives, and international benchmarking are important elements in the organization's provision of services and in its activities as a competence center.

In addition, RTR also reports to the relevant bodies in the Austrian federal government and to the National Council (one of the two chambers of the Austrian Parliament) on the fulfillment of its regulatory objectives as stipulated in the relevant material laws. In this context, the Communications Report focuses on RTR's reporting obligations pursuant to Art. 34 Par. 2 TKG 2003; under Art. 24 Par. 2 TKG 2003, the report must also include information on unfair practices in the provision of value-added services as well as the measures taken to combat such practices.

Finally, the report provides in-depth and realistic insights into the problems and challenges addressed by the regulatory authorities and RTR in fulfilling their legal duties and objectives in the interest of consumers and the economy during the reporting period.

1.1 Broadcasting: Contribution to the achievement of objectives under the KommAustria Act (KOG)

Objectives of KommAustria

The objectives to be pursued in the regulatory activities of the Austrian Communications Authority (KommAustria) and RTR's Broadcasting Division are defined as follows in Art. 2 Par. 2 of the KommAustria Act (Tasks and objectives of KommAustria):

1. to facilitate market access for new providers;

2. to ensure the diversity of opinions and encourage quality in broadcasting programs, including the technical prerequisites for their dissemination;

3. to develop technical and economic plans for a dual broadcasting market in Austria;

4. to ensure that content providers adhere to European minimum standards, especially in the interest of child, youth and consumer protection;

5. to optimize the use of Austria's broadcasting frequency spectrum;

6. to provide expert knowledge on convergence between audiovisual media and telecommunications, and to promote the development of markets in the audiovisual and telecommunications sectors;

7. to create and maintain modern, high-quality communications infrastructure in order to reinforce Austria's high locational quality.

In addition, the duties of RTR's Broadcasting Division also include promoting competition in the field of electronic communications as set forth in Art. 120 TKG 2003.

All of the activities of KommAustria and RTR's Broadcasting Division in the year 2009 can be attributed to the duties defined in Art. 2 KOG and Art. 120 TKG 2003 or to the additional duties of promoting digitization, supporting television film production as well as commercial and non-commercial private broadcasters, and operating a competence center for broadcasting industry affairs.

Therefore, the main focus of the authority's regulatory duties is to enable more competition and more diversity of opinions and media in the interest of the entire population of Austria.

In this context, the allocation and licensing procedures under the Private Radio Act (PrR-G) and the Private Television Act (PrTV-G) in 2009 were also a major part of the authority's efforts to establish a dual broadcasting market. The number of procedures and parties involved were largely comparable to those in the previous year.

Expansion of nationwide multiplex platform, new invitation to tender for local digital television platforms

In the field of digital television, the expansion of nationwide digital terrestrial coverage continued, and another invitation to tender was carried out for local and regional television. In addition, several of the regional multiplex platforms (which were first licensed in 2008) already launched broadcasting operations in the year 2009.

The need to ensure a diversity of opinions plays an especially important role in the awarding of licenses. For this purpose, most of the licensing procedures carried out in 2009 also involved selection procedures (or "beauty contests").

Active frequency planning is a key prerequisite for efficient licensing activities. In order to ensure that all of the technical prerequisites for broadcasting are fulfilled, it is indispensable to support the ongoing development of broadcasting frequency management at the national and international level. At the national level, applications are reviewed for compatibility with previously allocated frequencies. At the international level, this requirement refers to ongoing coordination with frequency administrations in neighboring countries, either directly or within the framework of bilateral and multilateral conferences. In some cases, these conferences are also held at the European level. In addition to avoiding technical disruptions and interference, the purpose of these conferences is to optimize the use of the frequency spectrum. Broadcasting frequencies are a scarce commodity in any country, especially in a small one such as Austria.

Given the limited availability of broadcasting frequencies, the topic of the "digital dividend" has been subject to vigorous debate in Europe – and more recently in Austria as well. This discussion generally revolves around the question of whether the 790-862 MHz frequency band, which is currently used for television broadcasting, should be reserved for television or for mobile communications (or both) in the future. At the end of 2009, the Austrian debate on the digital dividend prompted RTR to commission a study on the future use of this frequency band. The study is scheduled for completion at the end of April 2010. For further details on this topic, please refer to Section 6.4.

KommAustria and RTR as its operational arm are responsible for the legal supervision of multiplex operators and private broadcasters. These activities serve to encourage pluralism in the Austrian media landscape as well as the creation of fair conditions for competition. In addition to issuing licenses, activities in this area specifically include the approval of changes in programming and ownership as well as monitoring compliance with legal regulations and the terms and conditions of broadcasting licenses.

Numerous complaints from ORF regarding private radio broadcasters

In the year 2009, the authority's regulatory efforts also focused on this area because of numerous complaints submitted by the Austrian Broadcasting Corporation (ORF) about private broadcasters due to alleged violations of advertising regulations under the Private Radio Act.

It is also especially worth noting the authority's ongoing monitoring of Austrian broadcasts by ORF as well as private broadcasters in 2009. In these activities, the regulatory authority's official duties include regular reviews of compliance with advertising regulations.

Broadcasting markets defined by KommAustria

With regard to infrastructure, KommAustria and RTR are responsible for co-regulatory tasks (in particular the supervision of multiplex platform operators) as well as the specific instruments of competition regulation under the TKG 2003. Upon completion of the relevant market definitions and market analyses, these instruments may be employed for the sake of enabling the highest possible level of competition on the markets for broadcasting infrastructure. In the period under review, KommAustria issued the Broadcasting Market Definition Ordinance 2009, which defined three national markets specific to broadcasting in Austria. For all three of those markets, the corresponding market analyses were also initiated in 2009.

Austrian Digitization Fund

Grant recipients included retail consumers

In fulfillment of its duties under Art. 9a KOG, RTR continued to award grants for digital transmission technologies and digital applications based on European standards in connection with broadcasting. Once again, grants from this fund were awarded to retail consumers, who were provided with vouchers to purchase DVB-T and DVB-C boxes at reduced prices, as well as broadcasters for simulcast coverage (i.e., simultaneous broadcasting of analog and digital television signals) and the authors of studies aiming to advance the digitization process.

Austria again earned an outstanding rank among European countries in terms of digitization progress thanks to the rapid tender and licensing procedures for digital broadcasting (e.g., for local terrestrial television) as well as the measures taken by the Digitization Fund in 2009: By the end of the year, 60% of Austria's households were already receiving television signals by digital means. This represents an increase of nearly 10% of all television households compared to late 2008, when the corresponding figure was just over 50%.

Austrian Television Fund

The provisions of Articles 9f and 9g in conjunction with Articles 9c to 9e KommAustria Act (KOG), which have been in effect since January 1, 2004, define the basis for the activities of the Austrian Television Fund.

The main purpose of grants from this fund is to strengthen the Austrian film industry and Austria as a media location. The objective of strengthening the Austrian film industry involves reinforcing the rights of producers vis-à-vis television broadcasters (e.g., by ensuring that broadcasting rights are granted for a limited time period). As for strengthening Austria as a media location, the funds are intended to provide an incentive for production companies from abroad to engage in co-productions which create a large share of added value in Austria.

In addition, the fund is also intended to help maintain a diverse cultural landscape and strengthen the audiovisual sector in Europe.

Private and Non-Commercial Broadcasting Funds

The Fund for the Promotion of Private Broadcasting ("Private Broadcasting Fund") and the Fund for the Promotion of Non-Commercial Broadcasting ("Non-Commercial Broadcasting Fund") were established by an amendment to the KommAustria Act in 2009. The two funds receive an overall endowment of EUR 6 million per year for the purpose of promoting the dual broadcasting system in Austria and helping broadcasters deliver diverse and high-quality programming. The funds are allocated in accordance with the provisions of applicable law and a set of guidelines to be approved by the European Commission under the state aid rules of the EC Treaty. A decision on these guidelines is expected in early 2010, and the first deadline for applications is planned for the first quarter of the year.

In December 2009, grants were already allocated to non-commercial broadcasters in a procedure carried out under the special de minimis regulation. The Austrian federal government plans to increase these grants gradually to a total of EUR 18 million (by 2013).

Competence center

Under Art. 9 KOG, RTR is also responsible for acting as a competence center for broadcasting and telecommunications industry affairs. In the Broadcasting Division, expenditure for the activities of the competence center is limited to a maximum of 10% of overall expenditure for that industry. In 2009, these activities included RTR studies, which were subsequently published in the regulatory authority's publication series, as well as cooperation in training and education activities for the employees of broadcasting organizations, such as private commercial broadcasters (in cooperation with the *Privatsenderpraxis* association) and the Austrian association of free radio broadcasters (VFRÖ). In addition, RTR and KommAustria also played an active role in the activities of the Research Institute for Electronic Mass Media Law (REM).

1.2 Telecommunications: Contribution to the achievement of objectives under the TKG 2003 (report pursuant to Art. 34 Par. 2 TKG 2003)

The objectives and duties of the regulatory authorities for the sake of competition and media diversity are set forth in the Austrian Telecommunications Act 2003 (TKG 2003). Accordingly, the regulatory authority is also required to report on the achievement of the objectives defined in the TKG 2003. The regulatory authority's activities are devoted to defining a general framework for the market, enforcing obligations and rights, ensuring the fair, transparent and non-discriminatory allocation of scarce resources, protecting the interests of consumers, promoting investment and innovation, and supporting harmonization at the EU level in order to create a level playing field for sustainable and functioning competition.

A number of specific examples of these activities during the reporting period are discussed briefly below. An overview as well as details on each topic can be found in the corresponding sections in this report.

Amendments to the Telecommunications Markets Ordinance 2008

Amendments to the TKMV 2008

The Telecommunications Markets Ordinance defines the markets relevant to sectoral regulation. On the basis of those definitions, the regulatory authority subsequently conducts market analyses at regular intervals.

In 2009, two amendments were introduced to the Telecommunications Markets Ordinance 2008 (TKMV 2008), which originally went into effect on December 30, 2008. The amendments defined the retail market for fixed-link voice telephony for non-residential customers and the wholesale broadband market as markets susceptible to sector-specific regulation. For further details, please refer to Section 4.2.1.

Analyses of markets for termination in individual public mobile networks

On June 15, 2009, the Telekom-Control-Kommission (TKK) completed a new market analysis procedure (Procedure M 1/08) and issued four decisions stating that the mobile network operators mobilkom austria AG, T-Mobile Austria GmbH, Orange Austria Telecommunication GmbH and Hutchison 3G Austria GmbH each possess significant market power as defined under Art. 35 TKG 2003 in the provision of mobile termination services in their own individual networks.

Further adaptation of termination fees ("glide path")

Subsequently, the TKK imposed specific obligations on the mobile network operators in order to ensure non-discrimination, interconnection and the publication of a reference offer for mobile termination services, as well as an obligation to use cost-based pricing in mobile termination fees. In addition, the TKK defined specific fees for termination services.

Removal of obligations imposed on Telekom Austria TA AG for transit services

In an official decision issued on August 6, 2009 (Procedure M 13/09-27), the TKK again lifted the regulatory obligations imposed on Telekom Austria for fixed-link transit services. The obligations had again become applicable not on the basis of a TKK market analysis decision, but on the basis of the transitional provision under Art. 133 Par. 7 TKG 2003 and a ruling of the Austrian Administrative Court.

Network access

Creating the conditions necessary to enable new entrants to provide services on the market is a crucial area of regulatory activity. In this context, it is especially important to ensure (open) network access, in particular by means of interconnection. The interconnection of communications networks supports interoperability between subscribers in all public communications networks.

A number of procedures were also carried out in this area in 2009, especially with regard to the definition of fixed-link and mobile termination fees as well as the issue of local loop unbundling.

Shared use of communication lines and site sharing

Expansion of wayleave rights in TKG 2003

In an amendment to the TKG 2003 (Federal Law Gazette I No. 65/2009) designed to facilitate the rollout of new broadband communications networks, the provisions regarding Section 2 of the TKG 2003 ("Wayleave rights and rights of joint use") were changed in terms of content as well as procedural regulations. The amendment expanded the nature and scope of shared use, and introduced provisions to accelerate the procedure for obtaining such rights.

Retail conciliation procedures under Art. 122 Par. 1 No. 1 TKG 2003

Decline in number of conciliation procedures

After a sudden and drastic increase in 2008, the number of requests for conciliation procedures fortunately declined in the year 2009. While the number of new requests had reached an all-time high of 5,226 in 2008, this figure dropped by approximately 20% to 4,258 in 2009.

Frequencies

2.6 GHz frequency assignment and refarming: Key issues in the near future

With regard to frequency administration, the regulatory authority conducted procedures for the assignment of frequencies in the 3.5 GHz band and for the review of coverage requirements in this band. Moreover, RTR began preparing for the assignment of frequencies in the 2.6 GHz band; the corresponding procedure is scheduled for 2010.

In addition to the procedures mentioned above, a large part of the regulatory authority's activities in the field of frequency administration involved issues which will have to be resolved in TKK procedures in the coming years. One of the main issues the authority dealt with in this context was refarming (i.e., making the frequency bands currently used for GSM services available for UMTS).

Supervisory procedures

Supervisory procedures were necessary in a wide variety of areas in order to ensure compliance with the provisions of telecommunications law and with obligations imposed by way of official decisions. In 2009, the regulatory authority conducted two reviews of whether a product can be replicated by alternative operators on the retail market without encountering discrimination or a margin squeeze. These reviews were triggered by special offers introduced by Telekom Austria. The authority also conducted individual procedures in order to investigate interference from transmission systems in upstream facilities (DSLAMs).

Next generation networks as a challenge in the coming years

NGN/NGA as major future challenges

The migration to next generation networks (i.e., the replacement of conventional circuit-switched telecommunications networks with modern packet-based networks) and the resulting fundamental changes in the economic, technical and regulatory landscape for telecommunications represent both a challenge and a focus area for market participants and the regulatory authority. Since it held a symposium on NGNs in the summer of 2007, RTR has consistently devoted efforts to the topic and carried out a number of activities in this area. The network operators also bolstered their efforts during the reporting period, especially with regard to modern access networks (next generation access, or NGA); this also manifested itself in RTR's activities in the NGN/NGA focus area.

New KEM-V 2009: Adaptations for value-added services

KEM-V 2009 contains further improvements to consumer protection

The Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V) 2009 (Federal Law Gazette II No. 212/2009) is a new version of the 6th RTR Ordinance defining regulations for communications parameters, fees and value-added services. This amendment served to conclude a discussion process which had begun as early as 2008.

The changes to the ordinance essentially involved adaptations and clarifications for the sake of consumer protection with regard to value-added services.

International roaming: Expansion of EU regulation to include text messaging and mobile data services

Regulation expanded to include text messaging and data services

The European Union's Roaming Regulation, which imposes numerous obligations on mobile network operators, has now been in effect for nearly three years. While the regulation from June 30, 2007 only applied to voice telephony, the new Roaming Regulation expands the scope of application to text messaging (SMS) and mobile data services. The expanded Roaming Regulation entered into effect on July 1, 2009. The validity of the first regulation, which was set to expire in the summer of 2010, was extended until the summer of 2012.

Cooperation in developing the regulatory framework at the European level

New regulatory framework finalized

In 2009, the European Union completed its review of the regulatory framework for electronic communications and published the telecoms reform package in the Official Journal of the European Union on December 18, 2009. In the coming months, this package will have to be implemented accordingly in Austrian law.

Competence center

Internet Offensive, ICT Factbook, ICT Task Force

Under the provisions of Art. 9 KOG, RTR is also responsible for acting as a competence center for broadcasting and telecommunications industry affairs. This duty does not apply to RTR's activities in the regulation of postal services.

In RTR's Telecommunications Division, for example, RTR worked with the Austrian Federal Chancellery and the Federal Ministry of Transport, Innovation and Technology (BMVIT) to implement a platform for the presentation of ICT projects in Austria. Moreover, in order to enhance its knowledge and skills in the field of information and communications technology (ICT), RTR also conducted international research and analyses on experience in top-ranking ICT countries. This knowledge is also put to use in updating and maintaining RTR's ICT indices. In addition, RTR continues to provide support for the Federal Chancellery and the Federal Ministry of Transport, Innovation and Technology. In the future, these activities will also be conducted within the framework of the "Internet Society Competence Center" (KIG) established on February 9, 2010.

1.3 Contribution to the achievement of objectives under the Postal Services Act (PostG)

In this area, one relevant topic during the reporting period was the Austrian Postal Services Act of 1997 (PostG 1997), which was supplemented and amended by specific provisions of the Postal Market Act (PMG) in early December 2009.

The Postal Services Act stipulates that postal services must be provided in a satisfactory manner for all users throughout the federal territory of Austria at a reasonable price and on equal terms. The act defines the basic criteria for the fulfillment of the universal service mandate as well as the general terms of competition in the field of postal services.

The PMG is intended to ensure that Austria's consumers and businesses have access to diverse and high-quality postal services at reasonable prices. In particular, the PMG is designed to ensure sufficient basic postal services (universal service) at reasonable prices and to enable fair competition in the provision of postal services. However, this provision regarding the purpose of the act (Art. 1 PMG) will not go into effect until January 1, 2011.

PostG does not define objectives of regulation

The Communications Report 2008 already mentioned that – in contrast to the KommAustria Act (KOG) and Telecommunications Act (TKG) 2003 – the Postal Services Act does not stipulate objectives to be attained through regulation. The entry into effect of several provisions in the PMG has not changed this interpretation.

Defining topic: Planned closure of post offices

From the perspective of the Telekom-Control-Kommission's Postal Service Regulation Committee (TKKP), the reporting period was largely characterized by approval procedures for Österreichische Post AG's general terms and conditions of service, supervisory procedures regarding the permissibility of certain discounts, and in particular supervisory procedures related to the closure of post offices in Austria. In this process, the committee relied on the legal view that the Federal Minister of Transport, Innovation and Technology is responsible for prohibiting the closure of post offices in accordance with the Postal Services Act. This interpretation of the law was also confirmed by the Austrian Administrative Court (Case G 205/09 inter alia; October 8, 2009).

Controversy regarding PMG

The Postal Market Act (PMG), which many alternative postal service providers believe has fallen far short of expectations with regard to market deregulation, was announced on December 4, 2009. While the PMG will largely go into effect on January 1, 2011 (or even December 31, 2012 for the mandatory opening of access to mailboxes in buildings), a number of changes relevant to the Postal Service Regulation Committee already went into effect in December 2009. These included the following:

Post-Control-Kommission (PCK)

- The TKK's Postal Service Regulation Committee is now known as the *Post-Control-Kommission* (Postal Control Commission, or PCK).
- The PCK will assess whether it is permissible to close post offices.
- The PCK is advised by the Post Office Advisory Board. This board was established on January 27, 2010 and submits comments and opinions on the closure of post offices.

No transparency requirements

The PostG and PMG (where it is already in force) do not stipulate specific transparency obligations for the regulatory authority. Therefore – in contrast to the requirements under Art. 123 TKG 2003 – fundamental decisions made by the regulatory authority are not made public or presented in this report.

2. Regulatory authorities and environment

2.1 Regulatory authorities

In implementing the Austrian Telecommunications Act 1997 (TKG [1997]), the Austrian government established two regulatory authorities for telecommunications: the Telekom-Control-Kommission (TKK) and the Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR; formerly known as Telekom-Control GmbH). On the basis of the KommAustria Act, KommAustria was set up in 2001 as the regulatory authority for the broadcasting markets. The duties and objectives of all regulatory authorities responsible for electronic communications markets are defined in the relevant laws, specifically in the Austrian Telecommunications Act 2003 (TKG 2003) and the KommAustria Act (KOG).

For example, the Telecommunications Act 2003 calls for the creation of modern electronic infrastructure, ensuring equal opportunities and functional competition as well as promoting and protecting the interests of users.

The KommAustria Act defines the specific duties of the regulatory authority as follows: issuing broadcasting licenses, conducting procedures regarding the shared use of broadcasting stations, issuing permits for the operation of broadcasting stations, frequency administration, legal supervision of private broadcasting organizations, preparing for the introduction of digital broadcasting, and monitoring compliance with advertising regulations by private broadcasters as well as the Austrian Broadcasting Corporation (ORF).

On January 1, 2008, the TKK was expanded to include a second committee for matters related to postal services (known as the *Post-Control-Kommission* [Postal Control Commission], or PCK, since the announcement of the Postal Market Act on December 4, 2009), with RTR as its operative arm. The Postal Services Act (PostG) 1997 and the Postal Market Act (PMG), a large part of which will not go into effect until January 1, 2011, essentially govern the provision of universal service for the Austrian postal market.

2.1.1 Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR)

RTR is a convergent regulatory authority which is wholly owned by the Republic of Austria. The organization is headed by two managing directors: In the year 2009, Alfred Grinschgl served as managing director of the Broadcasting Division, while Georg Serentschy was in charge of the Telecommunications Division and postal service regulation. With regard to the specific technical matters handled by these divisions, the managing directors run their respective units separately; in all other matters, decisions are made jointly by both directors.

The duties assigned to RTR by law can be subdivided into the following areas:

1. Operational support for KommAustria, the PCK and TKK;
2. Execution of specific official duties in the Telecommunications Division (e.g., powers to issue ordinances and to carry out procedures in the field of numbering) and in postal regulation;
3. Activities under the Signatures Act (SigG);
4. Administration and allocation of grants from the Austrian Digitization Fund, Non-Commercial Broadcasting Fund, Private Broadcasting Fund and Austrian Television Fund (handled by the Broadcasting Division);
5. Management of a competence center for issues related to media and telecommunications convergence (both divisions);
6. Maintenance of the list pursuant to Art. 7 of the Austrian E-Commerce Act (ECG).

2.1.2 Telekom-Control-Kommission (TKK)

The Telekom-Control-Kommission was set up as a panel authority with the powers of a court and makes major decisions in connection with telecommunications regulation. The TKK is not bound by instructions from any authority. The commission also acts as the supervisory authority for electronic signatures. Each member of the commission is appointed for a term of five years (currently November 2007 to November 2012).
In the year under review, the TKK comprised the following members:

- Elfriede Solé (Chairperson)
- Erhard Fürst
- Günter Haring
- Eckhard Hermann (Alternate Member)
- Mathias Grandosek (Alternate Member)
- Otto Petrovic (Alternate Member).

A comprehensive list of the TKK's duties can be found in Art. 117 TKG 2003.

2.1.3 Post-Control-Kommission (PCK)

The PCK (formerly known as the TKK's *Senat für Postangelegenheiten* [Postal Service Regulation Committee]) was set up as a panel authority with the powers of a court and makes major decisions in connection with the regulation of postal services. This commission is not bound by instructions from any authority. Each member of the commission is appointed for a term of five years (currently until November 2012).
In the year under review, the PCK comprised the following members:

- Elfriede Solé (Chairperson)
- Erhard Fürst
- Alfred Stratil
- Eckhard Hermann (Alternate Member)
- Mathias Grandosek (Alternate Member)
- Alfred Taudes (Alternate Member).

A full list of the duties assigned to the PCK can be found in Art. 25a PostG 1997 and Art. 40 PMG.

2.1.4 Austrian Communications Authority (KommAustria)

KommAustria is an authority which reports directly to the Austrian Federal Chancellor. This body consists of eight members, and since January 1, 2004 it has been headed by Michael Ogris, who is currently serving his second term as chairman. In its operations, KommAustria acts as an independent body and relies on RTR for operational support in the performance of its duties in broadcasting regulation.

KommAustria head Michael Ogris makes official decisions and represents KommAustria to the outside world

Within the scope of its official activities, the authority makes first-instance decisions – in some cases also acting as an investigative authority with the power to report violations – and performs its broadcasting regulation duties in accordance with the following laws:

KommAustria Act (KOG), Private Radio Act (PrR-G), Private Television Act (PrTV-G), ORF Act (ORF-G), Telecommunications Act 2003 (TKG 2003), Access Control Act (ZuKG), and Cooperation of Consumer Protection Authorities Act (VBKG).

Moreover, KommAustria has also been assigned official duties and responsibilities in private-sector administration for the federal government; in this context, RTR is essentially responsible for providing infrastructure:

- Since 2004, KommAustria has been responsible for administering and allocating federal press and journalism subsidies on the basis of the Press Subsidies Act 2004 (PresseFG 2004) and the Journalism Subsidies Act 1984 (PubFG).

- Since mid-2006, KommAustria has also acted as the supervisory authority for collecting societies under the Collecting Societies Act 2006 (VerwGesG 2006). In terms of organization, this area is separated from KommAustria's other activities and is therefore not covered by this report.

2.2 National regulatory environment

In order to achieve the regulatory objectives defined under Austrian law, the regulatory authorities cooperate with numerous national and international institutions, many of which are described in brief below.

Federal Chancellery (BKA)

KommAustria is subordinate to the Federal Chancellery and acts as an independent body in its business operations, relying on RTR for operational support in the performance of its broadcasting regulation duties. KommAustria is bound by the instructions of the Federal Chancellery. At the operational level, RTR cooperates closely with the Media Department (V/4) in the BKA's Constitutional Service, especially in legal matters, in matters related to broadcasting digitization and the continued development of a dual broadcasting market, and in events pertaining to media policy.

KommAustria and RTR's Broadcasting Division report to the BKA

Federal Ministry of Transport, Innovation and Technology (BMVIT)

The Federal Ministry of Transport, Innovation and Technology is responsible for defining the general framework for the telecommunications and postal services markets. The managing director in charge of the Telecommunications Division and postal service regulation at RTR is bound by the instructions of the Federal Minister of Transport, Innovation and Technology.

On the basis of its experience in day-to-day execution (e.g., at the EU level), RTR advises the ministry on the ongoing development of this framework.

Telecommunications authorities

The duties of the telecommunications authorities – which include the Federal Ministry of Transport, Innovation and Technology (as the highest authority), the Telecommunications Offices, as well as the Office for Radio Systems and Telecommunications Terminal Equipment – are governed by Articles 112 to 114 TKG 2003. For RTR's Telecommunications Division, it is important to emphasize the competence of the telecommunications authorities as the first-instance administrative penal authority as well as their competence in granting rights of way and in assigning frequencies. KommAustria is responsible for managing the frequency spectrum for terrestrial broadcasting and for issuing building and operating permits for terrestrial broadcasting facilities. The telecommunications authorities are in charge of monitoring adherence to the technical parameters approved for such facilities.

Postal service authorities

The duties of the postal service authorities – which include the Federal Ministry of Transport, Innovation and Technology (as the highest authority) and the first-instance postal service authority – are governed by Art. 25 PostG 1997. In this context, the latter authority essentially acts as the first-instance administrative penal authority.

Post Office Advisory Board

The Post Office Advisory Board was established under Art. 43 PMG as an advisory body to the PCK in matters related to ensuring nationwide coverage with post offices. The board must be consulted and submit its comments before the PCK takes supervisory measures, and in particular before the PCK makes decisions regarding the closure of post offices. The PCK may take those comments and opinions into account at its own discretion.

The board consists of three voting members, who are appointed by the Austrian Association of Municipalities, the Austrian Association of Cities and Towns, and the Liaison Office of the Federal Provinces. In addition, the board includes a representative of RTR as a non-voting member. The Post Office Advisory Board held its founding meeting on January 27, 2010.
The board currently comprises the following members:

- Robert Hink (Chairperson)
- Paul Trippl (Deputy Chairperson)
- Thomas Weninger
- Georg Serentschy

- Bernhard Haubenberger (Alternate Member)
- Albert Kreiner (Alternate Member)
- Sabine Marchart (Alternate Member)
- Wolfgang Feiel (Alternate Member).

Digital Platform Austria

The Digital Platform Austria working group was established by the Austrian Federal Chancellor under Art. 21 of the Private Television Act (PrTV-G) in order to support the regulatory authority in creating a plan for the introduction of digital broadcasting. The group's activities are managed by the regulatory authority (KommAustria) and by RTR. One major step in the digitization process – namely the digitization of terrestrial television broadcasting – will be completed in the first half of 2011.

Broadcasting Advisory Board

This board was set up as an advisory body for KommAustria and must be given the opportunity to submit comments before private broadcasting licenses are issued or changes in programming are approved.

The Broadcasting Advisory Board consists of six members appointed by the Austrian federal government.
Now in its second six-year term (from May 30, 2007 onward), the Board comprises the following members:

- René Tritscher (Chairperson for three years)
- Astrid Zimmermann (Deputy Chairperson for three years)
- Barbara Auzinger
- Gerald Grünberger
- Eduard Pesendorfer
- Harald Stockbauer.

Broadcasting Fund Review Board

This review board was set up for the purpose of advising RTR on the allocation of grants from the broadcasting funds; to this end, the board is required to submit comments and opinions on the fulfillment of prerequisites for funding. The board consists of five broadcasting experts, each of whom is appointed by the Austrian federal government for a term of three years. At present, the board includes the following members:

- Michael Holoubek (Chairperson)
- Angela Fritz (Deputy Chairperson)
- René Tritscher
- Martina Hohensinn
- Cornelia Breuss.

Austrian Television Fund Review Board

Under Art. 9h of the KommAustria Act, the purpose of this review board is to advise RTR's management on the allocation of grants from the Austrian Television Fund (FERNSEHFONDS AUSTRIA). Its five members are required to have a sound knowledge of the film industry as well as several years of relevant practical experience. All members are appointed by the Austrian Federal Chancellor for a term of three years and work for the board on a voluntary basis.
RTR's Television Fund Review Board currently comprises the following members:

- Andreas Hruza (Chairperson)
- Werner Müller (Deputy Chairperson)
- Bettina Leidl
- Gerlinde Seitner
- Matthias Settele.

Federal Communications Senate (BKS)

The Federal Communications Senate established within the Federal Chancellery is responsible for handling appeals against KommAustria decisions and for legal supervision of the Austrian Broadcasting Corporation (ORF).

A majority of the five members of the BKS must be appointed judges in Austria, and according to Art. 12 Par. 1 KOG they are independent and not bound by instructions in the performance of their duties. The members of this body are nominated by the federal government and appointed by the Austrian president.
The Federal Communications Senate currently includes the following members:

- Wolfgang Pöschl
- Edwin Gitschthaler
- Dorit Primus
- Michael Holoubek
- Georg Karasek
- Rainer Geissler (Alternate Member)
- Ilse Huber (Alternate Member)
- Barbara Helige (Alternate Member)
- Barbara Leitl-Staudinger (Alternate Member)
- Robert Streller (Alternate Member).

Federal Competition Authority

Due to certain parallels in sector-specific and general competition law and with due attention to maintaining the integrity of each authority's competences, it is necessary to ensure that the regulatory authorities cooperate closely with the Federal Competition Authority in matters related to general competition law on the basis of legally defined rights to submit comments and petitions. Austrian law and Community law provide for differing forms of cooperation between the general competition authority and sector-specific competition authorities.

Other organizations and national working groups

In addition to the bodies mentioned above, RTR also cooperates with other relevant institutions and organizations, such as the Austrian Federal Economic Chamber, Austrian Chamber of Labor, Consumer Information Association, universities and specialized colleges as well as the Telecommunications Research Center Vienna and the Working Group for Technical Coordination in Telecommunications (AK-TK).

2.3 International regulatory environment

The Independent Regulators Group (IRG) is a forum for the exchange of experience and views among independent national regulatory authorities (NRAs) for telecommunications within the European Union, in candidate countries (i.e., NRAs in Croatia, the Republic of Macedonia and Turkey), and in Switzerland, Norway, Iceland and Liechtenstein. By exchanging information, encouraging contact between experts and drawing up common positions, the NRAs support one another in the liberalization of national telecommunications markets and work together to harmonize market conditions by ensuring the consistent application of the European regulatory framework in each country.

In 2002, the European Commission established the European Regulators Group (ERG) as its own advisory body (Decision 2002/627/EC) in order to ensure better coordination of national regulatory practices through the consistent application of the EU's (then) new regulatory framework.

In 2009, the Independent Regulators Group (IRG) and the European Regulators Group (ERG) were able to contribute their experience in key areas of regulation for the further development of the European regulatory framework and in day-to-day implementation.

Progress in harmonization

Specific examples such as the continuing convergence of mobile termination fees clearly indicate that harmonization using an EU-wide bottom-up approach – that is, through effective regulation within each individual national market – is a successful strategy. The harmonization process has also been supported by a strong commitment to common positions and the targeted monitoring of members' compliance with those positions.

BEREC as a new telecommunications body

In the course of the review of the regulatory framework, the Body of European Regulators for Electronic Communications (BEREC) was established in late 2009 under Regulation (EC) 1211/2009. BEREC will carry out its tasks independently, impartially and transparently. In all of its activities, the body will pursue the same objectives as those of the national regulatory authorities as set out in Article 8 of Directive 2002/21/EC (Framework Directive). In particular, BEREC will contribute to the development and better functioning of the internal market for electronic communications networks and services by aiming to ensure the consistent application of the EU regulatory framework for electronic communications. This new regulatory body is expected to launch its operational activities at the beginning of 2010.

Postal services

Participation in CERP

In coordination with the Federal Ministry of Transport, Innovation and Technology, RTR began to participate in international working groups in the field of postal regulation in 2008. In the year under review, the regulatory authority intensified these activities in line with the relevant focus areas and priorities. In particular, RTR's activities focused on participation in the various project teams, working groups and plenary meetings of the European Committee for Postal Regulation (CERP). With its 48 member states, CERP includes both regulatory authorities and government ministries, and the body operates in close cooperation with the European Commission. In the reporting period, RTR employees participated heavily in the preparation of numerous reports and statements.

CERP project teams and working groups

Project teams and working groups in which RTR participates:

- Project Team Cost Accounting/Price Regulation
- Project Team Universal Service and its Financing
- Project Team National Regulatory Authorities
- Project Team Market/Supervision
- Project Team Universal Service
- Working Group Application.

Postal Directive Committee

Another significant body in the context of postal regulation is the European Commission's Postal Directive Committee, in which non-EU countries also participate in meetings with observer status. In the year under review, those meetings involved specialist presentations as well as the active international exchange of experience, especially with regard to the implementation status of the 3rd Postal Directive and many other key regulatory issues related to postal services.

RTR also devoted substantial effort to preparing an extensive questionnaire in the course of a study on "The role of regulators in a more competitive postal market" drawn up for the European Commission.

For further details on RTR's international activities, please refer to Section 4.2.16.

3. Decisions of the high courts, Administrative Court and Constitutional Court

3.1 Lines of command and levels of appeal

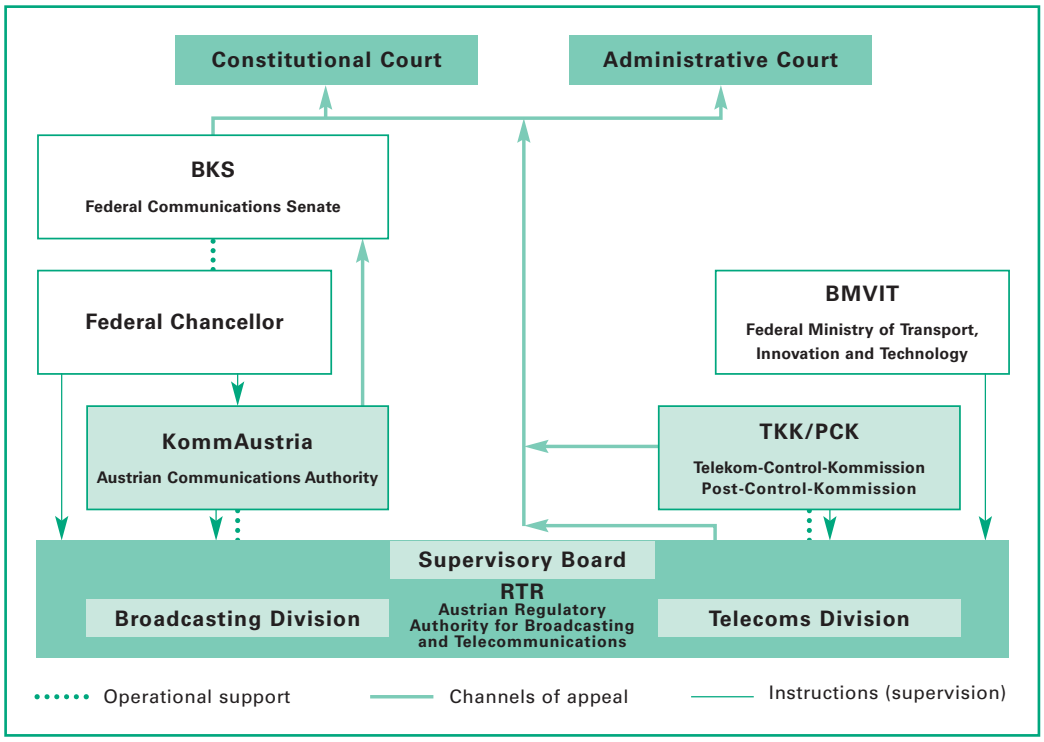
In the field of broadcasting, the Austrian Communications Authority (KommAustria) as well as the managing director of RTR's Broadcasting Division are bound by the instructions of the Federal Chancellor. All instructions must be issued in writing and justified accordingly.

In the field of telecommunications and postal regulation, the Austrian Federal Minister of Transport, Innovation and Technology is authorized to issue instructions to the managing director of RTR's Telecommunications Division; these instructions likewise have to be issued in writing and justified accordingly.

Finally, the chairperson of the Telekom-Control-Kommission (or the member designated in the TKK's rules of procedure), the chairperson of the Post-Control-Kommission (PCK) and the head of KommAustria also have the power to issue instructions for RTR's staff in specialist matters, except in the preparation of expert opinions.

TKK and PCK decisions can be contested by means of complaints filed with Austria's high courts (i.e., the Austrian Administrative Court and/or the Austrian Constitutional Court). Appeals against RTR's official decisions (in matters pertaining to the Telecommunications Division) can be submitted to the Austrian Administrative Court and/or the Austrian Constitutional Court, while appeals against KommAustria decisions can be submitted to the Federal Communications Senate (BKS) in the second instance. Further appeals against BKS decisions can be submitted to Austria's high courts. In matters related to the supervision of ORF's advertising activities, KommAustria has the power to investigate and report violations to the BKS.

Figure 1: Lines of command and levels of appeal (as of December 31, 2009)



Source: RTR

3.2 Broadcasting Division

3.2.1 Federal Communications Senate (BKS)

KommAustria's official decisions regarding broadcasting regulation issues can generally be contested by means of appeals, which are decided on by the Federal Communications Senate (BKS). The BKS issues decisions on the cases themselves and can amend official first-instance decisions in any way. As an exception, this competence is assigned to the Independent Administrative Board *(Unabhängiger Verwaltungssenat)* in Vienna for administrative penal cases.

KommAustria decisions confirmed after appeals to the BKS

In the reporting period, the BKS issued 32 decisions in response to appeals, with 12 decisions pertaining to complaints from ORF regarding violations of advertising regulations on the part of private broadcasters. With the exception of one decision in which ORF's appeal was sustained, all of the decisions issued by KommAustria were confirmed.

In the licensing procedure for regional terrestrial multiplex platforms (MUX C), the BKS confirmed KommAustria's official decisions to grant licenses to WESTSTEIRISCHE KABEL-TV

GesmbH and Tele1Vision Video- und Fernsehproduktion GesmbH for the operation of terrestrial multiplex platforms in the region of Western Styria/Central Graz and the Greater Vienna Area, respectively.

In the field of radio broadcasting, three KommAustria decisions were confirmed in which applications for the allocation of a coverage area and a radio broadcasting license were rejected due to the absence of special local needs in accordance with Art. 12 Par. 6 Private Radio Act (PrR-G).

In addition, the BKS confirmed the allocation of the "S POELTEN (Schildberg) 96.3 MHz" coverage area to Antenne Österreich GmbH for the purpose of expanding its existing coverage area (Vienna 102.5 MHz).

In the radio licensing procedure for the "Wiener Neustadt and Neunkirchen Districts, Town of Wiener Neustadt" coverage area, the BKS confirmed KommAustria's rejection of the application from Radio Corvinus GmbH (under incorporation) due to the applicant's failure to comply with an instruction to remedy defects in the application in a timely manner.

Likewise, the BKS confirmed KommAustria's decision to allocate KRONEHIT Radiobetriebs GmbH. the "HALLWANG 92.3 MHz" coverage area for the purpose of expanding coverage by the nationwide broadcasting licensee. In another case, the BKS confirmed KommAustria's official decision to reject an application from KRONEHIT Radiobetriebs GmbH. for the allocation of the "SPITTAL DRAU 5 (Hühnersberg) 99.3 MHz" coverage area for the purpose of expanding coverage under the applicant's nationwide broadcasting license. The application was regarded as a *res iudicata*. In contrast, the first-instance determination of the existing coverage area for the nationwide radio broadcasting license held by KRONEHIT Radiobetriebs GmbH., which indicated that the coverage area no longer included "SALZBURG (Gaisberg) 94.0 MHz" and "SPITTAL DRAU 5 (Hühnersberg) 99.3 MHz," was overturned without substitution due to the absence of a disputed legal relationship which would have required such a determination.

Violations of the Private Radio Act and Private Television Act identified in the first instance due to the failure of radio broadcaster DIGI Hit Programm Consulting GmbH and cable broadcaster Creative Networks Solution GmbH to present recordings of their broadcasts were also confirmed.

In the field of television broadcasting, the BKS also confirmed the first-instance identification of a severe violation on the part of the satellite television broadcaster Deep Space Media GmbH. Between 5:00 and 6:00 pm on May 26, 2008, the broadcaster violated the provisions of Art. 32 Par. 2 Private Television Act ("Protection of Minors") on the channels "Gratis Hot TV," "Manneskraft TV" and "Spass im TV" by broadcasting programs which may have an adverse effect on the physical, mental or moral development of minors and for which it is not ensured that such broadcasts cannot usually be seen or heard by minors.

In another case, the BKS confirmed KommAustria's decision on the lapse of the satellite broadcasting license held by Mostafavi-Rad KEG for the channel "Firebird TV" due to the broadcaster's failure to carry out regular broadcasting operations.

In addition, the BKS confirmed an official rectification decision which stated that Livetunes Network GmbH holds a digital radio broadcasting license pursuant to Art. 28 Private Television Act.

In connection with the market analysis conducted in 2009, the BKS confirmed KommAustria's three decisions instructing Österreichische Rundfunksender GmbH & Co KG (ORS) to supply data for the purpose of market analyses with regard to the three markets defined as relevant in the Broadcasting Market Definition Ordinance 2009 (RFMVO 2009) of April 30, 2009.

With regard to financing contributions, the BKS rejected the appeal submitted by Community TV-GmbH regarding KommAustria's official decision requiring the broadcaster to pay financing contributions for the year 2008.

In connection with the shared use of ORF broadcasting facilities, the BKS overturned an official decision issued by KommAustria in 2003 with regard to PULS CITY TV GmbH; the case was remanded to KommAustria for reconsideration and the adoption of a new official decision.

In addition, the BKS issued rulings on official decisions made by KommAustria in connection with advertising monitoring in five cases where violations were identified on the part of private broadcasters. In four of those cases, the decisions issued by KommAustria were confirmed in their entirety.

In its capacity as the (first-instance) legal supervisory authority for ORF, the BKS also decides on reports filed by KommAustria in the course of its advertising monitoring activities (for further information, please refer to Section 4.1.8). In the period under review, seven official decisions were issued in this regard, and violations of the ORF Act (ORF-G) were identified in six of those cases.

3.2.2 Proceedings before the Constitutional Court (VfGH)

Complaints regarding BKS decisions on appeals can also be filed with the Austrian Constitutional Court. In the reporting period, the Constitutional Court rejected a complaint submitted by KRONEHIT Radiobetriebs GmbH. regarding the "SALZBURG (Gaisberg) 94.0 MHz" coverage area due to a lack of substantive legitimation on the part of the complainant.

3.2.3 Proceedings before the Administrative Court (VwGH)

Administrative Court reviews official decisions issued by BKS

BKS decisions on appeals are subject to review by the Austrian Administrative Court. In contrast to the BKS, the Administrative Court does not decide on the cases themselves; instead, it can overturn BKS decisions where appropriate, which subsequently requires the BKS to amend its decision.

In the reporting period, the Administrative Court issued rulings on four BKS decisions pertaining to radio broadcasting licenses. The court issued an additional ruling in response to a complaint submitted by ORF regarding a private broadcaster. The decisions of the BKS were not overturned in any of those cases.

3.3 Telecommunications Division

3.3.1 Proceedings before the Constitutional Court (VfGH)

During the period under review, a total of four complaints regarding TKK decisions were filed with the Austrian Constitutional Court. All of those complaints were related to procedures in which a company was identified as possessing significant market power and subjected to obligations pursuant to Articles 38 to 47 TKG 2003.

During the reporting period, the Constitutional Court discontinued the procedure in one case because the underlying complaint was withdrawn.

In addition, the Constitutional Court rejected a direct application submitted under Art. 139 B-VG requesting that the renewed definition of a market as susceptible to sector-specific ex ante regulation be overturned; the request was rejected for lack of substantive legitimation. The Constitutional Court justified its decision by stating that the mere definition of a market for the purposes of sector-specific ex ante regulation does not bring about an immediate and direct effect on an operator. As of December 31, 2009, four procedures were still pending.

3.3.2 Proceedings before the Administrative Court (VwGH)

During the period under review, a total of 42 complaints regarding TKK decisions were filed with the Austrian Administrative Court. These complaints pertained to 23 procedures in which a company was identified as possessing significant market power and subjected to obligations under Articles 38 to 47 TKG 2003, 15 interconnection procedures, one supervisory procedure under Art. 91 TKG 2003, one frequency assignment procedure under Art. 56 TKG 2003, and two other procedures.

The Administrative Court handed down a total of 28 decisions in the reporting period. In 22 cases, the procedure was declared invalid and discontinued because the underlying complaint was withdrawn. Two official decisions were overturned due to violations of procedural rules, and in two other cases the court identified legal violations in the content of the decisions. In two procedures regarding frequency assignments under Art. 56 TKG 2003, the Administrative Court confirmed the TKK's official decisions. As of December 31, 2009, 26 complaints were still pending before the Administrative Court.

3.4 Postal regulation

3.4.1 Proceedings before the Constitutional Court (VfGH)

During the reporting period, one complaint regarding a decision issued by the TKK Postal Regulation Committee (known as the *Post-Control-Kommission* since the Postal Market Act went into effect on December 5, 2009) was submitted to the Austrian Constitutional Court. The complaint concerned a supervisory procedure pursuant to Art. 27 Postal Services Act (PostG) 1997 regarding the approval of discounts, and it was rejected by the Constitutional Court in a ruling issued on December 17, 2009. As of December 31, 2009, no further procedures were pending before the court.

3.4.2 Proceedings before the Administrative Court (VwGH)

During the period under review, the Austrian Administrative Court issued only one ruling in relation to this field. In the case in question, the court confirmed the PCK's decision to require approval of discounts for reserved postal services and notification of discounts for universal services. As of December 31, 2009, no further procedures were pending before the court.

4. RTR's activities in 2009

4.1 Broadcasting Division

In addition to ongoing procedures, the authority's regulatory activities in the field of radio broadcasting in 2009 were characterized by numerous complaints submitted by the Austrian Broadcasting Corporation (ORF) about private broadcasters' alleged violations of advertising regulations under the Private Radio Act. Another major focus area was the allocation of radio broadcasting licenses for the "Wiener Neustadt and Neunkirchen Districts, Town of Wiener Neustadt" and "Graz 104.6 MHz" coverage areas.

Moreover, activities in the field of digital television centered around the continuing expansion of DVB-T coverage nationwide as well the new invitation to tender for MUX C (local and regional television) after the previous procedure in 2007.

4.1.1 Regulatory activities in radio broadcasting

4.1.1.1 Licensing procedures / Allocation of frequencies

Applications can be submitted at any time

Applications for the allocation of new frequencies can be submitted to KommAustria at any time. Applicants can either request a license for a new, separate coverage area or for the expansion or improvement of existing coverage areas. Moreover, an existing nationwide radio broadcaster can also request the allocation of frequencies in order to expand its coverage area.[1]

Priority of allocations

Article 10 PrR-G defines the objectives to be pursued in allocating frequencies in the interest of a dual broadcasting system.

19 frequency allocations

In the year 2009, the regulatory authority handled a total of 37 allocation procedures for radio broadcasting pursuant to the Austrian Private Radio Act (PrR-G) and completed 19 of those procedures by way of official decisions. The procedures were carried out at the request of the relevant parties or on the basis of official invitations to tender. Two radio broadcasting licenses were issued to private broadcasters, and in nine procedures a total of 12 frequencies were allocated to existing private broadcasters for the purpose of expanding their coverage areas. In addition, one frequency was allocated to a radio broadcaster for the purpose of improving coverage in an existing coverage area. In another case, the regulatory authority was able to allocate a frequency which had previously been reserved for a separate decision due to a complaint pending before the Austrian Constitutional Court. In addition, a total of six frequencies were allocated to Austria's only nationwide private radio broadcaster, KRONEHIT Radiobetriebs GmbH., during the reporting period in order to expand the organization's nationwide license. Four license applications were rejected due to failure to fulfill the relevant legal requirements.

[1] Detailed documentation on requirements imposed in licensing procedures can be found on the RTR web site at http://www.rtr.at/en/rf/VeranstalterBetreiber.

Finally, 18 additional procedures were still pending at the end of the reporting period (not including the frequencies requested by the nationwide radio broadcaster for the purpose of expanding its coverage area).

4.1.1.2 Allocation of frequencies to create new coverage areas

One existing license renewed

In 2009, one radio broadcasting license was awarded for the "Wiener Neustadt and Neunkirchen Districts, Town of Wiener Neustadt" coverage area. The broadcaster's license had expired as of September 30, 2009. In this procedure, the previous licensee, HiT FM NÖ Süd Radiobetriebsges.m.b.H., was again awarded the license in the first instance. However, as appeals were submitted against this official decision, it has not yet taken legal effect.

Creation of a new coverage area

An additional radio broadcasting license was granted to Arabella Graz Privatradio GmbH for the "Graz 104.6 MHz" coverage area; in this case as well, the official decision is not yet legally effective.

4.1.1.3 Allocation of frequencies to expand or improve existing coverage areas

Restricted tender procedure for applications involving coverage expansions

In cases where a broadcaster applies for the expansion of its coverage area and the relevant frequency's technical range comprises a population of less than 50,000, the public invitation to tender can be restricted to existing radio broadcasters for the purpose of expanding existing coverage areas (Art. 13 Par. 3 PrR-G).

Nine existing coverage areas expanded

Eight procedures carried out with such a restricted invitation to tender under Art. 13 Par. 3 PrR-G led to the expansion of previously existing coverage areas in 2009:

- SCHEFFAU 99.5 MHz, S JOHANN 90.6 MHz, KITZBUEHEL 3 104.4 MHz – Expansion of the existing coverage area "Lower Inntal Valley (including Hall and Zillertal Valley)" (Antenne Österreich GmbH; coverage area renamed "Eastern region of North Tyrol 2");
- HAIMING 106.8 MHz – Expansion of the existing coverage area "Eastern Region of North Tyrol" (U1 Tirol Medien GmbH; coverage area renamed "Eastern region of North Tyrol and parts of the Tyrolean highlands");
- WAIDHOFEN YB 6 107.3 MHz – Expansion of the existing coverage area "Northern Mostviertel region" (Privatradio Mostviertel GmbH & Co KG);
- S ANTON ARLB 101.8 MHz – Expansion of the existing coverage area "Tyrolean highlands" (Radio Oberland GmbH);
- EISENERZ 101.0 MHz – Expansion of the existing coverage area "Bruck an der Mur/Mur-, Mürztal 106.6 MHz" (Radio-TV GRÜN WEISS Betriebs GmbH Nfg. KEG);
- MÜRZZUSCHLAG 107.0 MHz – Expansion of the existing coverage area "Bruck an der Mur/Mur-, Mürztal 106.6 MHz" (Radio-TV GRÜN WEISS Betriebs GmbH Nfg. KEG);
- MAYRHOFEN 3, 96.0 MHz – Expansion of the existing coverage area "Jenbach" (Radio Maria Österreich; coverage area renamed "Jenbach and Zillertal");

- SCHLADMING 6 104.0 MHz, ADMONT 2 103.0 MHz – Expansion of the existing coverage area "Liezen Area" (CulturCentrum Wolkenstein; coverage area renamed "Ennstal Valley").

In addition, one procedure carried out under Art. 12 in conjunction with Art. 10 PrR-G after an unrestricted invitation to tender also served to expand a previously existing coverage area:

- FELDKIRCH 104.3 MHz – Expansion of the existing coverage area "Bludenz" (Dachverband für Kultur- und Medieninitiativen und Jugend; coverage area renamed "Bludenz and Feldkirch").

Announcement of coverage improvement applications to licensees in the same coverage area

Under Art. 12 Par. 4 PrR-G, if an application for improvements in coverage is deemed feasible and permissible in terms of communications technology, it is announced to the radio broadcasters licensed for the area which could be covered by the requested transmission capacity. Within two weeks of delivery of the announcement, those radio broadcasters have the right to apply for allocation of the transmission capacity themselves if the capacity in question could also serve to improve coverage in their own areas. In these applications, the applicants are also required to specify the coverage deficiencies to be remedied by the transmission capacity in question.

If another radio broadcaster submits an application and is able to provide evidence that allocating the transmission capacity to that broadcaster's coverage area would bring about a greater improvement of deficiencies in its coverage, the transmission capacity is to be allocated to that broadcaster and not to the original applicant.

The decision as to whether such an improvement is greater is based on the principle of economy in frequency usage (with special attention to avoiding double or multiple coverage), the number of people affected by the coverage deficiencies (resident population) as well as the geographical extent and severity of the coverage deficiencies.

One improvement of coverage in an existing coverage area

One allocation procedure carried out under Art. 12 in conjunction with Art. 10 PrR-G served to improve the quality of coverage in an existing coverage area:

- PAISSLBERG 2 96.7 MHz to improve coverage in the coverage area "Carinthia" (Antenne Kärnten Regionalradio GmbH).

Finally, the Catholic broadcasting association "Radio Maria Österreich" was allocated the "SPITTAL DRAU 5 (Hühnersberg) 99.3 MHz" frequency as part of the "Spittal an der Drau" coverage area for the duration of the relevant radio broadcasting license. In this special case, the official allocation decision was reserved for a separate decision because a complaint procedure regarding the frequency was pending before the Austrian Constitutional Court at the time when the decision was made. Due to the later discontinuation of the complaint procedure, it was possible to include the frequency "SPITTAL DRAU 5 (Hühnersberg) 99.3 MHz" in the "Spittal an der Drau" coverage area and thus to allocate the frequency as described above.

4.1.1.4 Nationwide broadcasting license

Status at end of 2008

On December 6, 2004, KommAustria issued KRONEHIT Radiobetriebs GmbH. the first license for nationwide private terrestrial radio broadcasting in Austria. On the basis of the 28 frequencies allocated in connection with the license award, the company was allocated seven additional frequencies in 2005, 15 in the year 2006, ten in 2007, and eight in 2008. Due to rulings handed down by the Austrian Administrative Court, the frequencies "SALZBURG (Gaisberg) 94.0 MHz" and "SPITTAL DRAU 5 (Hühnersberg) 99.3 MHz" are no longer allocated to the nationwide licensee. KRONEHIT Radiobetriebs GmbH. broadcasts its radio programs in adult contemporary format under the name "Kronehit".

Six additional frequencies allocated in 2009

In 2009, the licensee was allocated the following six frequencies to expand its coverage area, and its broadcasting license was amended accordingly:

- Radio broadcasting station: HINTERTUX 2, location: Hohenhaustenne, frequency: 97.7 MHz;
- Radio broadcasting station: HALLWANG, frequency: 92.3 MHz;
- Radio broadcasting station: BAD AUSSEE 2, location: Reitern, frequency: 107.2 MHz;
- Radio broadcasting station: STRASSWALCHEN, location: Tannberg, frequency: 91.3 MHz;
- Radio broadcasting station: UNZMARKT, location: Rittersberg, frequency: 91.5 MHz;
- Radio broadcasting station: VIKTRING, location: Stifterkogel, frequency: 91.6 MHz.

These frequency allocations served to reduce gaps in coverage in the federal provinces of Carinthia, Salzburg and Styria.

Opportunity to apply for nationwide license in 2008-2009

In the period from October 20, 2008 to April 30, 2009, the regulatory authority invited interested parties to apply for another nationwide license in accordance with Art. 28b Par. 1 PrR-G. However, no applications were received.

4.1.1.5 Event and educational radio programs

Event radio licenses

Event radio refers to radio broadcasting licenses which are granted for a maximum of three months under Art. 3 Par. 5 No. 1 PrR-G and which are used in the local area surrounding an independent public event during and around the time of the event.

In 2009, licenses were granted for the following event radio programs:

- "Fun & Action – Sports & Kultur" association for radio broadcasts from May 13 to 24, 2009 in connection with the GTI gathering in the area around Lake Wörthersee;
- "Verein für Kultur Inzing" association for radio broadcasts from October 2 to 25, 2009 in connection with the "Inzinger Identitätswochen" event;
- Bernd Kranebitter for radio broadcasts from August 15 to October 31, 2009 in connection with the "Radiospotting" project;
- "Radio Maria Österreich" association for radio broadcasts from October 3 to November 1, 2009 (eventually extended to November 30, 2009) for the "850 Years of (Church in) St. Pölten – Gloria Mass" project.

Educational radio licenses

Pursuant to Art. 3 Par. 5 No. 2 PrR-G, educational radio refers to licenses granted to education and training institutions for the surrounding local area if the programs have a functional relationship to the duties to be fulfilled by those institutions. These licenses can be granted for a maximum of one year.

The following educational radio licenses were granted in 2009:

- One educational radio broadcasting license was granted to the "Radio Gymnasium" association for self-produced radio broadcasting with content partly designed by school pupils in the course of their lessons. The radio station's verbal content is tailored to events in the Central Burgenland region and broadcast in the language of the ethnic groups of the Burgenland region as well as the language of instruction at the Oberpullendorf secondary school.

- One educational radio broadcasting license was granted to the "Verein zur Schaffung und zum Betrieb von unabhängigen Fachhochschulradios St. Pölten" association for self-produced radio content broadcast for students and school pupils by students at the St. Pölten University of Applied Sciences (FH), including various music shows, talk shows, broadcasts on IT and media-related topics, chart shows and the like.

- One educational radio license was granted to a secondary school in Freistadt which had applied for a self-produced radio broadcasting license for pupils, teachers and parents, comprising music broadcasts, projects of the lower and upper school classes, interviews, news broadcasts as well as contributions from parents and teachers.

- One educational radio license was granted to the "Basic Vocal" association for self-produced radio content for young and middle-aged people in the "HOT AC" format, with the exception of the music styles techno and rock, including content of regional and educational relevance.

- One educational radio license was granted to "Freies Radio B 138," an association established to promote independent, non-commercial radio projects in the Krems Valley; the station's core programming features are open access as a special means of promoting local citizens' participation and the high involvement of schools in the region.

4.1.1.6 Procedures under telecommunications law in the field of radio broadcasting

Procedures under telecommunications law

For the sake of simplicity in administration ("one-stop shopping"), KommAustria is responsible for issuing licenses under broadcasting law as well as permits for radio systems (for the provision of broadcasting services) under telecommunications law.

Applications under telecommunications law without a direct connection to broadcasting law generally pertain to planned technical changes in radio systems, such as the use of new transmitter antennas, site changes or power enhancements.

All such applications are reviewed for compatibility with existing domestic and foreign transmitters by RTR's Broadcasting Frequency Management department. In many cases, this requires an international coordination procedure, in the course of which it is necessary to obtain the consent of the neighboring countries affected. In applications for changes, it is then possible to approve the planned modifications to radio systems.

With regard to applications which are also subject to broadcasting law (allocation of frequencies to expand or improve existing coverage areas), the procedure provided for under broadcasting law is continued and the telecommunications permit is issued together with the final broadcasting permit.

Private radio broadcasters

In the year 2009, KommAustria approved 17 changes to radio systems for private radio broadcasters; one application under telecommunications law was disputed and withdrawn in 2009, and another application was rejected. At the end of the year, four additional applications were still pending. In addition, KommAustria issued approvals for the launch of radio system operations in broadcasting frequency bands (e.g., to cover soccer stadiums, drive-in movie theaters, etc.) in ten cases.

Austrian Broadcasting Corporation (ORF)

As the authority in charge of issuing broadcasting permits for broadcasting transmitter stations, KommAustria also handles matters involving the Austrian Broadcasting Corporation (ORF).

In the case of the ORF, four applications for changes in (FM) radio systems were approved and two permits were issued for digital short-wave broadcasting.

4.1.2 Regulatory activities in television broadcasting

4.1.2.1 Digital terrestrial television

Nine decisions concerning 93 transmitter stations

During the reporting period, the expansion of the MUX A platform continued. In addition to the existing permits, KommAustria issued permits for 93 transmitter stations in a total of nine telecommunications decisions in 2009. At the end of the year, MUX A provided coverage for approximately 93% of Austria's population.

New channel on MUX B

The MUX B platform was expanded to include three additional broadcasting locations. Moreover, a fourth television channel (Servus TV) was added to the platform. At the end of the reporting period, MUX B provided coverage for approximately 87% of Austria's population.

4.1.2.2 Local digital terrestrial television

12 licenses for digital channels

After 16 licenses to operate local multiplex platforms in various regions of Austria were issued at the end of 2008, a majority of those platforms launched operations in 2009. In total, 12 licenses for digital channels were issued during the year under review.

New invitation to tender for MUX C

In November 2009, a new invitation to tender was held for available frequencies in the coverage layer used for MUX C. A total of six applicants took part in the procedure, which was still pending at the end of 2009.

4.1.2.3 Mobile TV

As for the nationwide multiplex platform for mobile terrestrial broadcasting (MUX D), no regulatory activities except for a channel shift were carried out in 2009.

4.1.3 Activities in the Digital Platform Austria working group

The Digital Platform Austria working group was established by the Austrian legislature in 2001 with the objective of supporting the regulatory authority in the development of broadcasting digitization plans. The working group consists of over 300 experts representing broadcasters, service providers, network operators, industry, trade, science and research, as well as consumer protection organizations and other stakeholders.

Digital dividend event

January 27, 2009: Digital dividend event

In January 2009, RTR's Digital Platform Austria working group invited participants to an event entitled "The Digital Dividend." Some 160 representatives of broadcasters, telecommunications and infrastructure operators, government authorities, science/research institutions and the business world took part in the event.

The motive underlying this event was the idea that the time had come to discuss the digital dividend in Austria, especially in light of the fact that more than half of all households in the country could already receive digital television signals. Among other things, the topics addressed included the status of the discussion in the European Commission, the results of the RRC 06 international planning conference, positions on the digital dividend from the broadcasting and telecommunications industries, and key technical parameters. Representatives from the broadcasting and telecommunications industries presented their positions, which were subsequently discussed by the participants.

Digital Radio Workshop – Survey of demand for digital broadcasting in Austria

Digital Radio Workshop

RTR and KommAustria initiated a workshop on the topic of digital radio broadcasting with a broad range of participants (for further information, see Section 4.1.10, Austrian Digitization Fund).

Publication of study "Advertising-based financing and mobile TV – International benchmarking of mobile TV advertising forms"

Best practices highlight potential of mobile television financed by advertising

This study, which was commissioned by RTR and carried out by Spoon Next Level Technology GmbH in a cooperative research project with the University of Graz and the evolaris next level private foundation, was published in December 2009 and can be downloaded from RTR's web site. On the basis of a comparative analysis of various business models for advertising-financed mobile television and the identification of international best practices, the study highlights the potential of television financed by advertising on mobile phones for the Austrian market and provides recommendations and possible courses of action for the public sector as well as market participants.

After an analysis of ten different forms of advertising, the study shows that specifically localized advertisements shown while content is loading are met with the highest acceptance. In addition, sponsor indications and links to microsites are also used.

The study's most pressing recommendation is to expand the user base for mobile television. In addition, the study recommends carrying out pilot projects involving the combination of mobile TV and additional interactive services.

4.1.4 Satellite broadcasting

KommAustria is also responsible for issuing satellite broadcasting licenses. The uniform licensing procedure for satellite television and radio broadcasting is governed by Art. 4 et seq. of the Private Television Act (PrTV-G).

New satellite broadcasting licenses

In 2009, KommAustria granted new satellite broadcasting licenses for five television channels and two radio channels:

- Red Bull Media House GmbH received two licenses for satellite television broadcasting:
  - "Red Bull TV" is an unencrypted special-interest channel which focuses on reports, magazines and documentaries on the topics of sports, lifestyle, art and culture, nightlife, music and travel as well as live event coverage. The information offered is restricted to events of supraregional relevance, entertainment and sports. The target group consists of people in the 14 to 49 age group who are interested in and open to innovative programming elements. The language used in programming is generally German, with some reports broadcast in English language, in part with subtitles or a voice-over. The channel is broadcast on the "ServusTV" channel during the following windows: Monday/Tuesday from 9:15 pm to 1:15 am, Friday/Saturday from 10:15 pm to 10:45 am, Saturday/Sunday from 10:30 pm to 7:55 am, Sunday/Monday from 10:00 pm to 6:20 am.
  - The other channel licensed is an unencrypted special-interest channel with worldwide reports and music from various genres which focuses on various styles of international music from classical to pop, event-related news from the fields of sports and culture, and event and story-related graphic and audio content. This channel might be described as a radio station which also comprises visual elements. The information offered is restricted to events of supraregional relevance from the fields of music, entertainment and sports.

The target group consists of people in the 14 to 49 age group who are interested in and open to innovative programming elements. The share of music content in programming averages approximately 75 to 80%. The language of programming is generally English, with subtitles provided for certain broadcasts.

- AMUSYS Amusement Systems Electronics GmbH: The "BCC 1TV" channel is an unencrypted subscription-based television channel for sports cafés, betting agencies, bookmakers and similar venues for the transmission of events related to gambling, such as sporting events, races and matches. In addition, the channel broadcasts commentary, pre-event reports, background reports and retrospectives on these events.

- Dragana Mirkovic Bijelic SAT TV KEG: "DM Sat" is an unencrypted entertainment channel which is free of political content and focuses on the subject of music from Balkan countries. The channel is broadcast in multiple languages (Serbo-Croatian, English, German, French, Romanian, etc.), with the bulk of programming in Serbo-Croatian. Programming predominantly consists of music shows (18 hours per day) as well as telenovelas (2 hours per day), (talk) shows, reports, weather reports and advertising.

- NMTV New Media Vertriebs GmbH: NMTV is a completely self-produced teleshopping channel broadcast in unencrypted form between 10:30 pm and 4:00 am. From 10:30 to 11:00 pm, the channel broadcasts non-erotic shows, which are followed by shows with erotic content from 11:00 pm onward. The offers presented include merchandise (e.g., DVDs, oils and fragrances) and services (teledating and chat services as well as miscellaneous telephone and text message premium services).

- Reditune Österreich Bornhauser GmbH & Co KG: The channel approved is an encrypted 24-hour entertainment radio station focusing on music. The channel's content is offered as ambient music for department stores, hotels, restaurants and similar venues.

- U1 Tirol Medien GmbH: The approved radio channel provides unencrypted 24-hour self-produced programming of general interest (only national and international news reports are outsourced), focusing heavily on local content in its verbal and music programming. Verbal content essentially includes news, an animal show, a job exchange, discussion shows as well as series covering local events. Music content includes hit songs, oldies and evergreens as well as traditional music.

Changes in satellite broadcasting licenses subject to approval

Substantial changes in satellite channels' programming are subject to approval under Art. 6 PrTV-G. Within the scope of its legal supervisory activities, KommAustria approved a number of changes in 2008. For details, please refer to Section 4.1.8.5.

4.1.5 Public communications networks and services

Communications networks must be reported under Art. 15 TKG 2003

The obligation to report the planned operation or provision of a public communications network or service for broadcasting transmission (radio and television) and additional broadcasting services refers in particular to dissemination by means of radio networks and cable networks. The launch, modification and discontinuation of such operations are each to be reported separately. Regardless of their place of incorporation, all communications service providers which render these services in Austria are subject to this reporting requirement. After receiving a complete notification report, KommAustria issues a confirmation (general approval) pursuant to Art. 15 Par. 3 in conjunction with Art. 120 TKG 2003.

In the reporting period, KommAustria issued seven confirmations under Art. 15 Par. 3 TKG 2003 to cable network operators.

Competition regulation for broadcasting networks

Under the TKG 2003, public communications networks and services for broadcasting are also generally subject to competition regulation by KommAustria. The regulatory authority's activities in the context of market analyses are described in the next section.

4.1.6 Broadcasting market analysis

Market definition and analysis

Under the TKG 2003, KommAustria is required to carry out regular reviews and analyses of broadcasting-specific markets for the provision of communications networks and services ("broadcasting transmission services").

European Commission issues new markets recommendation

On December 28, 2007, the European Commission adopted a new Recommendation on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services. The original version of the Commission's recommendation from 2003 also included the "Market for broadcasting transmission services to deliver broadcast content to end-users," which is no longer mentioned in the new recommendation. In the transitional provisions of the new recommendation, however, the Commission suggests that national regulatory authorities (NRAs) should carry out market analyses in order to determine the extent to which obligations should be maintained, amended or lifted; this should be done regardless of whether or not the relevant market is included in the new recommendation.

Review of relevant markets ordinance

In accordance with Art. 36 Par. 1 TKG 2003, the regulatory authority initiated a review of the ordinance identifying relevant markets susceptible to sector-specific regulation (RFMVO 2004). For this purpose, an extensive data survey was conducted among market participants and a new definition of relevant markets in the broadcasting sector was developed.

Broadcasting Market Definition Ordinance 2009 (RFMVO 2009)

After carrying out a consultation at the national level and coordinating the results at the EU level, the regulatory authority adopted the new ordinance on the relevant national markets for broadcasting transmission services for the provision of broadcasting content to end-users, subject to sector-specific regulation (Broadcasting Market Ordinance 2009, or RFMVO 2009) on April 30, 2009. In the new ordinance, KommAustria defined the following relevant markets:

1. Market for the analog terrestrial transmission of FM radio broadcasting signals to end-users;

2. Market for access and the digital terrestrial transmission of television signals to end-users using the MUX A and MUX B multiplex platforms;

3. Market for access to transmission facilities and the digital terrestrial transmission of television signals to end-users.

In geographical terms, each of these markets comprises the entire federal territory of the Republic of Austria.

Market analysis

On May 13, 2009, KommAustria instructed RTR's official experts to carry out market analyses on the basis of the new market definition ordinance. The purpose of these market analysis opinions is to examine whether effective competition prevails on each market from an economic perspective and whether self-sustaining competition exists in the absence of sector-specific regulation. In addition, the opinions are to identify those factors and competition problems which stand in the way of effective competition on the three markets. For this purpose, it was again necessary to collect data from market participants. In some cases, this data survey required an information procedure under Art. 90 TKG 2003, meaning that the market analyses stipulated under Art. 37 TKG 2003 will only be completed in the year 2010.

4.1.7 Broadcasting frequency management and coordination

In the year 2009, the regulatory authority once again carried out a large number of domestic and international coordination procedures. In FM radio broadcasting, one major area of activity in the reporting period involved handling coordination requests from the Czech Republic.

Many coordination procedures with Germany and Switzerland dealt with digital terrestrial television (DVB-T) and digital terrestrial radio (T-DAB).

In digital terrestrial television, the rollout of DVB-T networks was a key issue, while procedures related to T-DAB – especially in Germany – involved fundamental GE06 (Geneva Agreement 2006) plan changes, which required RTR's broadcasting frequency management experts to review the effects of those changes on Austria.

Frequency coordination procedures prevent unwanted effects of additional frequency usage

Germany wishes to transform the existing DVB-T coverage layer in the VHF frequency band based on the GE06 plan into several equivalent T-DAB coverage layers. The effects of those changes on Austria's plan entries require planning changes in Austria, which in turn have effects on Austria's neighboring countries.

Germany's DVB-T plans, which certainly have a significant effect on Austria, are designed to concentrate more transmission capacity in areas of high population density, as many private television broadcasters have only shown interest in covering those areas. In addition, the elimination of the channels above Channel 60 for television in Germany has brought about major gaps in heavily populated areas. The German authorities wish to fill those gaps in part by using channels from rural allotment areas.

In Austria, the DVB-T transmission network operated by Österreichische Rundfunksender GmbH & Co KG (ORS), which broadcasts Multiplex A (MUX A), has been expanded drastically, which has also required an increase in international coordination activities.

Moreover, several DVB-T transmitters were also added to the MUX B platform, and those transmitters also had to be coordinated with neighboring countries. Likewise, DVB-T transmitters were coordinated for the local and regional platform (MUX C), which in some cases required conversions or changes in existing plan entries. In addition, new transmission capacities arising from white spaces were also coordinated as extensions of the plan.

DRM+ standard enables new strategies for digital radio

In the reporting period, the DRM+ standard for digital terrestrial radio was issued by the European Telecommunications Standards Institute (ETSI), thus enabling new strategies for radio digitization. At present, it is still not possible to assess the extent to which this development will impact the market and manufacturing industry.

Another new digital broadcasting system was also standardized by ETSI in the year under review: the DVB-T2 system, which is a further development of DVB-T. The first prototype of a DVB-T2 transmitter was put into operation for test purposes in London in mid-2009.

DVB-T2 further increases efficiency

The DVB-T2 system will bring about additional gains in efficiency as well as increased flexibility in the construction of broadcasting transmitter networks; in particular, these changes can be taken into consideration for terrestrial HDTV broadcasting in the future. In England, regular DVB-T2 operations were already launched in one region at the end of 2009.

4.1.7.1 Frequency coordination procedures

The number of frequency coordination procedures handled in the field of broadcasting in 2009 is shown in the table below.

Coordination procedures open up new transmission capacities

Table 1: Number of coordination procedures in 2009

2009: 791 frequency coordination procedures

Country	Analog radio	Digital radio	Analog television	Digital television
Austria	56	9	0	38
Germany	20	53	2	40
France	207	0	0	0
Croatia	8	0	0	11
Poland	8	14	0	1
Switzerland	63	14	0	9
Slovakia	20	1	0	10
Slovenia	7	17	0	1
Czech Republic	110	0	0	43
Hungary	0	0	0	29
TOTAL	**499**	**108**	**2**	**182**

Source: RTR

During the year under review, Slovenia coordinated its nationwide digital terrestrial radio (T-DAB) plan with Austria. The plan comprised a total of 17 transmitter locations, each with a transmission power of 5 kW. Slovenia plans to carry out an invitation to tender for T-DAB in 2010.

In the course of coordination procedures for broadcasting transmitters, the regulatory authority took part in numerous bilateral and multilateral coordination negotiations in 2009.

At the meeting of the CEAM multilateral coordination group in Prague, which brought together representatives from Austria, Germany, Poland, the Czech Republic, Slovakia, Slovenia and Hungary, participants discussed specific coordination procedures as well as the potential effects of allocating the television channels above 60 to mobile network operators and the introduction of DVB-T2 as the successor to the DVB-T standard.

The ADSL coordination group, which comprises representatives from Austria, Germany, Switzerland and Liechtenstein, met in Bavaria and primarily discussed the implementation and planning of DVB-T and T-DAB broadcasting networks in the common border area between the member countries. In this context, the Austrian representatives placed special emphasis on ensuring equal access to spectrum.

4.1.7.2 Participation in licensing and allocation procedures

MUX A rollout already completed in many regions

In the year under review, the full rollout of the MUX A platform was completed in the province of Salzburg. In the federal provinces where the digitization process has not yet been completed, a number of regions were fully digitized in 2009. This was the case in the regions of Ausserfern, Upper Inntal Valley, Southern and Eastern Styria as well as the Alpenvorland region in Upper Austria and the Waldviertel region. In all of those cases, frequency planning was handled by RTR's Frequency Management department and ORS, the MUX A licensee.

The federal provinces of Upper Austria and Lower Austria will most probably complete the transition to digital-only broadcasting in the first half of 2010. The analogue turn-off (ATO) envisioned for mid-2011 is thus highly realistic from today's perspective.

In the course of the licensing procedures for FM radio carried out by KommAustria, the frequency management team prepared opinions on the relevant frequencies. The year under review was also characterized by numerous applications for technical changes and expansions. As in the previous year, these measures were largely taken in order to optimize and further expand coverage for the nationwide radio broadcaster (Kronehit). One important focus of activities in this area was the replacement of the former Kronehit frequency 94.0 MHz in Salzburg (Gaisberg) in 2009.

4.1.7.3 Frequency register

Frequency register provides an overview of broadcasting frequency utilization

At present, the frequency register and transmitter map include some 2,100 broadcasting transmitters. Approximately 1,700 of those transmitters can be attributed to the ORF, while the remaining 400 are used by private broadcasters. The frequency register includes analog transmitters as well as the new DVB-T transmitters (multiplexes). Analog television transmitters are not removed from the frequency register until the relevant permit holders have relinquished the corresponding transmission capacity.

The DVB-T transmitters approved in the frequency register as of late 2009 are distributed among the individual MUX platforms as follows:

Table 2: Number of approved DVB-T/H transmitters (as of December 31, 2009)

DVB-T Multiplex A (ORS multiplex)	194 transmitters
DVB-T Multiplex B (ORS multiplex)	20 transmitters
DVB-T Multiplex C (local multiplex)	35 transmitters
DVB-T Multiplex D (DVB-H multiplex)	19 transmitters

Source: RTR

Data on approved broadcasting transmitters is also available to the public in the form of tables as well as a graphic transmitter map on the RTR web site (http://www.rtr.at).

4.1.7.4 Measurement activities

Measurement activities support the preparation of expert opinions in frequency management

In the reporting period, approximately 20 major measurement projects were carried out and the results analyzed in the process of preparing expert opinions and international coordination activities.

Due to severe wear and tear, it was necessary to replace RTR's measurement vehicle in 2009.

In three measurement operations, pilot broadcasts were also carried out and their practical effects analyzed.

One special measurement project was launched in cooperation with the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT) in order to examine the terrestrial television channel situation in Mörbisch and St. Margareten; these channels are highly important for the use of wireless microphones during the festivals in those towns.

Another series of measurements was performed in order to measure DVB-T coverage in the western part of Austria. The objective was to verify MUX A's coverage in Austria and to investigate the use of the spectrum by DVB-T transmitters abroad. This was also necessary with regard to the future uses of wireless microphones in the UHF band, as less spectrum may be available for those applications due to the potential use of the digital dividend for mobile communications.

4.1.7.5 Participation in international working groups

ECC TG4

International working groups prepare studies, reports and strategies

On the basis of the second mandate from the European Commission regarding the digital dividend, the CEPT TG4 working group held three international conferences in the year under review. The planned reports were completed in a timely manner, after which it was possible to pass them on for consultation at the EU level.

A large part of the report on cross-border coordination between broadcasting and mobile services essentially refers to the results regarding coordination field strength in the GE06 agreement. Coordination field strength measurements make it possible to determine the number of neighboring administrations to involve in coordination activities. The report in question also presents additional methods, especially with regard to compatibility between two different radio services.

Broadcasting digitization has also had effects on the various secondary users of the same frequency band. This new situation for secondary users, especially those who use wireless microphones, was covered in an additional report which discusses the changes secondary users can expect now and (increasingly) in the future. In addition, the report details possible solutions, such as alternative frequency bands or classifications of critical and non-critical applications. Moreover, the report states that it is necessary to work on new and more efficient systems for secondary users.

Frequency Management Project Team 45 (FM PT45)

In the year 2009, this team held four meetings on the digitization of Band II (FM broadcasting band) and completed ECC Report 141 ("Future possibilities for the digitalisation of Band II") in September 2009.

One important topic to be discussed by this working group in its 2010 meetings is the assessment of options for introducing digital radio based on a comparison of the systems available on the market. In this context, the group will focus heavily on the technical parameters of the systems and the resulting regulatory issues.

Furthermore, Project Team 45 will discuss and propose possible additional uses of professional wireless microphones in alternative radio bands at the European level.

Joint Task Group 5-6 (JTG 5-6)

The JTG 5-6 working group was first established in 2008 and continued its activities in 2009. The group expects to complete its work in the course of the year 2010.

In accordance with the decision made at the World Radio Conference 2007 (WRC 2007), this group deals with the co-primary use of the 790-862 MHz frequency band (i.e., the digital dividend) for broadcasting and mobile communications.

The group's technical reports address the issues of technical compatibility as well as measurements regarding various services in the 790-862 MHz frequency band. Examples of these services include broadcasting, mobile communications and aircraft radio navigation.

4.1.8 Legal supervision

4.1.8.1 Advertising monitoring

Since August 1, 2004, KommAustria has been obligated under the KommAustria Act (KOG) to review evaluations of broadcasts containing advertising among all broadcasters on at least a monthly basis in order to ensure that they comply with advertising provisions under Austrian broadcasting law.

KommAustria is responsible for decisions with regard to the programs of private broadcasters in the enforcement of advertising regulations set forth in the PrR-G and PrTV-G, while – as the legal supervisory authority for ORF (and its channels) – the BKS is responsible for identifying violations of advertising regulations under the ORF Act (ORF-G) in response to reports from KommAustria. In determining the frequency of evaluations and selecting the sample reviewed, KommAustria accounts for the market shares of the respective broadcasters and tries to attain a representative cross-section of programs from various areas (culture, sports, reports, news, entertainment shows, feature films, etc.).

Channels monitored

Monthly samples

In the reporting period, ORF channels as well as those of private broadcasters were evaluated. (The list below does not include those procedures which were initiated on the basis of complaints from third parties citing violations of advertising regulations.)

Austrian Broadcasting Corporation (ORF) channels reviewed multiple times

Among the ORF's channels, the regulatory authority reviewed the regional radio stations for Lower Austria, Salzburg and Vienna twice as well as the television stations ORF 1 and ORF 2 six times without identifying any violations in 2009.

The procedures regarding the samples taken for the Ö1 radio station and the television stations ORF 1 and ORF 2 (with the latter samples each comprising 24 hours of broadcasts) have not yet been completed. The BKS identified legal violations on the part of Ö2's regional stations in Carinthia and Tyrol as well as the television broadcasts of Tourismusfernsehen Gesellschaft mbH and ORF 1 (two violations).

Six legal violations identified on the part of private broadcasters

The following private broadcasters' programs were analyzed (or requested): Vienna: Radio Eins Privatradio GmbH, Verein zur Förderung und Unterstützung von Freien Lokalen Nichtkommerziellen Radioprojekten ("Freies Radio Wien" for short) and N & C Privatradio Betriebs GmbH; Upper Austria: Entspannungsfunk Gesellschaft mbH and "On Air" Privatradio GmbH; Tyrol: N & C Privatradio Betriebs GmbH, FREIES RADIO INNSBRUCK – FREIRAD Verein zur Förderung der Medienvielfalt und der Freiheit der Meinungsäußerung, Regionalradio Tirol GmbH, Klassik Radio GmbH & Co KG and Lokalradio Innsbruck GmbH; Styria: Ennstaler Lokalradio GmbH and Privat-Radio Betriebs GmbH; Burgenland: Privatradio Burgenland GmbH; Salzburg: WELLE SALZBURG GmbH. Violations of advertising regulations were identified by KommAustria in only two of those cases. Three additional procedures have not yet been completed.

Among the private television broadcasters, RSL tirol tv Filmproduktion GmbH, AiNet Telekommunikations-Netzwerk Betriebs GmbH, ATV Privat TV GmbH & Co KG, Austria 9 TV GmbH, ATV Aichfeld Film- und Videoproduktion GmbH, and Alpenglühen Media GmbH were selected for sampling. In four of those cases, KommAustria identified a violation of advertising regulations.

4.1.8.2 Decisions of the Federal Communications Senate (BKS) on advertising violations

As in the year 2008, the BKS completed a large number of legal supervisory procedures initiated on the basis of KommAustria reports regarding ORF as well as procedures involving those private broadcasters which appealed against KommAustria's identification of advertising violations during the reporting period. Once again, the BKS concurred with KommAustria's legal views regarding advertising violations in a vast majority of cases.

BKS decisions on hidden advertising and Administrative Court ruling on advertising in event announcements

In terms of content, it is especially worth mentioning the BKS decisions regarding the regulation prohibiting hidden advertising (e.g., September 7, 2009, 611.956/0029-BKS/2009 [ORF-G]; November 16, 2009, 611.110/0007-BKS/2009 [PrR-G] and 611.196/0004-BKS/2009 [PrTV-G]) and one ruling of the Austrian Administrative Court on the delineation of event announcements and advertising under the ORF Act (July 1, 2009, 2009/04/0079; regarding the Private Radio Act, cf. the BKS decision of December 14, 2009, 611.030/0001-BKS/2009).

4.1.8.3 Legal violations

KommAustria decides on violations of the Private Radio Act (PrR-G) and the Private Television Act (PrTV-G) by virtue of its office or on the basis of complaints pursuant to Art. 25 PrR-G and Art. 61 PrTV-G.

Procedures based on complaints

During the reporting period, 16 complaints regarding broadcasters were submitted, and in 15 of those cases KommAustria at least partly concurred with the complaint and identified violations of advertising regulations pursuant to Art. 25 Par. 1 PrR-G or Art. 34 et seq. PrTV-G. One complaint was withdrawn by the complainant.

Ex officio legal supervision

In the year under review, official monitoring activities largely focused on reviewing compliance with advertising regulations (see Section 4.1.8.1 on advertising monitoring) as well as the accompanying procedures regarding legal violations.

In two other procedures, KommAustria determined that broadcasters had violated the conditions of their official licensing decisions.

Lapse of satellite broadcasting license

In one case, KommAustria ascertained the lapse of a satellite broadcasting license because the licensee had not carried out regular broadcasting operations in accordance with the terms of its license over a continuous period of one year for reasons within the licensee's control.

One procedure due to a violation of Art. 32 PrTV-G ("Protection of Minors") was completed with the identification of a violation in 2009.

Twelve penal procedures

In the legal violation procedures, KommAustria carried out twelve penal procedures, one of which was completed with a penal order. Eight procedures were still pending at the end of the reporting period. Two procedures from the previous year were also completed with a penal order, and one other procedure was discontinued.

Three revocation procedures for satellite broadcasting licenses

In three cases in 2009, KommAustria carried out procedures to revoke satellite broadcasting licenses due to various legal violations.

4.1.8.4 Changes in ownership

Ongoing monitoring of ownership structures

Another major area of legal supervision covered by KommAustria involves monitoring the ownership structures of private broadcasters. These activities are intended to ensure that the legal requirements for broadcasting (Art. 5 Par. 3 and Articles 7 to 9 PrR-G, and Art. 4 Par. 3 and Articles 10 and 11 PrTV-G), such as professional, financial and organizational qualifications, the absence of reasons for disqualification, and the safeguarding of a diversity of opinions (i.e., avoidance of excessively high media concentration), are still fulfilled after a license is issued. Violations of or lapses in the fulfillment of these licensing requirements constitute grounds for the revocation of broadcasting licenses.

During the reporting period, the regulatory authority received numerous reports on changes in ownership structure under Art. 22 Par. 4 PrR-G which did not exceed the 50% threshold. In this context, it is particularly worth noting the transfer of company shares in Antenne Steiermark Regionalradio GmbH (the general partner in Antenne Steiermark Regionalradio GmbH & Co KG) from Styria Media Group AG to Styria Media Regional AG; at the same time, Styria Media Group AG's shares as a limited partner in Antenne Steiermark Regionalradio GmbH & Co KG were also transferred to Styria Media Regional AG. In addition, one of Radio Arabella GmbH's shareholders transferred 5% of the company's shares to the remaining shareholders.

In the reporting period, no assessment decisions were issued on the basis of the provisions of Art. 22 Par. 5 PrR-G.

A number of notifications pursuant to Art. 10 Par. 6 PrTV-G were submitted, including a change in ownership structure within the corporate group of SevenOne Media Austria GmbH. In addition, Austria 9 TV GmbH submitted notifications regarding changes in its ownership structure during the reporting period, which ultimately led to a notification stating that 58.5% of the shares in Austria 9 TV GmbH are held by Conrad Heberling and 41.5% by Andmann Media Holding GmbH.

No assessment decisions were issued on the basis of the provisions of Art. 10 Par. 7 PrTV-G during the year under review.

4.1.8.5 Programming changes

Approval procedures for programming changes in radio broadcasting (PrR-G)

Programming changes pursuant to the PrR-G

Since an amendment to the Private Radio Act (PrR-G) went into effect in August 2004 (Federal Law Gazette I No. 97/2004), under Art. 28a Par. 2 PrR-G private analog terrestrial radio broadcasters are allowed to request an official assessment decision from KommAustria on whether or not planned programming changes can be considered fundamental changes. The question of whether a change in programming can be considered fundamental is to be assessed with due attention to the original licensing decision.

During the reporting period, Bregenzer Lokalradio GmbH (licensed for the town of Bregenz) applied for the approval of a fundamental change in the nature of its programming pursuant to Art. 28a Par. 3 PrR-G in the form of a programming cooperation arrangement with Freies Radio Proton. After conducting the procedure specified in Art. 28a Par. 3 PrR-G, KommAustria approved the insertion of a broadcast window for Freies Radio Proton within the radio broadcasts of Bregenzer Lokalradio GmbH.

In addition, Antenne Oberösterreich GmbH (licensed for the town of Wels) requested approval for a planned change in its radio programming in the form of a change in music content (music format) pursuant to Art. 28a Par. 3 PrR-G. During the period under review, KommAustria therefore initiated a procedure pursuant to Art. 28a Par. 3 PrR-G, which will be concluded in the year 2010.

Approval procedures for programming changes in television broadcasting (PrTV-G)

Programming changes pursuant to the PrTV-G

Since an amendment to the Private Television Act (PrTV-G) was introduced in Federal Law Gazette I No. 97/2004, analog terrestrial broadcasting licensees under the PrTV-G can also request an official assessment under Art. 63a PrTV-G from KommAustria as to whether or not a planned change can be considered a fundamental change in the nature of programming, and can subsequently have such fundamental programming changes approved by the authority.

This decision is taken according to the same criteria as those set forth in the PrR-G. No procedures pursuant to Art. 63a PrTV-G were carried out in the reporting period.

Approval procedures for programming changes in satellite broadcasting and digital terrestrial broadcasting

Holders of satellite broadcasting licenses and digital terrestrial broadcasting licenses pursuant to Art. 28 PrTV-G are subject to the procedure defined in Art. 6 PrTV-G.

As licenses are issued without an official selection procedure in those cases, the range of permissible programming changes is somewhat broader than in the case of analog terrestrial radio and television, for which the available frequency resources are more limited. Licensees operating satellite and digital terrestrial channels are required to notify the regulatory authority in advance of any major changes in programming category, program duration, number and duration of "window" programs as well as the transmission of channels using different satellites or additional terrestrial multiplex platforms. Changes notified in this way are to be approved by the regulatory authority as long as Sections 3 and 7 PrTV-G are observed.

If changes of this kind are made without advance regulatory approval, an administrative penal procedure is to be initiated.

Satellite broadcasting

In the year under review, a total of nine approval procedures for changes pursuant to Art. 6 PrTV-G were carried out for satellite television broadcasters; these procedures primarily referred to changes in programming content and duration. In one case, the satellite used for transmission was also changed. Two additional change procedures were still pending at the end of the reporting period and will be completed in 2010.

Digital terrestrial broadcasting

Moreover, two approval procedures for changes pursuant to Art. 6 PrTV-G were carried out for mobile digital terrestrial television (MUX D). These procedures concerned two channels for which parallel approval procedures were also conducted in satellite broadcasting, as the channels in question are transmitted via both platforms.

4.1.8.6 Conciliation in broadcasting

As in RTR's Telecommunications Division (cf. Section 4.2.4.1), it is also possible to initiate conciliation procedures pursuant to Art. 122 Par. 1 No. 1 TKG 2003 in the Broadcasting Division for certain types of complaints.

Only 26 conciliation cases in broadcasting

Compared to the number of conciliation cases regarding telecommunications, broadcasting conciliation currently accounts for a very small share of the total number of cases. In the year 2009, the Broadcasting Division saw a total of 26 requests for conciliation, which represents 0.61% of all conciliation cases in 2009. Complaints in this field typically concerned transmission quality.

Innovations in broadcasting

In the future, however, RTR's conciliation body expects to see an increase in the number of conciliation cases in broadcasting. Among other things, this can be attributed to the increasing number of new products in the field of broadcasting, such as video on demand. At the same time, service quality is also an increasingly common issue in complaints, as more and more new technologies are being offered for the dissemination of broadcasting services.

4.1.9 Private and Non-Commercial Broadcasting Funds

The Fund for the Promotion of Private Broadcasting ("Private Broadcasting Fund") and the Fund for the Promotion of Non-Commercial Broadcasting ("Non-Commercial Broadcasting Fund") were established by an amendment to the KommAustria Act in 2009. RTR administers the funds, which are endowed with EUR 5 million and EUR 1 million (respectively) from the fees collected in accordance with Art. 3 Par. 1 of the Austrian Broadcasting Fees Act (RGG). These funds were previously allocated to the federal budget.

RTR is responsible for administering the funds and awarding grants for the purpose of promoting private broadcasting. Grant decisions are made by the managing director of RTR's Broadcasting Division with due attention to Austrian law, the grant guidelines and the opinions of the review board.

The purpose of the grants is to promote the dual broadcasting system in Austria and to help broadcasters deliver diverse and high-quality programming.

Broadcasters whose activities require a license or notification pursuant to the Private Television Act or Private Radio Act are eligible to apply for grants.

RTR has drawn up guidelines for grant awards from the two funds, and the guidelines are to be approved by the European Commission in a procedure under EU state aid rules. The European Commission is expected to make a decision on these guidelines in early 2010.

Once the guidelines have been approved by the European Commission, the first submission date for applications will be scheduled in the first few months of 2010.

In the year 2009, grants totaling EUR 375,000.00 were already allocated to 14 non-commercial broadcasters in a procedure carried out under the special de minimis regulation.

4.1.10 Austrian Digitization Fund

Endowment

In 2009, the Digitization Fund received an endowment of EUR 500,000.00. These funds are derived from Austrian broadcasting fees which are collected jointly with ORF programming fees but are generally allocated to the federal budget.

Grant guidelines

RTR issued guidelines for grant awards from the Digitization Fund on April 8, 2005. These guidelines form the basis for decisions regarding grant awards and define specific criteria for such awards.

On April 30, 2009, RTR issued special guidelines governing grants to support the digital terrestrial transmission of regional and local channels via regional and local DVB-T multiplex platforms and transmission systems (known as MUX C in Austria). The purpose of these grants is to make the transition to digital broadcasting technology economically viable for channels currently broadcast in analog terrestrial mode, and thus to prevent those channels from losing viewers in the course of consumers' general changeover to digital terrestrial receivers.

Moreover, the grants are also designed to make it economically viable for those local and regional broadcasters who have only been able to broadcast their channels on cable networks due to a shortage of terrestrial frequencies to broadcast using digital terrestrial technology as well. The same applies to broadcasters who previously had no technical access to the broadcasting market at all. In 2009, RTR received the first application from a broadcaster, and additional applications are expected in 2010, as the majority of local multiplex platforms went into operation in late 2009. Moreover, an additional invitation to tender for local and regional multiplex platforms was held in the fall of 2009. Those multiplex platform operators are also eligible for grants from the Digitization Fund.

Focus areas

Digitization Fund activities

One focus of the fund's activities in 2009 was the allocation of grants for digital cable receivers.

The campaign launched in early 2007 to support the purchase of MHP-compatible set-top boxes was finally completed in 2009. The campaign was designed for consumers who decided to switch to digital cable reception early and opted to purchase terminal devices which support linear video and audio content as well as interactive additional services (such as conventional teletext enriched with graphics and images, video on demand, voting functions, etc.) based on MHP, Europe's open middleware standard. The objective of the project was to support the digitization of cable infrastructure in Austria.

In another measure to promote the digitization of cable infrastructure, consumers have been offered subsidies for the early adoption of digital broadcasting reception using HD-compatible DVB-C devices since December 2008. The subsidy campaign launched in 2008 for the UPC group's cable customers also continued in 2009.

In cooperation with the Trade Association for Telecommunications and Broadcasting Companies in the Austrian Federal Economic Chamber, another similar campaign to support the purchase of HDTV-ready receivers was launched for the customers of other cable network operators in September 2009. Over 20 cable network operators have taken part in the campaign, which will be concluded at the end of February or May 2010.

With regard to broadcasting based on the DVB-H standard for mobile handheld receivers, RTR commissioned a study on the topic of "Advertising-based financing and mobile TV – International benchmarking of mobile TV advertising forms" in 2008. The study was carried out in order to provide an international comparison of existing mobile television offers and the success of financing those broadcasts with advertising revenues. In addition, the study was also intended to examine the extent to which business models from other countries would be feasible in Austria. The study was completed in the fall of 2009 and published as part of the regulatory authority's publication series on December 1, 2009. The document is available (in German) at http://www.rtr.at/de/komp/SchriftenreiheNr32009, and a printed volume is also available at RTR's offices.

Upon completion of the study "Survey of demand for digital radio in Austria" commissioned by RTR in 2008, RTR and KommAustria established the Digital Radio Working Group, which comprised relevant market participants from Austria, Germany and Switzerland. The objective of the working group was to develop as realistic a picture as possible of the technical, organizational and financial challenges and threats associated with the potential introduction of digital radio in Austria, thus creating a sound decision-making basis for market participants. In several workshops and special task forces, the working group studied this topic intensively and completed its activities in the fall of 2009. The results are summarized in Section 4.1.11.

Another special focus area in the activities of the Digitization Fund in 2009 was the issue of the digital dividend. In early 2009, the Digital Platform Austria working group organized a special event on this topic (for further details, see Section 4.1.3). For additional information on developments with regard to the digital dividend in Austria, please refer to Section 6.4.

Finally, RTR also supported or financed the following projects using resources from the Digitization Fund in 2009:

- Subsidies for DVB-T receivers for nationwide digital terrestrial television: While the campaign for early adopters was concluded successfully at the end of March 2008, the campaign for disadvantaged consumers was extended to December 31, 2009. This subsidy, which covers up to 50% of the price of the receiver, benefits customers in the DVB-T switchover regions who are exempt from the broadcasting fees collected by GIS and wish to purchase an MHP-compatible DVB-T receiver;

- Subsidies for the additional transmission costs arising from simulcast operation (simultaneous analog and digital transmission) for ATV;

- Support for the operation of digital cable multiplex platforms which deliver ORF channels, ATV and various additional services in high quality;

- Support for a pilot project pursuant to Art. 22 PrTV-G for the digital transmission of broadcasting channels using low-power transmitters in mountainous terrain: The results of the pilot project were published on RTR's web site.

Six other requests for grants were rejected in 2009 due to incompatibility with the grant guidelines.

For several other applications submitted in 2009, grant decisions had not yet been made at the end of the reporting period.

The funds allocated by the Federal Ministry of Finance as of January 30, 2009 and the existing amount in the Digitization Fund generated interest revenues in the amount of EUR 156,678.98 during the reporting period (including interest on the repayment of unused grants in the amount of EUR 798.02). Including the repayment of unused grants in the amount of EUR 4,741.58 and the repayment of administrative expenses from 2009 (EUR 291,106.27), total credits to the fund came to EUR 952,526.83 in the year 2009.

Allocation of funds

Of the total amount available in the Digitization Fund, grants paid out in 2009 amounted to EUR 2,865,966.85, while administrative expenses and RTR's participation in projects came to EUR 678,800.00. Therefore, the fund paid out a total of EUR 3,544,766.85 in the year under review.

4.1.11 Survey of demand for digital radio

Market participants discussed introduction of digital radio

At the beginning of 2009, RTR and KommAustria initiated the establishment of the Digital Radio Working Group, which comprises relevant market participants from Austria, Germany and Switzerland, in order to assess market demand for the rollout of a separate digital radio transmitter network and thus for the introduction of digital radio in Austria.

In addition to representatives of ORF, Austria's private and independent radio broadcasters, as well as RTR and KommAustria, the working group included the Media Department in the Austrian Federal Chancellery's Constitutional Service, the radio broadcasting representative from the Association of State Media Authorities for Broadcasting in Germany (ALM) and the State Media Authority of Lower Saxony, the Swiss Federal Office of Communications (BAKOM), the Association of the Austrian Electrical and Electronics Industries (FEEI), Österreichische Rundfunksender GmbH & Co KG (ORS), the German Association of the Automotive Industry (VDA), the Broadcast Technology Institute (IRT), ASFINAG and the Austrian Chamber of Labor.

Digital broadcasting and the transmission technologies suited for that purpose enable a more efficient use of the frequency spectrum, greater diversity in programming and opinions, including special-interest channels, as well as the provision of entirely new or improved (and visual) additional services which could not be transmitted using analog radio technology (or only to a limited extent).

Digital radio already available on DVB-H and DVB-T platforms

Since June 2008, digital radio has been possible in Austria using the DVB-H digital broadcasting standard. However, the five radio channels transmitted using this technology (Ö3, Ö1, FM4, KRONEHIT and LoungeFM) are broadcast in encrypted form and can only be received for a fee as an additional option within a television channel package. The radio station package is marketed by the mobile network operators mobilkom austria, Orange and Hutchison, which also offer the necessary DVB-H-compliant handheld devices. The technical range of this service amounts to 53% of the population (areas of high population density in Austria).

Starting at the end of January 2010, the religious radio channel "Radio Maria" will be broadcast digitally and in unencrypted form using the DVB-T digital television broadcasting standard throughout Vienna, in the southern part of the Vienna Basin down to Wiener Neustadt, and in large parts of Lower Austria (Weinviertel region, parts of the Waldviertel region, Danube region up to the area around Krems) and in some areas of the province of Burgenland. ORF's Ö3 radio station can also be received via DVB-T. However, Ö3 is only available via DVB-T at certain times on DVB-T Multiplex B, as these broadcasts alternate with ORF Sport Plus television broadcasts.

Radio Maria and Ö3 available via DVB-T

4.1.11.1 Key insights from the Digital Radio Working Group

The forms of digital radio broadcasting discussed above (DVB-T, DVB-H) only refer to radio transmissions in parallel with television broadcasts. However, radio broadcasters also see a need to broadcast radio signals exclusively in terrestrial mode.

In order to create a sound basis for the introduction of digital radio in Austria, the working group considers it necessary to adapt the Austrian Private Radio Act and possibly also the ORF Act.

In order to roll out a separate digital radio transmitter network, the working group believes that the DAB+ transmission standard currently appears to be the best option for the widespread dissemination of radio content. In contrast, the DRM+ standard could prove especially suitable for broadcasters which focus on specific local areas.

DAB+ and DRM+ are preferred transmission standards

However, the working group also came to the conclusion that the development of digital radio in Europe has not yet progressed to the point that one could expect rapid success on the relatively small market in Austria. In particular, the costly, protracted and still unsuccessful efforts to decide on a uniform course of action among commercial and public radio broadcasters and to ensure the market success of radio digitization are considered to have an adverse impact on the prospects of this initiative in Austria.

Introduction of digital radio not yet realistic

The investment required for this purpose cannot be financed by the market alone without government support. In fact, digitization is expected to lead to a decrease in advertising revenues for radio broadcasters, as the existing and new broadcasters would have to compete for a listener population which has basically reached its full potential size.

Broadcasters fear high introduction costs and intensified competition

Moreover, a realistic estimate of the total costs is not possible due to factors which are extremely difficult to calculate. In particular, these factors include the duration of any necessary simulcast operation in radio broadcasting (i.e., analog and digital in parallel), which will depend heavily on consumers' acceptance of the new technology and their willingness to purchase new receivers. Defining a time for an analog turn-off is not considered a suitable means of accelerating this process.

The working group estimated the broadcasting costs for 12 to 15 radio channels on a nationwide radio multiplex based on the DAB+ standard at a total of EUR 6 to 10 million per year.

As a result, the vast majority of radio broadcasters in the working group have come to the conclusion that it would not be wise to introduce digital radio in Austria at the moment.

Need for continued monitoring of digital radio's development in Europe

However, the working group did state that it is important to continue monitoring and analyzing the European radio market, especially in order to enable rapid responses to new developments in countries with larger populations and to the resulting changes in the interests of (Austrian) consumers. For this purpose, the group proposed the establishment of a new working group under the working title "Digital Radio Interest Group" in early 2010. RTR and KommAustria will coordinate the activities of this new working group.

A detailed description of the results attained by the Digital Radio Working Group can be found at http://www.rtr.at/de/komp/alleBerichte/Endbericht.pdf (in German).

4.1.12 Austrian Television Fund

In the year 2009, the Austrian Television Fund (FERNSEHFONDS AUSTRIA) celebrated its fifth anniversary. The provisions of Articles 9f and 9g in conjunction with Articles 9c to 9e KommAustria Act (KOG), which have been in effect since January 1, 2004,[2] define the basis for the activities of the fund.

Endowment increased to EUR 13.5 million in 2009

The Austrian Television Fund awards grants to independent television producers in the form of non-repayable subsidies. Until mid-2009, the budget available for these grants amounted to EUR 7.5 million. From June 30, 2009 onward, the fund's annual endowment was increased by EUR 6 million. In State Aid Case N 348/2009, the European Commission approved the increase in funding to EUR 13.5 million under the Austrian Budget Act 2009 without additional conditions until June 30, 2013.

The funds are derived from the broadcasting fees collected in accordance with Art. 3 Par. 1 Broadcasting Fees Act (RGG) and allocated to the federal budget. The objectives of the fund, namely to enhance the quality of television productions and the capacity of the Austrian film industry, have remained unchanged and will be promoted even further by the increase in funding. In addition, the fund is also intended to help maintain a diverse cultural landscape, to strengthen Austria as a media location and to contribute to the audiovisual sector in Europe.

In addition to the requirements of the KommAustria Act, which defines how the funds are obtained and the fundamental decision-making bases, the grant guidelines for the Austrian Television Fund specify the purpose of grants from the fund, the costs which can be subsidized, personal and material qualification requirements, etc.

Grant decisions are made by the managing director of RTR's Broadcasting Division, Alfred Grinschgl, on the basis of the grant guidelines and after due consideration of the review board's comments.

[2] Federal Law Gazette I No. 71/2003

4.1.12.1 Grant guidelines

In the year 2009, the regulatory authority had no reason to change the grant guidelines for the fund, which have been approved by the European Commission until June 30, 2013. Due to the increase in the amount of funding available, amendments to the KommAustria Act and the grant guidelines are planned for 2010 in order to broaden the fund's activities.

The changes planned in the KommAustria Act[3] will include the introduction of a new grant which covers up to 80% of the actual and documented costs for the production of film versions for people with visual and hearing impairments, and up to 50% for the production of foreign-language versions. Moreover, in the future it will be possible to finance up to 30% of the production budget for projects which fulfill certain requirements; the previous funding limit was 20%.

The changes in the grant guidelines for the Austrian Television Fund will reflect the amended requirements of the KommAustria Act and account for experience and new developments in the film industry. Until the guidelines are notified to the European Commission, the regulatory authority plans to exchange ideas and opinions with film producers and the Austrian Association for the Audiovisual and Film Industry. In this way, it will be possible to ensure that the needs of all parties involved are taken into consideration and reflected wherever possible.

The current version of the guidelines can be found on the Austrian Television Fund's web site (http://www.fernsehfonds.at).

4.1.12.2 Projects supported

There were four application dates in 2009, and a total of 92 grant applications were submitted for the production of television films, series and documentaries.

Grant approvals were issued for a total of 50 projects. However, one producer decided not to accept the grant offered. A total of eight projects were withdrawn before the relevant review board meetings, while 34 were rejected because at the time of submission they did not comply with the grants' purpose as defined in the guidelines and the KommAustria Act (KOG), or because they were considered less worthy of funding compared to the other projects submitted.

Therefore, a total of 49 projects (20 television films, three television series and 26 television documentaries) were supported with grants totaling EUR 11,495,368.00 in the year 2009.

2009: 49 projects supported with approximately EUR 11.5 million

The decisions of the Austrian Television Fund can be viewed at http://www.fernsehfonds.at (in German).

[3] See the draft of the Federal Act amending the Federal Constitutional Act, the KommAustria Act, the Telecommunications Act 2003, the Collecting Societies Act 2006, the ORF Act, the Private Television Act, the Private Radio Act and the Act on Exclusive Television Rights.

4.1.12.3 Events

Additional funding for television productions from the European Union's MEDIA Program

At the beginning of the year 2009, an information event was held at RTR's premises on the European Union's funding program for television productions. The event was organized by MEDIA Desk Austria and MEDIA Desk Slovakia in cooperation with the Austrian Television Fund and was attended by numerous Austrian and Slovakian television producers. A total of EUR 11.4 million in production grants was available in the EU's grant budget for 2009.

Grants are available for television projects which are submitted by independent European producers and which involve at least three television broadcasters from countries participating in the MEDIA program. The main producer in the project is responsible for submitting the application. Information and application forms can be found at http://www.mediadesk.at and http://ec.europa.eu/media.

The Austrian Television Fund and Austria as a media location

In order to mark its fifth anniversary, the fund held an event entitled "The Austrian Television Fund and Austria as a media location" in June 2009. This event again highlighted the significance of the Austrian film industry as a key economic factor and as a distinguishing feature of Austria as a media location. Between 2004 and 2008, the Austrian Television Fund supported 175 projects with a total funding amount of EUR 35 million. The total planned production costs for those projects amounted to some EUR 230 million.

For the fund's fifth anniversary, RTR also published a comprehensive catalog of all projects supported as well as key data on funding activities over the last five years.

European Co-Production in Baden

With the support of the Austrian Television Fund, the Austrian Film Institute, the Vienna Film Fund and MEDIA, the Erich Pommer Institute (EPI) organized a workshop on the topic of "European Co-Production" in October 2009.

As a case study, "The White Ribbon" by Michael Haneke was considered a special highlight by all of the international participants. In addition, co-producers Stefan Arndt/X Filme Creative Pool GmbH and Michael Katz/wega Filmproduktionsges.m.b.h provided unique insights into financing and production workflows.

Austrian co-productions in the fiction genre with ProSiebenSat.1

The objective of this event, which was organized by RTR in November 2009, was to expand cooperation between the German ProSiebenSat.1 television group and Austrian producers, in particular for the "romantic comedy" broadcasting slot on Tuesday evenings. Stefan Gärtner (Senior Vice President of Co-Productions and Film Policy) and Joachim Kosack (Senior Vice President/Head of German Fiction at SAT.1) from the ProSiebenSat.1 group presented their channel's requirements and were then available for one-on-one discussions.

Business aspects of film production

In cooperation with the Erich Pommer Institute, the Austrian Film Institute and the Vienna Film Fund, the Austrian Television Fund invited Austrian producers to a one-day event on the crucial role of producers as businesspeople. The event was held on RTR's premises in December 2009.

Michael Wolkenstein (Association of German Film Producers), Peter Engelmann (Endurance Entertainment) Regina Ziegler (ZIEGLER FILM GmbH & Co. KG), Susanne Stürmer (UFA Film & TV Produktion GmbH), Matthias Settele (SetTele Entertainment GmbH) and John Lueftner (Superfilm Filmproduktions GmbH.) discussed ongoing changes in the film industry and the potential for professionalization in film production from the perspective of Austrian and German film and television producers.

4.1.13 Press and journalism subsidies

4.1.13.1 Press subsidies

First grants for self-regulation bodies

New: Grants for self-regulation bodies

In June 2009, the legal basis was established for the promotion of self-regulation bodies in the media field. Grants are available for:

- Recognized self-regulation bodies in the field of commercial communication in the media pursuant to Art. 9m KommAustria Act 2001 (Federal Law Gazette I No. 32/2001 as amended by Federal Law Gazette I No. 52/2009); and

- Organizations representing self-regulation bodies in the Austrian press sector pursuant to Art. 12a of the Press Subsidies Act 2004 (Federal Law Gazette I No. 136/2003 as amended by Federal Law Gazette I No. 52/2009).

The objectives of these new grants are to ensure the independence of those bodies, to ensure that the duties set forth in their articles of association are carried out, and to effectively enforce their decisions and resolutions. Decisions on grant awards are made by KommAustria.

The Fund for the Promotion of Self-Regulation in Commercial Communications has an annual endowment of EUR 50,000.00. Once the grant guidelines had been published by KommAustria, the first grants from the fund were awarded at the end of October 2009: The only applicant was the Austrian Society for Self-Regulation in Advertising (Austrian Advertising Council), which received the entire endowment amount for costs already incurred in the fulfillment of its duties.

The Fund for the Promotion of Self-Regulation in the Press has an annual endowment of EUR 150,000.00. These new grants are intended to support efforts to re-establish the Austrian Press Council. However, due to a lack of applicants, no grants could be awarded from this fund in 2009.

Applications and budget

Approval rate reaches new high of 95.4%

In the year 2009, KommAustria received 130 applications for financial support under the Press Subsidies Act 2004. The authority granted subsidies in 124 cases, while six applications had to be rejected because they did not fulfill the relevant legal requirements. The approval rate thus increased to 95.4%.

The number of applicants for these subsidies decreased compared to 2008, in particular due to the restructuring of the *Oberösterreichische Rundschau* and its transformation into two free weekly newspapers which are not eligible for subsidies.

After reaching an absolute low of only two applications in 2008, the number of research projects submitted rose to six in 2009. Grants were approved for three of those projects.

Details on grant awards were published on the RTR web site (http://www.rtr.at).

Table 3: Development of grant amounts, applications and success rates since 2005

	Grant total (EUR)	Number of applications	Number of approvals	Approval rate in %
2005	12,837,950.20	154	134	87.0
2006	12,837,949.80	144	133	92.4
2007	12,827,999.80	149	136	91.3
2008	12,837,999.70	138	129	93.5
2009	12,837,999.50	130	124	95.4
Total	**64,179,899.00**	**715**	**656**	**ø 91.75**

Source: RTR

4.1.13.2 Journalism subsidies – Promotion of print periodicals

Under Section II of the Federal Act on Subsidies for Political Education Work and Journalism (PubFG) 1984, the federal government is required to "promote journalism which serves the purpose of educating citizens."

The purpose of these subsidies is to preserve the diversity and multitude of print periodicals.

Under the Journalism Subsidies Act (PubFG, Federal Law Gazette I No. 136/2003), KommAustria has been responsible for distributing journalism subsidies since 2004. Subsidies are allocated on the basis of eligibility for funding. KommAustria makes decisions on these subsidies with the support of the Journalism Subsidies Advisory Board.

The 19 members of this board, who are each appointed by the Austrian Federal Chancellor for a three-year term, represent various areas of the public sphere, for example the political parties represented in Austria's National Council, the trade unions, science and research, education, churches and religious communities, publishers of periodicals, presses and freelance journalists. In addition, various federal ministries and the Chamber of Tax Consultants and Certified Accountants also have the right to submit proposals.

The amount of the subsidies granted is determined by KommAustria on a case-by-case basis with due attention to the Advisory Board's recommendation and the scope, circulation, resources and financial situation of each print periodical. In any case, subsidies must not be lower than 0.4% or higher than 4% of the total amount allocated for these subsidies in the Federal Finance Act.

In 2009, grants totaling EUR 361,000.00 were paid out to support 94 print periodicals. The lowest subsidy defined by law (0.4%) amounted to EUR 1,444.00, while the highest subsidy amount granted came to EUR 3,875.00.

Twelve applications were rejected because they did not fulfill the grant prerequisites defined in Section II of the Journalism Subsidies Act 1984.

4.2 Telecommunications Division

New legal framework and migration to next generation networks as focus areas in 2009

In the field of telecommunications, the progress of liberalization has made it necessary to (further) refine the definition of regulatory duties and instruments. In 2009, the European Union completed its review of the regulatory framework for electronic communications and published the telecoms reform package in the Official Journal of the European Union on December 18, 2009. The new framework is to be implemented in Austrian law by May 25, 2011 at the latest.

In 2009, regulatory activities in RTR's Telecommunications Division again focused on market definition and market analysis, issues related to network access, the shared use of communication lines and site sharing, unfair practices in relation to value-added services, as well as the topic of general terms and conditions and fees.

One special focus of the authority's regulatory work in 2009 was the migration of existing networks to next generation networks (NGNs) – in particular next generation access (NGA; optical fiber access networks) – and the accompanying transformation of the economic, technical and regulatory landscape of the telecommunications industry.

4.2.1 Market definition and analysis

4.2.1.1 Market definition

Two new markets defined – Demand-side survey

Under Art. 36 TKG 2003, RTR is required to conduct periodic reviews of the relevant national markets susceptible to sector-specific regulation according to national circumstances and in line with the principles of general competition law, taking into account the requirements of sector-specific regulation. If necessary, RTR is to issue the corresponding amendments to the Telecommunications Markets Ordinance (TKMV) in accordance with Art. 36 TKG 2003.

The TKMV 2008 serves as the basis for procedures regarding the identification of effective competition or significant market power on each market; such procedures are to be carried out by the Telekom-Control-Kommission (TKK) pursuant to Art. 37 TKG 2003. This also includes imposing specific obligations on market participants.

In connection with the definition of national markets which may require sector-specific regulation, an amendment to the TKG 2003 introduced a provision stipulating that any obligations previously imposed with regard to a market formerly defined as relevant are to be removed *ex lege* in cases where the market in question is no longer considered relevant under the corresponding ordinance.

Amendments to the Telecommunications Markets Ordinance 2008

In 2009, two amendments were introduced to the Telecommunications Markets Ordinance 2008 (TKMV 2008), which originally went into effect on December 30, 2008. The amendments defined the retail market for fixed-link voice telephony for non-residential customers and the wholesale market for the provision of broadband access for non-residential customers as markets susceptible to sector-specific regulation.

Retail market for fixed-link voice telephony for non-residential customers

On April 2, 2009, the first amendment to RTR's Telecommunications Markets Ordinance (TKMV) 2008 went into effect.

With this amendment, the market for "Publicly available telephone services provided at a fixed location for non-residential customers (retail market)" was defined as susceptible to sector-specific regulation.

This market is not included in the Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services.

Therefore, in defining this market, RTR paid special attention to whether all three relevance criteria were fulfilled. According to the rules defined by the European Commission, these cumulative criteria must be satisfied in any case in order to allow ex ante regulation.

The relevance criteria are as follows:

- Existence of non-transitory barriers to entry (of a structural and/or legal nature);
- Market structure does not tend toward effective competition in the long term (without sector-specific regulation); and
- The provisions of general competition law alone are not sufficient to address the relevant competition problems.

It turned out that the market in question satisfied all three of these relevance criteria. In addition, the final comments of the European Commission in the relevant coordination procedure did not contain any statements contradicting this conclusion.

The procedure to be carried out by the TKK in accordance with Art. 37 TKG 2003 for the purpose of identifying effective competition or significant market power, including the imposition of specific obligations, was still pending at the end of the reporting period.

Demand-side survey on broadband Internet in 2009

In the first quarter of 2009, RTR conducted a representative survey of approximately 3,000 households and 1,000 businesses on their deployment and use of broadband (Demand-side survey: http://www.rtr.at/de/komp/BerichtNASE2009, in German). The project was carried out in cooperation with the Institute for Empirical Social Studies (IFES) in Vienna.

In order to duly account for the dynamic development of the broadband sector and to ensure that the data basis for the required market definition and analysis procedures is as up to date as possible, it is necessary to collect and analyze data on a regular basis.

As a result, the demand-side survey was carried out once again in 2009 in order to investigate demand behavior more thoroughly in the broadband Internet segment. As in the previous studies, this survey largely focused on specific issues related to market definition. The results of the survey were incorporated into the definition of the broadband market and the resulting amendment to the TKMV 2008 (as mentioned above).

As it is indispensable for market-oriented regulation to examine the demand side in addition to the supply side of the market, demand-side surveys are conducted in addition to RTR's regular data collection efforts within the framework of the Communications Survey Ordinance (KEV), which already provides information on the supply side of the market (e.g., revenues, lines, etc.).

Wholesale broadband market

On December 22, 2009, the second amendment to RTR's Telecommunications Markets Ordinance (TKMV) 2008 went into effect; this amendment concerned the definition of the wholesale broadband market.

With the amendment, the "Wholesale market for the provision of broadband access for non-residential customers" was defined as susceptible to sector-specific regulation pursuant to Art. 36 Par. 1 TKG 2003.

The definition of the wholesale broadband access market developed by RTR is based on the observation that the competitive pressure between mobile and various fixed-link broadband offerings (e.g., DSL, broadband via cable networks) in the residential retail segment has reached such a high level that the residential retail market must be considered to comprise both mobile and fixed-link broadband access services. The competitive situation is different in the case of retail broadband offers for business (non-residential) customers, who predominantly use mobile broadband as a complement to fixed-link access. In contrast, the results of RTR's extensive market monitoring activities indicate that residential retail customers generally use mobile broadband as an equivalent substitute for fixed-link services. For more information, please also refer to the broadband Internet survey (NASE) carried out in 2009. The results of this survey were incorporated in the amendment to the TKMV 2008.

Once the second amendment to the TKMV 2008 goes into effect on February 1, 2010 (and due to the TKG 2003 amendment mentioned above), Telekom Austria will no longer be required – at least from a regulatory standpoint – to offer its competitors wholesale broadband products for subsequent resale to their residential retail customers, as this obligation will be eliminated *ex lege* when the amendment takes effect. Telekom Austria will, of course, be permitted to offer the products in question on a voluntary basis.

RTR's interpretation regarding the wholesale broadband market drew a great deal of attention both in Austria and abroad, as the Austrian regulatory authority was the first in the European Union to account for the immediate competitive pressure from mobile communications not only on the market for voice telephony, but also on the broadband market. The pressure exerted by mobile communications on fixed-link products is stronger in Austria than in any other EU country.

The serious doubts raised by the European Commission in the coordination procedure pursuant to Art. 129 TKG 2003 were withdrawn in the further course of the procedure and after RTR submitted extensive information and additional data to the European Commission.

4.2.1.2 Market analysis

The three-stage market analysis process required in this context comprises the following steps:

1. Market definition;
2. Market analysis and, if necessary, identification of significant market power;
3. Imposition of regulatory instruments.

The second stage requires the TKK to conduct an analysis of competition on all markets defined by RTR with a view to determining whether effective competition prevails or one or more companies have significant market power on those markets (Art. 37 Par. 2 and 3 TKG 2003).

Third round of market analysis procedures

Finally, depending on whether significant market power is identified, the third stage may involve imposing regulatory instruments (i.e., specific obligations under Articles 38 et seq. TKG 2003) which can be used to resolve the current and potential competition problems identified (Art. 37 Par. 1 and 2 TKG 2003).

The procedures initiated in 2009 in accordance with Art. 37 TKG 2003 in order to determine whether effective competition prevails or (at least) one company possesses significant market power on the relevant markets defined in the TKMV 2008 are to be carried out as "multiple-party" procedures. This means that all of the operators on the given market have the rights of parties to the procedure under the Austrian General Administrative Procedures Act (AVG). Therefore, the regulatory authority is required to include over 500 parties (at least in the initial stage) when carrying out each of those procedures.

Analyses of markets for termination in individual public mobile networks

All mobile operators possess SMP on their own termination markets

On June 15, 2009, the TKK completed a market analysis procedure (Procedure M 1/08) pursuant to Art. 37 TKG 2003 and issued four official decisions stating that the mobile network operators mobilkom austria, T-Mobile, Orange and Hutchison each possess significant market power as defined under Art. 35 TKG 2003 in the provision of voice call termination services in their own individual mobile networks.

In order to address the potential competition problems identified in the procedure which would arise in the absence of regulation on these individual mobile termination markets, the TKK subjected the mobile operators to specific obligations to ensure non-discrimination (in varying forms) and interconnection as well as obligations to publish a reference offer for mobile termination services and to ensure cost-based pricing in mobile termination fees. In order to implement the cost-based pricing obligation, specific fees were defined for these mobile termination services, and the termination fees will be reduced gradually from 4.50 euro cents to 2.01 euro cents at six-month intervals (in the form of a "glide path"). The target value represents the costs of efficient provision of the service of mobile termination. Specifically, the maximum mobile termination fees in the table below were defined for the time periods shown.

Definition of mobile termination fees

Table 4: Mobile termination fees set by the TKK

From the delivery of decisions until June 30, 2009	4.50 euro cents
From July 1, 2009 until December 31, 2009	4.00 euro cents
From January 1, 2010 until June 30, 2010	3.50 euro cents
From July 1, 2010 until December 31, 2010	3.01 euro cents
From January 1, 2011 until May 31, 2011	2.51 euro cents
From June 1, 2011 until the completion of a new procedure pursuant to Art. 37 TKG 2003 with regard to individual mobile termination services	2.01 euro cents

Source: RTR

Virtual mobile network operator provides termination services

Once the mobile virtual network operator (MVNO) Mundio Mobile (Austria) Limited (formerly Barablu Mobile Austria Limited; referred to below as "Mundio") launched operations, the TKK initiated another market analysis procedure with regard to this individual market for termination in a public mobile telephone network.

MVNO requires contract with mobile network operator

As an MVNO, Mundio produces mobile communications services and sells them to retail customers and/or operators and providers of communications networks and services. In contrast to conventional mobile network operators, Mundio does not operate a complete mobile radio network itself because it does not have frequency usage rights. Instead, Mundio substitutes part of the mobile network infrastructure – that is, the radio network – by purchasing these services wholesale from a mobile network operator (under a "national roaming" agreement with a host network operator).

In a draft enforcement order dated December 14, 2009, the TKK determined that Mundio also possesses significant market power on its own mobile termination market. As a result, the TKK plans to impose various specific obligations on Mundio. The obligations will be consistent with those already imposed on other mobile network operators. In particular, the TKK plans to subject Mundio to the same maximum fees for mobile termination. The consultation procedure for this draft decision will last until February 2010, and a final decision is expected in the first quarter of 2010.

Removal of obligations imposed on Telekom Austria TA AG for transit services (M 13/09)

Pending market analyses

In an official decision issued on August 6, 2009 (M 13/09-27), the TKK once again lifted the regulatory obligations imposed on Telekom Austria for fixed-link transit services. The obligations had (again) gone into effect not on the basis of a TKK market analysis decision, but on the basis of the transitional provision under Art. 133 Par. 7 TKG 2003 and a ruling of the Austrian Administrative Court for the following reasons:

In an official decision issued before the TKG 2003 went into effect, the TKK had identified Telekom Austria AG (the legal predecessor to Telekom Austria TA AG) as an SMP operator on the national market for interconnection services. On the basis of this decision, Telekom Austria was subjected to various obligations, such as cost-based pricing, equal treatment, and others in accordance with the TKG (1997). According to the transitional provision mentioned above, these obligations were also to remain in force until the completion of a market analysis under the new regulations once the TKG 2003 went into effect. This market analysis was completed with the TKK's official decision of March 19, 2007 (M 16a/06-25). Where they applied to transit services in the public fixed-link telephone network, the obligations imposed on Telekom Austria and (still) in effect under Art. 133 Par. 7 TKG 2003 were lifted due to the existence of effective competition on that market.

Due to procedural violations identified (i.e., only Telekom Austria had been accorded the status of a party to the procedure), the TKK's market analysis decision was overturned by the Austrian Administrative Court in April 2009, thus restoring the obligations imposed on Telekom Austria (under the TKG [1997]) in accordance with the transitional provision mentioned above.

As the TKMV 2008 – which no longer defines the transit market as a relevant market susceptible to sector-specific regulation – had already gone into effect on December 31, 2008, the Administrative Court ruling meant that Telekom Austria was still subject to (old) obligations on a market which was no longer even subject to regulation. Therefore, these obligations were (again) removed by the TKK in an official decision dated August 6, 2009. The decision was disputed by various parties to the procedure, which was carried out as a multiple-party procedure in accordance with the relevant rulings of the European Court of Justice and the Austrian Administrative Court. The complaints in question were submitted to the Administrative Court and Constitutional Court, and the cases are still pending.

Physical access to network infrastructure (wholesale market; M 3/09)

In its session on January 12, 2009, the TKK initiated a procedure for the analysis of the wholesale market for physical access to network infrastructure (formerly known as the "unbundling market"). The procedure is still pending.

Wholesale market for fixed-link origination and termination (M 4/09 and M 5/09)

In a resolution dated January 12, 2009, the TKK initiated procedures pursuant to Art. 37 TKG 2003 ex officio with regard to origination (call origination in the public telephone network provided at a fixed location; Procedure M 4/09) and termination (call termination on individual public telephone networks provided at a fixed location; Procedure M 5/09).

Official experts at RTR were instructed to prepare an economic opinion on those markets. At the end of the reporting period, the market analysis procedures M 4/09 and M 5/09 were still ongoing.

TKK market analysis procedures

In 2009, the TKK initiated two market analysis procedures under Art. 37 TKG 2003 with regard to the retail markets for access to the public telephone network at a fixed location for residential and non-residential customers in order to determine whether effective competition prevails or certain operators possess significant market power (and thus require specific obligations) on those markets.

In addition, the TKK also launched a market analysis procedure under Art. 37 TKG 2003 for the wholesale broadband access market.

All three procedures were still pending at the end of the reporting period.

Leased line markets: Terminating segments and retail leased lines (M 6-8/09)

On January 12, 2009, the TKK initiated additional market analysis procedures with regard to leased lines: The competitive conditions on the market are being analyzed in one procedure pertaining to retail leased lines with bandwidths up to and including 2.048 Mbit/s (M 6/09) and in two procedures regarding the wholesale markets for terminating segments of leased lines with low bandwidths (up to and including 2.048 Mbit/s) and with high bandwidths (over 2.048 Mbit/s up to and including 155.52 Mbit/s; M 7/09 and M 8/09). At the end of the period under review, these procedures were also still pending.

4.2.2 Network access

Network access as a prerequisite for market entry

Creating the conditions necessary to enable new entrants to provide services on the market is a crucial area of regulatory activity. In this context, it is especially important to ensure (open) network access, in particular by means of interconnection. The interconnection of communications networks supports interoperability between the subscribers of all public telephone networks.

Dispute resolution

Under Art. 48 Par. 1 TKG 2003, each operator of a public communications network is required to provide a reference offer for other operators of such networks upon request. In this context, all parties involved are to pursue the objective of enabling and improving communication among the users of different public communications networks. Should these operators be unable to reach an agreement on interconnection in accordance with Art. 48 TKG 2003, then any party involved can call upon the regulatory authority, which will then issue an official decision in lieu of such an agreement (Articles 50 and 121 TKG 2003).

Interconnection order in lieu of agreement

Interconnection orders regarding mobile termination fees

Definition of mobile termination fees for past time periods

In a total of eight interconnection orders issued on April 20, 2009 in which it was necessary to define mobile termination fees primarily for time periods in the past, the TKK set those mobile termination fees which had been stipulated in the market analysis decisions of October 15, 2007. However, the orders differed from the previously issued decisions in that the glide path was adapted in such a way that all mobile operators reached the "symmetrical target" of 5.72 euro cents on July 1, 2008 (instead of January 1, 2009). The main reason for this adaptation was the substantial decrease in costs. The mobile termination fees set by the TKK are as follows:

Eight bilateral dispute resolution procedures

Table 5: Mobile termination fees set by the TKK, 2006 to 2009

Definition of specific fees

Euro cents (excluding VAT)	mobilkom austria	T-Mobile	Orange	Hutchison
From July 1, 2006	8.34	10.66	11.28	15.95
From January 1, 2007	7.13	9.45	10.07	13.90
From July 1, 2007	5.91	8.23	8.85	11.86
From January 1, 2008	5.72	7.02	7.64	9.81
From July 1, 2008	5.72	5.72	5.72	5.72
From January 1, 2009	4.50	4.50	4.50	4.50

Source: RTR

These fees were set for a limited time period in a market analysis decision (Art. 37 TKG 2003) regarding the market for termination in each operator's individual public mobile network; the fees went into effect on June 15, 2009 (M 1/08).

Mobile number porting – Rate announcements

Network announcements for ported mobile numbers

On November 3, 2003, mobilkom austria submitted a request to the TKK for the definition of regulations governing mobile number porting vis-à-vis Hutchison. The official decision issued by the TKK in response to this request on July 30, 2004 was overturned by the Austrian Administrative Court, as was the substitute decision dated March 6, 2006.

Subsequently, mobilkom austria and Hutchison were able to reach an agreement on the process of mobile number porting and on the fee charged for this service. In terms of content, the agreement was essentially similar to the official decision issued on March 6, 2006. However, the operators were not able to agree on the issue of rate transparency, specifically with regard to rate announcements and their content.

Based on the provisions of Art. 12 of the Number Porting Ordinance (NÜV) on the general requirement of ported number announcements indicating the network called, and on the basis of market observations with regard to how mobile operators have implemented such network announcements in practice, the TKK issued an official decision on May 18, 2009 in response to the request submitted by both parties. The TKK decided that the following network announcements are permissible in connection with a ported telephone number:

1. "You are calling a number which has been ported to the [name of network] network"; or

2. Simply announcing the short name of the network called.

In addition, the TKK decided that a network announcement may be omitted if the source network operator sets its retail rates in such a way that all calls to other networks are subject to the same charges. This includes flat rate packages. However, the network announcement must be provided in cases where the uniform rates only apply to a certain number of minutes or only at certain times.

Fixed-link network number porting

On January 23, 2009, Hutchison submitted a request for an order of mutual terms and conditions vis-à-vis Multikom Austria Telekom GmbH with regard to the process of geographical number porting.

Multikom Austria Telekom GmbH did not raise objections to the text of the order requested, meaning that the TKK essentially fulfilled Hutchison's request in the official decision issued on April 20, 2009.

New terms and conditions for local loop unbundling (Z 5, 8, 10, 11/07, Z 5/08)

Comprehensive new regulations for unbundling

In its session on April 20, 2009, the TKK issued two general orders on the basis of several draft measures from December 22, 2008. The orders related to the unbundling of Telekom Austria's local loops by UPC Austria GmbH and Silver Server GmbH, as well as three partial orders for the relationship between Tele2 Telecommunication GmbH and Telekom Austria with regard to fault elimination, ordering processes and permissible porting procedures. These orders constitute a comprehensive redefinition of the regulations governing local loop unbundling, which were essentially based on decisions from the year 2001.

New definition of service to be provided

The definition of the service to be provided was changed in such a way that an unbundled local loop must satisfy a measurable minimum quality level based on specifically defined parameters (average values for upstream/downstream attenuation at the relevant in-house distribution point or a reference value based on line length and gauge), otherwise the fault must be remedied by Telekom Austria.

Compulsory time frame for network compatibility testing

With regard to the approval of innovative transmission technologies on local loops, Telekom Austria is now required to carry out the relevant network compatibility tests within a specifically defined time frame; the tests are to end with the adoption of switching guidelines for each transmission technology.

Preliminary switching guidelines for innovative transmission technologies

In updates of switching guidelines for existing transmission systems which are generally network-compatible and in new switching guidelines for systems which are not yet network-compatible, the TKK decisions state that Telekom Austria may put preliminary switching guidelines into effect in order to enable the rapid deployment of innovative transmission technologies in its access network. Should an unbundling partner fail to respond to the relevant announcements by Telekom Austria, this is taken as consent. However, it is only possible to put preliminary guidelines into effect if the TKK's order for the disputed switching guidelines was requested in a procedure pursuant to Art. 50 TKG 2003 and the preceding dispute resolution procedure involving RTR has been completed, meaning that the unbundling partner has at least 12 weeks' time to express any objections to the relevant switching guidelines to Telekom Austria and the TKK.

Shorter processing times subject to use of electronic interfaces

In contrast to the draft measures, the planned shortening of order processing times is not divided into two different temporal stages; instead, the more drastically shortened time periods for the second stage will only be applied to orders placed via an electronic interface in order to accelerate its implementation among unbundling partners. In addition to the possibility of number porting within 14 days after unbundling, cancellation codes for frequently

encountered types of cases were also defined in order to facilitate the automated processing of transactions related to orders for unbundled local loops.

With regard to access to the main distribution frame, the regulations regarding open collocation from Procedure Z 1/07 were also incorporated. It was not possible to fulfill the unbundling partners' request for the removal of usage limitations in collocation spaces, as this topic was not covered by the current market analysis decision. The fees charged for Etherlink connections between collocation locations were updated on the basis of Telekom Austria's wholesale Etherlink offer.

More efficient fault elimination with reference values and penalties

In addition to the redefinition of the service to be provided in the main part or the order (see above), the regulations governing fault elimination were also revised due to recurring quality problems with unbundled local loops. Upon receiving notification of a fault, Telekom Austria is now required to communicate the average upstream and downstream attenuation levels (where available) at the in-house distribution point. If those values are not available, at least the line length and gauge must be provided in order to enable the unbundling partner to calculate the reference value for attenuation. A number of specific measures to be taken by Telekom Austria were indicated as examples for the purpose of fault elimination. Additional changes compared to the draft measure included the possible methods of fault identification, a shift in the start time of the fault elimination period to the time of fault notification (the draft measure stipulated that the period would start only upon the conclusive identification of a fault, which caused a delay of up to 24 hours in some cases and was therefore criticized heavily by all applicants), and the introduction of penalties in cases where Telekom Austria fails to comply with the required fault elimination periods.

Prevention of interference by upstream DSLAMs

Additional provisions govern the handling of interference from transmission systems at upstream DSLAM locations (e.g., by announcing maximum permitted levels), the possibility of compulsory measurement dates at upstream DSLAM locations in the case of interference, and the obligation to reconfigure or shut down incompatible systems.

Fees for fixed-link interconnection services between Hutchison and Telekom Austria (Z 9/07)

In a dispute resolution procedure pursuant to Art. 50 TKG 2003 carried out between Hutchison and Telekom Austria, the TKK issued an official decision on August 6, 2009 (Z 9/07-100) to redefine the fees these two companies charge one another for the interconnection services of termination, origination and transit in the fixed-link network.

On the basis of the requests submitted by the parties in the procedure, the previously applicable fees were confirmed for the period from the submission of the requests until the date of the decision, and a fee increase of 29.4% for local interconnection (traffic type V33 – peak: 1.12 euro cents, off-peak: 0.50 euro cents) and 19.0% for regional interconnection (traffic type V3 – peak: 1.58 euro cents, off-peak: 0.73 euro cents) was ordered from the date of the decision onward; the increases are each indicated on the basis of a weighted average compared to the previous fees.

The economic opinion obtained in the course of the procedure showed that the costs of providing interconnection services according to the FL-LRAIC (forward-looking long-run

average incremental costs) standard had risen sharply since the last time these fees were set (in 2004). This can mainly be attributed to a sharp decrease in call minutes in the fixed-link network. The fees set in accordance with the requests were lower than the maximum cost-based fees permitted under the regulatory obligations imposed on Telekom Austria.

Effects of Decision Z 9/07 on the industry as a whole:

The fees ordered in this decision only apply to the parties to the dispute resolution procedure and therefore have no immediate effect on other operators; in particular, the decision does not affect existing agreements regarding interconnection services. In this context, it is also necessary to note that a number of alternative network operators requested that the regulatory authority grant them the status of parties to this procedure. In justifying these requests, the parties indicated that procedures pursuant to Art. 50 TKG 2003 also have an effect on them as defined in the relevant interpretations of the law (regarding market analysis procedures). However, the requests were rejected because such an effect does not exist, in particular due to the exclusive effect of the procedure on the applicant and the applicant's counterparty.

4.2.3 Shared use of communication lines and site sharing

Section 2, Art. 5 et seq. of the TKG 2003 define regulations regarding wayleave rights and rights of joint use, and the TKK is responsible for procedures concerning rights to the shared use of communication lines and site sharing. The TKG amendment introduced in 2009 (Federal Law Gazette I No. 65/2009) revised these regulations in terms of content and procedures.

Telecommunications Reference Rate Ordinance 2009 (TRV 2009)

Under Art. 7 TKG 2003, RTR is required to define uniform nationwide reference rates for one-off compensation for the use of lines or systems secured by rights, and for the installation, operation, expansion or replacement of communication lines by their owners. These reference rates were first defined in the RTR Reference Rate Ordinance of February 20, 2004, which expired on February 20, 2009.

In order to set a new reference rate, RTR collected data on the extent to which the last rate defined (EUR 2.07 per linear meter) had proven viable in practice. A query sent to the Telecommunications Offices and the Federal Ministry of Transport, Innovation and Technology as well as an internal analysis of the relevant inquiries received by RTR since the Reference Rate Ordinance 2004 was issued did not provide any indications that the basic procedure chosen for adjusting the amount previously defined (on the basis of the TKG 1997 at that time) or the defined amount of the reference rate had been criticized by the parties affected by the ordinance.

Therefore, in issuing the new Reference Rate Ordinance in 2009, RTR also adjusted the prevailing rate on the basis of the Austrian Consumer Price Index 1996. Once again, the new reference rate in the amount of EUR 2.30 (again valid for five years) was met with agreement by the Presidents of the Austrian Chambers of Agriculture and the Austrian Association of Electricity Companies as representatives of the parties involved. The Telecommunications Reference Rate Ordinance 2009 (TRV 2009) was announced in Federal Law Gazette II No. 238/2009.

Order for the shared use of ducts (D 1/09)

On November 20, 2009, the TKK for the first time ordered the shared use of infrastructure in accordance with the provisions of the Telecommunications Act 2003 (TKG 2003) which were amended in the summer of 2009. The applicant in this procedure was Silver Server GmbH, which requested an order for the shared use of ducts and dark fiber belonging to ÖBB-Infrastruktur AG (a subsidiary of the Austrian Railway Group).

The 2009 amendment to the TKG 2003, which was intended to facilitate the rollout of new broadband communications networks, changed the procedural regulations relevant to the TKK's activities. In particular, the period within which the TKK is required to decide on requests for shared use was shortened from four months to six weeks, and the possibility of precluding objections from the applicant's counterparty (which is unusual in Austrian law on administrative procedures) was included in the TKG 2003.

At the same time, the scope of parties potentially subject to obligations was expanded. While (only) the shared use of "communication lines" was to be tolerated under certain circumstances in the past, the shared use of "lines, facilities or parts thereof" must now be tolerated if their owner exercises a wayleave, line use or usage right under the TKG 2003, another federal act or provincial legislation, and if shared use is economically reasonable and technically feasible for the owner. Under the same economic and technical prerequisites, owners of cable ducts, conduit or parts thereof are also required to allow shared use for communication lines. Therefore, companies outside of the telecommunications industry are also obliged to allow the shared use of their infrastructure under certain circumstances.

One of the key issues in this procedure was whether the regulations of the TKG 2003 are applicable to railway infrastructure. The Austrian Railway (ÖBB) argued that access to rail infrastructure was governed exclusively by the Railway Act, meaning that the (amended) TKG 2003 was not applicable. The TKK did not agree with this interpretation of the law.

In terms of content, the decision defined the first detailed regulations on the shared use of infrastructure from outside the telecommunications industry. For example, the decision governs the rights and obligations of the parties to shared use orders, the fundamental arrangements for access to other organizations' infrastructure, system maintenance, the duration of shared use, termination privileges and the appropriate fee for shared use (in this case EUR 0.64 per linear meter per month for ducts along a street of houses in Vienna).

As in the decisions on network access under Art. 50 TKG 2003, this decision on the shared use of ducts also serves as a replacement order in cases where parties are unable to reach an agreement. A number of additional requests submitted by Silver Server GmbH (e.g., on access to dark fiber) were rejected for procedural reasons.

Withdrawal of application (D 2/09)

Another request for the shared use of ducts in the Kitzbühel area was withdrawn by the applicant before the TKK could issue a decision. As a result, the procedure was discontinued.

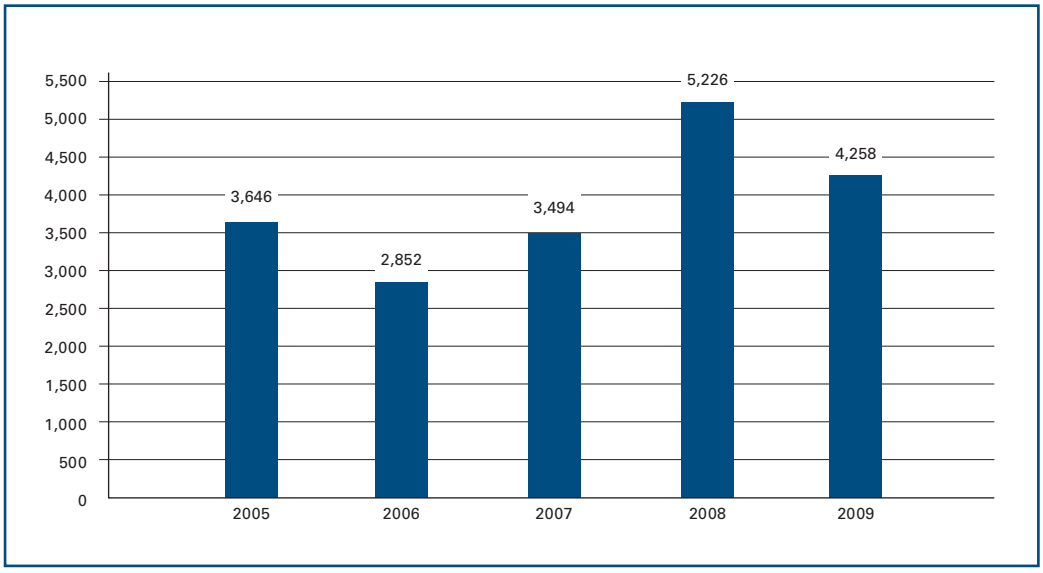
4.2.4 Conciliation procedures

4.2.4.1 Retail conciliation procedures under Art. 122 Par. 1 No. 1 TKG 2003

Number of conciliation cases declined in 2009

After a sudden and drastic increase in 2008, the number of requests for conciliation procedures fortunately declined in the year 2009. While the number of new requests had reached an all-time high of 5,226 in 2008, this figure dropped by approximately 20% to 4,258 in 2009.

Figure 2: Conciliation cases per year, 2005 to 2009



Source: RTR

Number of cases still rising in long-term perspective

Compared to the number of cases in 2007, however, the development in 2009 still represents a substantial increase. This warrants the conclusion that the number of cases has generally been on the rise in recent years. This development is punctuated by individual peaks which can be attributed to specific and temporary problems. For example, the large number of cases handled in 2004 and 2005 resulted from the widespread misuse of dialer programs. This problem was successfully mitigated by the introduction of additional consumer protection provisions in the Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V). The year 2008 was then characterized by a spike in the number of complaints regarding aggressive direct sales techniques. These complaints – which were mainly attributable to a single operator – also declined in number, as the operator in question apparently changed its marketing practices.

Focus on data services

In terms of content, conciliation activities in 2009 clearly focused on complaints regarding mobile broadband connections. A very large number of products on the market still involve high consumption-based charges in some cases. While the data volumes included in the monthly base fee are highly favorable in Austria (also by international comparison), the additional consumption-based fees charged once that data volume has been exceeded can be substantial, even several times higher than the base fee itself. These rate structures, which can be described as a critical issue, then become a "trap" in cases where the user is not aware of atypical developments in the costs incurred for data volumes. Unfortunately, this problem arises quite frequently. Whether it is due to the user's inexperience with programs which create high levels of data traffic (e.g., file sharing programs) or barely perceptible causes such as erroneous software updates, experience has shown that many users fail to notice increasing data transmission volumes until it is too late – that is, once they receive their bill. In this context, the use of mobile broadband connections abroad (roaming) has often caused significant problems (see below for details).

The enormous market success of mobile broadband in Austria has been accompanied (de facto necessarily) by an increase in the number of user complaints about those services.

However, at the same time a positive counter-development has been observed, as operators have continually improved their warning mechanisms and introduced blocking mechanisms early in order to protect their customers. The development of the products themselves is also encouraging: Higher data volumes included in service packages and lower prices have reduced the potential for conflict. In this context, it is particularly worth mentioning those products which no longer involve consumption-based charges at all. The market has already seen the introduction of the first flat rate products or fair use products; in the latter case, bandwidth is reduced once a certain limit is reached, but no additional charges are incurred. One can only hope that such products establish themselves firmly on the Austrian market. From the conciliation body's perspective, users are strongly advised to choose mobile Internet connections with this form of billing. The slightly higher base fees for such services bring about greater security regarding costs and eliminate the need for continuous monitoring in this regard.

Given the corresponding usage behavior on the part of consumers, prepaid offers might also be advisable, as they have a built-in cost-limiting mechanism.

Value-added services becoming less of a problem

The encouraging developments in conciliation cases regarding value-added services also continued in 2009. Whereas value-added services were the predominant reason for complaints when RTR's conciliation body began its activities, these procedures have clearly become less significant.

Expensive data roaming services

Conciliation procedures regarding international roaming have a special status of sorts: These procedures are not significant in terms of the number of cases, but the amounts involved in the disputes are sometimes extremely high. The procedures involving the largest sums for residential customers are almost exclusively related to bills for data roaming. The new European rules will certainly bring some relief with regard to these procedures. One especially difficult problem is data roaming in the vicinity of national borders even though the users are still located in Austria. Due to the country's topographical situation, cases have arisen again and again in which users do not notice that their telephones have registered on a network

abroad. In this context, it is especially striking that some operators block roaming services by default in order to protect their customers, only activating the service if explicitly requested to do so by the user. This measure certainly appears reasonable, as fewer complaints have been received from customers of those operators.

New procedural guidelines well received

As for the handling of procedures themselves, the procedural guidelines introduced in late 2008 as well as the possibility of submitting applications using a web-based form have proven very helpful. The far tighter and leaner procedural guidelines enable the conciliation body to handle procedures more rapidly and expediently, thus the new guidelines have been very well received all around.

4.2.4.2 Conciliation procedures under Art. 122 Par. 1 No. 2 TKG 2003

RTR as conciliation body

Under Art. 122 Par. 1 TKG 2003, RTR can be called in as a conciliation body in disputes between customers, providers/operators of communications services and networks, and interest groups. In particular, the conciliation body is available in cases where complaints regarding quality of service and invoice disputes between a customer and an operator cannot be settled in a satisfactory manner (No. 1) and in cases of alleged violations of the TKG 2003 (No. 2).

On the basis of the TKG 2003, RTR can also act as a conciliation body in disputes with resellers of communications services and handle complaints regarding providers of broadcasting infrastructure (e.g., cable network operators) in the course of such conciliation procedures. By law, KommAustria has placed RTR in charge of conducting these procedures.

In general, operators are obligated to take part in such proceedings and to provide all documentation and information necessary. RTR's duty in these procedures is to help negotiate an amicable solution or to communicate its opinion on the case in question to the parties.

4.2.5 Competition monitoring

Even closer monitoring of market developments

Given the changing conditions on the market and the accompanying deregulation process (e.g., the reduction in the number of markets defined as susceptible to ex ante regulation), RTR decided as early as 2008 to monitor market developments more closely in the future. In this context, the regulatory authority has mainly focused on the wholesale markets for unbundling and broadband access.

For this purpose, RTR has established systematic and individual monitoring in order to ascertain whether and the extent to which companies with significant market power comply with the specific obligations imposed on them in market analysis procedures under Art. 37 TKG 2003.

In addition, RTR has set up a uniform point of contact to which competition-related violations (e.g., violations of specific obligations imposed due to the identification of significant market power) can – and should – be reported. Interested parties can contact RTR at a dedicated e-mail address (wettbewerbsmonitor@rtr.at) in order to report potential competition-related violations and to provide any relevant documentation on such violations. The regulatory authority makes every effort to ascertain and evaluate the facts in each case as quickly as possible and to remedy competition-related violations in a timely manner within the scope of its abilities.

2009: No violations

In the course of the year 2009, RTR performed in-depth analyses of the data submitted to the regulatory authority and thus verified that no systematic violations of TKK decisions or the TKG 2003 have resulted from significant market power.

The regulatory authority invites all interested parties to continue reporting suspected violations of competition law.

4.2.6 Supervisory procedures

First stage: Opportunity to submit comments or eliminate violations

If, in performing its duties, the regulatory authority finds reason to believe that a company has violated the provisions of the TKG 2003, the provisions of an ordinance issued on the basis of the TKG 2003 (e.g., the Communications Parameters, Fees and Value-Added Services Ordinance [KEM-V]), or an official decision issued on the basis of the TKG 2003, then the regulatory authority is required to communicate the perceived shortcomings to the company in question (Art. 91 TKG 2003). At the same time, the company is to be given the opportunity to submit comments on the allegations or to remedy the shortcomings within one month. This period may only be shortened if the company in question consents or has repeatedly violated the provision in question.

Second stage: Official decision ordering measures if violation is not remedied

If the violation is not remedied within one month, the regulatory authority issues an official decision ordering appropriate and reasonable measures in order to ensure that the relevant provision is observed.

Third stage: Suspension or revocation of right to operate communications networks or services, or revocation of assigned frequencies and communications parameters

In the final step, if the measures ordered in the official decision are not taken, the regulatory authority may suspend or revoke the company's right to operate or provide communications networks or services, and assignments of frequencies and communications parameters may be revoked.

RTR's competence in such matters may arise from legal sources other than the TKG 2003. In this context, it is worth mentioning Regulation (EC) 717/2007 of the European Parliament and of the Council of 27 June 2007 on roaming on public mobile telephone networks within the Community (amendment to Directive 2002/21), as amended by Regulation (EC) 544/2009 of the European Parliament and of the Council of 18 June 2009.

This regulation is relevant because a number of supervisory procedures were carried out on the basis of this competence during the reporting period.

Innsbruck Aldrans (R 1/08)

In 2008, the TKK initiated a legal supervisory procedure against Telekom Austria because Tele2 had informed the regulatory authority about an increase in the number of complaints regarding service disruptions from broadband customers in a certain area near Innsbruck; those customers used Tele2 services via unbundled local loops. The complaints referred to reductions in the available transmission bandwidths as well as a deterioration in connection stability, and even complete interruptions of broadband services which had previously functioned in a stable manner. Based on measurements taken in response to the problem, Tele2 believed that the reason for the increased occurrence of disruptions was that Telekom Austria had put an upstream DSLAM (digital subscriber line access multiplexer) into operation. A

DSLAM is a broadband modem installed at Telekom Austria's serving area interfaces and thus closer to the end-user than Tele2's (comparable) modems, which are installed on the main distribution frames. As Telekom Austria's DSLAM was transmitting at least partly in the same frequency ranges but at higher power levels than the modems used by Tele2, this DSLAM was in fact causing the interference encountered in Tele2's broadband connections on unbundled lines (due to crosstalk).

After completing a procedure which was highly complex (mainly in technical terms), the TKK instructed Telekom Austria on March 9, 2009 to take measures to remedy the disruptions identified in Tele2's services. Telekom Austria was thus ordered to ensure that the signals transmitted from its DSLAM in the frequency ranges used by Tele2 were reduced in line with the power levels of the incoming Tele2 modem signals at the upstream DSLAM location. In substance, this obligation corresponded to the rules developed in 2008 by RTR's NGA industry working group (in which Telekom Austria participated) in order to govern the operation of broadband modems at upstream DSLAM locations. During the necessary changeover period, Telekom Austria was required to submit offers to Tele2 for an alternative technical implementation of its broadband services (using bitstreaming) in the interim and to report on the implementation measures taken.

Telekom Austria: Special offers

Telekom Austria's special offers in 2009 replicable without discrimination

In the year 2009, Telekom Austria again launched a number of campaigns involving special offers. In this context, it is especially worth highlighting the operator's special summer offer and its campaign during the holiday season in 2009.

Also known as combination packages *(Kombipaket)*, these special offers comprised fixed-link voice telephony and fixed-link broadband Internet products, with the optional inclusion of mobile voice products.

Both offers were the subject of procedures carried out by the TKK in order to ensure that the products could be replicated by alternative operators on the retail market without encountering discrimination or a margin squeeze.

The objective of the procedures was to ensure the following:

- that Telekom Austria was not granting discounts to retail customers which would have exposed alternative providers of those products to a margin squeeze; and

- that Telekom Austria also offered the wholesale products necessary to allow alternative operators to replicate those special offers on the retail market without encountering discrimination or a margin squeeze.

As the relevant inquiries revealed that alternative providers are, in fact, able to offer packages equivalent to those special offers on the terms described, the procedures were discontinued.

Telekom Austria: Review of possible margin squeeze

In September 2009, a procedure was initiated to review a possible margin squeeze by Telekom Austria by examining the difference between the company's retail and wholesale fees at the value creation levels of bitstream access and unbundling.

This review was necessary because Telekom Austria once again offered retail products at substantially reduced prices compared to previous campaigns, at the same time reducing the corresponding wholesale rates in 2009.

By examining the difference between retail and wholesale fees at the levels of bitstream access and unbundling in order to identify any severe changes, the regulatory authority intended to ensure that alternative providers were not subjected to a margin squeeze.

In the procedure, the regulatory authority determined that alternative providers were not exposed to a margin squeeze at the level of the wholesale broadband market compared to the retail market, nor at the level of the unbundling market compared to the wholesale broadband market in 2009.

Telekom Austria's special offers in 2009 replicable without margin squeeze

On the basis of projected data, no margin squeeze could be identified between the unbundling market and retail market for the year 2009 as a whole.

4.2.7 Unfair practices in the provision of value-added services (report pursuant to Art. 24 Par. 2 TKG 2003)

KEM-V 2009: Fundamental regulations on the provision of value-added services

With regard to value-added services, the last sentence of Art. 24 Par. 2 TKG 2003 requires the regulatory authority to provide information on unfair practices and the corresponding measures taken in its annual report pursuant to Art. 34 Par. 2 TKG 2003. In this context, the Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V) 2009, which went into effect on July 7, 2009, was a highly significant development. The ordinance is a new version of the KEM-V which was issued in 2004 and last amended in February 2008. The new version of the ordinance accounts for international developments, the changing market situation in Austria and experience gained in recent years. For further details and a discussion of the new provisions in the KEM-V 2009, please refer to Section 4.2.14.1.

Number of complaints regarding text message services continues to decrease

After decreasing in the year 2008, the number of complaints regarding value-added services again declined considerably in 2009. Whereas nearly 40% of the procedures handled in connection with RTR's duty as a conciliation body under Art. 122 TKG 2003 were related to complaints about value-added services in 2008, this share dropped to approximately 11% in 2009. As in the year 2008, the majority of complaints regarding these services concerned "MT-billed" text message services, in which the user is charged not for the value-added text messages sent, but the messages received. RTR's conciliation body was able to provide effective assistance for users who submitted complaints. In contrast, no further complaints were received with regard to dialer services.

"Migration" to the Internet

Recently, the regulatory authority has observed a tendency indicating that many services which were previously used via mobile telephones are now used via web portals. In addition, services formerly offered using value-added service numbers are increasingly being offered as "m-commerce services" for which charges are collected by the relevant network operator, but on behalf of another company (similar to a credit card payment) and under special legally defined prerequisites. Such services can be offered using geographical or mobile telephone numbers, and up to now no conspicuous patterns in the number of cases of misuse have been observed.

Monitoring of value-added services

In addition, RTR developed a web-based complaint form in 2008 in order to enable information to be entered and captured quickly; this form has been online since April 2008 and has been used regularly by consumers. The number of complaints has declined slightly: Some 500 were submitted between April 2008 and the end of that year, while roughly the same number of complaints were submitted in the entire year 2009. Most of the complaints submitted using the form have been related to MT-billed text message services. The complaints were analyzed, and in the case of conspicuously high frequencies the network operators were informed in order to develop timely solutions in the consumers' interest. These solutions were often implemented very quickly. For further details on RTR's monitoring of value-added services, please refer to Section 4.2.7 of the 2008 Communications Report.

Consistent monitoring and countermeasures

In the year 2009, RTR continued to monitor compliance with the provisions regarding value-added services in the KEM-V and KEM-V 2009 and to take the appropriate measures wherever necessary. In particular, RTR reviewed whether fee information requirements were fulfilled and whether erotic services were offered in the (0)900 range. In this regard, the authority's supervisory measures generally produced satisfactory results. With the past amendments to the KEM-V and in particular the new version of the ordinance (KEM-V 2009) as well as the continued monitoring of compliance, the regulatory authority has been (and will be) able to continue on the path it has taken thus far.

4.2.8 Competition regulation: General terms and conditions / rates and charges

Operators identified as possessing significant market power on a relevant market under telecommunications law can, among other things, be subjected to an obligation to have their retail rates and charges as well as their general terms and conditions of business approved by the regulatory authority.

Applicant's status as party to the procedure

The regulatory authority is required to issue a decision on each request for approval within eight weeks. Should the regulatory authority fail to issue a decision within that period, the rates or general terms and conditions submitted are considered to be approved (Art. 45 Par. 2 TKG 2003). An amendment to the TKG adopted in 2003 (Federal Law Gazette I No. 65/2009) later clarified these regulations, stating that only the applicant is to be granted the status of a party to the approval procedure.

ex ante approval on access markets

When a company subject to this requirement requests approval for its rates and charges, it is necessary to ensure that those rates and charges meet the standard of cost-based pricing. In the approval of general terms and conditions, the regulatory authority reviews their compatibility with certain legal provisions (cf. Art. 45 Par. 6 TKG 2003). Without this approval, companies subject to this requirement are not allowed to apply the respective terms and conditions and/or rates and charges.

Notification requirement with possible objection by TKK on carrier markets

In addition to the conventional ex ante approval process, it is also possible to provide for milder obligations, such as notification requirements in which the TKK is allowed to raise objections within eight weeks of notification.

In the year 2009, specific obligations were imposed on Telekom Austria as well as mobilkom austria. The ex ante approval requirement only applied to the markets for access to the public telephone network at a fixed location for residential and non-residential customers in 2009.

During the reporting period, operators on the markets for publicly available international and domestic telephone services provided at a fixed location for non-residential customers were only subject to a notification requirement in which the TKK may raise objections to the general terms and conditions (including service descriptions) and rates notified within a period of eight weeks.

Removal of obligations on the market for domestic telephone services for residential customers

The specific obligations previously imposed on the market for publicly available domestic telephone services provided at a fixed location for residential customers were lifted by the TKK in Decision M 09/09-56 of March 23, 2009. Therefore, operators on that market are now only subject to the notification requirements arising from Art. 25 TKG 2003.

Access to the public fixed-link telephone network realized using VoB

In the year 2009, the general terms and conditions (including service descriptions) as well as the rates and charges submitted by Telekom Austria for the "Business Net Phone" product were approved by the TKK in Decision G 83/09-15 of September 21, 2009. In this context, it is important to note that this was the first approval procedure involving access to the public telephone network realized by means of voice over broadband (VoB).

4.2.9 General terms and conditions / rates and charges under Art. 25 TKG 2003

Notification requirement pursuant to Art. 25 Par. 1 and 2 TKG 2003

Operators/providers of (tele)communications networks and services are obligated to draw up general terms and conditions as well as conditions regarding rates and charges and to notify the regulatory authority of those conditions in accordance with Art. 25 Par. 1 TKG 2003. Similarly, Art. 25 Par. 2 TKG 2003 stipulates that any changes in general terms and conditions or in conditions regarding rates and charges must be reported to the regulatory authority.

Under Art. 25 Par. 6 TKG 2003, the TKK may raise objections to notified general terms and conditions (including service descriptions) within a period of eight weeks if they are not in line with the review standards stipulated in Art. 25 Par. 6 TKG 2003, which are as follows: the TKG 2003; ordinances issued on the basis of the TKG 2003; Articles 864a and 879 General Civil Code (ABGB), and Articles 6 and 9 Consumer Protection Act (KSchG).

Under Art. 25 par. 6 TKG 2003, the TKK does not have the power to raise objections to notified terms and conditions regarding rates and charges, meaning that under that provision the TKK cannot review whether such conditions comply with the review standards. In 2009, the regulatory authority received a total of 227 notifications regarding rates and charges. These notifications were published by the regulatory authority and can be retrieved from the RTR web site.

2009: 153 notifications of general terms and conditions

In addition, the regulatory authority received a total of 153 notifications of general terms and conditions (and service descriptions) in accordance with Art. 25 TKG 2003 in the reporting period. After their conclusive review by the TKK, these notifications are also published on the RTR web site and can be retrieved from http://www.rtr.at.

In cases where it appears that notified general terms and conditions or service descriptions will not meet the review standards set forth in Art. 25 Par. 6 TKG 2003, the operator in question is generally informed of the TKK's objections.

During the reporting period, operators revised questionable provisions in 38 procedures so that the general terms and conditions (including service descriptions) were ultimately in line with the review standards and the TKK was not required to raise objections.

TKK issues objection due to violation of Art. 25 TKG 2003

Only in one procedure was it necessary for the TKK to issue an official objection to the terms and conditions pursuant to Art. 25 Par. 6 TKG 2003, as the operator in question failed to revise the notified terms and conditions.

This procedure referred to a clause in the operator's general terms and conditions which stipulated that the right to terminate the agreement free of charge – which operators are required to grant under Art. 25 Par. 3 TKG 2003 in the case of changes which are not exclusively favorable to the subscriber – is reserved for consumers as defined in the Austrian Consumer Protection Act (KSchG). According to the clause, businesses as defined in the Consumer Protection Act would not have been able to terminate their contracts free of charge in the case of changes which are introduced unilaterally by the operator and which are not exclusively favorable to the subscriber.

In contrast to the provisions of general civil law in Austria, Art. 25 TKG 2003 allows the operators/providers of communications networks and services to make unilateral changes to general terms and conditions as well as conditions regarding rates and charges under certain circumstances. As a form of compensation, Art. 25 TKG 2003 stipulates that the subscriber must be granted the right to terminate the contract in question free of charge in the case of changes which are not exclusively favorable to the subscriber. According to Art. 25 Par. 3 TKG 2003, this right to terminate contracts without charges exists regardless of whether or not the subscriber qualifies as a consumer.

The clause disputed in this procedure therefore did not comply with the provisions of Art. 25 TKG 2003, as it only granted the right to terminate free of charge to those subscribers who qualify as consumers. As a result, the TKK had to raise an objection to the operator's general terms and conditions due to a violation of Art. 25 TKG 2003. This official decision is legally effective, and no complaints were filed with Austria's high courts (Administrative Court and Constitutional Court).

The following development in the year 2009 is also worth noting:

Payment Services Act (ZaDiG)

On November 1, 2009, the Austrian Payment Services Act (ZaDiG) went into effect.

Payment Services Act effective as of November 1, 2009

Art. 27 Par. 6 of this act stipulates the following: "The payment service provider must not prohibit the payee from offering the payer a price reduction for using a certain payment instrument. The collection of charges by the payee in cases where a certain payment instrument is used shall not be permitted."

This provision in the Payment Services Act cannot be disregarded in the case of disadvantages to business customers (Art. 26 Abs. 6 ZaDiG) and is therefore not purely for the purpose of consumer protection. It appears questionable whether clauses which stipulate a charge for the use of certain payment instruments (e.g., a charge for the use of payment slips) will still comply with the review standards pursuant to Art. 25 Par. 6 TKG 2003 now that the Payment Services Act has gone into effect. At the end of the reporting period, the TKK had not yet completed its conclusive assessment, as all notifications where the general terms and conditions contained such clauses were withdrawn for revision.

Art. 25 TKG 2003

Supreme Court confirms Vienna Commercial Court ruling

As discussed in the 2008 Communications Report, the TKK took the Vienna Commercial Court Ruling 19 Cg 46/08y of June 17, 2008, which was not yet legally effective at the time, as an opportunity to review its legal interpretation to date. In due consideration of the arguments put forth by the Vienna Commercial Court, the TKK came to a conclusion regarding clauses which allow the operator to reverse changes in general terms and conditions within a certain period of time after receiving a termination notice from the customer, thus rendering the customer's termination notice ineffective. If interpreted to the maximum detriment of the customer, such clauses must be considered a severe disadvantage as defined in Art. 879 Par. 3 General Civil Code (ABGB), as they give rise to an unacceptable state of suspense for the customer.

A legally effective ruling on this issue now exists, as Ruling 19 Cg 46/08y of the Vienna Commercial Court has been confirmed at all levels of appeal. In Ruling 1 Ob 123/09h of August 8, 2009, the Austrian Supreme Court indicated that the arguments put forth by the appeals courts were accurate, meaning that it was only necessary to respond briefly to the appeal. The legal view adopted by the TKK in 2008 is thus consistent with the Austrian Supreme Court's recent decision.

4.2.10 International roaming in the European Union

Expansion of Roaming Regulation on July 1, 2009

The European Union's Roaming Regulation, which imposes numerous obligations on mobile network operators, has now been in effect for nearly three years. While the regulation adopted on June 30, 2007[4] only applied to voice telephony, the new Roaming Regulation[5] expands its scope of application to text messaging (SMS) and mobile data services. The expanded Roaming Regulation entered into effect on July 1, 2009. The validity of the first regulation, which was set to expire in the summer of 2010, was extended until the summer of 2012.

After the completion of the review provided for in Article 11 of the Roaming Regulation, the temporal extension and the expansion of the regulation to include text messaging and mobile data services were essentially justified by the fact that sustainable competition in voice roaming is not likely to prevail in the absence of regulatory measures after June 2010, that prices had remained broadly stable and exhibited no meaningful relationship with the underlying costs in the case of SMS roaming, and that high price levels and a lack of competition still prevailed with regard to data roaming services.

4.2.10.1 Overview of new roaming provisions

Voice telephony

Voice telephony: Further price reductions, per second billing

With regard to voice telephony, the previously defined maximum rates were adapted at both the wholesale and retail level, and the next date for price limit reductions was brought forward from August 30 to July 1, 2009. The average wholesale charges for regulated roaming calls were therefore decreased to 26 euro cents as of July 1, 2009. Further reductions of these rate limits are planned for July 1, 2010 (22 euro cents) and July 1, 2011 (18 euro cents). At the retail level, additional reductions were also introduced in the "Eurotariff": For outgoing calls, the rate limit was set at 43 euro cents from July 1, 2009 onward, and this limit will be reduced to 39 euro cents from July 1, 2010 and 35 euro cents from July 1, 2011. For incoming calls, the rate limit was set at 19 euro cents from July 1, 2009 onward, and the limit will be reduced to 15 euro cents from July 1, 2010 and 11 euro cents from July 1, 2011 (all prices indicated without value-added tax). In addition to the rate reductions, billing on a per second basis became mandatory at both the wholesale and retail level (Eurotariff) as of July 1, 2009. An initial minimum charging period of 30 seconds is also permitted at the wholesale level and in the case of outgoing calls. This is equivalent to a 30/1 billing increment for regulated outgoing roaming calls. In the case of incoming calls, per second billing is mandatory from the first second onward.

[4] Regulation (EC) No 717/2007 of the European Parliament and of the Council of 27 June 2007 on roaming on public mobile telephone networks within the Community and amending Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services, OJ L 2007/171, p. 32.

[5] Regulation (EC) No 544/2009 of the European Parliament and of the Council of 18 June 2009 amending Regulation (EC) No 717/2007 on roaming on public mobile telephone networks within the Community and Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services, OJ L 2009/167, p. 12.

Table 6: Maximum rate limits at the wholesale and retail level

Euro cents (excluding VAT)	July 1, 2009	July 1, 2010	July 1, 2011
Wholesale rate	26	22	18
Retail rate (outgoing)	43	39	35
Retail rate (incoming)	19	15	11

Source: RTR

As in the past, mobile operators are still allowed to offer alternative roaming rates ("specific roaming tariffs"), which may also entail higher charges or pulse rates. The essential requirement is that each mobile operator must offer at least one rate package which meets the requirements of the Eurotariff.

From July 1, 2010 onward, mobile operators will no longer be allowed to charge their subscribers for receiving voice messages (i.e., for receiving a call and message on their mobile voice boxes) when travelling abroad within the EU. However, this does not apply to listening to voice messages.

Text messaging (SMS)

Regulation for SMS roaming

From July 1, 2009 onward, price regulations were also introduced for text messages (regulated SMS roaming messages) at both the wholesale and retail level. After that time, the (average) wholesale charge for a regulated text message must not exceed 4 euro cents. At the retail level, mobile operators are required to offer their customers a "Euro-SMS tariff" which does not exceed 11 euro cents (excluding value-added tax) per text message sent. Moreover, it will no longer be permissible to charge customers for receiving text messages in an EU member state. Multimedia messages (MMS) are not covered by this price regulation, meaning that charges may still apply to receiving MMS messages while traveling in other EU member states.

Data roaming services

Price regulation for data roaming services at the wholesale level

For data roaming services, price regulations were introduced at the wholesale level from July 1, 2009 onward, with a maximum average wholesale charge of EUR 1.00 per megabyte. This maximum average wholesale charge will be reduced to 80 euro cents per megabyte from July 1, 2010, and to 50 euro cents per megabyte from July 1, 2011.

No retail price regulations were introduced for data roaming services, but the new regulation subjects mobile operators to far-reaching transparency and consumer protection rules.

Far-reaching user protection provisions

In addition to a general obligation to provide information about charges for using data roaming services, each mobile operator has been required since July 1, 2009 to send an automatic message to roaming customers free of charge when the customer initiates a data roaming connection in another member state of the European Union. The purpose of the message is to inform the customer that s/he is about to use a roaming service and to provide information on the roaming charges incurred in the customer's specific rate package.

From March 1, 2010 onward, mobile operators will be required to provide all customers who are able to use roaming services with a mechanism defining a certain maximum limit which cannot be exceeded when the customer uses data roaming services.

4.2.10.2 Implementation of the Roaming Regulation

Successful implementation of new obligations

In the year 2009 and since the expanded Roaming Regulation went into effect on July 1, 2009, RTR has observed that Austria's mobile operators have largely complied with the existing obligations. Nearly all of the providers in Austria based their Eurotariff rates for regulated roaming services on the maximum rates stipulated in the regulation. For more detailed information, please refer to Section 5.2.

On the users' side, there were relatively few complaints regarding the new obligations from the Roaming Regulation. Most complaints referred to the application of roaming rates which the customers did not want or agree to, as well as one provider's failure to charge customers a Eurotariff in compliance with the regulation. For information on complaints about data roaming in the vicinity of national borders, please refer to Section 4.2.4.1.

Billing increments under the Eurotariff: Legal supervision

In this context, it is worth mentioning one legal supervisory procedure which the regulatory authority initiated against mobilkom austria in the summer of 2009. The subject of the procedure was the operator's failure to charge a Eurotariff in compliance with the Roaming Regulation, as mobilkom austria charged customers in such a way that per second billing was applied to outgoing roaming calls from the first second onward in addition to a connection charge for the first 30 seconds of the call. However, since July 1, 2009, the new Roaming Regulation has required operators to use a minimum charging period of no more than 30 seconds, *after* which per second billing is mandatory. For example, for a short call of only one minute, mobilkom austria charged a connection fee for the first 30 seconds (25.80 euro cents including VAT) and then charged customers for 60 seconds on a per second basis (51.60 euro cents), thus accumulating a total of 77.40 euro cents. If the operator had applied the Eurotariff properly, a one-minute call should have cost no more than 51.60 euro cents (assuming maximum exploitation of the minimum charging period). This billing practice on the part of mobilkom austria meant that customers paid a premium of 50% in the example above. In an official decision issued on September 21, 2009, the TKK instructed mobilkom austria to stop charging the Eurotariff in violation of the Roaming Regulation and to reimburse customers as if the Eurotariff had been charged properly. mobilkom austria then submitted a complaint regarding the official decision to the Austrian Administrative Court.

4.2.11 Universal service

Scope

Universal service refers to the minimum set of public services to which all end-users must have access, regardless of their place of residence or business. It must be available throughout the country at a uniform and affordable price and at a specified quality level. Universal service includes the following services (Art. 26 TKG 2003):

1. Access to publicly available telephone services via a connection set up at a fixed location;

2. Creation of a comprehensive subscriber directory across all operators as well as access to this directory;

3. Nationwide coverage with public pay telephones.

Financial compensation

Under Art. 31 Par. 1 TKG 2003, the provider of universal service is to be compensated for the verifiable costs incurred in the provision of universal service which cannot be recovered despite efficient management where those costs constitute an unreasonable burden. As in the previous years, Austria's universal service provider Telekom Austria was able to reach private-law agreements with alternative telecommunications providers on the amount of compensation for the year 2008.

Quality criteria

The quality criteria for universal service are defined in the Universal Service Ordinance (UDV). Among other requirements, the criteria include key indicators such as the supply time for initial connection setup, the fault rate, call setup time, voice transmission quality and the number and features of public pay telephones in operation. Telekom Austria is required by law to provide RTR with a report on the extent to which it fulfilled those criteria on a yearly basis. The regulatory authority's review of the 2008 report did not give rise to any major objections. An overview of the quality criteria met by Telekom Austria in 2008 can be found at http://unternehmen.telekom.at/Content.Node/dateien/udv-2008.pdf. The Universal Service Ordinance, which defines the basis for those measurements, is available at http://www.rtr.at/de/tk/UDVerordnung (in German).

Changes in rates/charges

Charges as well as changes in charges for services provided under the universal service mandate may be reviewed by the regulatory authority if there is reason to suspect that those charges are not in line with the principle of affordability or other provisions of the TKG 2003. In this context, the criteria used to determine affordable price levels to date are the Austrian consumer price index as well as per capita income. In addition, the cost of a basket of goods was calculated on the basis of changing call charges over time. A comparison of these indicators then made it possible to assess whether the increase in charges over time was reasonably proportionate to the rise in consumer prices and income. Telekom Austria altered the charges applicable to services provided under the universal service mandate twice in the year 2009. According to the assessment criteria mentioned above, there was no reason to suspect that these changes violated the principle of affordability or other provisions of the TKG 2003. It was therefore not necessary to initiate a procedure pursuant to Art. 26 Par. 3 TKG 2003 in order to verify affordability.

4.2.12 Services subject to notification requirements

Service notifications, number notifications and data reports via the RTR web interface

Under Art. 15 TKG 2003, the regulatory authority must be notified in advance of the intended operation or provision of public communications networks or services as well as any changes or terminations of such networks/services. Upon notification, RTR issues a confirmation indicating that the notification was received in cases where it refers to a communications network or service. The notification process is handled via a web-based interface provided by RTR. Using this interface, operators and providers can also carry out the following processes:

- Number requests and returns;
- Reports required under the Communications Survey Ordinance (KEV);
- Information for market analyses;
- Reports relevant to financing contributions.

As of December 31, 2009, a total of 1,460 active services had been notified to RTR. A list of companies which have reported the operation or provision of public communications networks or services can be found on the RTR web site.

4.2.13 Frequencies

With regard to frequencies, the following procedures were carried out in the year 2009:

Assignment of frequencies in the 3.5 GHz band

Three frequency assignment procedures, review of compliance with 3.5 GHz coverage requirements

In April 2009, the TKK published an invitation to tender for frequencies in the 3.5 GHz band in order to assign the frequency usage rights which had been relinquished by UPC in December 2008. As in the previous procedures, the frequencies were assigned by means of an auction, which was held on August 5, 2009. The following companies succeeded in acquiring frequency usage rights: EVN Netz GmbH for Vienna and Lower Austria; B.net Burgenland Telekom GmbH for Burgenland; 4G Mobile GmbH for Styria, Carinthia, Northern Tyrol, Eastern Tyrol and Upper Austria; and Salzburg AG für Energie, Verkehr und Telekommunikation for the province of Salzburg. The total revenues from the auction came to EUR 140,860.00. The frequencies were assigned for a limited time period ending on December 31, 2019.

Review of compliance with coverage requirements in the 3.5 GHz frequency band

In January 2009, the TKK initiated a procedure in order to review the fulfillment of coverage requirements for frequencies in the 3.5 GHz band as stipulated in the assignment procedure in November 2004.

In the course of that frequency assignment procedure, a number of coverage requirements were imposed on the licensees. In those requirements, the regulatory authority stipulated that a certain coverage level had to be reached by December 31, 2008. The procedure revealed that the companies subject to the review, namely Teleport Consulting und Systemmanagement GesmbH and WiMAX Telecom GmbH, had fulfilled the coverage requirements to the extent stipulated.

Preparation for assignment of frequencies in the 2.6 GHz band

In the second half of 2010, the TKK intends to assign frequencies from the 2.6 GHz band. The auction is scheduled for September 2010, and preparations for the assignment procedure were largely completed in 2009. The auction software which has been used by the regulatory authority since the auction for UMTS frequencies in the year 2000 and which no longer reflects the state of the art due to recent developments in auction design as well as technical advances in the software industry will be replaced with a new software application for future assignment procedures. Implementation work began in the second quarter of 2009 and is scheduled for completion in the first quarter of 2010.

Refarming, future developments in frequency usage

In addition to the procedures mentioned above, a large part of the regulatory authority's activities in the field of frequency administration involved issues which will have to be resolved in the course of TKK procedures in the coming years. One of the main issues the authority dealt with in this context was refarming (i.e., making the frequency bands currently used for GSM services available for UMTS or LTE). This topic raises a large number of questions, especially in connection with potentially detrimental effects on competition. Another closely related topic is the expiration of frequency licenses in the 900 MHz and 1800 MHz bands. The earliest assignments are set to expire at the end of the year 2015.

In this context as well, a discussion has already begun on how to provide the companies involved with legal and planning certainty in a timely manner and thus to ensure continued coverage of the population without adverse effects in the future.

4.2.14 Communications parameters

4th amendment to the Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V)

The legal basis for RTR's administration of telephone numbers in Austria is the Communications Parameters, Fees and Value-Added Services Ordinance 2009 (KEM-V 2009), which defines a plan for communications parameters as well as regulations with regard to value-added services. Other addressing elements are administered on the basis of the Special Communications Parameters Ordinance (SKP-V).[6]

In addition to day-to-day operations, one major highlight in the year under review was the 4th amendment to the KEM-V.

4.2.14.1 KEM-V 2009

The results of the discussion process launched in 2008 were incorporated into a draft version of the new KEM-V (KEM-V 2009; Federal Law Gazette II No. 212/2009) and put out to public consultation in accordance with Art. 128 TKG 2003 from November 13, 2008 to January 30, 2009.

[6] For details, see http://www.rtr.at/en/tk/SKP.

As the entire KEM-V 2009 (including Annexes 1 and 2, with the latter defining the geographical borders between local networks) was published in the Federal Law Gazette, all of the provisions in the ordinance can now be accessed in electronic form.[7] The new ordinance went into effect on July 7, 2009.

Flexible use of geographical telephone numbers shelved

Since strongly divergent opinions have been expressed on the possibility of a more flexible use of geographical telephone numbers despite substantial changes in the original concept, RTR has now decided to set this topic aside for the time being, especially given the special situation of fixed-link networks in general. However, here it is necessary to note that – regardless of the postponement of the proposed changes – the nomadic scenarios already supported in connection with geographical telephone numbers are, of course, still possible under certain circumstances.

The main changes in the KEM-V 2009 compared to the previous ordinance are as follows:

Usage periods were adapted for the purpose of simplified administration by operators and the regulatory authority. The effects of those new regulations already began to manifest themselves in statistical evaluations in the year 2009 (see Section 4.2.14.2).

Exceptions to value-added service provisions now apply to voice services

The exception to the definition of value-added services for messaging services was expanded to included voice services until December 31, 2010. In addition, the consumer protection criteria to be fulfilled for this purpose were also tightened.

Moreover, a definition of the term "platform operator" was added to the ordinance; these operators are obliged to comply with the provisions regarding fee information for text messaging services. The authorities' inability to pursue providers established abroad and the sometimes unclear scope of protection regulations prompted the regulatory authority to adapt the ordinance in such a way that platform operators are required to comply with consumer protection provisions more rigorously.

As platform operators are usually established in Austria, these measures will enable the telecommunications authorities to combat misuse more effectively in the future.

Operators now required to provide evidence of compliance for value-added text messaging services

A new obligation to provide evidence of compliance with the provisions governing text messaging services was also introduced. In the case of a permissible objection to charges for text messaging services, this regulation stipulates that the communications service provider is obliged to provide the subscriber (consumer) with evidence of the provider's compliance with the relevant information requirements. For its part, the platform operator is required to provide the relevant communications service provider with the information necessary for this purpose, for which an exhaustive list is provided.

In addition, a number of adaptations were made to provisions concerning value-added services in order to ensure even more effective consumer protection and in particular a higher level of transparency. A number of minor changes were adopted in order to improve the ordinance and

[7] A link to the legally binding version of the KEM-V 2009 in the Austrian Legal Information System is available at http://www.rtr.at/kem-v.

make its provisions more easily comprehensible. To this end, the provisions of the ordinance were subdivided into three categories – voice and fax services, dialer services and messaging services (SMS-based services) – in order to improve the clarity of the ordinance's structure, and certain (language-related) points were also clarified.

In addition, the KEM-V 2009 now allows voice services in the (0)828 number range for the purpose of providing supporting information on a text messaging service using the same number. However, these numbers can only be called from those networks on which the messaging service itself can be used.

It is also important to note that telephone numbers involved in ongoing procedures are now ineligible for allocation. This change is especially relevant to the field of service numbers.

With regard to the provisions governing caller line identity (CLI), the ordinance was adapted in such a way that the transmission of telephone numbers in the (0)720 and (0)780 ranges is no longer restricted for emergency calls from a network termination point without an assigned geographical or mobile telephone number. Where technically possible, domestic operators may now also prevent routing for an obviously misused CLI, especially from the number ranges for value-added services. If the operator has the necessary technical capabilities, this mechanism makes it possible to protect consumers against calls from abroad intended to induce them to use value-added services.

4.2.14.2 Statistical analyses in telephone number administration

Table 7 provides a quantitative overview of the number of telephone number allocation decisions issued over the last five years. The table shows that the number of allocation decisions issued in the year under review dropped by 22% compared to 2008. The reason for this decline was the further optimization of processes in the operational administration of communications parameters. Since the KEM-V 2009 entered into force, allocation holders have been informed in advance when they face a potential loss of number usage rights. In this way, a substantial number of new number requests have been rendered unnecessary.

Table 7: Number of decisions issued, 2005 to 2009

	2005	2006	2007	2008	2009
Number of affirmative decisions	**871**	**834**	**1,036**	**991**	**786**
for geographical numbers	79	150	247	314	239
for non-geographical numbers	792	684	789	677	547
Number of negative decisions	**47**	**68**	**48**	**75**	**43**
Total	**918**	**902**	**1,084**	**1,066**	**829**

Source: RTR

In its administration of special communications parameters, RTR issued a total of nine decisions (all affirmative) in 2009.

Under the TKG 2003, the regulatory authority is required to decide on telephone number requests within three weeks of receiving the complete application. As shown in Table 8, the regulatory authority has continued to process requests far more quickly than the law requires. In 2009, RTR managed to maintain these processing times at approximately the same level as in 2008. Here it is important to note that the figures below are expressed in calendar days (not business days), meaning that an application received on a Thursday and completed on the following Monday is considered to have taken four days to process.

Table 8: Processing times for telephone number requests, 2005 to 2009

Processing time for telephone number requests (days)	2005	2006	2007	2008	2009
Average processing time	2.7	2.2	2.5	2.2	2.2
50% of all requests	1.8	1.3	1.4	1.2	1.2
90% of all requests	5.0	3.9	4.8	4.0	4.2

Source: RTR

Table 9 provides an overview of all telephone number ranges administered by RTR as of December 31, 2009, including allocated numbers and numbers in use. One especially striking development was the 49% increase in the number of area codes for private networks compared to the previous year. It is also worth noting that the number of subscriber numbers in use grew in the ranges for location-independent telephone numbers (+14%), for services subject to regulated maximum prices (+28%) and for value-added services subject to event-based charges (+49%). A slight trend reversal could be observed in the range for geographical telephone numbers. While the number of geographical numbers in use (on the overall market) dropped by 4% in 2008, this figure edged up by 1% in the year 2009. This increase can be attributed to the fact that Telekom Austria managed to keep utilization at a fairly constant level in the previous year (-1%) and that alternative operators were able to increase the use of geographical telephone numbers by 16%.

The use of telephone numbers for dial-up Internet access (or the use of numbers in the dial-up access range by dialer programs) has continued to decline. The substantial increase in the number of routing numbers in use and telephone troubleshooting hotlines can be attributed to enhanced data quality in the operators' use notifications.

Table 9: Numbers allocated and in use in Austria as of December 31, 2009

	Range	Allocated	Numbers	
			In use	Change from previous year
Geographical subscriber numbers Telekom Austria	(0)1, (0)2xx, (0)3xx, (0)4xx, (0)5xx, (0)6xx, (0)7xx	25,818,800*	2,410,376	-1%
Geographical subscriber numbers Alternative network operators	(0)1, (0)2xx, (0)3xx, (0)4xx, (0)5xx, (0)6xx, (0)7xx	2,712,500*	533,808	+16%
Area codes for private networks	(0)5	500	435	+49%
Area codes for mobile networks	(0)6xx	10**	10	+25%
Dial-up internet access	(0)718	7,100	47	-20%
Location-independent fixed network numbers	(0)720	261,100	43,850	+14%
Convergent services	(0)780	3,263	3,263	+13%
Toll-free services	(0)800	86,105	15,696	+3%
Toll-free dial-up internet access	(0)804 00	230	26	-7%
Services with regulated fee limits	(0)810, (0)820, (0)821	97,793	18,784	+28%
SMS services in the range for services with regulated fee limits	(0)828 2	1,745	25	+9%
Value-added services	(0)900, (0)930	121,888	27,310	0%
Value-added services subject to event-based charges	(0)901, (0)931	41,293	2,641	+49%
Dialers (value-added services)	(0)939	10,100	50	-12%
Carrier selection prefixes (public carrier networks)	10	36	24	+26%
Telephone troubleshooting hotlines	111	65	55	+90%
Telephone directory assistance services	118	48	43	+5%
Routing numbers for number portability	86	53	37	+76%
Routing numbers for mobile number portability	87	16	10	0%
Routing numbers for services	89	33	22	+144%

Source: RTR

* Figures are indicated in terms of unabbreviated numbers; that is, a telephone number shortened by one or two digits corresponds to 10 or 100 unabbreviated numbers, respectively.

** In some cases, this only refers to number ranges allocated under a mobile area code.

4.2.14.3 ENUM (Electronic Number Mapping)

Austria has taken a leading role in the field of ENUM. In order to maintain this position, the original contract signed by RTR and enum.at Dienstleistungs GmbH für konvergente Kommunikationsdienste in 2004 was expanded to include infrastructure ENUM in 2006. The original agreement would have expired at the end of 2009, but in September of that year it was extended for another two years.

The original contract concluded by RTR and enum.at Dienstleistungs GmbH für konvergente Kommunikationsdienste, the addendum to the contract as well as additional background information can be found on the RTR web site (http://www.rtr.at/enum).

4.2.15 Activities focusing on NGNs/NGA

NGNs/NGA still a key topic

The migration to next generation networks and the resulting fundamental changes in the economic, technical and regulatory landscape for telecommunications continue to represent both a challenge and a focus area for market participants and the regulatory authority. During the reporting period, network operators focused heavily on modern access networks (next generation access, or NGA); this also manifested itself in RTR's activities in the NGN/NGA focus area.

4.2.15.1 NGA industry working group

Discussion turns from general to specific

This industry working group, which was established in February 2008 as a result of a public consultation conducted by RTR on NGNs and which has been organized and moderated by RTR ever since, dealt with general issues related to the migration to NGA at first, but in the year 2009 the discussion was increasingly broadened to include aspects of an actual NGA rollout by Telekom Austria.

Preparations by industry working group

On the basis of the preparatory work already carried out by the NGA industry working group on the topic of local loop spectrum management, access to serving area interfaces and the resulting switching guidelines (cf. Volume 4/2008 of RTR's publication series: "Next Generation Access – Dialog between the Regulatory Authority and Market Participants" of October 2008), the group's experts were able to address current developments at the national and international level.

Telekom Austria presents NGA plans

While the main area of interest at the international level was the European Commission's activities in developing a recommendation on regulating next generation access, the participants' attention soon turned to developments in Austria, as Telekom Austria considered the NGA industry working group to be a suitable forum to present its plans for an NGA rollout in Austria to the other operators and to launch a discussion on this topic.

The key issues discussed in this context were ways to protect prior unbundling investments made by alternative operators as well as the demand for suitable (alternative) wholesale products which might help ensure competition in the access segment in a future NGA scenario.

4.2.15.2 Cooperation and financing models for NGA infrastructure

In fulfilling its legal obligation to operate a competence center for telecommunications, RTR also devoted efforts to developing and discussing opportunities and frameworks for infrastructure expansion and the financing of new broadband access networks (NGA) in 2009. This initiative was carried out in the course of two events and complemented by a study summarizing the results of those discussions as well as potential future courses of action on the basis of Austria's specific circumstances and possibilities.

On April 15, 2009, RTR invited interested parties to an initial event at which possible rollout and cooperation scenarios for NGA networks were discussed. In this context, RTR deliberately chose a very broad-based group of participants, inviting representatives from the telecommunications industry as well as electrical utility companies, municipal governments, infrastructure companies, interest groups as well as policymakers. The agenda included presentations on the realization of local infrastructure projects at the municipal level in Austria and abroad, a podium discussion with representatives of key stakeholders on potential cooperation arrangements in the telecommunications sector, broadband network expansion and its significance for public applications, and an outlook on the potential legal framework based on the EU's telecoms reform package. Moreover, participants also discussed the subjects of local versus nationwide solutions, open access in various forms, and the feasibility of cooperation arrangements for new and/or existing infrastructure.

Building on the results of the first discussion, RTR organized a follow-up event on May 26, 2009 on the topic of financing the rollout of NGA networks. This event was devoted to financing options from the perspective of the financial sector as well as potential public-sector contributions, which were evaluated on the basis of the EU's regulations on state aid. Specifically, the presentations and ensuing discussions with participants focused on questions related to grants and state aid, financing options and business cases.

After the two events, RTR cooperated with SBR Juconomy Consulting AG in preparing a study summarizing those discussions. The final product was presented at RTR's regulation workshop in October 2009 and published as Volume 2/2009 of RTR's publication series (http://www.rtr.at/de/komp/Publikationen/Band2-2009.pdf, in German).

The two events and the study were designed not only to provide ideas and stimuli for cooperation arrangements, but also to provide the parties with a platform organized by RTR for actual exchanges and the initiation of such arrangements. In terms of substance, the general principle applied to these two topic areas was the idea of a general and sector-specific arrangement in accordance with competition law which maximizes the contribution to sustainable competition and thus also to the objectives of regulation.

For further information on RTR's "Infrastructure and financing" focus area, please refer to http://www.rtr.at/en/tk/Infrastruktur; documentation from the events is available on RTR's web site at http://www.rtr.at/de/komp/Veranstaltung15042009 (April 15, 2009; in German) and http://www.rtr.at/de/komp/Veranstaltung26052009 (May 26, 2009; in German).

4.2.15.3 Alternative charging systems

This discussion, which was largely concluded in terms of content in 2008, primarily dealt with alternatives to the current interconnection system based on minutes and the CPNP regime, and was ultimately completed (for the time being) with the presentation of a final report in early 2009. In essence, the report states that each of the ten alternative scenarios examined has its specific advantages and disadvantages, and that the priorities defined will ultimately depend on the underlying assessment criteria and their relative weight. With this study, which was carried out in cooperation with SBR Juconomy Consulting AG, RTR was able to anticipate a topic which will become highly relevant not only in the course of NGN implementation at the national level, but also in the discussion at the European level. This discussion came to light (and is still ongoing) in the "bill and keep" study conducted by the ERG, the study on "The future of IC charging methods" conducted on behalf of the European Commission, and last but not least, in an Ofcom study which was conceptually similar to the one conducted by RTR. In 2010, RTR plans to continue its investigation of this topic not only at the international level, but also at the national level (in particular with regard to capacity-based interconnection).

4.2.16 International activities

IRG/ERG focus areas

Depending on the relevant focus areas and priorities, RTR participates in a wide variety of international working groups, such as the IRG/ERG, CEPT/ECC, the OECD and the Forum of European Supervisory Authorities for Electronic Signatures (FESA). In addition to its activities as a member of those working groups, RTR also acts as an advisor to Austrian representatives in organizations such as the European Commission's Communications Committee (CoCom).

The ERG's work program for 2009 comprised three main focus areas:

1. Framework review;

2. Further harmonization of the framework and its implementation;

3. New challenges due to new technologies and convergence.

The following reports and results were produced by IRG/ERG in the year 2009 (in chronological order):

Table 10: IRG/ERG documents in 2009

Date	Original title	Topic	Contents
January 12, 2009	3rd Roaming Data Report	Roaming	Analysis of effects of Roaming Regulation, market developments
February 27, 2009	I/ERG Statement on the Review	Review	Statement on harmonization and the optimal organizational setting in Europe
February 27, 2009	ERG Report on Tariff Transparency	Tariff transparency	Analysis of the status of tariff transparency and ways to promote transparency
February 27, 2009	ERG Report on Fixed-Mobile Convergence	Convergence	Analysis of fixed/ mobile convergence products
February 27, 2009	ERG Report on the Discussion on the application of margin squeeze tests to bundles	Bundled products	Analysis of and recommendations on margin squeeze tests for bundled products
June 3, 2009	ERG Statement on the Digital Dividend	Frequencies	Options for the use of the digital dividend
June 3, 2009	Report on NGA – Economic Analysis and Regulatory Principles	Next generation networks	Economic and regulatory analysis on the rollout of new access infrastructure, analysis of various rollout scenarios
June 3, 2009	ERG-RSPG Report on radio spectrum competition issues	Frequencies	Analysis of market regulation and spectrum management
June 3, 2009	ERG-RSPG Report on transitional spectrum issues	Frequencies	Regulatory challenges related to the flexible use of spectrum
June 3, 2009	ERG Report on price consistency in upstream broadband markets	Broadband	Analysis and recommendations for price regulation on wholesale broadband markets, margin squeeze
June 3, 2009	MTR snapshot Jan 2009	Mobile termination	Monitoring of developments in mobile interconnection charges
June 3, 2009	VoIP Action Plan	VoIP	Monitoring conformity with the Common Position on VoIP, Action Plan

Date	Original title	Topic	Contents
June 12, 2009	I/ERG Statement on the Review	Review	Statement on priority areas and the optimal organizational setting in Europe
June 30, 2009	Roaming Regulation ERG Guidelines	Roaming	Recommendation on harmonized implementation of the Roaming Regulation
July 22, 2009	4th International Roaming Benchmark Data Report	Roaming	Analysis of effects of Roaming Regulation, market developments
October 9, 2009	Report on the transition from sector-specific regulation to competition law	Regulation	Challenges and recommendations for the transition from - sector-specific regulation to general competition law
October 9, 2009	Report on the elaboration and monitoring of common positions	Harmonization	Generic model for reviewing implementation of ERG common positions
October 9, 2009	Report on Regulatory accounting in practice 2009	Cost accounting	Annual report on the development of regulatory accounting systems and their use in the various relevant markets
October 9, 2009	MTR snapshot, July 2009	Mobile termination	Monitoring of developments in mobile interconnection charges
October 15, 2009	Joint Declaration IRG-Regulatel	Cooperation	Statement on the further intensification of cooperation between European and South American regulatory authorities
November 4, 2009	ERG Draft Common Position Next Generation Networks/Future Charging mechanisms/Long term termination issues	Interconnection	Analysis of long-term alternative interconnection and charging regimes, bill and keep
December 3, 2009	Statement Review	Review	Statement on further harmonization measures and the optimal organizational setting in Europe
December 9, 2009	ERG Report on the regulation of access products necessary to deliver business connectivity services	Business products	Demands on regulation with regard to wholesale products for high-end business services

Date	Original title	Topic	Contents
December 9, 2009	Report on technical replicability of bundles	Bundled products	Analysis of demands on regulation with regard to the replicability of bundled products, the availability of adequate wholesale products and access to content

All of the documents listed in the table above can be found on the IRG and ERG web sites (http://www.irg.eu and http://www.erg.eu.int/).

Additional ERG statements submitted

In addition to publishing those documents, the ERG cooperated closely with the European Commission in the following areas in 2009:

- Further development of the Roaming Regulation;
- Discussion of termination recommendation with the European Commission;
- Preparation of the recommendation on next generation access.

4.3 Postal regulation

4.3.1 Announcement of the Postal Market Act

On December 4, 2009, the Postal Market Act (PMG) was announced in Austria's Federal Law Gazette. Essential provisions of this act, most notably the full liberalization of the postal market, will not go into effect until January 1, 2011.

However, the transitional provision set forth in Art. 64 Par. 2 stipulates that a number of provisions will already go into effect upon the announcement of the Postal Market Act.
Above all, this refers to the following:

- New procedural provisions governing the closure of post offices, for which the PCK is now responsible under the PMG;
- Establishment of the Post Office Advisory Board as an advisory body to the PCK in matters related to ensuring nationwide coverage with post offices;
- Ability of provincial governments, municipal governments or legal interest groups to submit complaints regarding the provision of universal services;
- Redefinition of access points;
- Renaming of the TKK's Postal Service Regulation Committee to *Post-Control-Kommission* (Postal Control Commission, or PCK).

4.3.2 Closure of post offices

One highly important area of activity in the field of postal service regulation in 2009 was Österreichische Post AG's closure of its own post offices. Under the provisions of the Postal Services Act (PostG) 1997, the responsibility for reviews to determine whether the closure of a post office is permissible was assigned to the Austrian Federal Ministry of Transport, Innovation and Technology (review of evidence for non-coverage of costs) as well as the TKK's Postal Regulation Committee (review of potential compromises of universal service provision).

The review in the relevant procedure before the TKK's Postal Regulation Committee has focused on the 293 post offices designated for closure in the Universal Service Plan 2009 as well as the 25 post offices indicated in the complementary report to the Universal Service Plan 2008, for which RTR prepared an economic opinion on behalf of the Federal Ministry of Transport, Innovation and Technology. With regard to the post offices for which agreements have already been reached between Österreichische Post AG and postal service partners, it was possible to discontinue the supervisory procedure because no potential compromise of universal service was identified.

Since Art. 7 PMG went into effect on December 5, 2009, the regulatory authority is now entirely responsible for reviewing whether the prerequisites for the closure of post offices are fulfilled. According to these criteria, a post office operated by Österreichische Post AG may only be closed down in cases where it is not possible to cover the costs of running the post office in

the long term and the provision of universal service is ensured by another post office (including those operated by other companies, such as postal service partners). In addition, it is necessary to ensure nationwide coverage with post offices.

4.3.3 Additional procedures before the Postal Service Regulation Committee (now the Post-Control-Kommission) and RTR

Apart from the closure of post offices by Österreichische Post AG, the procedures carried out before the TKK's Postal Regulation Committee (known as the *Post-Control-Kommission* [Postal Control Commission] since the announcement of the Postal Market Act in December 2009) and RTR essentially related to the following topics:

Discounts granted by Österreichische Post AG

- Discounts granted by Österreichische Post AG: In a decision handed down on February 25, 2009, the Austrian Administrative Court confirmed the regulatory authority's interpretation of the law in this regard, as did the Austrian Constitutional Court (G 205/09).

Comments on draft PMG

- Postal Market Act (PMG): The draft of the Postal Market Act was discussed, and a joint position was issued by RTR and the TKK's Postal Regulation Committee to identify critical issues in the draft legislation.

Changes to general terms and conditions

- Acknowledgment of changes in Österreichische Post AG's general terms and conditions of service with regard to domestic parcel services and international parcel services pursuant to Art. 9 Par. 4 PostG. There was no need to take supervisory measures in this case.

Various RTR procedures

Some of the activities which will be handled by RTR without the involvement of the Post-Control-Kommission are as follows:

- Handling of notifications as well as requests for notification of postal services pursuant to Art. 15 PostG 1997 as well as universal quality indicators pursuant to Art. 16a Par. 4 PostG 1997;
- Cooperation in international organizations (CERP project teams, working groups, CERP plenary sessions, and Postal Directive Committee meetings);
- Review of the Österreichische Post AG's Report on Universal Service 2008 as well as the Universal Service Plan 2009;
- Responding to general inquiries from various institutions in Austria and abroad.

Study on net costs of universal service

On behalf of the Federal Ministry of Transport, Innovation and Technology (BMVIT), RTR also launched an international invitation to tender for a study to calculate the net costs of Österreichische Post AG's universal service obligation. Due to the expected number of applications, the invitation was carried out by means of a negotiation procedure instead of a public announcement. The study was conducted with RTR's supervision and cooperation in 2009.

Finally, in the run-up to the announcement of the Postal Market Act and the accompanying changes (especially with regard to post office closures), intensive preparatory activities were necessary given the fact that the new law expanded the scope of the regulatory authority's responsibilities (e.g., review of cost accounting documents in the case of planned closures).

4.4 Electronic signatures

Electronic signatures represent the digital equivalent to handwritten signatures and serve the purpose of ensuring data authenticity and integrity. As a rule, these signatures are based on a certificate (also in electronic form) issued to the signatory by a certification service provider (CSP). Whether or not an electronic signature is considered equivalent to a handwritten signature (i.e., a qualified electronic signature) depends on the quality of the certification service (qualified certificate) as well as the security of the technical components and processes used (secure signature creation device, etc.). The Austrian Signatures Act (SigG) created the legal basis for the recognition of electronic signatures as equivalent to handwritten signatures and defines the technical and organizational requirements for this purpose. The supervisory authority's monitoring activities serve to ensure that those requirements are fulfilled.

The Signatures Act designated the TKK as Austria's supervisory authority for electronic signatures. Like the TKG 2003, the Signatures Act also requires RTR to provide operational support for this supervisory authority. RTR's performance of its duties under the Signatures Act is strictly separated within the company in terms of organization and financing, especially with regard to cost accounting. The authority is financed by fees as well as funds from the federal budget.

In line with its legal mandate, RTR continued to use the existing public key infrastructure to maintain electronic directories of CSPs and certificates issued to CSPs in the year 2009. This service was complemented by two new aspects in the reporting period:

Verification of qualified certificates soon possible throughout the EEA

- These directories were linked to those of other EEA member countries in order to create a basis for the automated verification of qualified certificates from the entire EEA. These measures were based on Commission Decision 2009/767/EC of 16 October 2009 setting out measures facilitating the use of procedures by electronic means through the 'points of single contact' under Directive 2006/123/EC of the European Parliament and of the Council on services in the internal market, according to which each member state has been required to publish a trusted list of supervised and accredited CSPs since December 28, 2009. These lists must use a standardized format which complies with the technical specifications published by the European Telecommunications Standards Institute (ETSI TS 102 231, Electronic Signatures and Infrastructures [ESI]; Provision of harmonized Trust-service status information) and which is described in detail in the Commission decision. In Austria, RTR has maintained this trusted list since December 2009. Interoperability was verified by means of a plug test run by ETSI and through cooperation with similar authorities in other countries in the Forum of European Supervisory Authorities for Electronic Signatures (FESA). For further information on the trusted list, please refer to http://www.signatur.rtr.at/en/directory/tsl.html.

RTR's signature verification service simplifies electronic signature checks

- Since May 2009, a public signature verification test has been offered at http://www.signaturpruefung.gv.at/; this test is capable of verifying electronic signatures in numerous formats (including CMS, XML and PDF-AS). In particular, the service is also capable of verifying the official signatures of government authorities. Each test of an electronic signature generates a verification report which shows the validity of the signature, certificate and manifest, and contains an electronic signature from RTR. The signature verification service is operated in cooperation with the Austrian Federal Chancellery and the Zentrum für sichere Informationstechnologie – Austria (A-SIT) confirmation authority.

TKK's top certificate now in Microsoft's Root Certificate Program

In order to simplify the use of these services with secure data transmission (https://...), RTR signed a contract with Microsoft Corporation in August 2009 to enable the worldwide distribution of the supervisory authority's top certificate by way of Windows updates (according to the information provided by Microsoft, distribution should begin in March 2010). In the course of the contract negotiations, the supervisory authority also revised its certification practice statement (CPS). The CPS is now based on a different certificate policy which no longer complies with the ETSI TS 101 456 specification (which governs the issuance of qualified certificates) but is now based on the more general ETSI TS 102 042 specification. The reason for this change was the amendment to the Signatures Act which went into effect in early 2008 and only provides for qualified certificates for physical persons. Certificates issued to CSPs by the supervisory authority are therefore no longer considered qualified certificates.

2009: Seven procedures initiated under the Signatures Act

In 2009, seven procedures under the Signatures Act were initiated before the TKK, and five of those procedures (plus three additional cases from 2008 that were still pending at the end of that year) were completed in 2009.

The certification service provider A-Trust Gesellschaft für Sicherheitssysteme im elektronischen Datenverkehr GmbH was once again the only provider of qualified certificates located in Austria in 2009. Four of the procedures initiated in 2009 and the three pending procedures from the previous year related to this CSP.

The review of A-Trust, which was initiated ex officio in 2008 and must be carried out at two-year intervals, was completed during the reporting period. In addition, the authority completed two procedures regarding the online registration of certificate applicants, which has been offered since 2008 for the use of the Austrian e-card (social and health insurance card) as a secure electronic signature device. Identity verification is based on a registered personal delivery in one case, and in the other case it is based on the previous verification of a person's identity in connection with the FinanzOnline platform, a service provided by the Austrian tax authority. All three procedures were completed without orders for supervisory measures.

One notification received from A-Trust mainly concerned improvements in its documentation system. Another notification from A-Trust concerned an extraordinary operating situation to which the CSP had, in the opinion of the supervisory authority, responded prudently. It was therefore possible to discontinue the two procedures before the TKK without ordering supervisory measures.

Since 2009, A-Trust has been issuing a new generation of smart cards in connection with the a.sign premium certification service; these new cards mainly deliver additional benefits in terms of cryptography. The relevant procedure before the TKK had not been completed at the end of the reporting period.

Creation of qualified electronic signatures now also possible using mobile phones

Since September 2009, A-Trust has been providing the signature and certification service "a.sign premium mobile," in which – similar to the "A1 Signatur" service provided by mobilkom austria from 2004 to 2007 – signature creation is triggered by means of a one-time password conveyed to the signatory in a text message (SMS). As was the case in the A1 Signatur service, the signatory does not require his/her own signature creation device. In contrast to A1 Signatur, however, a.sign premium mobile generates qualified electronic signatures, which (in legal terms) are broadly equivalent to handwritten signatures. The review procedure for this service had not been completed at the end of the reporting period.

As a complement to the relevant provisions under EU law, the Austrian Signatures Act also defines "qualified time-stamp services," which certify the existence of certain data at a certain point in time. The Federal Office of Metrology and Surveying, which is currently the only provider of qualified time-stamp services in Austria, reported a change in which its certification practice statement was adapted to reflect the terminology of the 2008 amendment to the Signatures Act. In addition, the Federal Office of Metrology and Surveying was also subjected to a periodic review in 2009. Both procedures were completed without orders for supervisory measures.

5. The Austrian communications markets

5.1 The Austrian communications and advertising market in 2009

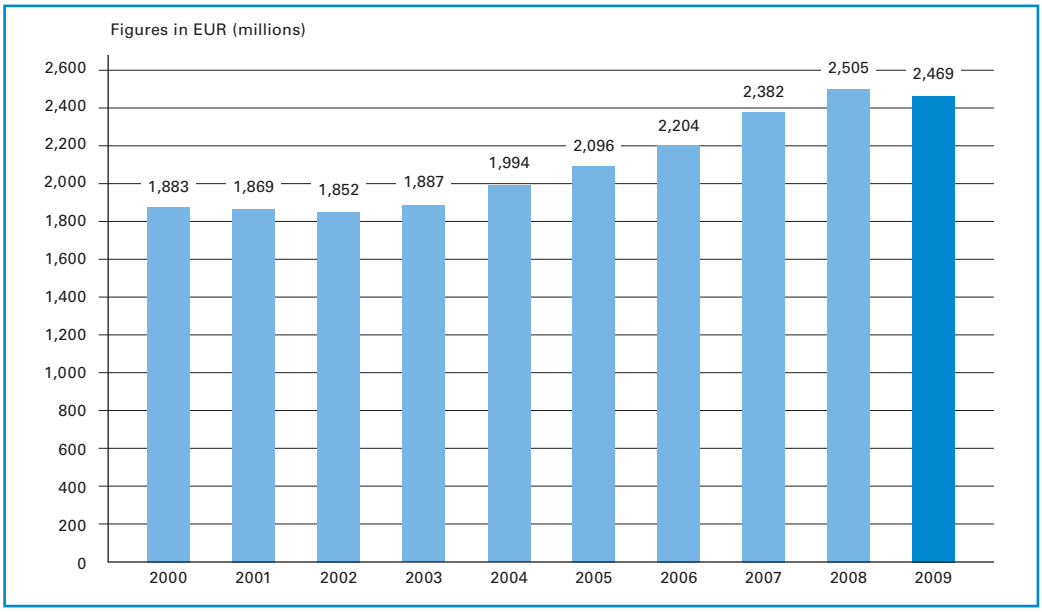
5.1.1 Development of the advertising market in 2009

First decrease in gross advertising revenues since 2003

With regard to the Austrian advertising market, the year 2009 can be regarded as something of an exception compared to the last decade: According to FOCUS Media Research, gross revenues from classic advertising declined for the first time since the years leading up to 2003, this time by approximately 1.5% (2008: EUR 2.505 billion, 2009: EUR 2.469 billion). Between 2004 and 2008, the market saw some highly respectable gains in this revenue category. At the same time, it is important to note that the decrease in 2009 was substantially smaller than many experts had projected at the beginning of the year. In particular, daily newspaper publishers as well as television advertising professionals were forecasting declines of 10% to 20%.

Nevertheless, three segments did record gains in advertising revenues in 2009: Online advertising revenues rose 32.6% (from EUR 87.2 million to EUR 115.6 million) over the year, and private television (+9.9%) as well as private radio (+6.8%) also posted gains in advertising revenues. At the same time, the television stations belonging to the Austrian Broadcasting Corporation (ORF) recorded a decline of 7.8% compared to the year 2008. Note that the figure indicated for private television broadcasting includes revenues from Austria-specific advertising on German television channels as well as advertising on private television stations licensed in Austria, such as ATV, PULS 4, AUSTRIA 9 and gotv, as well as the new channel ServusTV.

Figure 3: Development of overall advertising expenditure in Austria



Source: FOCUS Media Research (excluding cinema, classic brochure and online advertising)

The developments in the course of the year 2009 clearly show that overall gross advertising revenues slumped in the first two quarters of the year, then remained stable (year on year) in the third quarter, and finally rose markedly in the fourth quarter of 2009 compared to the previous year.

This trend toward recovery on the advertising market was also confirmed by developments in the early months of 2010. As a result, ORF no longer expects further declines in advertising revenues in 2010, especially in the television segment. In the first quarter of 2010, ORF's television channels recorded a year-on-year increase of 3.6% in advertising revenues.

The situation was rather similar in print media, especially in the daily newspapers segment: In the first quarter of 2010, Austria's daily newspapers saw advertising revenues increase by 8% compared to one year earlier.

Private broadcasters have surpassed ORF in terms of gross advertising revenues

In this context, it is important to note that the gross advertising revenues published regularly by FOCUS Media Research are based on values from the media companies' standard charges, and that the net values – the actual amounts received by those companies – may be substantially lower. For example, the difference between gross and net revenues is often said to be far smaller in the case of ORF compared to the private broadcasters. This means that in terms of gross revenues, private broadcasters surpassed ORF – by a wide margin – for the first time in 2009, but this development was probably not congruent with net revenues.

The generally difficult economic circumstances in 2009 were the main cause of the decline in advertising spending almost everywhere in the world, and Austria was certainly no exception. However, a number of minor additional factors specific to Austria also came into play,

including the fact that various major sporting events took place in the year 2008 (Euro 2008 championships, Summer Olympics). Similarly, the Austrian National Council elections also had a certain effect on advertising in Austria's daily newspapers and in private broadcasting.

5.1.2 Advertising expenditure

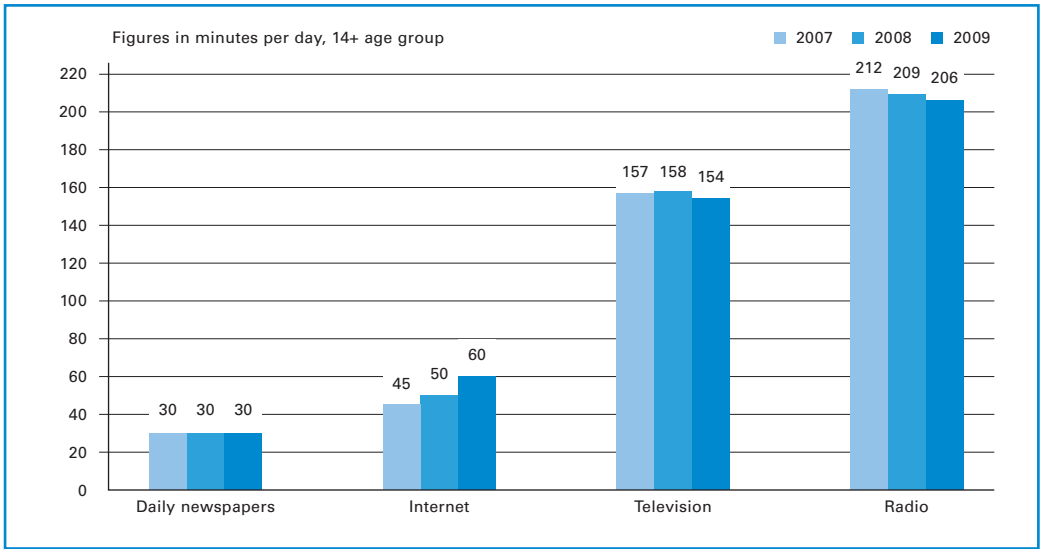
Losses not as significant as predicted at the start of 2009

Overall revenues from classic advertising in Austria (excluding cinema, classic brochure and online advertising) amounted to EUR 2.469 billion in 2009. This figure includes several major media categories: Print publications recorded an overall decline from EUR 1.524 billion to EUR 1.468 billion (-3.7%). For their part, however, Austrian daily newspapers – which constitute the main component of this segment – saw overall revenues grow from EUR 780 million to EUR 796 million (+2.1%). Overall, television advertising saw slight growth in revenues, which edged up from EUR 623 million to EUR 628 million (+0.8%). At the same time, radio advertising revenues dropped from EUR 178 million to EUR 172 million (-3.3%).

Online advertising still on the rise

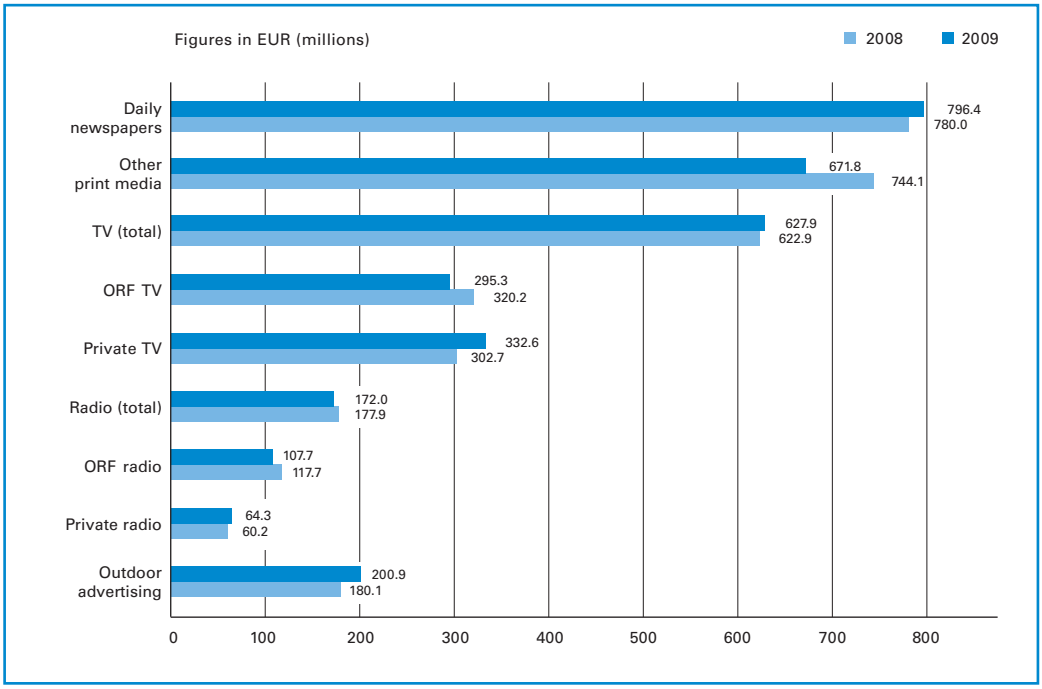
As mentioned above, the category which recorded the largest gain was online advertising, where revenues increased a full 32.6%. Gross advertising revenues in this segment are now approaching the level of gross revenues in the radio segment. During the year under review, online advertising was not as susceptible to cyclical fluctuations as classic television advertising, to name one example. Despite the economic crisis in 2009, the number of Internet users and daily Internet usage time continued to increase. In no other area is it possible to implement targeted advertising as quickly and effectively with regard to specific groups.

Figure 4: Development of daily media usage time, 2007 to 2009



Source: Radiotest, Teletest, MTUs, AIM

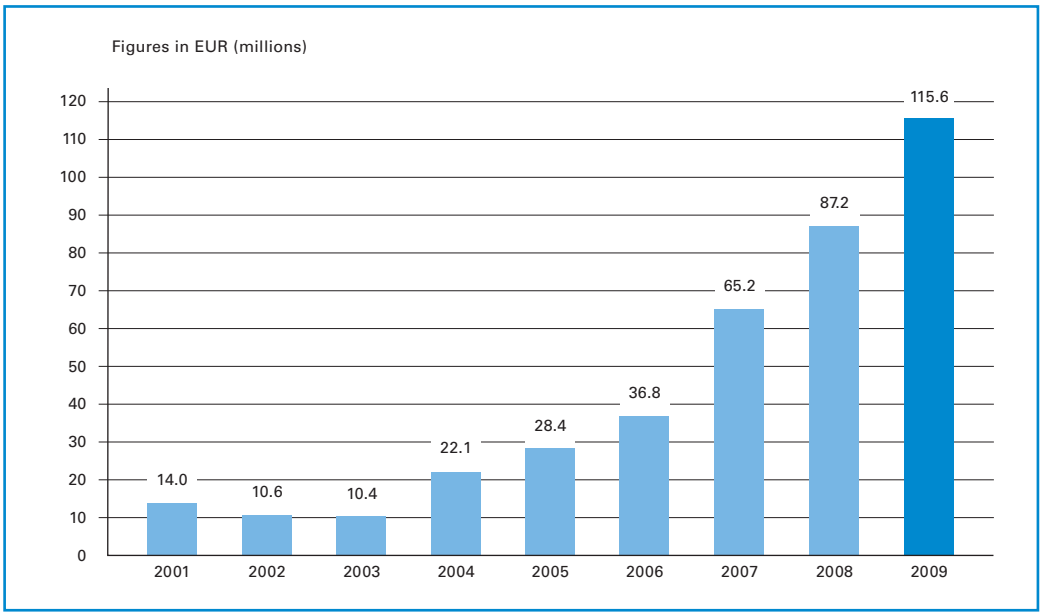
Figure 5: Advertising expenditure in Austria, 2008 vs. 2009



Source: FOCUS Media Research (excluding cinema, classic brochure and online advertising)

Figure 6: Online advertising expenditure in Austria

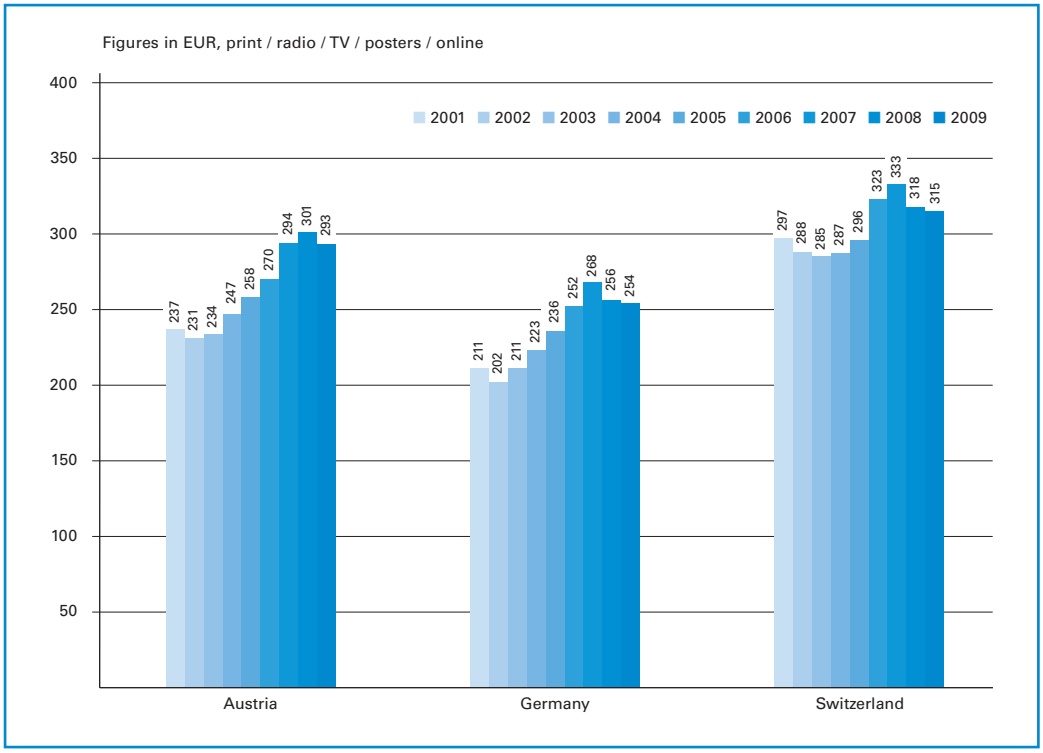
Online advertising revenues increased by 32.6% between 2008 and 2009



Source: FOCUS Media Research

The picture is similar in Germany, which is often regarded as a reference market for Austria: Overall advertising expenditure decreased by 1.3%, but online advertising still recorded substantial gains, reaching a total of EUR 1.6 billion (2008: EUR 1.5 billion).

Figure 7: Development of per capita advertising expenditure



Per capita advertising expenditure declined in Austria, Germany and Switzerland in 2009

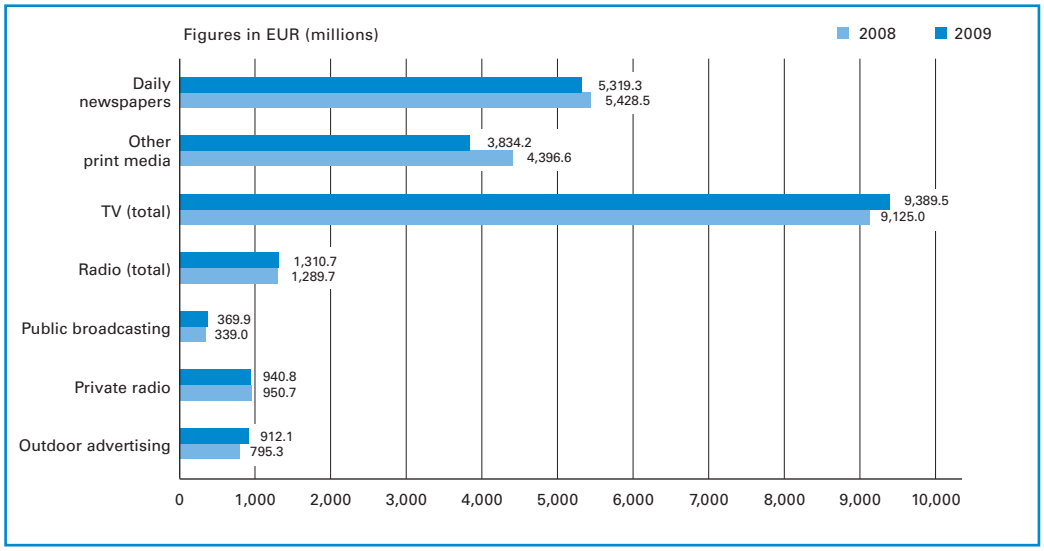
Source: FOCUS – *Buch der Werbung 2009* (including online advertising from 2001 to 2007; excluding online advertising in Austria in 2003; excluding online advertising from 2008 onward)

In 2009, gross advertising revenues in Germany's television segment even increased compared to 2008, but this was certainly only the case in the gross figures for the segment. Net advertising revenues – especially those of Germany's private broadcasters – most definitely declined year on year. In stark contrast to the figures for Austria, the advertising revenues of Germany's public broadcasters (ARD, the regional television broadcasters and ZDF) are very low compared to the overall revenues from television advertising.

Germany's print media segment showed substantial declines, especially compared to Austrian print media, with advertising expenditure in German periodicals and magazines (miscellaneous print media) dropping from EUR 4.397 billion to EUR 3.834 billion. Germany's daily newspapers also saw their advertising revenues fall from EUR 5.429 billion to EUR 5.319 billion in the year 2009.

Until mid-2009, revenues on the German market were also lower compared to 2008; however, advertising expenditure then increased substantially compared to the previous year, especially in the fourth quarter of 2009.

Figure 8: Advertising expenditure in Germany, 2008 vs. 2009



Source: S+P Deutschland

5.1.3 Television

5.1.3.1 Digitization of television broadcasting

Status of television digitization in Austria

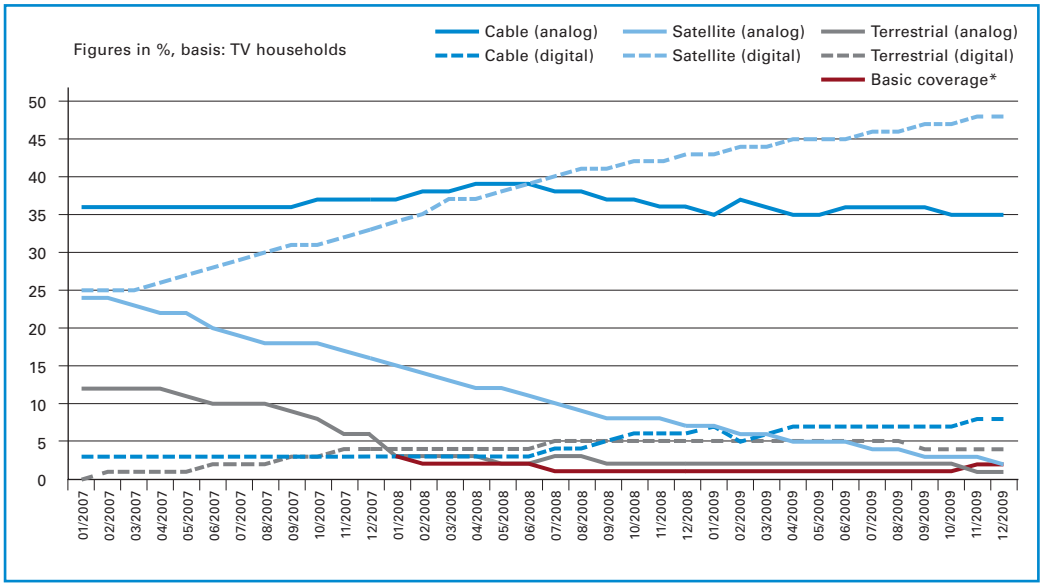
Overview

60% of Austria's television households now digitized

At the end of the year 2009, the process of digitizing Austria's television households cleared yet another major hurdle: In December, the digitization level in broadcasting reception via satellite, antenna and cable (including IP-TV) exceeded 60% of all television households for the first time. This represents an increase of approximately 10% compared to a year earlier (all percentage values are rounded and may therefore diverge slightly from the absolute figures).

While the changeover to digital television reception has nearly been completed in satellite and antenna households, this process has advanced at a much slower pace among cable households.

Figure 9: Television reception modes



Source: AGTT/GfK: Teletest

* Cable households which can only receive those channels which can also be received by terrestrial antenna.

Fifty percent of Austria's television households now rely on satellite reception; the share of digital satellite households rose from 43% in December 2008 to 48% in December 2009. This growth can be attributed entirely to an analog-to-digital migration process within the satellite platform. Whereas 7% of Austria's television households still used analog satellite television in December 2008, this percentage had dropped to a mere 2% by December 2009.

Number of digital cable households climbing

Compared to the previous year, the share of digital cable households rose by approximately one third, thus accounting for 8% of all television households in December 2009. The rise in the number of digital cable connections can also be attributed to the success of IP-TV, which is categorized as part of the cable platform and had already been installed in more than 2% of Austria's television households by the end of 2008. These connections almost exclusively rely on Telekom Austria's IP-TV product "aonTV." IP-TV households account for approximately 30% of the digital cable households in Austria. The percentage of digital households using conventional cable connections in the overall number of Austrian television households comes to nearly 5%, while IP-TV households already account for approximately 3%.

As in the year 2008, a slight decline in the number of analog cable households was observed in 2009. Between December 2008 and December 2009, the share of analog cable households in the distribution of reception modes dropped from 36% to 35% of Austria's television households.

Terrestrial television still slowly declining

The share of television households which receive digital terrestrial television (DVB-T) as their sole reception mode on their only (or main) television set remained stable at 5% until August 2009. However, the number of "DVB-T only" television households was actually on the decline from early 2009 onward. Due to rounding effects, this trend only became visible in the percentage distribution of reception modes in September 2009, when the percentage of "DVB-T only" households among all television households in Austria dropped to approximately 4%. Analog terrestrial households also declined slightly and now represent only 1% of television households (after rounding). At the end of December 2008, terrestrial television (digital and analog) was still the most important reception mode for some 7% of Austria's television households, but this percentage had dropped to 5% by the end of the year 2009.

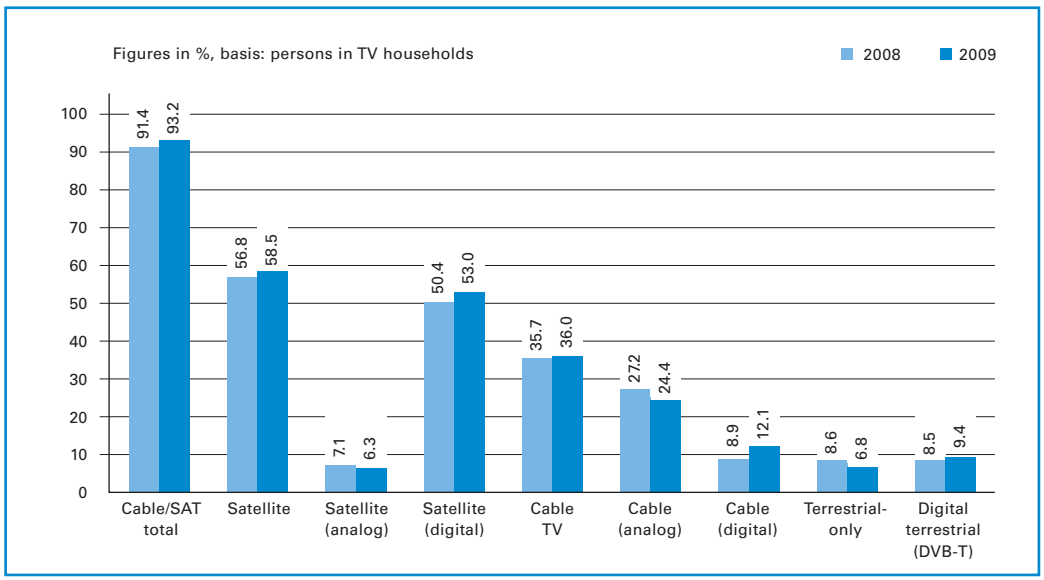
DVB-T used on at least 450,000 additional television sets in households

At the same time, the total number of DVB-T set-top boxes sold in Austria (approximately 612,000 digital terrestrial receivers) is more than four times the number of DVB-T households (approximately 150,000). This disparity indicates that the digital terrestrial television platform represents a highly important reception mode for additional television sets in households and for mobile television reception.

63% of viewers over 12 years of age live in digital television households

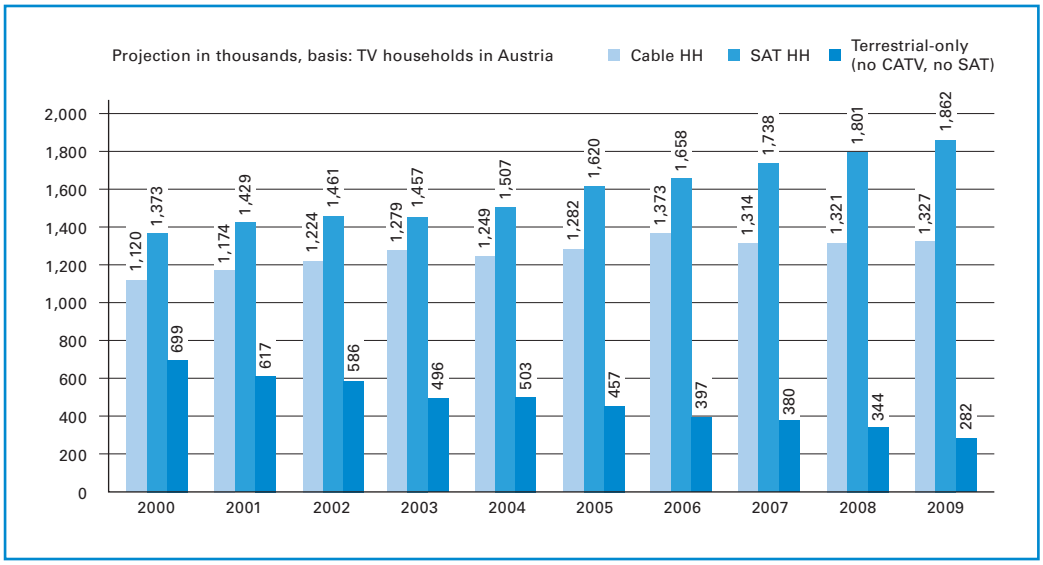
A total of 7.07 million persons over the age of 12 (the "viewer population") live in Austrian television households. A total of 63% (4.45 million) of those viewers already live in digitized television households (i.e., where the household's only [or main] television set relies on digital reception). Some 82% of those 4.45 million television viewers belong to digital satellite households.

Figure 10: Reception modes, 2008 vs. 2009



Source: Austrian Media Analysis

Figure 11: Development of reception modes



Source: Austrian Media Analysis

Digitization of terrestrial television reception

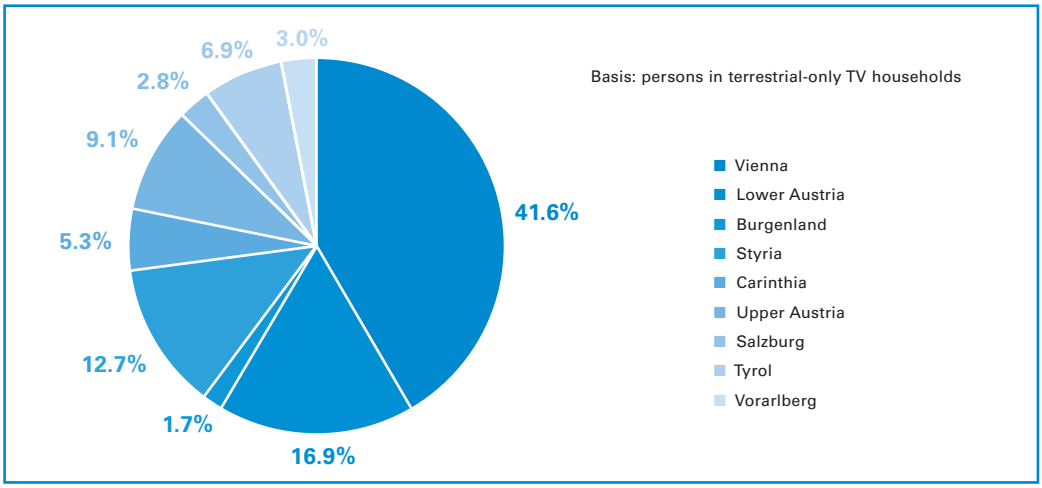
Terrestrial television losing ground as primary reception mode

Although terrestrial reception plays an especially significant role in the case of additional television sets, the use of terrestrial television as a household's primary reception mode has continued to decline.

Almost without exception, the gradual shutdown of analog terrestrial television has prompted analog satellite households to switch to digital satellite reception, which now allows them to receive Austrian and foreign television channels from a single source.

If we add up the remaining terrestrial-only households and analog satellite/terrestrial households, only 7% of all Austrian television households still relied on terrestrial television reception for their only (or main) television set in December 2009. This percentage equals approximately 243,000 households, compared to 485,000 (14% of all television households) in December 2008.

Figure 12: Terrestrial-only* reception in 2009



Source: Austrian Media Analysis 2009

* "Terrestrial-only" = persons with a television set who have neither cable nor satellite reception

However, if we include those households which use terrestrial reception on additional television sets, a different picture emerges with regard to the significance of DVB-T in Austria.

In the period between the launch of digital terrestrial television (October 2006) and the end of December 2009, a total of approximately 612,000 DVB-T set-top boxes were sold in Austria. This figure is over four times the number of "DVB-T only" households, which points to the high acceptance of DVB-T as a reception mode for additional television sets in households.

612,000 DVB-T receivers sold

Table 11: Number of DVB-T receivers sold, 2006 to 2009

DVB-T receivers sold		Total	2006	2007	2008	2009
DVB-T	**Total**	**611,729**	**107,283**	**296,984**	**133,162**	**74,300**
DVB-T	with MHP	**197,940**	51,320	82,305	40,890	23,425
DVB-T	without MHP	**411,595**	55,963	214,671	92,039	48,922

Source: GfK

Table 11 does not yet include the large number of new television sets which have built-in DVB-T tuners or other DVB-T receivers such as small reception devices which connect to the USB ports on laptops.

DVB-T available for 93% of television households

Since the launch of digital terrestrial television in the fall of 2006, the rollout of the transmitter network has progressed to the point that 93% of Austrian television households can now receive DVB-T signals (status at end of 2009) and thus have access to at least three nationwide Austrian television channels ("Multiplex A" with the channels ORF 1, ORF 2 and ATV).

For those 93% of television households, the switch to digital terrestrial television has now been entirely completed, as the temporary simulcast phase (i.e., parallel analog and digital terrestrial television broadcasting operations) has now ended.

The objective of ensuring that Multiplex A has a technical reach of 96% of television households will be attained in mid-2011.

No official information is available on the market success of the DVB-H broadcasts offered for mobile handheld devices (usually mobile phones) launched in all of Austria's provincial capitals in June 2008. The licensee for the "Multiplex D" transmission platform and the associated mobile network operators have agreed to maintain silence on this topic and are not required to report such data to KommAustria.

Future of DVB-H uncertain in Austria

According to unofficial estimates from the market, the number of DVB-H users is somewhere between 20,000 and 30,000. One severe obstacle to growth in the number of users is the lack of variety in compatible receivers on the market. One of the reasons cited for this problem is the handset manufacturers' widespread practice of equipping devices with individual features (in this case DVB-H compatibility) only for order quantities of 100,000 or more. Unfortunately, the Austrian market is far too small to fulfill such a high requirement. Therefore, this situation is only likely to change once substantially larger countries such as Germany and France successfully launch DVB-H broadcasting operations.

Since mid-2008, DVB-H television has been available in the high-density areas of Innsbruck, Klagenfurt, Salzburg, Vienna, Bregenz, Eisenstadt, Graz, Linz and St. Pölten. According to MEDIA BROADCAST (the company which holds the DVB-H platform license in Austria), the technical range of DVB-H in Austria covers approximately 53% of the country's population. Eleven general-interest television channels (ATV, N24, ORF 1, ORF 2, PULS 4, ProSieben Austria, RTL, RTL II, SAT.1, Super RTL and VOX), four television channels specifically designed for mobile usage (krone.tv, LaLaTV, LAOLA 1, Red Bull TV), and five radio stations (FM4, KRONEHIT, LoungeFM, Ö1, Ö3) can currently be received via the DVB-H platform.

Digitization of satellite television reception

Satellite television is still the most widespread reception mode in Austria, with 50% of television households relying on this form of reception.

Digitization of satellite reception nearly completed

By the end of December 2009, the digitization of Austria's satellite television households had reached 96%, up from 86% just one year earlier.

The share of satellite households which use analog reception thus dropped from 14% in December 2008 to 4% in December 2009.

The most important reason for this highly dynamic development in the transition of satellite households from analog to digital reception was the digitization of terrestrial television (see previous section).

Germany plans analog shutdown in 2012

In the near future, we can assume that the digitization of satellite households will continue to advance – albeit not as quickly – until analog terrestrial television broadcasting is switched off completely in June 2011. After that time, it is likely that only about 1% of "hard core" satellite households will continue to use analog satellite reception for foreign (mainly German) channels in order to postpone the purchase of a digital satellite receiver and/or a digital ORF card. Should the German public and private broadcasters go through with their plan to discontinue analog broadcasting via satellite at the end of April 2012, then we can assume that the last analog satellite households in Austria will switch to digital reception by that time, or only very few television households will still use analog satellite reception for foreign-language channels.

The number of television channels broadcast in HD quality via satellite – which has grown in the recent past and is will continue to grow in the near future – has apparently aroused a high level of interest among satellite households, thus making it a clear value-added feature of digital television. This conclusion is also supported by the sales figures for HD-compatible satellite receivers, which – in addition to HD-ready television sets – are required in order to watch HDTV programs.

In the year 2009, some 32% of all satellite receivers sold in Austria were HD-ready, whereas this figure only came to 12% in 2008.

Table 12: Number of DVB-S receivers sold, 2006 to 2009 (HD receivers shown separately)

DVB-S receivers sold		Total	2006	2007	2008	2009
DVB-S	**Total**	**1,682,084**	**424,754**	**587,713**	**322,688**	**346,929**
DVB-S, HD-ready	without hard drive	**145,425**	7,021	11,824	31,348	95,232
DVB-S, HD-ready	with hard drive	**24,316**	0	1,270	8,782	14,264

Source: GfK

Sales of HD satellite receivers tripled in 2009

Just under 47% of the HD-ready satellite receivers sold in Austria in 2009 were purchased in the fourth quarter of the year alone. This development can be attributed to the holiday season as well as the launch of ORF 2 as an HD channel in December. In addition, the German channels ARD and ZDF began broadcasting in HD quality at the end of 2009 (with regular operation starting in February 2010) and advertised their HDTV launches heavily with a special focus on the Winter Olympics in Vancouver. Like the culture channel ARTE, ORF 1 has been broadcast in HD via satellite since June 2008. The third Austrian television channel freely available in HD quality (since October 2009) is the Salzburg-based channel ServusTV.

Digitization of cable television reception

At 43% (35% analog and 8% digital), the share of cable households in Austria's overall number of television households has risen slightly since December 2008 (42%). In the distribution of reception modes, the share of digital cable households rose by one third to 8% of all television households in Austria in 2009. At the same time, the share of analog cable households edged down from 36% to 35%. Therefore, the shift away from analog cable television – which first became visible in the summer of 2008 and then continued only slowly – has now begun to pick up momentum.

Among cable television households, digital reception accounted for a share of nearly 19% in December 2009. New digital cable subscriptions in 2009 can be broken down into digital connections in "classic" cable networks and IP-TV subscriptions. In 2009, Telekom Austria managed to acquire approximately 34,000 new customers for its IP-TV product aonTV, and nearly the same number of digital cable connections were set up for customers of conventional cable networks. Therefore, a total of approximately 68,000 households opted for digital cable television (either "classic" or IP-TV) in 2009. Compared to the previous year, however, growth in the number of digital cable households actually slackened in 2009, as conventional cable and IP-TV providers had recorded a total of 90,000 new subscriptions in 2008.

IP-TV establishing a presence

IP-TV households already account for more than one third of digital cable households. The percentage of digital households using conventional cable connections in the overall number of Austrian television households comes to nearly 5%, while IP-TV households already account for approximately 3%. As a result, IP-TV has made a substantial contribution to the digitization of cable households, which is gradually gaining momentum.

Telekom Austria's IP-TV product aonTV had a total of approximately 100,000 customers in 2009, making it the undisputed market leader in the IP-TV segment. Reliable estimates of aonTV's market share in the IP-TV segment currently exceed 95%.

Since December 2008, consumers who switch from an analog broadcasting platform to digital cable – and at the same time opt for an HD-ready cable receiver – have been eligible for an HDTV subsidy from the Austrian Digitization Fund (which is administered by RTR).

HDTV also a driver of digitization in cable households

The attraction of high-definition television has apparently helped drive the digitization of cable households, and this is also reflected in the retail sales figures for HDTV cable receivers. (As the majority of digital cable households purchase their cable receivers directly from their cable network operator, and as the cable receivers available on the retail market are not compatible with the largest cable network [UPC], the retail sales figures for digital cable receivers are fairly low in absolute terms.)

Table 13: Number of DVB-C receivers sold in retail shops, 2006 to 2009 (HD receivers shown separately)

DVB-C receivers sold		Total	2006	2007	2008	2009
DVB-C	**Total**	**70,507**	**9,373**	**14,452**	**19,642**	**27,040**
DVB-C, HD-ready	without hard drive	**16,145**	147	2,125	4,878	8,995
DVB-C, HD-ready	with hard drive	**1,744**	0	0	542	1,202

Source: GfK

Compared to the year 2008, the number of HD-ready cable receivers sold in retail shops nearly doubled in 2009: Whereas 5,420 such receivers were sold in 2008, this figure jumped to 10,197 in the reporting period (not including HD-ready flat screen televisions with built-in DVB-C tuners). In contrast, the overall retail sales of DVB-C receivers (i.e., both SD and HD receivers) "only" increased approximately 38% compared to 2008, rising from 19,642 to 27,040 units.

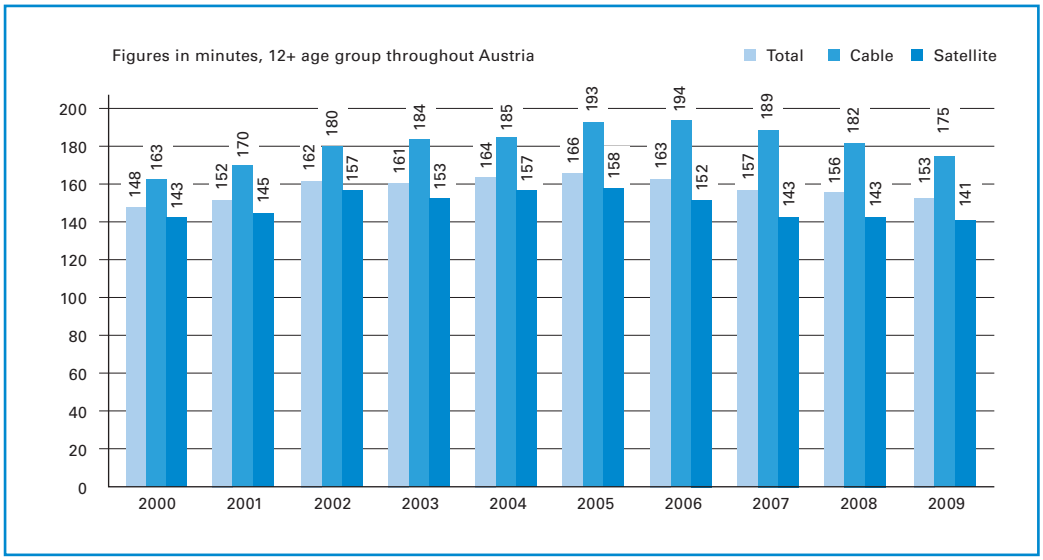
5.1.3.2 Television viewing

Since 1991, the reach levels and ratings of all television channels which can be received in Austria have been measured on the basis of the Teletest electronic viewing measurement system. The Teletest survey is carried out by the market research organization GfK Austria. For this purpose, 1,560 Austrian households were equipped with measurement devices developed by Telecontrol. The samples for these measurements were drawn with disproportionate representation of Austria's various regions and of different reception modes in order ensure more reliable results for all platforms. The organization behind the Teletest survey is the Teletest working group (AGTT), which includes ORF, ORF-Enterprise, ATV, IP-Österreich (the RTL Group's marketing organization) and SevenOne Media Austria (the marketing organization for the ProSiebenSat.1 Group). Especially for advertising agencies, the results of the Teletest provide a reliable tool for advertising bookings.

Television viewing time slowly decreasing

In 2009, persons in the 12+ age group throughout Austria's television households watched an average of 153 minutes of television (see Figure 13). In cable households, viewers in Austria even watched an average of 175 minutes per day, while the average came to only 141 minutes in satellite television households. The highest daily viewing time of 166 minutes (on average across all platforms) was reported in the Teletest from the year 2005, meaning that television viewing has declined slowly (but not drastically) in recent years.

Figure 13: Development of viewing time



Source: Teletest

Along with radio, therefore, television has remained one of Austria's leading media despite increasingly fierce competition from online media, which have made substantial gains (especially among younger users).

On average, 4.4 million Austrians watched television on a daily basis in 2009; this figure represents 62% of the overall viewer population in the 12+ age group (7.1 million). Broadcasters such as ORF have cited the lack of major events in 2009 as a major reason for the decrease in viewing time compared to the year 2008, when 63% of Austria's viewer population watched television daily. For example, the Euro 2008 championships, the Summer Olympics and the Austrian National Council elections were all held in 2008.

Television viewing increases with age

In general, the level of television consumption rises along with the viewers' age in Austria: Children (3 to 11 years) as well as youths and young adults (12 to 29 years) exhibited the lowest average viewing time, with 69 and 84 minutes per day (respectively) in 2008. The 30 to 39 and 40 to 49 age groups show an average viewing time of 114 and 143 minutes, respectively, while the 60+ age group spends an average of nearly four hours per day watching television. On average, women watch half an hour more television per day than men, with older age groups also exhibiting substantially longer viewing times in this case as well.

Clear difference between rural and urban viewers

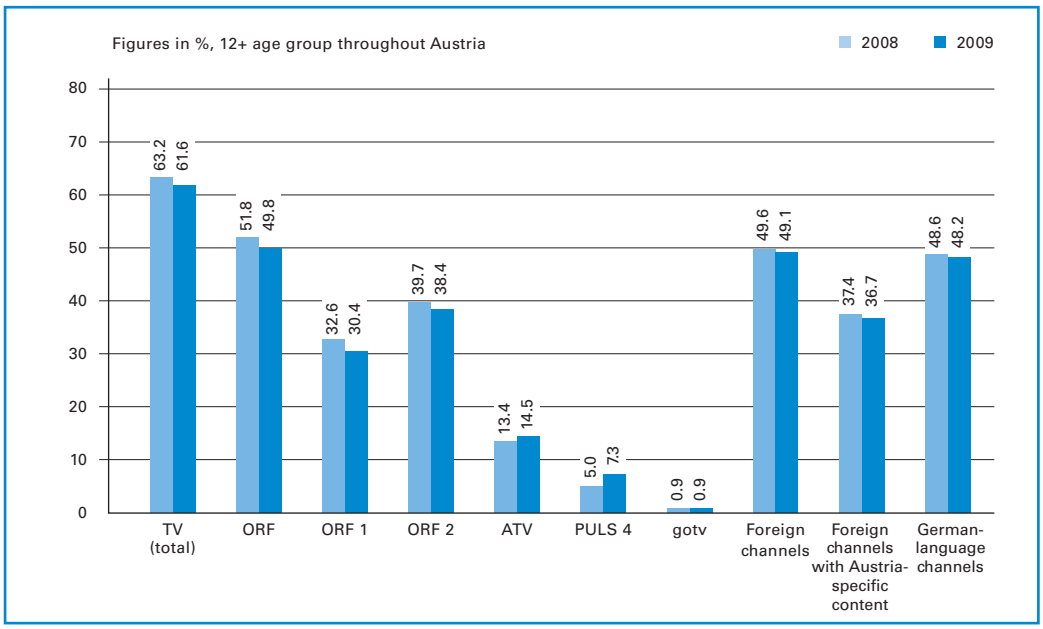
In addition to age and gender, however, people's level of education and place of residence also play a significant role: People with lower levels of education (compulsory schooling or vocational school) watch an average of 60 minutes more television per day than those who have completed a university-track secondary school or hold a university degree. In municipalities with less than 5,000 inhabitants, the average viewing time is 40 minutes longer than in cities.

Over the course of the day, television viewing rises sharply in the early hours of the evening, reaching a peak during prime time, which is between 6:00 pm and 10:00 pm. The number of television viewers generally peaks at 9:00 pm; an average of 2.5 million people – or 35% of Austria's viewer population – watched television at that time in the year 2009. In the course of the week, Sunday is the day with the highest viewer numbers; as for seasonal effects, television viewing times are highest during the winter.

5.1.3.3 Television reach levels and market shares

The overall reach of television continued to decline in the year under review, dropping from 63.2% in 2008 to 61.6% in 2009; the latter figure is roughly equivalent to 4.355 million viewers in the 12+ age group (see Figure 14).

Figure 14: Daily reach of television, 2008 vs. 2009



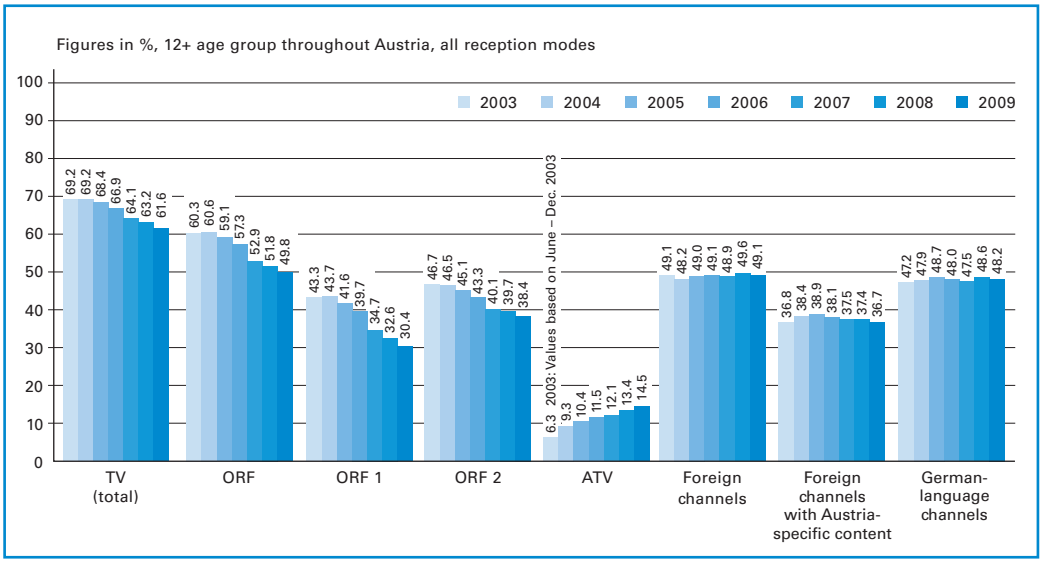
Source: Teletest

ORF's daily reach dropped slightly; private broadcasters gained

The two ORF channels also had a slightly smaller number of viewers compared to the previous year, with ORF 1 reaching a total of 30.4% on a daily basis in 2009 (2008: 32.6%) and ORF 2 attaining a reach level of 38.4% (2008: 39.7%). However, the two private nationwide television broadcasters ATV and PULS 4 were able to gain additional daily viewers for their channels in the reporting period: ATV's daily reach rose from 13.4% to 14.5%, while PULS 4's reach increased from 5% to 7.3%. ATV attributed its growth in daily reach specifically to in-house Austrian productions such as *Bauer sucht Frau* ("Farmer seeks wife") or *Teenager werden Mütter* ("Teenage motherhood"). In both 2008 and 2009, the channel "gotv" attained a daily reach level of 0.9%.

The long-term daily reach levels of foreign/German-language television channels showed only minor changes (see Figure 15): As early as 2003, foreign television channels were watched by 49.1% of the viewer population in Austria, and in 2009 those channels again reached a total of 49.1% of Austria's viewers. Likewise, the German channels which offer partly Austria-specific content (such as Austrian "advertising windows") showed fairly stable developments (36.8% in 2003; 36.7% in 2009), as did the overall reach of foreign German-language television channels, which rose from 47.2% in 2003 to 48.2% in 2009.

Figure 15: Long-term development of television's daily reach levels



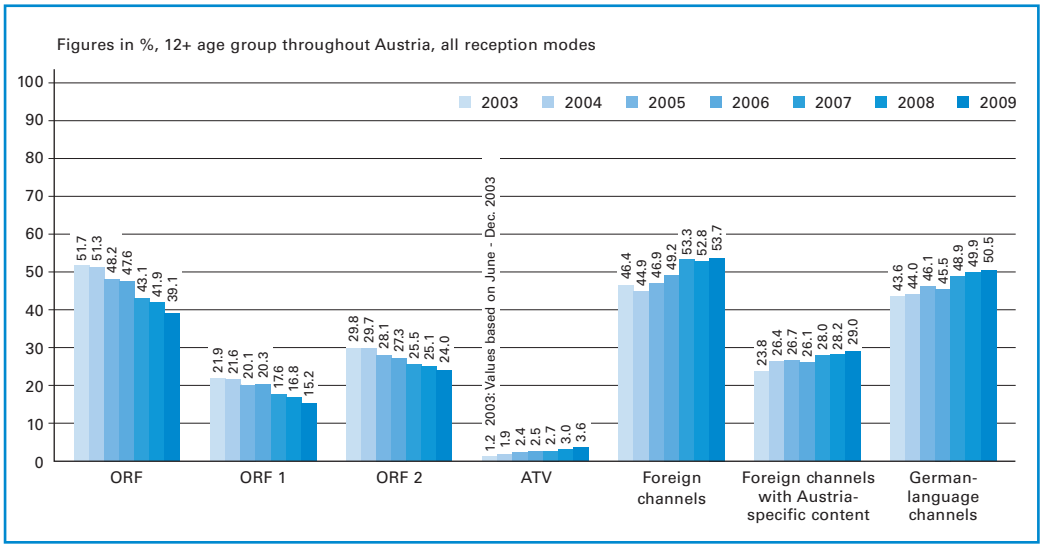
Source: Teletest

In contrast to daily reach levels, which indicate the total number of viewers who watch a television channel for at least one minute on a given day, market shares reveal the percentage of viewers in the overall viewer population who watch a given channel and for how long. In terms of market share, the two ORF channels have continued to decline in both the short and medium term. Experts put this development down to the increasing diversity of television channels available to viewers (especially those who rely on digital satellite reception) as well as additional cable television channels.

Between 2008 and 2009, ORF 1's market share dropped from 16.8% to 15.2%, while that of ORF 2 fell from 25.1% to 24.0%. In 2003, ORF 1's market share was as high as 21.9%, and ORF 2's share came to 29.8%. The market share of ATV, Austria's first nationwide private television broadcaster, rose from 3% in 2008 to 3.6% in 2009.

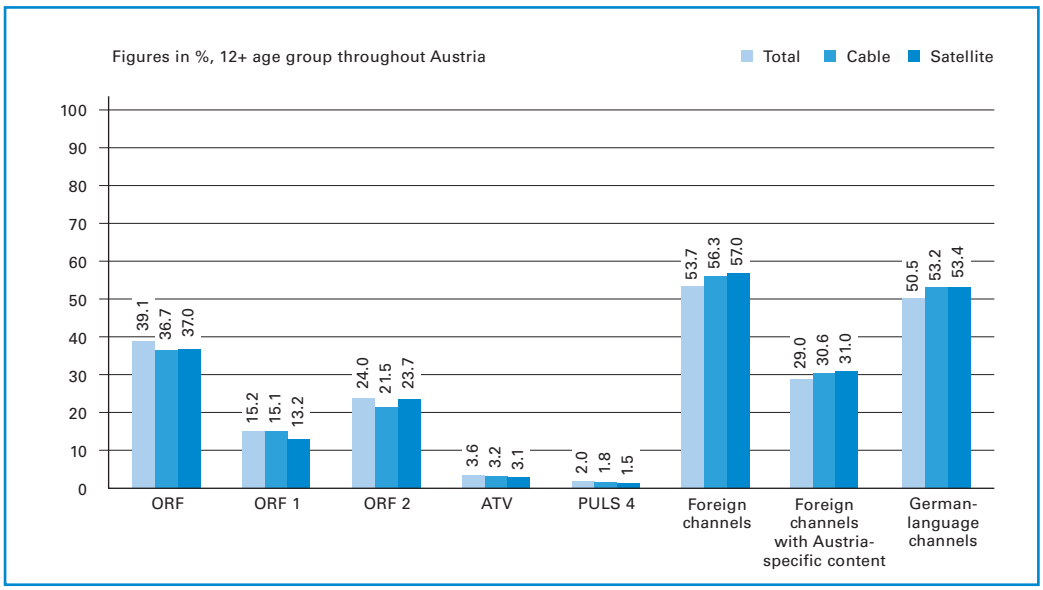
At the same time, the market shares of all foreign television channels (including those which offer Austria-specific content, namely SAT.1, RTL, ProSieben, VOX, RTL II, Super RTL and Kabel 1) and German-language television channels have grown in recent years. The foreign channels which offer Austria-specific content boosted their overall market share from 23.8% in 2003 to 29.0% in 2009, while German-language channels increased their share of the market from 43.6% in 2003 to 50.5% in 2009.

Figure 16: Long-term development of television market shares



Source: Teletest

Figure 17: Television market shares in 2009



Source: Teletest 2009

5.1.4 Radio market

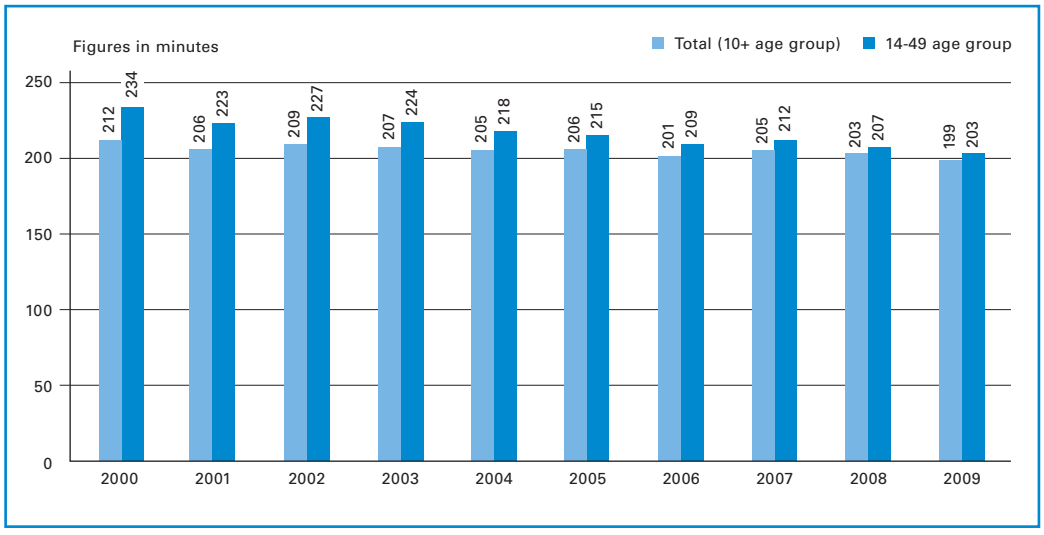
Radio still most popular medium

Data on reach levels and market shares in Austrian radio broadcasting has been collected since the launch of the Radiotest survey, which is also conducted by GfK Austria. This survey is commissioned by ORF as well as numerous private radio stations. In the Radiotest, a total of 24,000 interviews (computer-assisted telephone interviews, or CATIs) are carried out in disproportionate form throughout Austria. In certain cases, smaller radio broadcasters also commission additional interviews, for example in order to obtain significant results at a more local level.

Despite the fact that listening time dropped from 209 minutes in 2008 to 206 minutes in 2009, radio is still the most widely and longest used medium in Austria (see Figure 4; all market research based on the 14+ target group). At the same time, Austrian daily newspapers are read for an average of 30 minutes per day, Internet usage time has increased markedly in the last few years (up one third, i.e., from 45 minutes in 2007 to 60 minutes in 2009), and television has seen slight decreases in daily viewing time. Naturally, it is also necessary in this context to point out that radio is not used as heavily for the purpose of obtaining news and information. Daily newspapers – and in part also television – are the primary media used for this purpose. To a far greater extent, radio serves the purpose of entertainment and has increasingly become an everyday accompaniment in recent years.

Figure 18: Development of listening time

Listening time has declined in recent years



Source: Radiotest

Over 80% listen to radio daily

In general, daily radio listening time has declined slightly in recent years. In the year 2000, daily listening time came to 212 minutes (total for 10+ age group) and 234 minutes (14-49 age group) in Austria. However, the longer listening times recorded during that period were certainly more closely related to the launch of numerous private radio stations and not necessarily associated with the lower level of Internet usage ten years ago. At present, some 81% of all Austrians listen to the radio on a daily basis.

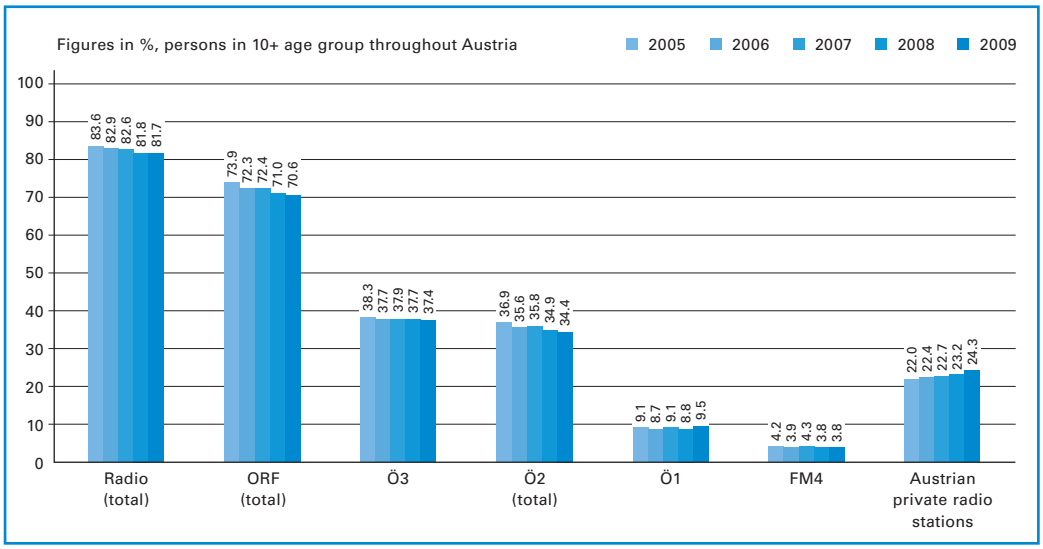
ORF's daily reach dropped slightly; private broadcasters gained

In terms of daily reach as well as market share, ORF's radio stations – especially Ö3 – have shown slow but steady decreases in recent years. Nevertheless, ORF's Ö3 station remained the undisputed leader on the Austrian radio market. Thus the ORF's media research report on the second half of 2009 states the following: "With more than 5.2 million listeners, ORF's family of radio stations also maintained its leading role on the Austrian market in the second half of 2009 – despite the large number of competitors, which has now climbed to a total of 81 radio stations. ORF's daily reach of 70.4% means that more than 7 out of 10 listeners in Austria rely on the competence of ORF's public radio broadcasters on a daily basis."

An analysis of the daily reach figures for ORF's radio stations reveals the following picture: Ö1 was able to increase its reach among listeners in the 10+ age group from 8.8% in 2008 to 9.5% in 2009; Ö3 saw a slight decline in its share of listeners, from 37.7% in 2008 to 37.4% in 2009, as did ORF's regional radio broadcasters, whose reach fell from 34.9% to 34.4%. FM4's daily reach remained approximately the same at 3.8%.

Figure 19: Development of daily reach levels in radio broadcasting

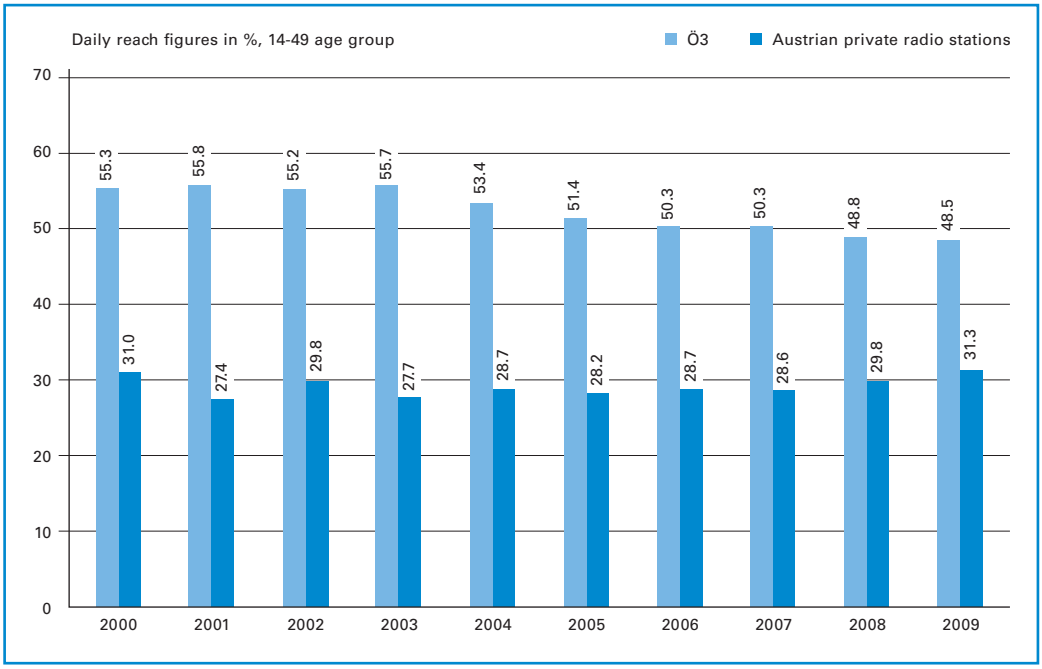
Private radio stations' daily reach levels rising steadily



Source: Radiotest

Upon closer examination, however, the data reveals a number of more clearly recognizable developments: In the 10+ age group, Ö3's daily reach fell from 41.1% in 2000 to 37.4% in 2009. Over the same period, the number of listeners tuning in to private radio stations rose from 22.7% to 24.3%. A similar picture emerges among listeners in the 14 to 49 age group: Ö3 saw its share of daily listeners decline from 55.3% in 2000 to 48.5% in 2009, while the daily reach of private radio broadcasters rose from 31.0% to 31.3% over the same period.

Figure 20: Development of daily reach, Ö3 vs. private radio stations



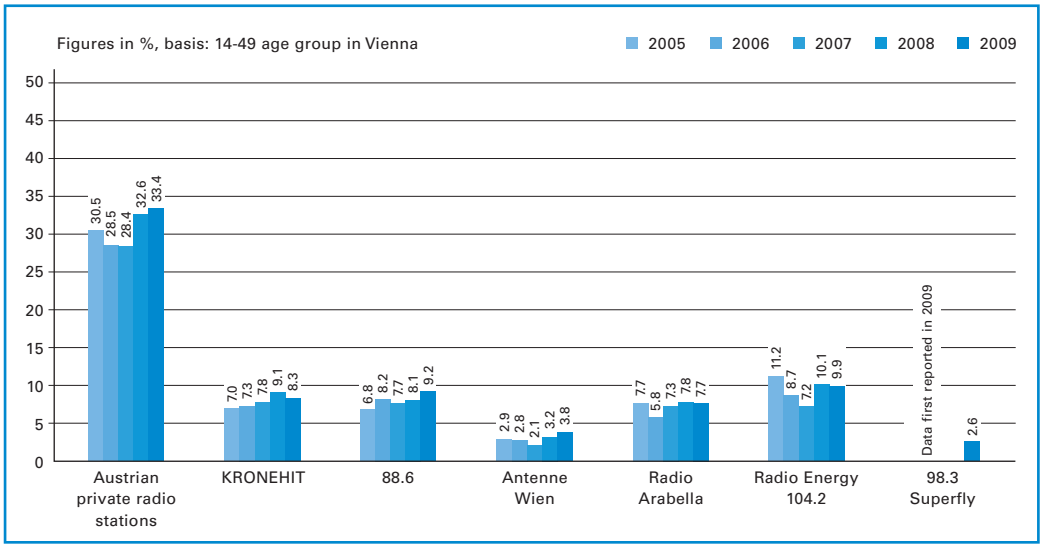
Source: Radiotest

Among Austria's private radio broadcasters, the following stations achieved the highest daily reach levels in 2009: KRONEHIT's daily reach came to 11% throughout Austria, Antenne Steiermark and Life Radio Oberösterreich each attained a level of 3.3%, "88.6" reached 3%, and Radio Arabella Wien and Radio Energy 104.2 each had a 2.5% reach level throughout Austria. Finally, Antenne Salzburg and the HiT FM group recorded a daily reach level of 1.3%, Antenne Kärnten 1.2%, and Antenne Wien 1.1% throughout Austria (see Table 14).

The development of Austrian radio broadcasters' market shares reveals that some private radio stations have made substantial gains in recent years: In the 10+ age group, Austrian private radio broadcasters managed to boost their overall market share from 18% in 2005 to 21% in 2009, and from 22% to 27% in the 14 to 49 target group over the same period. At the same time, ORF's family of radio stations lost part of their overall market share, which fell from 80% in 2005 to 77% in 2009 in the 10+ age group and from 75% (2005) to 70% (2009) in the 14 to 49 age group. In this context, Hitradio Ö3 saw a far smaller decline, while the Ö2 regional radio stations lost slightly more market share.

In the province of Vienna, ORF's flagship station Ö3 and the private broadcasters are in a neck-and-neck race in the 14 to 49 age group, which is considered especially relevant. In 2009, Ö3 attained a reach level of 34.1%, while Vienna's private radio broadcasters reached 33.4%. The difference in reach levels back in 2005 was substantially larger, with Ö3 enjoying a 39.0% reach level and the private stations reaching only 30.5% in the 14 to 49 age group in Vienna.

Figure 21: Development of private radio broadcasters' daily reach levels in Vienna

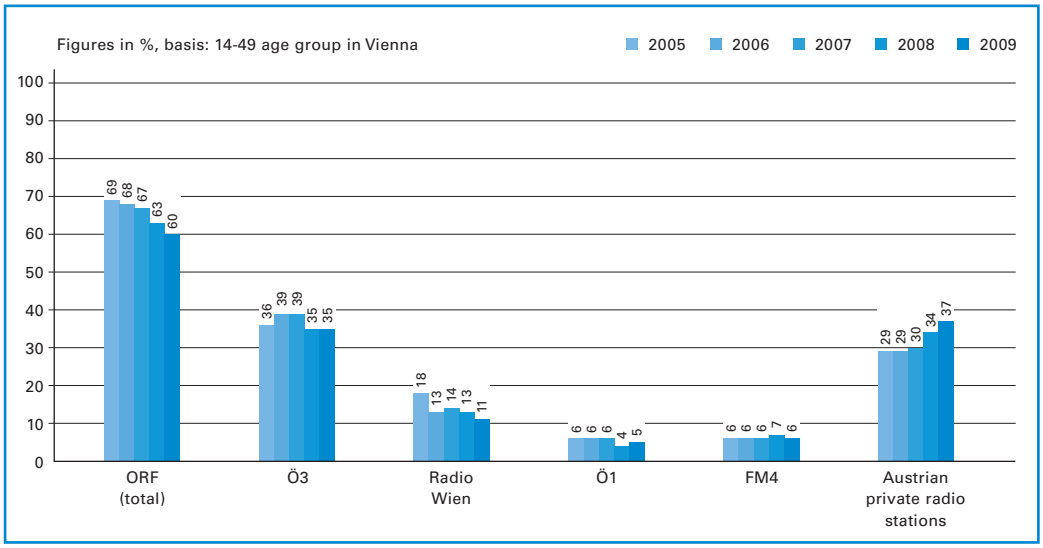


Source: Radiotest

As for market shares, the private broadcasters surpassed Ö3 in the 14 to 49 age group for the first time in 2009. The private stations garnered an overall market share of 37% in the 14 to 49 age group in Vienna, while Ö3's market share came to 35%. With a market share of 10% in the 14 to 49 age group, the station "88.6" was able to maintain its position as Vienna's top private radio broadcaster. Austria's private broadcasters are not only chipping away at Ö3's market share, but also that of Radio Wien. Nevertheless, ORF's radio stations have still managed to retain their dominant positions in Vienna even ten years after the launch of private radio broadcasting.

Figure 22: Radio market shares in Vienna

ORF radio stations still in first place in Vienna



Source: Radiotest

Table 14: Daily reach of radio stations in Austria (2009)

	Total	Vienna	Lower Austria	Burgenland	Styria	Carinthia	Upper Austria	Salzburg	Tyrol (including Eastern Tyrol)	Vorarlberg
Total number of cases (unweighted)	**15,351**	**2,165**	**2,105**	**1,225**	**1,927**	**1,317**	**1,730**	**1,429**	**1,911**	**1,542**
Total daily reach										
Radio total	81.0	71.9	83.5	86.3	83.5	86.0	82.4	83.3	82.2	81.5
ORF total	67.1	53.8	71.2	77.7	70.4	74.0	67.9	70.0	70.2	69.0
Austrian private BC total	31.3	33.4	29.2	26.5	32.1	31.5	35.5	27.5	28.6	25.6
Other stations total	34.6	36.2	31.2	28.1	34.6	32.8	39.9	32.7	33.9	33.3
Minor stations total	4.7	4.4	2.3	2.4	2.8	2.9	6.8	7.7	6.7	10.0
Other minor stations	3.3	4.4	2.3	2.4	2.8	2.9	3.5	3.6	3.2	4.4
ORF's daily reach										
Ö1	5.5	8.0	5.0	4.8	4.8	4.9	5.0	5.8	3.8	4.0
Ö3	48.5	34.1	53.2	55.8	52.3	51.4	51.0	53.0	52.5	49.1
FM4	6.1	7.5	4.9	5.2	5.4	5.5	6.5	7.4	5.3	5.3
ORF regional stations total	21.5	15.5	23.7	32.0	23.0	29.7	18.4	21.3	22.3	26.3
Radio Wien	4.0	12.4	6.9	4.3	-	-	-	-	-	-
Radio Niederösterreich	4.1	2.8	17.2	1.8	0.4	-	1.3	-	-	-
Radio Burgenland	1.3	1.0	0.8	27.9	0.6	-	-	-	-	-
Radio Steiermark	3.3	-	0.5	2.1	21.4	0.7	0.1	0.6	-	-
Radio Kärnten	2.0	-	-	-	0.4	29.3	-	0.2	0.3	-
Radio Oberösterreich	3.1	-	0.6	-	0.2	-	17.1	1.3	-	-
Radio Salzburg	1.5	-	-	-	0.2	0.2	0.9	19.8	0.2	-
Radio Tirol	1.9	-	-	-	-	0.2	-	0.2	21.9	0.3
Radio Vorarlberg	1.2	-	-	-	-	-	-	-	0.1	26.2
Daily reach of private radio stations										
RMS Top	30.9	32.8	28.8	26.4	32.1	31.3	35.5	26.5	27.7	25.6
KRONEHIT	11.0	8.3	15.2	15.5	9.1	9.7	14.4	6.5	9.5	7.4
HiT FM total	1.3	0.3	5.5	5.2	0.1	-	0.0	-	-	-
88.6	3.0	9.2	5.2	3.0	-	-	-	-	-	-
Antenne Wien	1.1	3.8	1.8	0.9	-	-	-	-	-	-
Radio Arabella (V/LA/B)	2.5	7.7	4.9	1.4	-	-	-	-	-	-
Radio Energy 104,2	2.5	9.9	2.4	0.6	-	-	-	-	-	-
98,3 Superfly	0.6	2.6	0.2	0.3	-	-	-	-	-	-
Antenne Steiermark	3.3	-	0.2	4.9	20.4	1.0	0.2	0.2	-	-
Radio Eins	0.1	-	-	-	1.0	-	-	-	-	-
Soundportal	0.6	-	-	-	4.0	-	-	-	-	-
Radio Graz	0.2	-	-	-	1.7	-	-	-	-	-
Radio Grün-Weiß	0.1	-	-	-	0.6	-	-	-	-	-
Radio West	0.1	-	-	-	0.6	-	-	-	-	-
Antenne Kärnten	1.2	-	-	-	0.3	17.9	-	0.5	0.0	-
Radio Harmonie	0.3	-	-	-	-	4.8	-	-	-	-
Life Radio (UA)	3.3	-	0.8	-	0.1	0.7	17.9	0.3	-	-
Antenne Wels	0.1	-	-	-	-	-	0.3	-	-	-
LoungeFM	0.4	-	0.1	-	-	-	2.0	-	-	-
Radio Arabella (UA)	0.4	-	-	-	-	-	2.5	-	-	-
Antenne Salzburg	1.3	-	-	-	0.0	0.5	1.8	15.7	-	-
Radio Arabella (Sbg.)	0.0	-	-	-	-	-	-	0.6	-	-
Welle 1 gesamt (Sbg./UA)	0.9	-	-	-	-	-	2.8	6.6	-	-
Life Radio (Tyrol)	0.6	-	-	-	-	-	-	-	7.4	0.1
Antenne Tirol	0.4	-	-	-	-	-	-	-	4.8	-
Radio Osttirol	0.2	-	-	-	-	0.5	-	-	1.7	-
Radio U1 Tirol	0.6	-	-	-	-	-	-	-	7.5	-
Welle (Tyrol)	0.3	-	-	-	-	-	-	-	3.3	-
Antenne Vorarlberg	0.9	-	-	-	-	-	-	-	-	19.1

Source: Radiotest 2009; vertical percentages, Figures in %, 14-49 age group

5.1.4.1 Status of radio digitization in Austria

Only few radio stations available on digital platforms

Digital radio still plays a rather insignificant role on the Austrian market. However, a few broadcasters have already begun to use the digital terrestrial (DVB-T) transmission platform, which was primarily set up for television broadcasting, in order to broadcast radio content by digital means.

Starting in January 2010, the religious radio station Radio Maria will be broadcast in unencrypted form via DVB-T throughout Vienna, in the southern part of the Vienna Basin, and in large parts of the provinces of Lower Austria and Burgenland. In contrast, ORF's Ö3 station is only available via at certain times of day on DVB-T Multiplex B, as these radio broadcasts alternate with ORF Sport Plus television.

Five radio stations available via DVB-H

Since June 2008, digital radio broadcasting has also been possible using the DVB-H digital broadcasting standard in Austria. However, the five radio stations transmitted using this technology (Ö3, Ö1, FM4, KRONEHIT and LoungeFM) are broadcast in encrypted form and can only be received for a fee as an additional option within a television channel package. The radio station package is marketed by the mobile network operators mobilkom austria, Orange and Hutchison, which also offer the necessary DVB-H-compliant handheld devices. The technical range of this service amounts to 53% of the population (in areas of high population density in Austria).

At the beginning of 2009, RTR and KommAustria initiated the establishment of the Digital Radio Working Group, which comprises relevant market participants from Austria, Germany and Switzerland, in order to assess market demand for the introduction of digital radio in Austria (see Section 4.1.11).

5.1.5 Print media

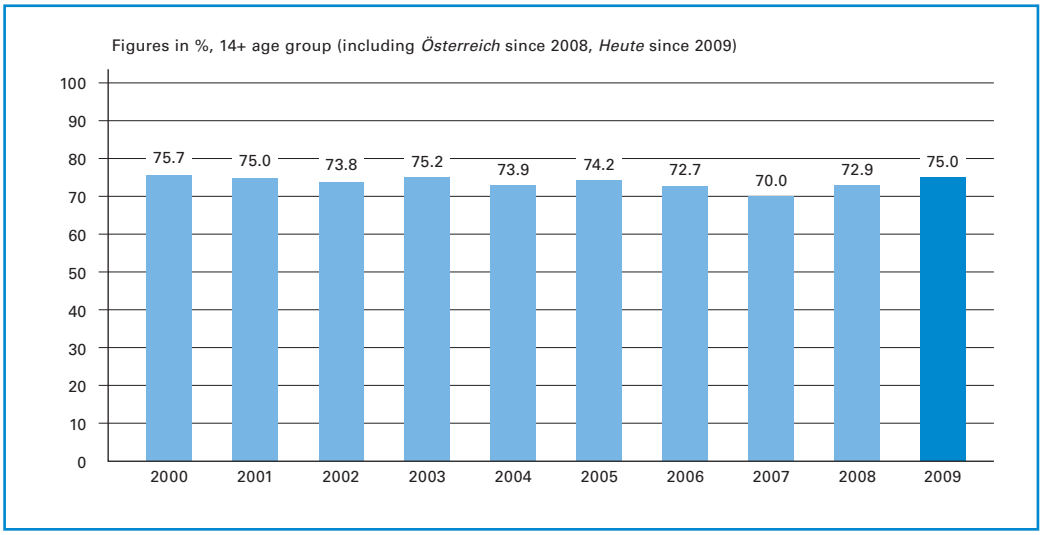
Print media reach 3/4 of population

In 2009, Austria's daily newspapers reached a total of 5.3 million readers on a daily basis; this figure represents approximately three quarters of the resident population over 14 years of age.

For the first time, the Austrian Media Analysis 2009 included the free daily newspaper *Heute*, for which reach levels were surveyed in the federal provinces of Vienna, Lower Austria and Upper Austria. With a daily reach of 35.9% (512,000 readers), *Heute* is now only just behind the *Kronen Zeitung* (37.5%) in Vienna. The daily newspaper *Österreich* is in third place with 21.9%.

In Lower Austria, 11.3% (152,000 readers) read *Heute* on a daily basis, and the corresponding figure for Upper Austria is 4.0% (47,000 readers).

Figure 23: Daily newspapers: Development of reach levels



Source: Austrian Media Analysis

Although its daily reach edged down to 40.4%, the *Kronen Zeitung* is still clearly the top daily newspaper in Austria. The Sunday edition of the paper even reaches 48.8% of Austrian readers over 14 years of age.

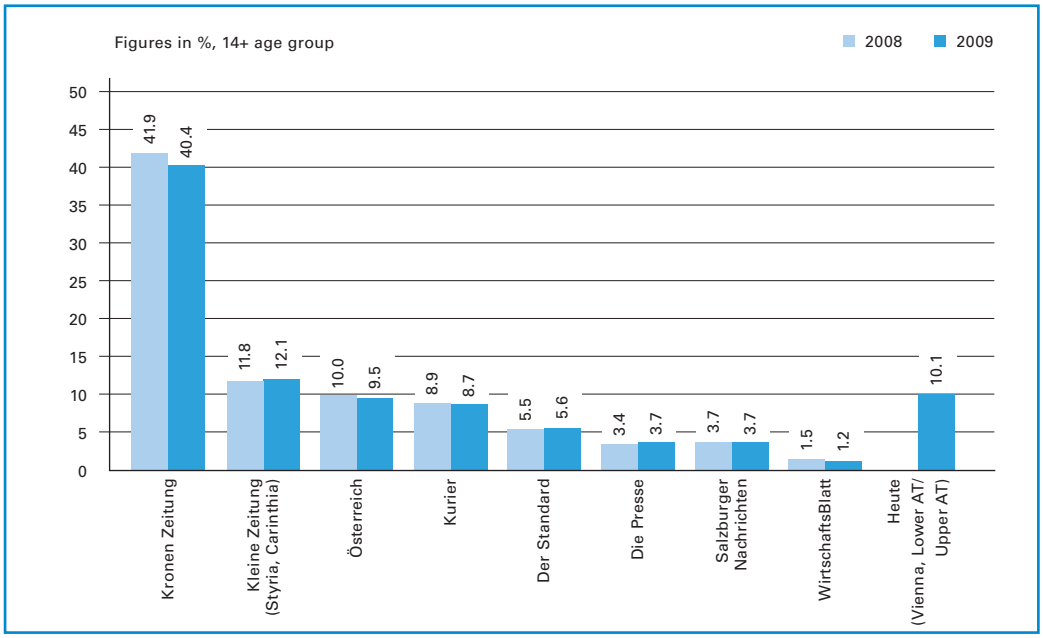
In terms of reach, the *Kronen Zeitung* is followed by the *Kleine Zeitung*, *Österreich*, *Kurier*, *Der Standard*, *Tiroler Tageszeitung*, *Oberösterreichische Nachrichten*, *Die Presse* and *Salzburger Nachrichten*; the last two are tied with 3.7% each. *Heute* is not included in this list because its daily reach is only surveyed in three of Austria's federal provinces.

The *Kleine Zeitung* saw a gain in reach in 2009 (in the province of Styria), as did the *Tiroler Tageszeitung*, *Die Presse* – which has also been published on Sundays since March 2009 – and *Der Standard*.

Der Standard and Heute have the youngest readers

Der Standard is still the paid daily newspaper with the youngest readership (average age: 42 years). However, the readers of the free daily newspaper *Heute* are younger on average (39.9 years).

Figure 24: Daily reach of national daily newspapers, 2008 vs. 2009



Source: Austrian Media Analysis

Media Analysis includes free newspapers for the first time

Nearly all of the weekly magazines included in the Media Analysis 2009 gained readers compared to the year 2008, especially *Die Ganze Woche* (up from 13.5% to 14.1%) and *Seitenblicke* (up from 2.0% to 3.2%). The weekly magazines *profil, Falter* and *Format* also succeeded in maintaining their positions and even increasing their reach levels. *TV-Media* and *NEWS* both saw declines in reach, albeit from a far higher level. The former remained Austria's top paid weekly magazine with a reach level of 14.3%, followed by *Die Ganze Woche* with 14.1% and *NEWS* with 11.6%. *eMedia*, a biweekly magazine which also belongs to the NEWS publishing house, also saw its reach level decline, as did the regional paid weekly newspapers.

5.2 Development of the Austrian telecommunications markets

Continuing the third round of market analyses

In the field of telecommunications, the regulatory authority focused its efforts on continuing the third round of market analysis procedures in 2009. These procedures were still based on the EU's legal framework for electronic communications markets from 2002 and its implementation in Austria, namely in the Telecommunications Act (TKG) 2003 and the accompanying ordinances. The current European legal framework has undergone a review and revision process in recent years and was ultimately published in the Official Journal of the European Union in December 2009. By May 25, 2011, the results of this review of the legal framework are to be implemented in the Austrian Telecommunications Act (cf. Section 4.2).

The sections that follow give an overview of market developments and selected indicators, but in no way should this discussion be considered exhaustive. Instead, it only serves to illustrate the complexity of market relationships and to report on key figures of general interest.

In terms of structure, this overview is essentially based on the relevant markets defined in the most recent review of the TKMV 2008; in this context, the markets have been merged to form various clusters. The cluster approach generally applied in RTR's market analyses is motivated by practical considerations as well as the existing (horizontal and vertical) links between individual markets. These links can only be presented adequately in a comprehensive overview. However, this discussion is not exclusively confined to the relevant markets defined under the TKMV 2008. As mentioned above, in defining the focal points of this market overview, we have also paid special attention to the potential interests of our readers.

The data underlying the descriptions and explanations provided in the sections below is derived from the operator surveys carried out by RTR in the past as well as complementary quarterly data collected under the Communications Survey Ordinance (KEV). In addition, the discussion is also based on supplementary data derived from international experience as well as other studies and reports.

5.2.1 General market development

Further decline in retail revenues

Since the rapid growth of the Austrian telecommunications market following the start of liberalization, revenues on the retail market began to decline in 2006, and this trend also continued in the year 2009. In the last two years, retail revenues from telecommunications services have fallen by 5.9% (2007 to 2008) and 4.1% (2008 to 2009) to EUR 4.13 billion. Table 15 shows how the revenues break down across the various business areas. Nearly two thirds of revenues (63.1%) can be attributed to mobile communications, while approximately one fourth are generated by fixed-link voice telephony and 11% by broadband services (not including mobile broadband).

Nearly two thirds of total revenues generated by mobile services

In the field of mobile communications, it is also important to consider the growth in mobile broadband connections, which is not shown separately in Table 15 but was especially high. Despite rising revenues from mobile broadband services, the trend in retail revenues from mobile communications services has not reversed direction: Revenues at the retail level continued to decline (albeit only slightly) in the year 2009.

Table 15: Development of retail telecommunications revenues

	2007 (EUR millions)	2008 (EUR millions)	2009 (EUR millions)	Change in %, 2007 to 2008	Change in %, 2008 to 2009	Percentage of total revenues, 2007	Percentage of total revenues, 2008	Percentage of total revenues, 2009
Fixed-link networks*	1,218	1,110	997	-8.9	-10.1	26.6	25.8	24.1
Mobile networks	2,682	2,613	2,606	-2.5	-0.3	58.6	60.7	63.1
Broadband**	592	502	456	-15.2	-9.1	12.9	11.6	11.0
Leased lines	84	82	73	-2.4	-11.8	1.8	1.9	1.8
Total	**4,575**	**4,307**	**4,133**	**-5.9**	**-4.1**			

Source: RTR

* The figures shown include all voice telephony revenues on the retail fixed-link market, including dial-up services and public pay telephones.

** Revenues from mobile broadband services are included in mobile network revenues.

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

Table 16: Overall development of traffic volumes and lines/subscribers

	Unit	2007 (millions)	2008 (millions)	2009 (millions)	Change in %, 2007 to 2008	Change in %, 2008 to 2009
Fixed-link networks*	Call minutes	9,952.85	8,030.54	6,571.13	-19.31	-18.17
	Lines	2.74	2.67	2.66	-2.30	-0.41
Mobile networks	Call minutes	16,977.20	19,596.10	21,113.01	15.43	7.74
	Subscribers (contract and prepaid)	9.91	10.61	11.43	7.00	7.81
Broadband	Fixed-link connections	1.62	1.73	1.88	6.71	8.62
	Mobile connections	0.55	0.96	1.29	76.37	33.95
Leased lines	Number of 64 kbit/s equivalents	2.17	2.78	3.80	28.18	36.64

Source: RTR

* Minutes including dial-up services and public telephones

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

Table 16 shows the development of traffic volumes and the number of lines/subscribers in each business segment over the last three years. As in the case of revenues, the trend observed in recent years also continued in 2009. However, it is striking that the decline in the number of fixed-link lines was only 0.41%, meaning that this figure only dropped slightly compared to recent years – not least due to the combination package *(Kombipaket)* promoted heavily by Telekom Austria. The number of call minutes on the fixed-link network also dropped less significantly compared to the previous years.

In mobile communications, the number of call minutes and subscribers (i.e., the number of activated subscriber numbers) continued to climb in the year 2009, but the rate of growth decreased, as was the case in the previous year. While the growth rate came to 15.4% between 2007 and 2008, it fell to a mere 7.7% between 2008 and 2009.

Rapid growth in mobile broadband continues

A similar picture can be observed in the field of mobile broadband, where the growth rate dropped from 76.4% in 2008 to 34.0% in 2009. In contrast, growth in the number of fixed-link broadband lines only increased by two percentage points to 8.6% in 2009. In recent years, mobile networks have thus become the fiercest competitor to the fixed-link network in Austria. This is not only the case in voice services (cf. the opposing developments in the number of call minutes in Table 16), but also increasingly in broadband services. At the end of 2009, 40.7% of all broadband connections in Austria were mobile connections (1.29 million), meaning that Austria has taken a leading position in the EU in terms of mobile broadband penetration.

In terms of 64 kbit/s equivalents, growth in the number of leased lines was constant in the year 2009. This can be mainly attributed to the fact that demand for leased lines with high bandwidths has risen in recent years, especially as those lines offer more favorable prices per kbit/s equivalent compared to low bit-rate leased lines. As a result, this increase is not reflected to the same extent in the revenues shown in Table 15.

A comparison of trends in revenues from each segment in Table 15 with the corresponding traffic volumes and numbers of lines/subscribers in Table 16 reveals that rates in the fixed-link segment have largely stagnated, whereas the mobile segment has seen significant rate reductions in recent years. Moreover, the stagnation in mobile revenues has to be interpreted against the backdrop of a very high national penetration rate, with over 11 million activated subscriber numbers in Austria.

Prices have declined considerably in the broadband segment as well, a development which can largely be attributed to bundled offers (i.e., combinations of multiple retail services such as fixed-link voice telephony, broadband, mobile telephony, etc.), which have become increasingly prevalent on the Austrian market in recent years. These package offers also make it more difficult to break down revenues from fixed charges by individual service, thus bringing about a certain degree of imprecision in the allocation of revenues to specific segments.

Main driver of growth: Mobile broadband

Therefore, the main driver of growth is still the development of broadband access, in particular mobile broadband connections. However, due to a lack of available data, this development – which is highly significant in terms of volume (cf. Table 16) – cannot be depicted separately, and the specific revenues from mobile broadband connections cannot be reported separately in Table 15.

Table 17 provides a qualitative overview of the main factors influencing market developments in Austria. For more detailed information, please refer to the sections referenced below.

Table 17: Trends on Austrian retail markets in 2009

Service	Revenues	Traffic volumes	Rates	Remarks	cf. Section
Fixed-link telecommunications	Decreasing	Decreasing	Stagnating/ decreasing	Partial substitution with mobile telephony, VoI and PN	5.2.2
Mobile communications	Decreasing	Increasing	Decreasing	Share of data services rising quickly; introduction of flat rates	5.2.3
Broadband	Decreasing*	Increasing	Decreasing	Rapid growth in mobile broadband	5.2.4
Leased lines	Decreasing	Capacity increasing	Stagnating	Higher bandwidths gaining importance	5.2.5

Source: RTR

* Excluding mobile broadband revenues

5.2.2 Fixed-link telecommunications

5.2.2.1 Introduction

Increasing market consolidation

After a large number of new companies entered the fixed-link market during the first stage of liberalization, the market has undergone a process of consolidation in the last few years. In particular, this refers to mergers and acquisitions among the largest alternative operators: As early as 2004, Tele2 (the largest alternative provider in the residential segment) acquired UTA, which was one of the most important unbundling operators apart from Inode. UPC Telekabel took over Inode in early 2006 and Telesystem Tirol in late 2007. eTel, a provider which primarily operated in the business segment, had taken over numerous smaller companies – especially Internet service providers – before eTel itself was acquired by Telekom Austria in early 2007.

Depending on the type and scope of the network infrastructure used, different business models can be distinguished in the fixed-link segment:

Quasi-monopolist structures on the local access market

- As the former monopolist, Telekom Austria is the only telecommunications enterprise with nationwide fixed-link infrastructure and still holds the largest market share by far, especially in the access market. As Telekom Austria's market power puts the company in a position to prevent alternative providers from gaining access to its customers and thus to frustrate or even prevent competition, Telekom Austria has been classified as a company with significant market power (SMP) up to this point. As a result, Telekom Austria is subject to special regulations regarding its prices as well as its terms and conditions of business. The company is also obligated to grant other competitors non-discriminatory access to certain parts of its network. The local access networks still exhibit characteristics which indicate that

from a static point of view, one infrastructure provider could actually handle the overall demand for subscriber lines more cost-effectively than two or more providers (for empirical data regarding the state of national and EU access markets, please see Sections 5.2.2.2.2 and 5.2.2.2.3.1).

- Several of Austria's alternative telecommunications providers have their own carrier networks and/or regionally limited access networks. In order to reach subscribers in other networks, however, those companies are forced to rely on the interconnection services of Telekom Austria (and in some cases other operators). As separate infrastructure ensures a greater degree of independence from the SMP operator's wholesale services and makes it possible to provide a wider range of services and greater product flexibility compared to pure carrier network operators, communications network operators certainly have incentives to develop new networks and to expand existing ones.

Quasi-competitive structures in the carrier segment

- Carrier selection has proven to be an effective instrument for promoting competition on the fixed-link market, as it allows relatively easy access to the market and involves low investment costs compared to building separate access networks. The competitive stimulus created by the entry of new providers also put pressure on Telekom Austria to lower its prices, thus bringing about a decline in rates throughout the industry. Carrier network operators accept incoming calls from the originating network and deliver them to the terminating network. Origination and termination may also take place in the same network. The carrier network does not require its own telecommunications network infrastructure; instead, the carrier network is generally interconnected with the incumbent's telecommunications network by means of a dialing code. The carrier network operator collects the charges directly from the subscriber and is required to pay origination, transit and termination charges to the other operator(s) for the services used. In carrier selection, it is necessary to distinguish between call-by-call (CbC) and carrier pre-selection (CPS) arrangements. For more detailed information, please refer to Section 5.2.2.1 of the Communications Report 2007.

VoIP as a technology with high innovative potential

Another major development is Voice over Internet Protocol (VoIP), which is becoming a powerful factor in the entire fixed-link sector and may have an impact on all of the business models mentioned in Table 18. VoIP refers to a technology which allows voice communication via IP-based networks. This technology is expected to generate drastic changes in or even replace traditional circuit-switched voice telephony. At present, however, two main types can be identified among the numerous potential VoIP services, and this distinction is certainly relevant for regulatory purposes: VoB (Voice over Broadband) and VoI (Voice over Internet). In VoB, telephone access is offered together with Internet access, whereas in VoI a (broadband) Internet connection already exists and the VoIP services are used via the public Internet. Providers of VoB in Austria include Tele2, UPC (Inode) and Silver Server, while VoI is offered by companies such as Skype and Sipgate.

Whereas fixed-link markets have been discussed as a whole up to this point, the retail and wholesale markets are described separately below in line with the delineation of markets in the TKMV 2008 and the European Commission's Relevant Markets Recommendation.

As mentioned in the introduction, the relevant individual markets are not discussed point by point, but on the basis of specific focus areas. Table 18 provides an overview of the business models described above as they are found on the Austrian market. For the sake of typified classification, combined forms of these business models are not shown.

Table 18: Business models for fixed-link voice telephony on the Austrian market

Incumbent / former monopolist	Telekom Austria as the only nationwide, fully vertically integrated company		
(Alternative) communications network or service providers (types)	**Purchased services (esp. from incumbent operator)**	**Self-provided services**	**Investment requirements**
Access network operators	▪ Interconnection ▪ Poss. leased lines ▪ Poss. unbundling	▪ Operation of access and core network (e.g., local loops, transmission and switching facilities) ▪ Service design ▪ Pricing ▪ Sales/billing	High
Carrier network operators	▪ Interconnection ▪ Poss. leased lines	▪ Operation of core network (e.g., transmission and switching facilities) ▪ Service design (limited) ▪ Pricing ▪ Sales/billing	Medium
Resellers (carrier network) (CPS/CbC provided using a separate dialing code or via the carrier network partner)	▪ Connection minutes	▪ Pricing ▪ Sales/billing	Low
Resellers (other) (e.g., calling cards, telephone shops, dial-in telephone service)	▪ Connection minutes	▪ Pricing ▪ Sales/billing	Low
Combined forms	Combinations of the alternative business models above		

Source: RTR

5.2.2.2 Retail markets for fixed-link communications

5.2.2.2.1 Market participants

Five operators currently cover more than 90% of demand

Table 19 lists the largest providers of fixed-link voice telephony services in Austria. Taken together, these operators cover more than 90% of the call minutes handled on the retail market.

Table 19: Largest providers on the retail fixed-link markets

Company	Share of call minutes
Telekom Austria	approx 60%
Tele2	< 25%
UPC	< 5%
COLT	< 5%
FINAREA	< 5%

Source: RTR

5.2.2.2.2 Structural developments on the fixed-link market

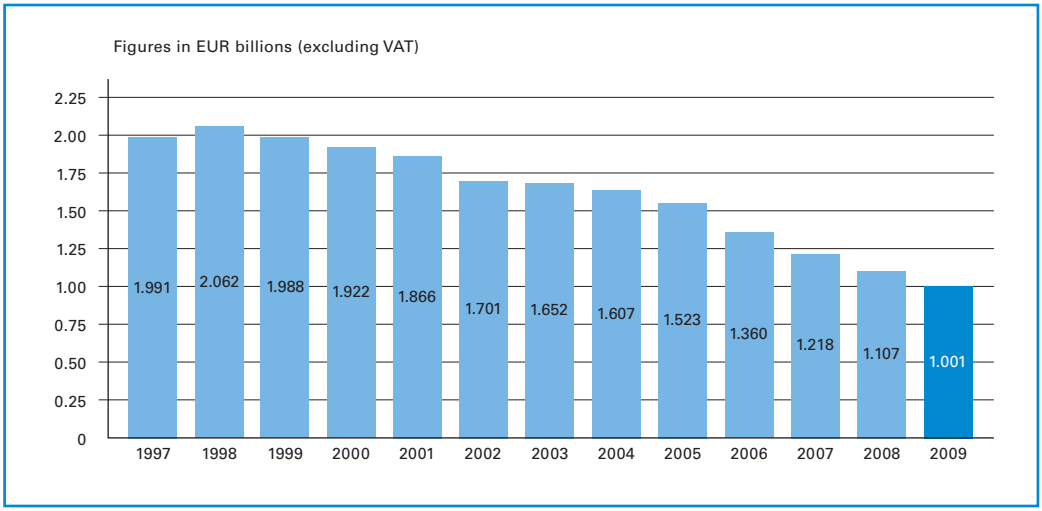
Substantial declines in retail fixed-link revenues

In the past, the rapid growth in the number of subscribers on the mobile communications market in particular brought about a substantial decline in total revenues on the market for fixed-link telephony services (cf. Figure 25). Although revenues on the overall fixed-link retail market followed an upward trend from the start of liberalization until the year 1998 (1998: +3.6%), they have declined steadily since that time (1999 to 2009), most recently losing 10.1% between the years 2008 and 2009. In the last ten years, total revenues on the Austrian fixed-link market have decreased to half of their former level and now amount to approximately EUR 1 billion. This general decrease can be seen (albeit to different degrees) in revenues as well as traffic volumes.

The calculation of overall revenues on the fixed-link retail market in Figure 25 is based on the following income types:

- Connection charges for local calls within Austria;
- Connection charges for long-distance calls within Austria;
- Connection charges for calls to Austrian mobile networks;
- Connection charges for international calls;
- Connection charges from public pay telephones;
- Connection charges for online services;
- Revenues from the sale of cards and minutes to resellers;
- Monthly base fees;
- Charges for special coverage obligations;
- Connection setup charges.

Figure 25: Development of revenues on the fixed-link retail market



Source: RTR

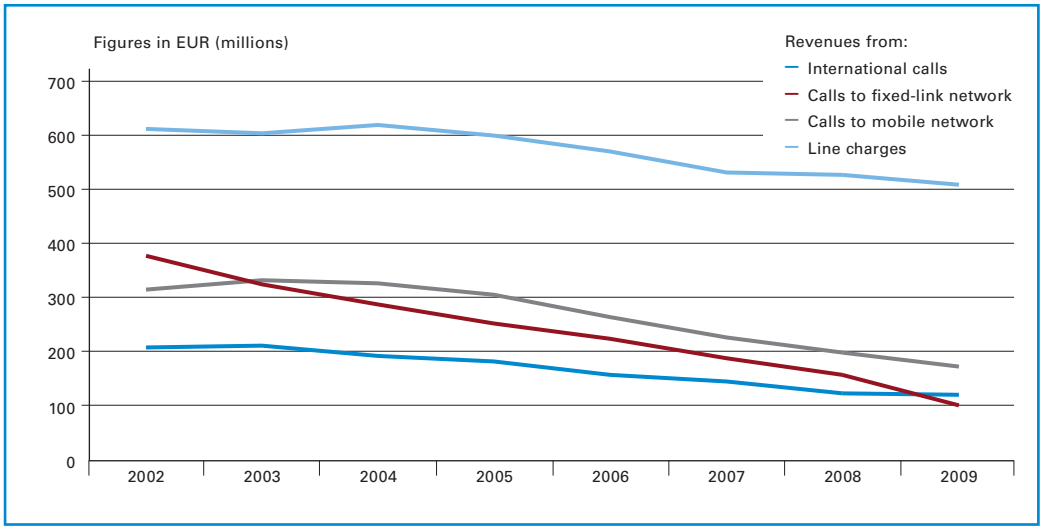
Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

Decrease in revenues from fixed-link calls

Figure 26 shows clear differences in the development of revenues in each charge category (line charges, calls to mobile networks, calls to fixed-link networks and international calls). Revenues from connection charges have been most heavily affected by the decline, especially in the case of calls to the fixed-link networks, where revenues dropped by 35% between 2008 and 2009 alone. As a result of this sharp decline, the revenues generated by domestic fixed-link calls were lower than those arising from international calls for the first time in 2009. Revenues from calls to mobile networks have also decreased steadily since 2003 (most recently by 12%). The decreases identified in call charges can mainly be attributed to intermodal competition emanating from the mobile communications sector. Above all, this competition has affected revenues from calls to domestic fixed-link networks in the residential segment. Moreover, part of this persistent decline in revenues can also be explained by additional price reductions, but such reductions have become less and less pronounced. In general, it is important to note that these developments refer to the fixed-link sector as a whole and not only to specific operators.

Decline in revenues from call charges due to intermodal competition from the mobile sector

Figure 26: Development of retail fixed-link revenues by segment



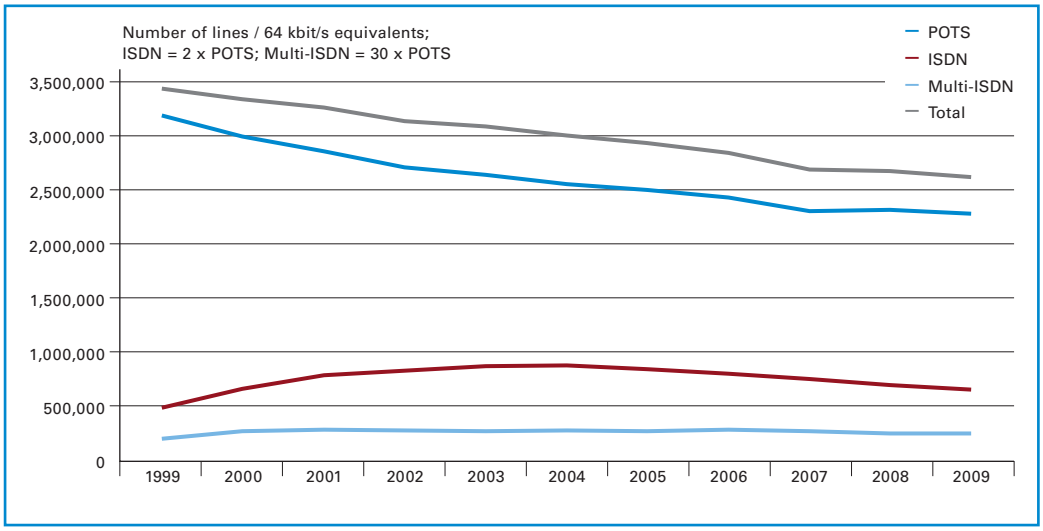
Revenues from access services largely stable

Source: RTR

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

With regard to access services, monthly base fees and setup charges only dropped slightly in 2009 (-3%), as did the number of lines in each category (cf. Figure 27). Among other things, the largely stable development of the number of lines in recent years can be attributed to the sustained success of various bundled products.

Figure 27: Development of line types in 64 kbit/s equivalents



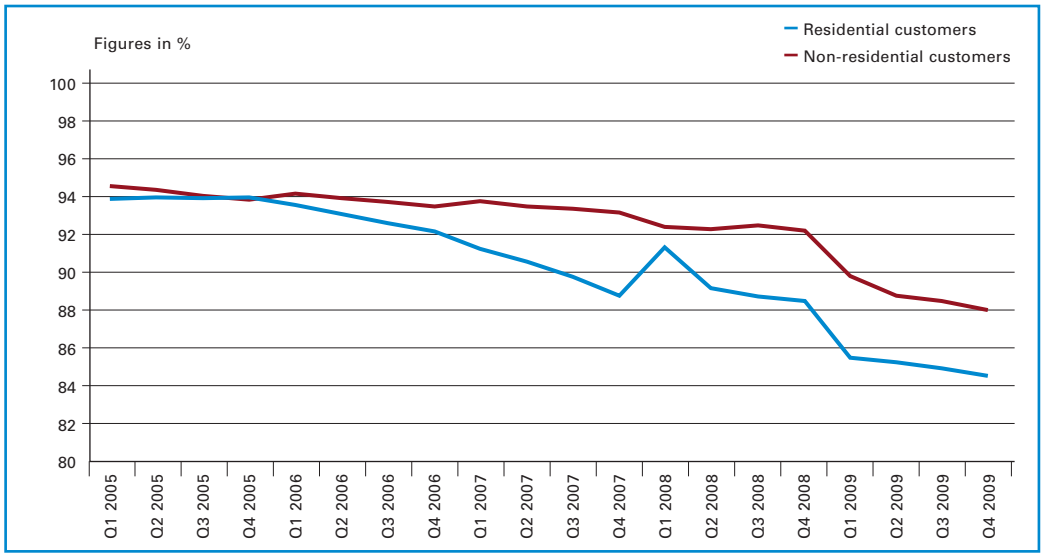
Source: RTR

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

Telekom Austria's market share remains high and fairly stable in access segment

The market share figures for Telekom Austria (Figures 28 and 29) also provide an indirect indication of how successful alternative network operators (subscriber and carrier network operators) have been in individual segments of the fixed-link telephony market since the start of liberalization. Telekom Austria's share of the market for subscriber lines (measured in terms of revenues from monthly base fees and setup charges) decreased slightly in the year 2009, but still remained at a comparatively high level. The high concentration in terms of connected subscribers is not particularly surprising, as only few alternative network operators (ANOs) have their own access networks to connect subscribers directly. The vast majority of subscriber lines are thus realized by Telekom Austria. However, Figure 28 also shows that somewhat more competitive developments can be observed in the residential segment (compared to non-residential customers). This can be attributed in particular to the unbundling activities of Tele2 und and the gains achieved by the cable network operator UPC. In general, customer retention is lower and demand behavior is more elastic in the residential segment (compared to the business segment).

Figure 28: Telekom Austria's market share for access services by customer segment



Source: RTR

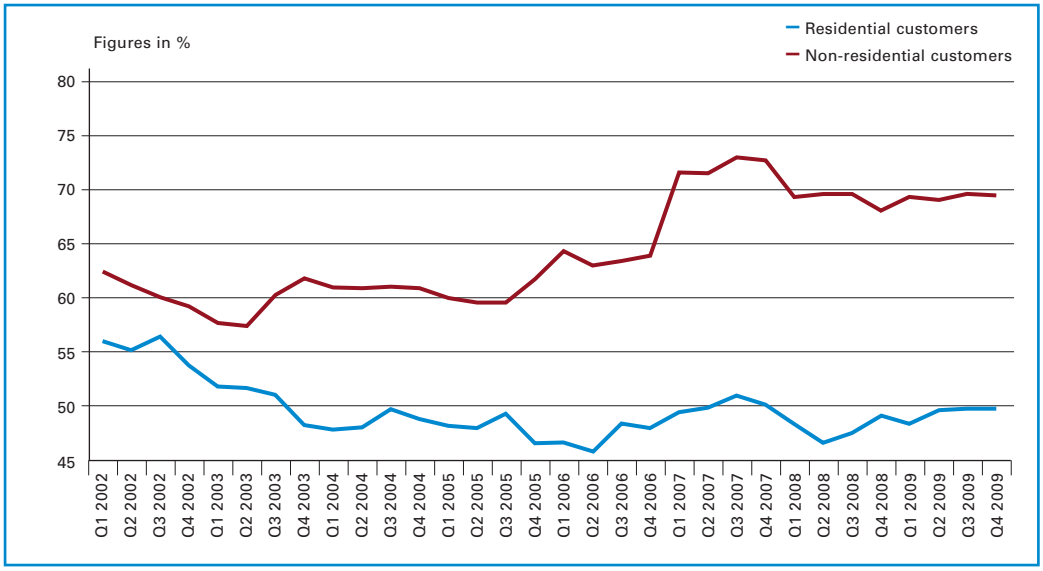
The temporary rise in Telekom Austria's market share among residential customers in Q1 2008 can be explained by an increase in setup activities during that quarter.
Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

Telekom Austria's market share holds steady in business segment

With regard to connection services (national and international; calls to the mobile network, fixed-link network and abroad), the alternative operators have managed to garner a substantially larger share of the market (cf. Figure 29). As for domestic calls, however, Telekom Austria's market share among business customers has again been on the rise since mid-2005. A substantial part of this development can be attributed to Telekom Austria's acquisition of eTel; this effect is included in the data from Q1 2007 onward. In 2008 and 2009, Telekom Austria's market share largely remained stable in the residential and non-residential segments.

Apparently, it is becoming increasingly difficult for conventional carrier network operators to sustain their positions on the market in times of shrinking profit margins as well as increasing competition in bundled products, which of course go well beyond the scope of classic carrier services.

Figure 29: Telekom Austria's market share for carrier services by customer segment



Source: RTR

The sudden increase in Telekom Austria's share of revenues from carrier services for non-residential customers in Q1 2007 resulted from Telekom Austria's takeover of eTel, which was included in the data from that time onward. Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

The stagnation of the alternative network operators' market shares in terms of connection services, which is only implicitly shown in Figure 29, is closely linked to the development of the market for call-by-call (CbC) and carrier pre-selection (CPS) services. As shown in Figure 30, CPS in particular gained popularity quickly, although this segment has shown a steadily declining trend in recent years. At the end of the reporting period, some 540,000 subscribers in Austria still had all of their calls handled by an alternative network operator. Here it is also necessary to account for CbC services, for which data is more difficult to collect and is therefore only reported with sufficient consistency from July 2003 onward (i.e., the start of the observation period for RTR's Operator Survey 2006).

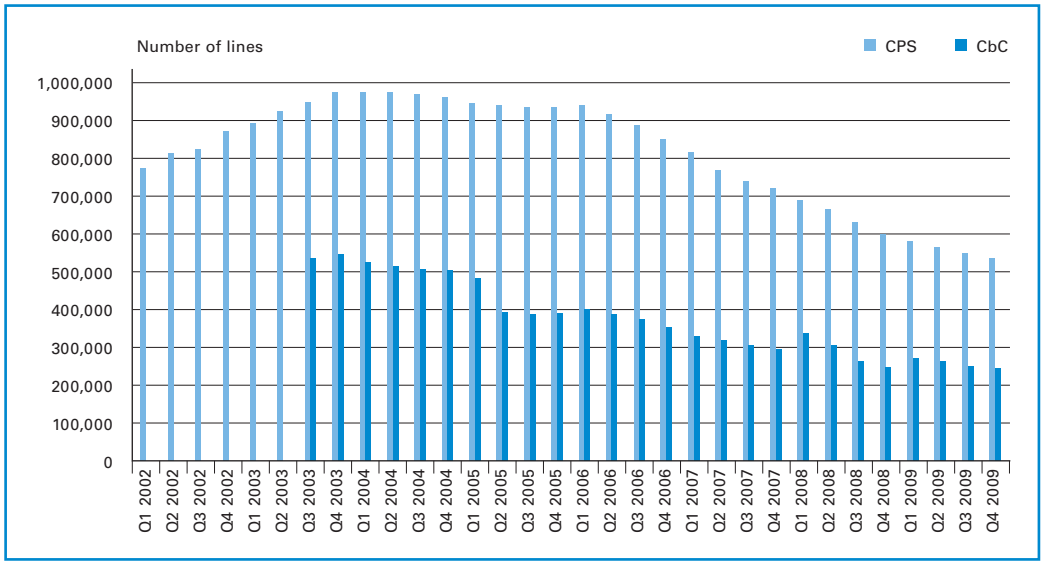
Carrier (pre-) selection still essential, but declining further

At present, we can assume a basic level of just under 250,000 CbC customers. The decline in CPS services can also be explained by the fact that alternative network operators have increasingly moved up the ladder of investment, that is, from carrier pre-selection to subscriber network operation. Moreover, as CbC is sometimes also used in combination with CPS, it is not possible to calculate a simple total. However, we can state that the two forms of access are used on approximately 30% of all lines at fixed locations in Austria. Moreover, the CPS and CbC

levels shown reflect the respective aggregate values for residential as well as non-residential customers. Regulatory experience indicates that a very large share of CbC usage can be attributed to residential customers.

In any event, the figures shown suggest that these special access obligations were among the most important liberalization instruments in the fixed-link market and still represent an essential form of basic regulation at the wholesale level. This is because they quickly enabled competition and allowed alternative network operators – which at first did not (and in some cases still do not) have their own local access infrastructure – to enter the market. Allowing these operators to use Telekom Austria's existing infrastructure enabled them to provide their services throughout Austria within a very short time without requiring them to go through the difficult process of building their own (nationwide) networks. Over time, these measures have served to enable alternative network operators to make the transition to more sustainable business models (i.e., to move up the ladder of investment).

Figure 30: Development in number of CPS and CbC customers



Source: RTR

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

5.2.2.2.3 International comparison

In this section, international statistics are used as a benchmark against which the results on the Austrian market for fixed-link voice telephony can be compared. Key indicators in this context refer specifically to market structure and market share distribution as well as rates and rate developments.

One problem inherent to international comparisons is the heterogeneous nature of rate models, billing structures, market structures, etc. Therefore, the figures and country rankings indicated here must be interpreted with some degree of caution. The data set used for this comparison was the 15th Implementation Report published by the European Commission.

5.2.2.2.3.1 Market shares

Table 20 shows the average market shares of the EU's incumbent operators in terms of revenues in individual call segments compared to Telekom Austria's market shares. While Telekom Austria's market share for domestic calls – despite an increase – is still well below the EU average, the Austrian incumbent's market share for calls to mobile networks is now only marginally lower than the EU average due to marked increases in this segment. As for international calls, Telekom Austria's market share is close to the EU average.

Table 20: Average market share of incumbent operators on the EU voice telephony market (by revenues)

	Domestic calls total		Calls to mobile networks		International calls	
	EU average	Telekom Austria	EU average	Telekom Austria	EU average	Telekom Austria
2006	60.9%	55.3%	60.0%	52.0%	53.6%	52.4%
2007	71.6%	61.8%	61.6%	59.3%	54.4%	57.9%
2008	70.2%	62.4%	59.5%	59.2%	50.6%	52.1%

Source: 14th and 15th Implementation Reports of the European Commission

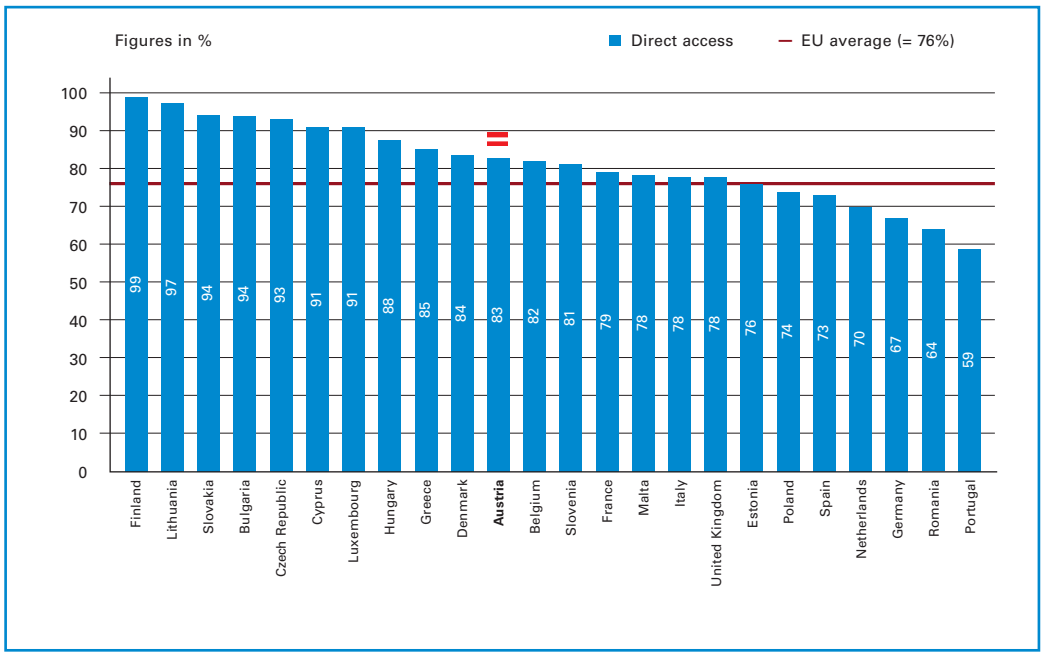
Data for the year 2009 was not yet available when this report was published.

Incumbent's fixed-link market share close to European average

With regard to access services, it is necessary to rely on the number of subscribers for the purpose of international comparisons. Figure 31 shows that the value reported for Austria's national incumbent (83%) is approximately seven percentage points higher than the European average. However, the market shares shown in Figure 28 are only comparable to a limited extent, as the revenues underlying that chart were calculated on the basis of different product bundles.

Overall, the international comparison of market structures shows that the situation on the Austrian market for narrowband fixed-link telephony can be described as "average" with regard to competition.

Figure 31: Share of subscribers using the incumbent for direct access (July 2009)



Source: 15th Implementation Report of the European Commission

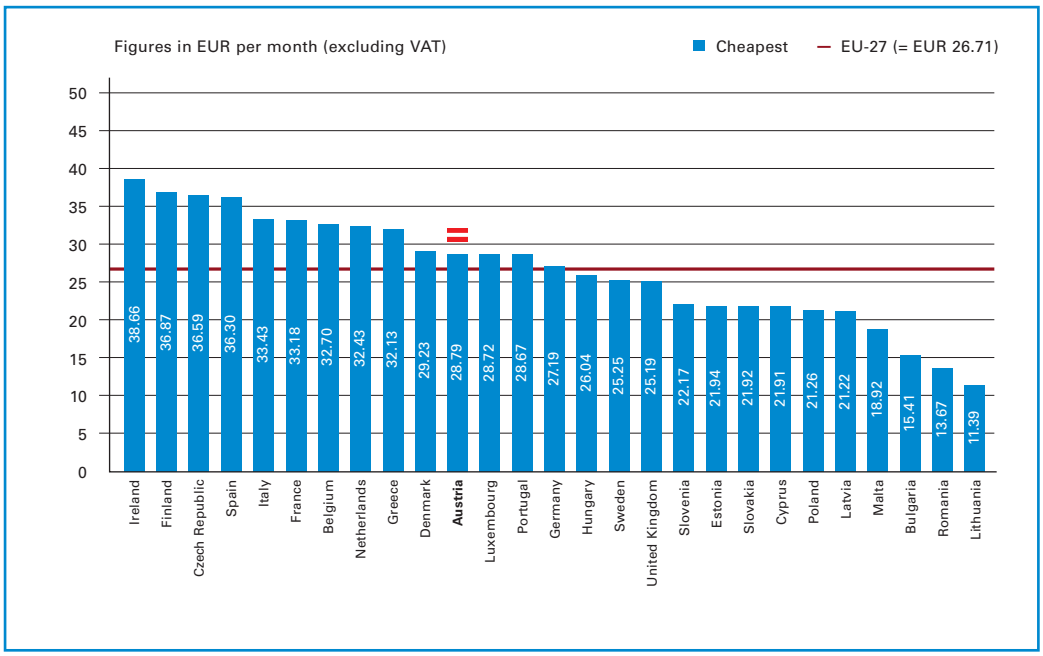
5.2.2.2.3.2 Rates and charges

In general, this comparison is based only on the rates of the incumbent operator in each country. As this analysis does not include the rates offered by alternative operators, it creates distortions which become even greater in cases where the incumbent commands a smaller market share and that of its competitors (which, as experience has shown, are often far less expensive) becomes larger. Such rate comparisons are subject to an additional limitation due to the various forms of price differentiation among incumbent operators.

Austrian residential and business rates in the middle range in the EU

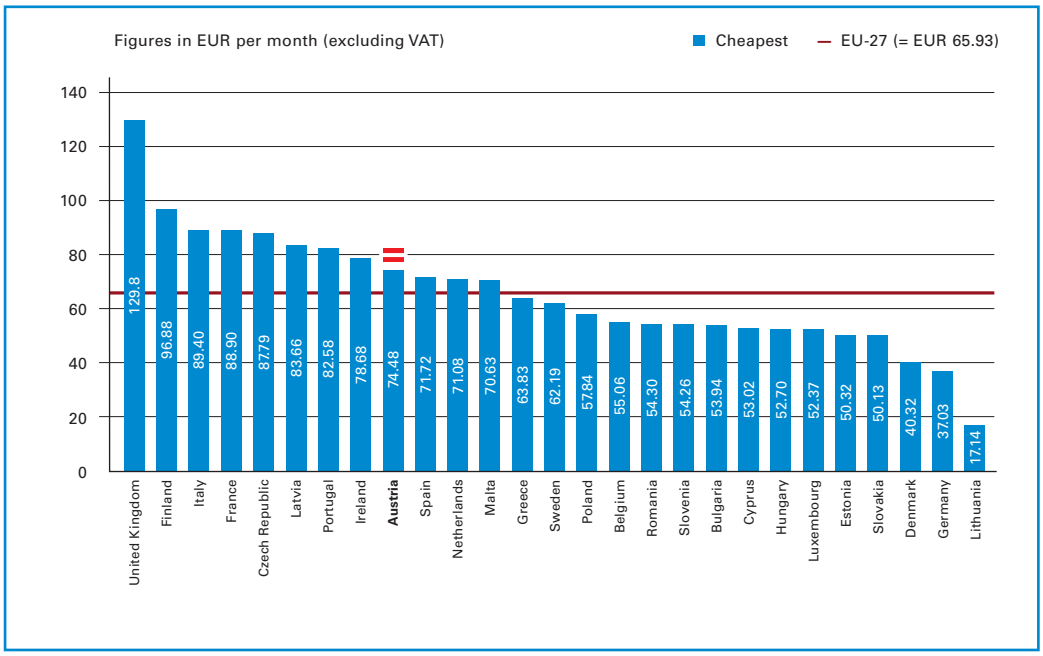
Figures 32 and 33 show baskets for residential and business customers. These calculations include the monthly base fee, the connection setup charge, domestic calls over various distances, international calls as well as calls to mobile networks. The underlying demand behavior and weighting factors are designed to reflect a "standard European residential/ business user." Telekom Austria's lowest rates are just above the EU average for both residential and business customers.

Figure 32: Average monthly expenditure – OECD residential basket (September 2009)



Source: 15th Implementation Report of the European Commission

Figure 33: Average monthly expenditure – OECD business basket (September 2009)



Source: 15th Implementation Report of the European Commission

5.2.2.3 Wholesale fixed-link markets

Wholesale markets highly important for competition on retail markets

In order to offer products on the retail markets, operators also rely on wholesale services provided by other operators. Although these markets are not (or only hardly) perceived by the consumer, they represent an important requirement for functioning competition. On the one hand, the interconnection of networks (which brings about transactions at the wholesale level) serves to enable the customers of one network operator to reach the customers of other network operators. Otherwise, small networks with only few customers would be placed at a disadvantage, and "any to any" connectivity would not be ensured. On the other hand, network operators can purchase wholesale services from Telekom Austria or other operators, which serves to lower their infrastructure investment costs and thus substantially reduces the barriers to market entry.

Therefore, there is a close link between the wholesale and retail markets, as services purchased on the wholesale market are ultimately included in retail products.

RTR has analyzed the following wholesale markets in the field of fixed-link voice telephony:

- The market for call origination on the public telephone network provided at a fixed location (origination);
- The (operator-specific) markets for call termination on individual public telephone networks provided at a fixed location (termination);
- The market for transit services on the fixed-link public telephone network (transit).

5.2.2.3.1 Origination

The service of origination refers to the transmission of voice and data traffic from the subscriber to the first interconnectable exchange in the source network. The first interconnectable exchange refers to the exchange where at least one network operator is interconnected with the given source network and at which traffic can be handed over.

Depending on the infrastructure they own, operators can either provide origination services themselves or purchase those services on the wholesale market. If an operator has customers connected directly to its network, the operator itself provides the origination service (i.e., as a self-provided service) and does not generate revenues at the wholesale level. This is the case in a vast majority of calls.

Origination as an essential wholesale service for competition at the retail level

Carrier network operators which do not have customers connected directly to their networks purchase origination services within the framework of carrier (pre-)selection. Due to its position of significant market power on the access markets, Telekom Austria is obligated to offer this service. This arrangement substantially lowers the barriers to entry for carrier markets at the retail level.

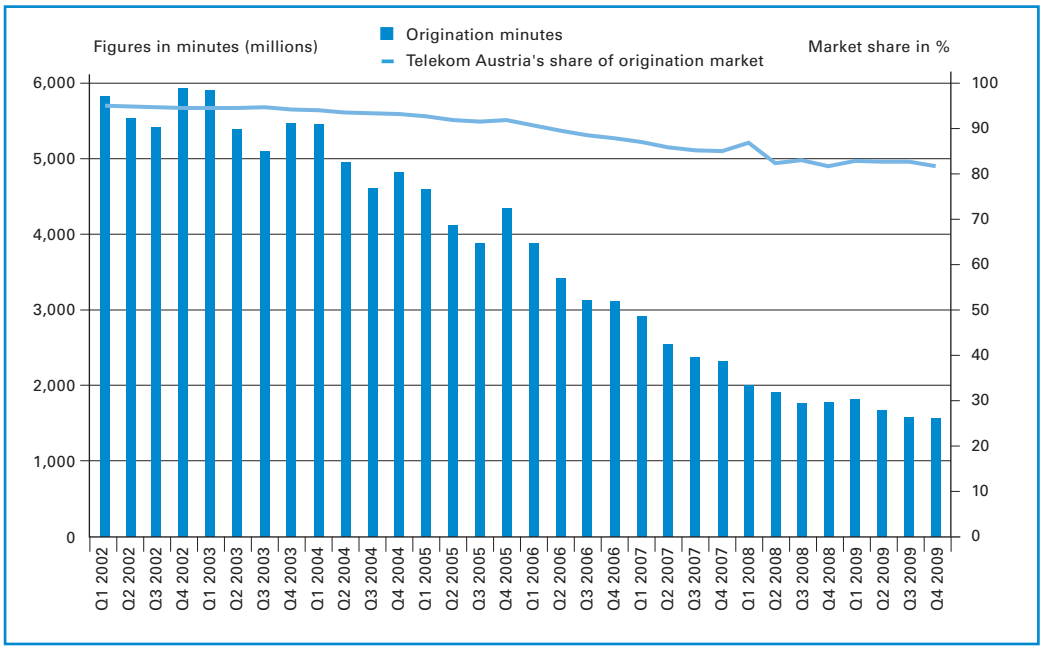
Finally, the origination market also includes origination services for calls to target network-priced service numbers. This is the case where retail customers make calls to toll-free numbers, numbers with regulated maximum prices, and value-added service numbers. The access network operator collects the corresponding charge for providing the service of origination.

Minutes declining, but Telekom Austria's market share remains high

In parallel with the development on the retail markets, the overall number of origination minutes has declined steadily and significantly since the year 2003. Two of the main reasons for this development are the sharp decline in the significance of narrowband dial-up Internet services and fixed-link/mobile substitution in voice services, especially for domestic calls in the residential segment. As dial-up traffic hardly played a role toward the end of the observation period due to the rapid growth of broadband access (see Section 5.2.4), the decline in the number of minutes has also leveled off to a certain extent since mid-2008 (cf. Figure 34).

Telekom Austria still commands a very large share of the origination market (cf. Figure 34), and the incumbent's market share has only decreased slightly – but to a greater extent than in the case of retail access – in the years since the market was liberalized in Austria. The sharper decrease in market share on the origination market can be attributed to the development of dial-up Internet access (see above), as narrowband Internet connections used to generate high traffic volumes for Telekom Austria in particular. Given that this effect has become far less significant in the last two years, Telekom Austria's market share has largely remained stable.

Figure 34: Development of overall origination minutes and Telekom Austria's market share



Source: RTR

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

As mentioned above, Telekom Austria is subject to price regulations on the origination market. Table 21 shows Telekom Austria's regulated origination charges during peak and off-peak times.[8] On all wholesale markets, peak times are from Monday to Friday (business days) from 8:00 am to 6:00 pm, while all other times are considered to be off-peak.

Table 21: Telekom Austria's origination charges as of December 31, 2009 in euro cents (excluding VAT)

Local origination	Peak	Off-peak
Telekom Austria to carrier network	0.82	0.48

Source: RTR

5.2.2.3.2 Termination

Termination is a wholesale service provided by every subscriber network operator for the purpose of transporting incoming traffic from the last interconnectable exchange to the subscribers connected to the operator's network.

Termination monopoly creates operator-specific market power

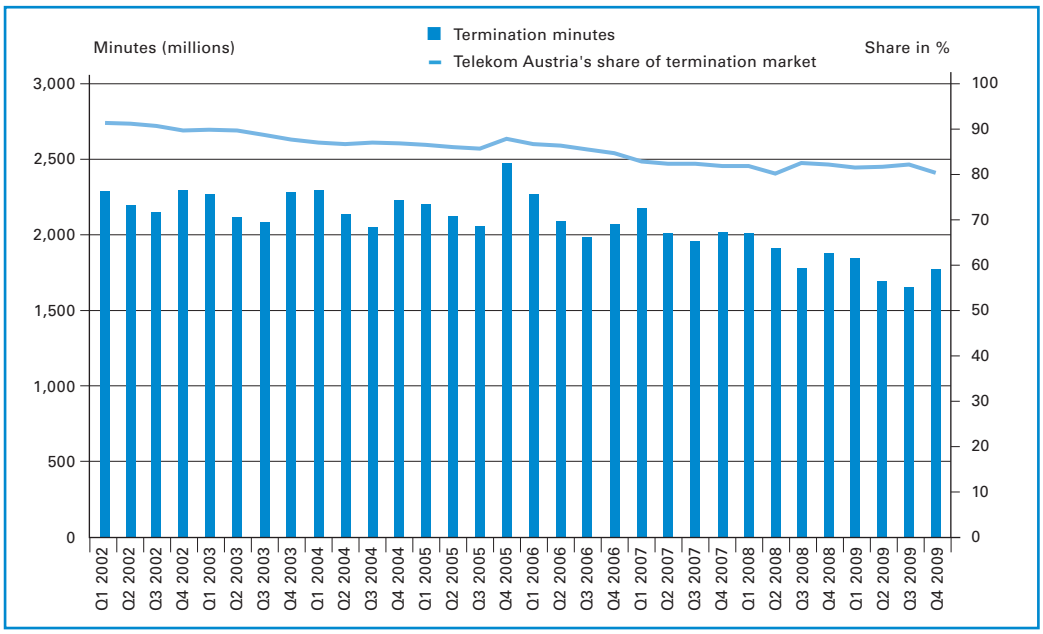
As termination services can only be rendered by the provider network to which the subscriber is connected, termination markets are delineated for each individual operator. Each subscriber network operator thus has its own termination market, in which that operator has a market share of 100%, which qualifies as significant market power in accordance with Art. 35 TKG 2003.

Figure 35 depicts the development of the overall number of termination minutes on the Austrian market. In the fixed-link networks, a total of approximately 7 billion minutes were terminated for other operators in 2009.[9] Both traffic minutes and the corresponding termination revenues (cf. Section 5.2.2.3.4) have declined in recent years. In contrast to the origination market, however, the overall number of termination minutes has remained relatively stable over time. This is due to the fact that the decline in dial-up services has not affected this area, and that the increasing number of calls from mobile networks to fixed-link networks has partly compensated for the declining number of calls within the fixed-link network.

[8] In a bilateral interconnection procedure conducted between Hutchison and Telekom Austria, the TKK issued an official decision (Z 9/07-100) on August 6, 2009 setting local origination charges at 1.12 euro cents (peak) and 0.50 euro cents (off-peak). These charges were only ordered for the relationship between the two parties to the procedure (see Section 4.2.2).

[9] In contrast to the discussion of origination above (see Figure 34), self-provided services are not included in Figure 35.

Figure 35: Development of overall termination minutes and Telekom Austria's share



Source: RTR

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

Termination in Telekom Austria's network remains a crucial service, as Telekom Austria has the largest number of directly connected fixed-link customers by far and thus terminates several times more call minutes than the other operators. Telekom Austria's share of overall fixed-link termination minutes has generally remained stable at 80% to 83% in recent years (cf. Figure 35).[10]

In the absence of regulation, Telekom Austria would create different competition problems than smaller network operators due to its large number of connected subscribers, its size and its power on other markets. These problems require regulatory remedies such as obligations to provide a reference interconnection offer (RIO), to maintain accounting separation, to ensure non-discrimination and to charge cost-oriented prices based on FL-RAIC.

Thanks to its large number of connected subscribers, UPC, which operates in certain regions of Austria, has the largest number of termination minutes among the alternative operators, followed by Tele2. The other fixed-link network operators handle substantially fewer termination minutes. Alternative network operators which provide termination services and collect a fee in return are required to comply only with regulated maximum limits for termination charges in order to address the competition problem identified in their case (i.e., excessively high pricing).

[10] This cannot be considered a "market share" because termination markets are specific to each network operator.

Table 22 provides an overview of regulated (local) termination charges.[11]

Table 22: Termination charges of Telekom Austria and ANOs as of December 31, 2009 in euro cents (excluding VAT)

Termination	Peak	Off-peak
Telekom Austria	0.82	0.48
ANOs	1.28	0.71

Source: RTR

5.2.2.3.3 Transit

Transit serves the purpose of covering distances and interconnecting networks

Transit services refer to carrying traffic between two exchanges which are interconnectable with different networks or between two zones around interconnectable exchanges. Therefore, these services are provided by communications network operators in order to cover certain line sections and cannot be regarded as origination or termination as described above.

All network operators which transport traffic from one exchange to another provide services on the transit market. This service may be provided within as well as beyond the boundaries of the operator's own network. The operators which offer services on this market thus include subscriber network operators and "pure" transit network operators (as well as carrier network operators) which receive traffic from other networks and forward it to still other networks. Whereas subscriber network operators provide transit services predominantly in the form of bundled products which include origination and termination, transit network operators ensure that other networks can be reached even if they are not directly interconnected. Carrier network operators as well as all other companies which are directly interconnected offer transit services as part of direct interconnection via joining links (i.e., lines connecting networks). When traffic flows via a joining link, a transit service is provided from one network to another.

Transit market competitive

As several companies (in addition to Telekom Austria) offer services on the transit market and compete heavily with one another, effective competition prevails on this market. Therefore, none of the companies are subject to sector-specific ex ante regulation.

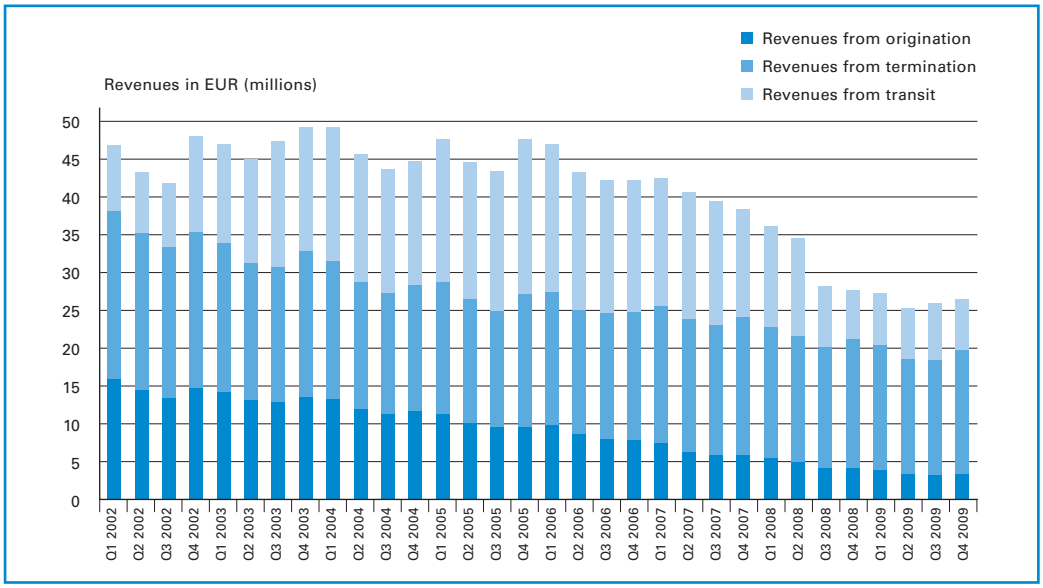
[11] In a bilateral interconnection procedure conducted between Hutchison and Telekom Austria, the TKK issued an official decision (Z 9/07-100) on August 6, 2009 setting local termination charges at 1.12 euro cents (peak) and 0.50 euro cents (off-peak). These charges were only ordered for the relationship between the two parties to the procedure (see Section 4.2.2).

5.2.2.3.4 Development of revenues on wholesale markets

Revenues now declining only slowly

After significant declines in the years 2005 to 2008, revenues on the wholesale markets largely stabilized in 2009. Revenues from origination (which mainly arise from origination for carrier network operators) have continued to decrease, but at a relatively low level, while termination and transit revenues have remained approximately the same (apart from seasonal fluctuations). As for termination services, the decline in the termination of calls within the fixed-link network was largely offset by increases in termination in mobile networks in the past. The declining transit revenues can be attributed to an increase in direct interconnection between operators and to the integration of eTel into Telekom Austria in 2008. However, this consolidation process on the transit market appears to have come to an end.

Figure 36: Development of revenues on wholesale fixed-link markets



Source: RTR

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

5.2.3 Mobile communications

5.2.3.1 Market participants

Four MNOs and one MVNO operating on the Austrian market

During the reporting period, there were four economically independent mobile network operators (MNOs) operating on the Austrian market. New MNOs can only enter the market if they can obtain frequency usage rights through assignments or transfers. Austria's fully integrated mobile network operators are mobilkom austria, T-Mobile, Orange and Hutchison.

Mobile virtual network operators (MVNOs) are communications network operators which do not have their own radio communications networks (or the corresponding frequency usage rights), but they do operate essential network elements in the core network (home location registers [HLRs], mobile switching centers [MSCs], etc.), possess the corresponding addressing elements (e.g., a mobile network code), and administer SIM cards themselves. Operators in this category are active on all wholesale and retail markets except for the Austrian wholesale market for international roaming. According to the definition above, the only MVNO currently operating in Austria is Mundio (formerly Barablu Mobile Austria).

The primary function of airtime resellers is the separate marketing of mobile communications services in their own name and for their own account. However, they are not in any way involved in the production process underlying mobile services. Operators in this category only provide services at the retail level (customer support, billing and acquisition). In 2009, there were only very few independently owned airtime resellers in Austria.

Table 23 provides an overview of the years in which each of the operators mentioned above entered the market and the frequencies assigned to each MNO.

Table 23: Austria's MNOs/MVNO: Frequency assignments and years of market entry

Company	Type	Market entry	GSM 900	GSM 1800	UMTS
mobilkom austria	MNO	1994	2 x 17.0	2 x 15.0	2 x 14.8
T-Mobile	MNO	1996	2 x 12.8	2 x 25.4	2 x 15.0
Orange	MNO	1998	2 x 4.0	2 x 33.0	2 x 14.8
Hutchison	MNO	2003			2 x 14.8
Mundio	MVNO	2008			

Source: RTR

5.2.3.2 Market development

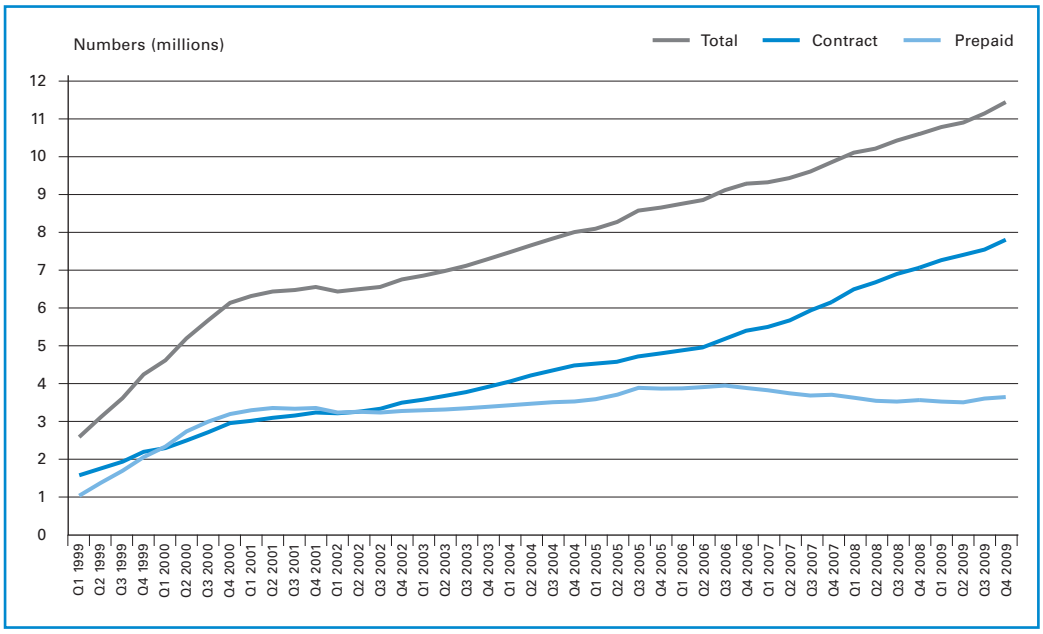
5.2.3.2.1 Development of number of subscribers and penetration rates

The number of activated mobile subscriber numbers has continued to rise steadily, coming to more than 11.4 million subscribers at the end of 2009 (cf. Figure 37). This increase can mainly be attributed to rapid growth in the number of contract customers (who account for more than two thirds of activated subscriber numbers) and in the use of data products.

Mobile penetration at 137%

Austria's mobile penetration rate, which is calculated as the number of activated subscriber numbers divided by population, had reached 137% by the end of 2009 (up ten percentage points compared to one year earlier). According to the 15th Implementation Report of the European Commission, the average penetration rate in the EU came to 121.9% in October 2009. At that time, Austria's penetration rate (133.5%) was markedly higher than the EU average.

Figure 37: Development of activated mobile subscriber numbers



Source: RTR

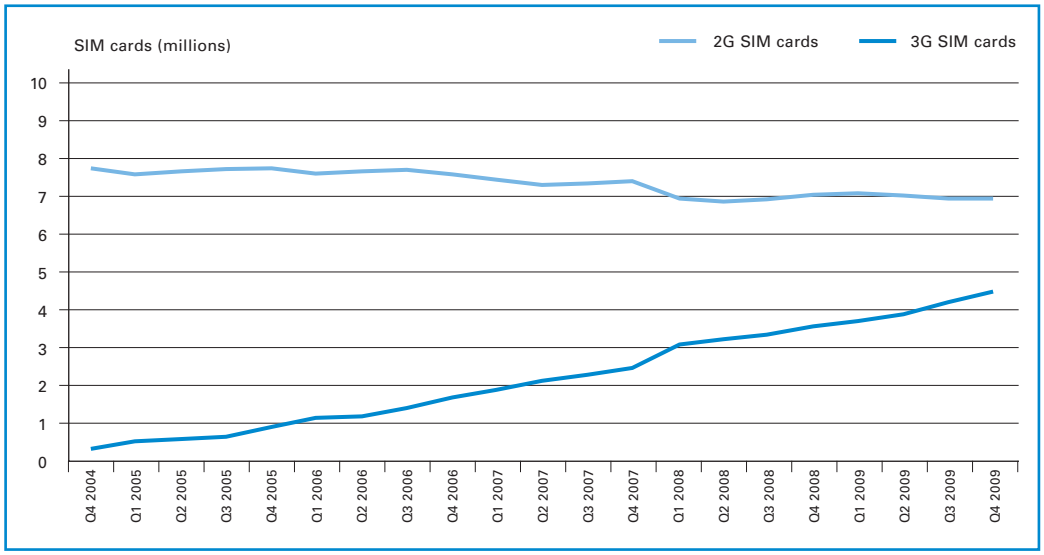
Data interpolated from Q4 2003 to Q3 2004.
Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

5.2.3.2.2 Development in number of 2G vs. 3G-compatible SIM cards

40% of all SIM cards are 3G-compatible

Figure 38 shows the number of activated SIM cards in Austria, broken down into 2G (GSM) and 3G (UMTS) SIM cards. As the figure shows, the number of 3G-compatible SIM cards has continued to rise steadily, while the number of 2G-compatible SIM cards has remained fairly stable around seven million. By the end of 2009, nearly 40% of all SIM cards were already 3G-compatible. This development can be attributed to the fact that most mobile network operators are now only issuing 3G-compatible SIM cards, even in cases where the subscriber only uses GSM services, and that the number of mobile data cards and data modems has continued to grow rapidly. The number of SIM cards which only support 2G applications is a point of interest because efforts are currently underway to refarm GSM frequencies in the individual member states of the European Union, including Austria. The amendment to the GSM Directive required for this purpose was already introduced in the fall of 2009. The refarming of GSM frequencies means that it will also be possible to use them for 3G technologies in the future. However, the stable and high level of 2G-only SIM cards suggests that this process will require a fairly long period of time.

Figure 38: Development in number of 2G vs. 3G-compatible SIM cards



Source: RTR

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

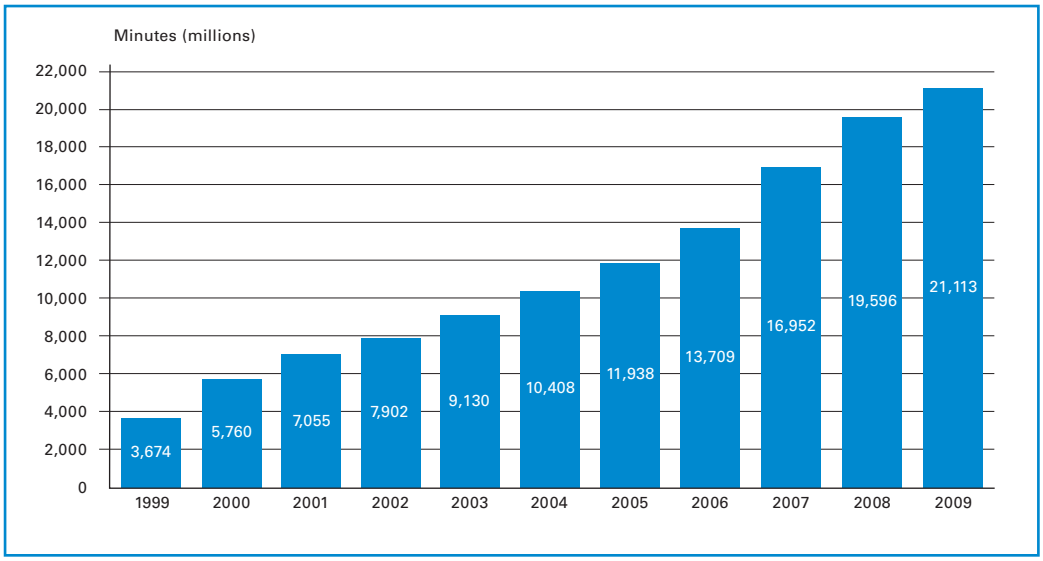
5.2.3.2.3 Development of call minutes and text messages

Rapid growth in traffic volumes continues

In the Austrian mobile communications cluster, call minutes and the number of text messages (SMS) again saw substantial growth in 2009, although the growth rate was markedly lower than in previous years. Figure 39 shows the number of technical call minutes on the retail mobile communications market, which amounted to approximately 21 billion in 2009. Call minutes showed consistently high growth rates of about 15% per year from 2003 to 2006, followed by a high of approximately 24% in 2007. In the year 2008 and during the economic crisis of 2009, growth in the number of call minutes slackened to 15.6% and 7.7%, respectively.

Growth in the number of text messages sent has also continued to slow, but this figure was still approximately 21% in 2009. As in the case of call minutes, the growth rate for text messages reached a peak of 60% in 2007 (when various flat rate plans were introduced). As shown in Figure 40, customers of Austrian mobile network operators sent approximately 5.7 billion text messages in 2009.

Figure 39: Call minutes on the retail mobile communications market (technical measurement*)

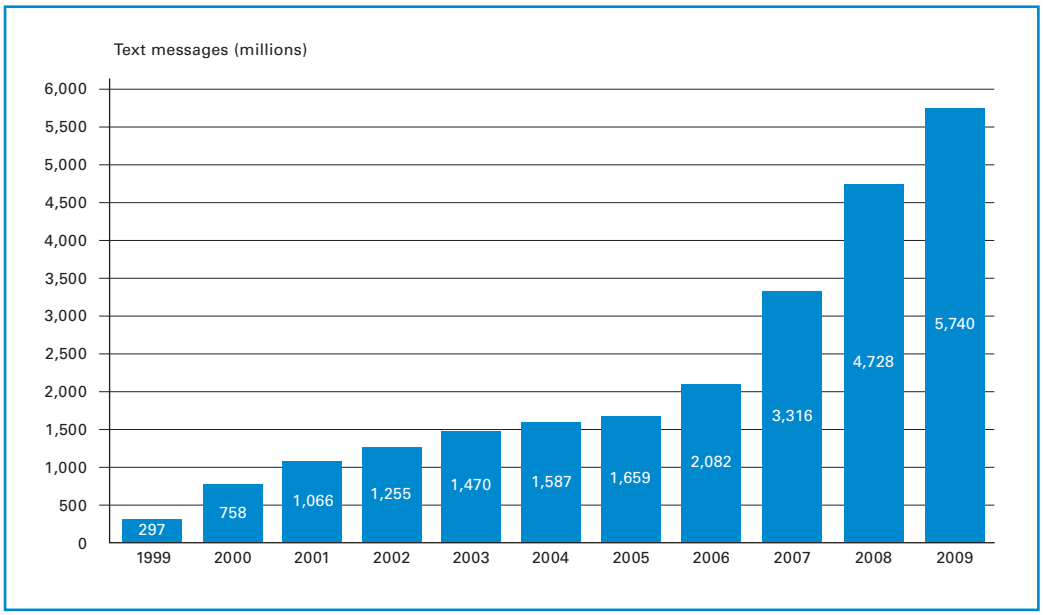


Source: RTR

* This figure refers to the actual time retail customers spent talking on their mobile phones (without accounting for billing increments). In contrast, billed call minutes refer to the number of call minutes charged to retail customers (using the applicable billing increments).

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

Figure 40: Number of text messages on the retail mobile market (technical measurement*)



Source: RTR

* This figure refers to the actual number of text messages sent by retail customers. In contrast, billed text messages refer to the number of text messages charged to retail customers.

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

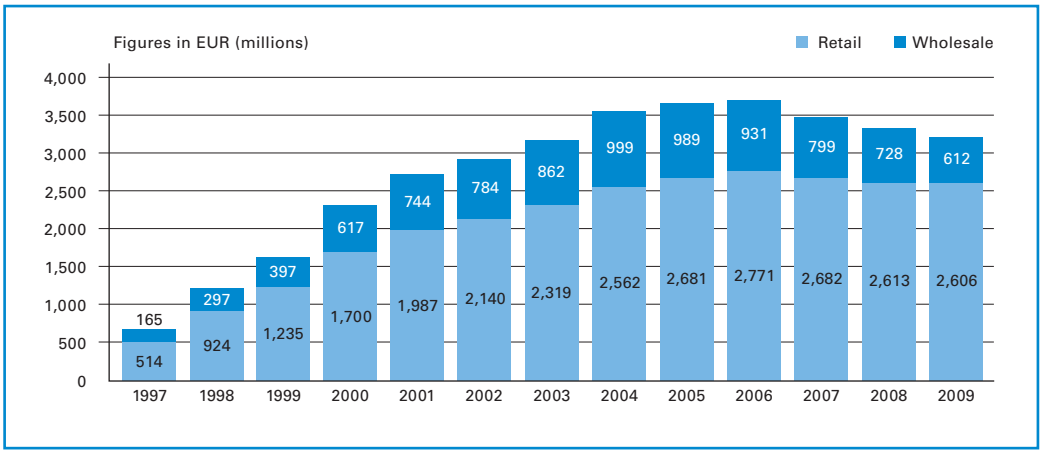
5.2.3.2.4 Development of revenues

Despite increases in the number of subscribers and in traffic volumes, overall revenues in the mobile communications sector once again dropped slightly in 2009 (by approximately EUR 123 million; cf. Figure 41), although retail revenues remained roughly the same due to continued growth in revenues from data and value-added data services (including SMS and MMS).

Overall mobile revenues continue to decrease

Therefore, the decline in overall revenues can mainly be attributed to the wholesale level, where revenues fell from EUR 728 million to EUR 612 million (-16%) between 2008 and 2009. Wholesale revenues declined due to the gradual reduction of termination charges (cf. Section 4.2.1.2) as well as the further reduction of charges for international roaming in accordance with the EU Roaming Regulation, which calls for a maximum charge for international roaming (voice, text messaging and data services) within the EU/EEA at the wholesale level (cf. Section 4.2.10). On the other hand, as the regulation has affected revenues at the wholesale level, decreasing expenses and cost reductions have also been observed; given equal inbound and outbound volumes, this effect would even yield a balance of zero. For this reason, the decline in revenues has only had a partial effect on profits.

Figure 41: Development of revenues in mobile communications



Source: RTR

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

The calculation of revenues in Figure 41 is based on the following income types:

Retail revenues:

- Connection charges for voice services;
- Connection charges for text messages (SMS);
- Connection charges for data services;
- Basic monthly fees;
- Activation charges.

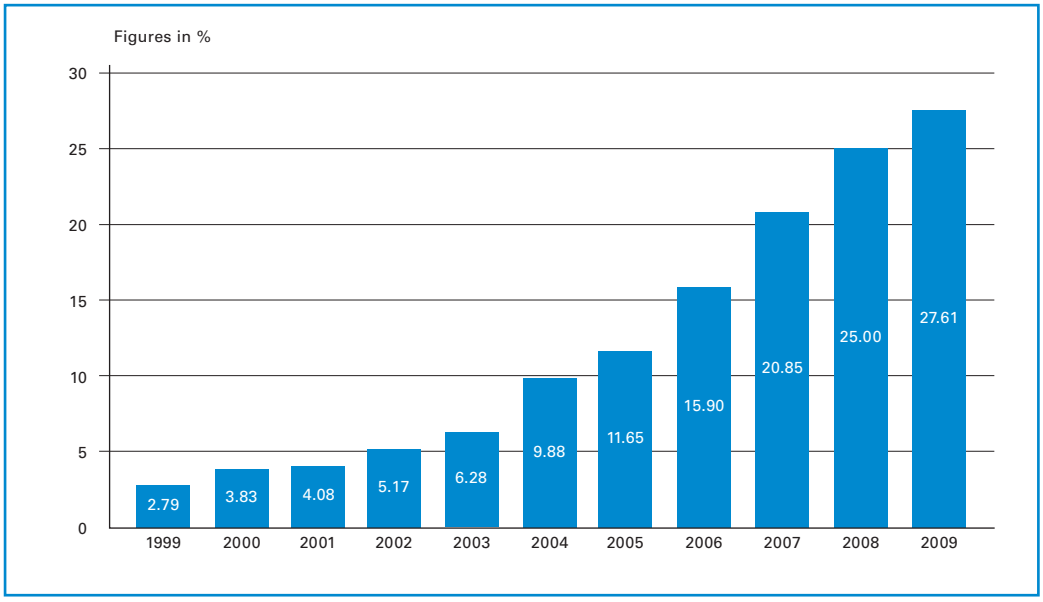
Wholesale revenues:

- Revenues from voice termination;
- Revenues from SMS termination;
- Revenues from inbound international roaming (subscribers from abroad using their telephones in Austria).

Mobile data services continue to gain importance

As in the previous years, revenues from data services and value-added data services (including SMS and MMS) once again rose sharply in 2009. At EUR 719 million, these revenues already account for just over one quarter (27.61%) of overall retail revenues on the mobile communications market. This can mainly be attributed to rapid growth in the number of mobile broadband users. At the end of 2009, over 40% of all broadband connections in Austria were based on mobile technology (cf. Section 5.2.4).

Figure 42: Share of revenues from mobile data and value-added data services (including SMS and MMS) in overall retail mobile communications revenues



Source: RTR

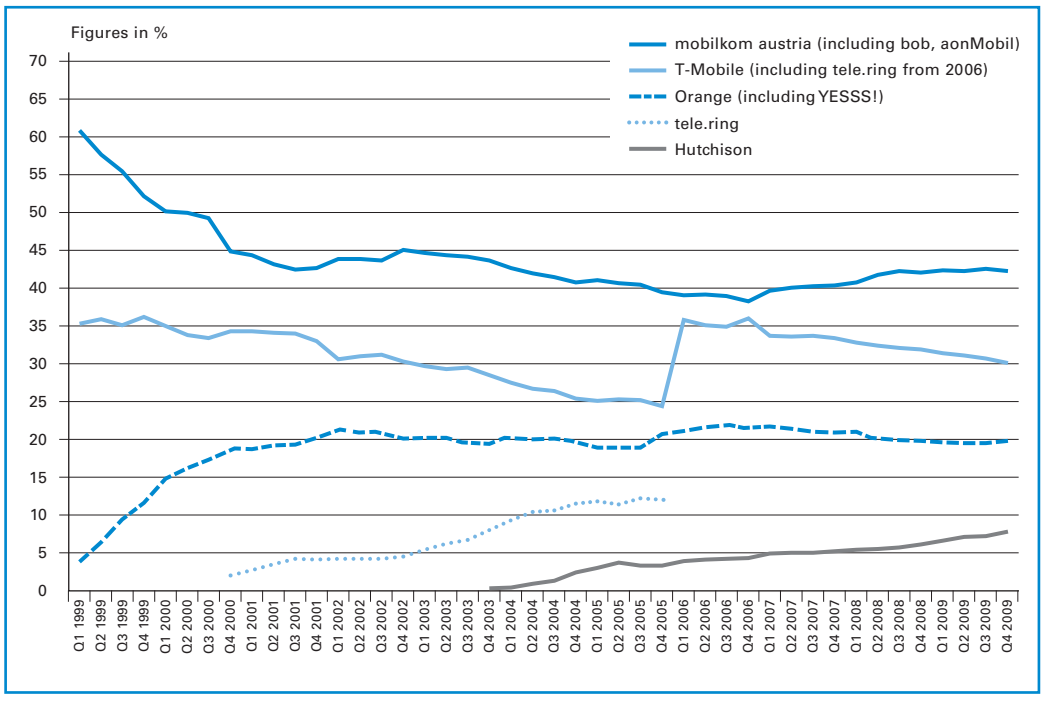
Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

5.2.3.3 Market shares and concentration

Figure 43 below shows the market shares of mobile network operators in terms of subscribers. The market shares of airtime resellers owned by Austria's mobile network operators are included in the data for each host network operator, while independently owned service providers and Austria's MVNO are not included in the chart.

The development in the chart shows that the market shares of the two largest providers nearly converged in the year 2006 due to T-Mobile's takeover of tele.ring. Since the end of 2006, however, the opposite trend has been observed: While mobilkom austria's market share (including bob and aonMobil) has risen slowly but steadily, amounting to 42.3% at the end of 2009, T-Mobile's market share (including tele.ring) has been declining since mid-2006 and came to 30.1% at the end of 2009. The market share of the smallest MNO, Hutchison, has continued to show steady growth, coming to 7.8% at the end of 2009. The market share of Orange (including YESSS!) had dropped to 19.8% by the end of the year under review.

Figure 43: Development of mobile market shares (basis: number of subscribers)



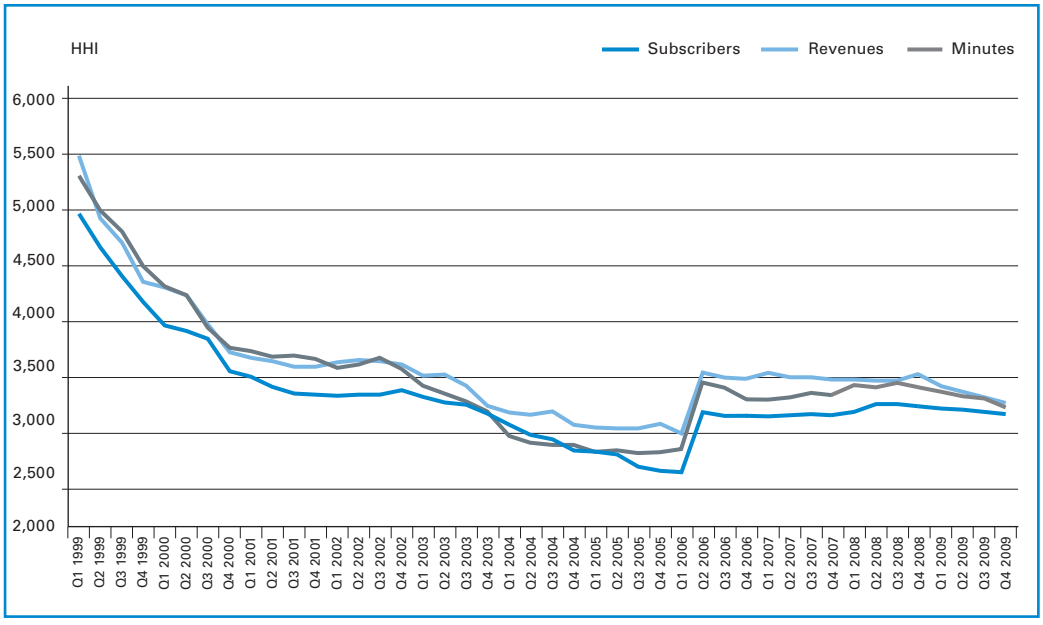
Source: Information compiled from operator web sites for RTR's Telecom Monitor.

One of the most common measures of concentration is the Hirschman-Herfindahl Index (HHI), which is calculated as the sum of squares of specific parameter values (in this case market share percentages). The value of this index is thus between 0 and 10,000. A value close to zero indicates low concentration and appears in cases where the market has a large number of participants of roughly the same size. The highest possible value of the index (10,000) indicates that there is a monopolist provider and thus 100% concentration in the parameter value.

HHI slowly decreasing

Due to the market entries of Orange (formerly One) and tele.ring, the Hirschman-Herfindahl Index for the mobile communications market dropped steadily until 2001 (cf. Figure 44). The index began to decline again after the entry of another mobile operator, Hutchison, in 2003. Not surprisingly, T-Mobile's acquisition of tele.ring in 2006 led to a sharp increase in the HHI for this market. However, the takeover of eTel by the Telekom Austria Group, which also includes mobilkom austria, in the first quarter of 2007 hardly showed any effect on the HHI. For all three categories (retail revenues, subscribers and minutes), the HHI has once again been decreasing since the end of 2008. However, the index has shown the most rapid decline with regard to retail revenues, which still showed the highest value (3,274) at the end of 2009. With a value of 3,171, the HHI based on the number of subscribers remained the lowest of the three indices.

Figure 44: Development of the HHI on the retail market for mobile communications



Source: RTR

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

5.2.3.4 Development of prices and rates for mobile telecommunications

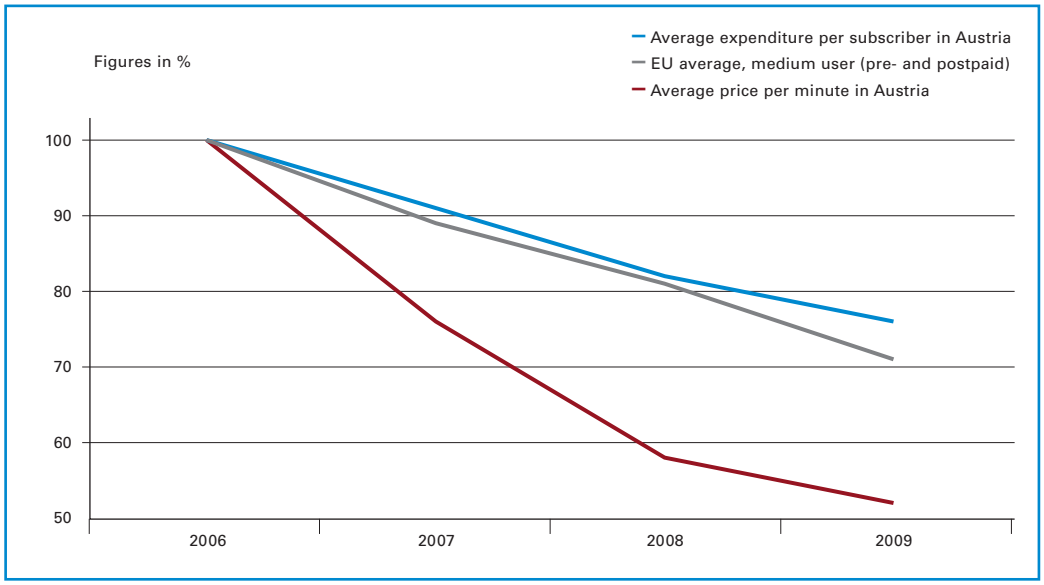
Prices declining

Figure 45 shows the development of the average expenditure per subscriber[12] and the average price per minute[13] in Austria since the year 2006. Likewise, the chart also shows the average development of rates throughout the EU for an average user based on the OECD baskets, which include voice services as well as SMS and MMS, from the 15th Implementation Report of the European Commission. Although these three indicators, which are meant to depict the development of rate plans and prices for mobile telecommunications services over the last three years, are not directly comparable, they all show that prices in the mobile communications segment have declined considerably both in Austria and on average throughout the EU since 2006.

As the chart shows, the most substantial decreases have been observed in average prices per minute; at the end of 2009, average prices came to only 52% of their 2006 level. The average expenditure per subscriber, which includes voice services as well as SMS and data services, came to approximately three quarters of its level from 2006.

The average rates at the EU level have undergone a similar development, decreasing by some 30% since 2006.

Figure 45: Price development



Source: RTR, 15th Implementation Report of the European Commission

[12] Calculated by dividing the total revenues on the retail mobile communications market by the number of subscribers.

[13] Calculated by dividing call traffic-based revenues (including base fees and activation charges) by the number of technical call minutes.

Development of rates

Flat rate plans include multiple services

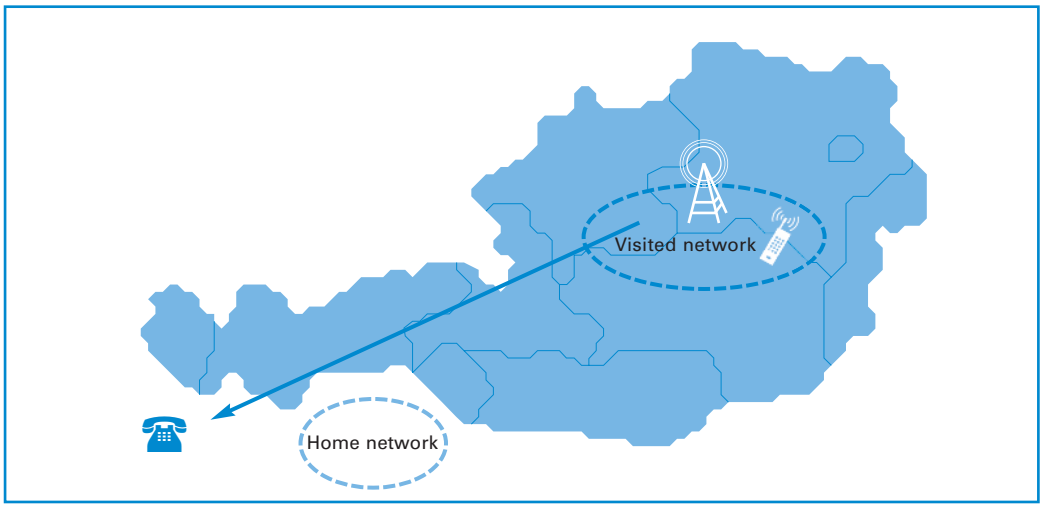
This trend toward an increasing number of flat rate plans also continued in the year 2009. Flat rate plans are characterized by the fact that they include services for a single price, regardless of the actual frequency and duration of use. These plans are increasingly being offered for the use of multiple services, that is, with a single charge including not only call minutes but also text messages and data volumes.

5.2.3.5 International roaming

In connection with mobile communications, the term "roaming" refers to the use of a mobile telephone outside the coverage area of one's own network operator (the home network), in which case the mobile phone uses the coverage service of another network (the visited network). In international roaming, the home and visited networks are located in different countries, and the coverage areas of the two networks do not overlap (or only overlap along shared national borders). Figure 46 below shows a call from a subscriber roaming in Austria to a number in his/her home network.

The subscriber does not pay the visited network operator directly for the service of roaming; instead, the amount is billed through the home network operator. The visited network charges the home network operator a fee known as an IOT (inter-operator tariff) at the wholesale level, and the home network charges the visitor a retail fee.

Figure 46: Call from a subscriber roaming in Austria to a number in his/her home country



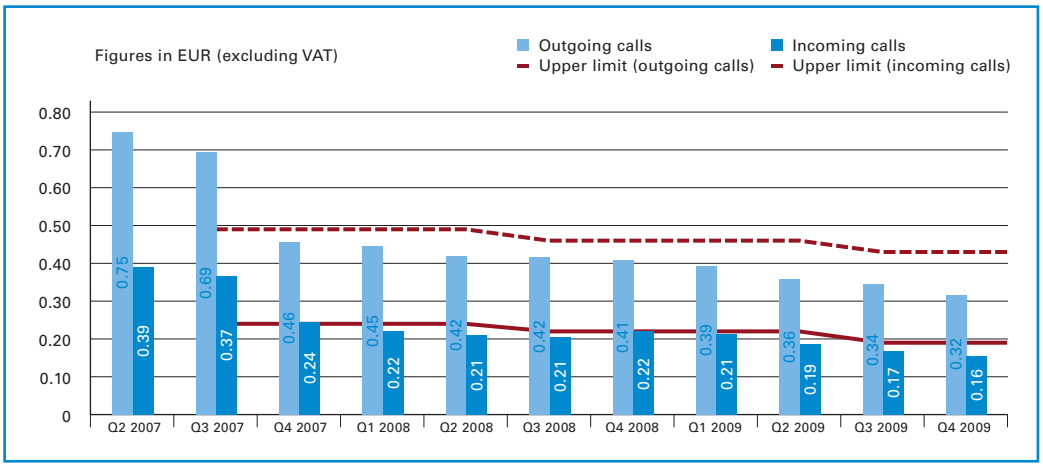
Source: RTR

Since the implementation of the Regulation on roaming in public mobile telephone networks within the Community on June 30, 2007, the European Commission has regulated voice roaming charges at the wholesale (IOT) and retail level (cf. Section 4.2.10). On June 18, 2009, the expanded Roaming Regulation went into effect, which (among other things) stipulates maximum charges for SMS roaming at the wholesale and retail level as well as a maximum charge for data roaming at the wholesale level within the EU/EEA. Under the new regulation, national regulatory authorities are required to monitor compliance with the new rules, which is why a semi-annual data survey is carried out. The results of this survey are presented in the charts below.

In this context, it is important to note that the retail Eurotariff required in the Roaming Regulation was only compulsory in its entirety from the fourth quarter of 2007 onward. The figures show average rates per billed minute (excluding VAT).

Figure 47 shows the average roaming rates at the retail level for incoming and outgoing calls within the EU/EEA as well as the maximum prices defined in the Roaming Regulation. Since the second quarter of 2007, these rates have dropped from EUR 0.75 to EUR 0.32 per minute for outgoing calls and from EUR 0.39 to EUR 0.16 per minute for incoming calls. Since July 1, 2009, the price limits on these calls have been EUR 0.43 for outgoing calls and EUR 0.19 for incoming calls (excluding VAT).

Figure 47: Average retail roaming rates for calls within the EU/EEA*



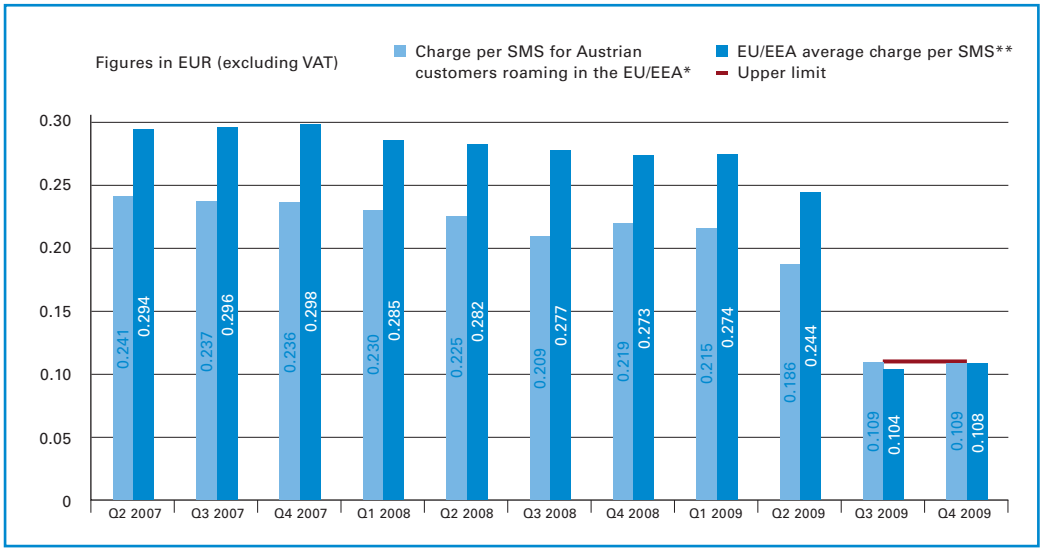
Source: RTR

* Average rate paid by Austrian customers for incoming/outgoing calls while roaming within the EU/EEA.

The expansion of the Roaming Regulation in the summer of 2009 also defines price regulations for SMS roaming at the wholesale and retail level. Figure 48 shows the average prices to be paid by an Austrian consumer for sending a text message while roaming within the EU/EEA, as well as the average prices paid by EU/EEA consumers for roaming text messages within the EU/EEA and the maximum charge of EUR 0.11 stipulated by the Roaming Regulation.

Figure 48: Average retail text message roaming charges within the EU/EEA

SMS roaming charges dropped sharply due to regulation



Source: RTR, ERG/BEREC International Roaming Benchmark Data Reports

* Average price paid by Austrian customers for sending text messages while roaming within the EU/EEA.
** Average price paid by EU/EEA customers for sending text messages while roaming within the EU/EEA.

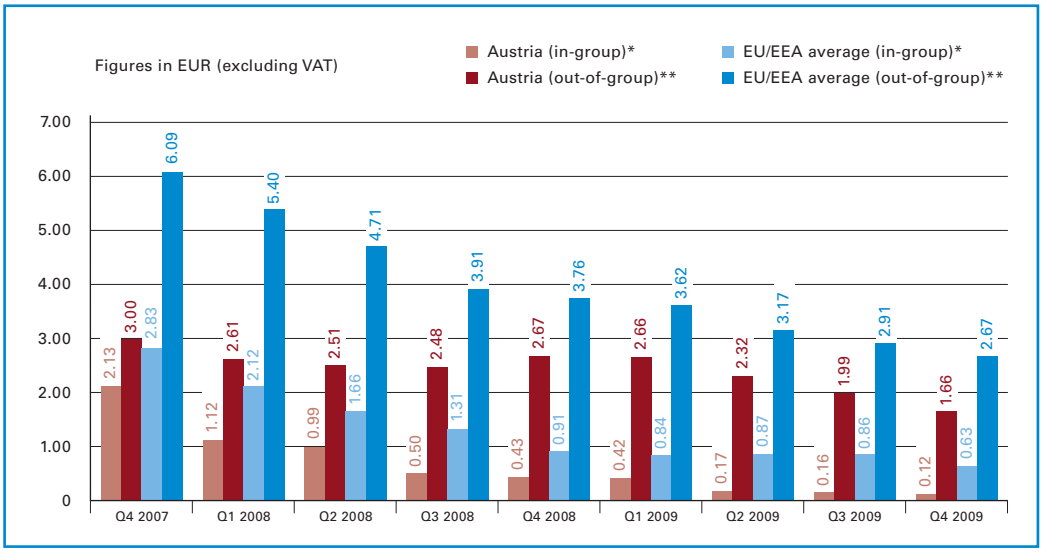
Data roaming rates continue to decrease

Figure 49 shows the average prices per megabyte for data roaming within the EU/EEA, broken down into in-group and out-of-group rates for Austria and the corresponding EU/EEA averages. Retail data roaming is currently not covered by the regulation, but maximum charges have been defined at the wholesale level; like the charges for voice services, these charges are decreased on a yearly basis. As the chart clearly shows, there are marked price differences depending on the networks in which customers roam. For example, customers of Austrian mobile network operators pay more than ten times more (EUR 1.66 per megabyte) when they roam on a network which does not belong to the same corporate group as their home network operator. The price per megabyte for in-group roaming only amounts to approximately EUR 0.12 per megabyte.

The chart also shows that the average prices for in-group and out-of-group data roaming have declined considerably since the end of 2007. In the fourth quarter of 2009, customers of Austrian mobile network operators paid nearly 95% less for in-group roaming than they did in the fourth quarter of 2007.

The EU/EEA average price for data roaming (per megabyte) within the EU/EEA has also dropped markedly since the fourth quarter of 2007, although the EU/EEA average is substantially higher than the prices paid by Austrian consumers for both out-of-group and in-group traffic.

Figure 49: Average retail data roaming rates within the EU/EEA (per megabyte)



Source: RTR, ERG/BEREC International Roaming Benchmark Data Reports

* In-group: The visited network operator belongs to the same corporate group (majority shareholder) as the home network operator.

** Out-of-group: The visited network operator does not belong to the same corporate group (majority shareholder) as the home network operator.

Outlook

Until the Roaming Regulation expires on June 30, 2012, a data survey will be conducted on a semi-annual basis in all EU member states. Those data surveys will be carried out by the national regulatory authorities and coordinated by the Body of European Regulators for Electronic Communications (BEREC), the successor to the ERG. Also at semi-annual intervals, BEREC will compile and publish a report on the development of prices on its web site (http://www.erg.eu.int) using the results of those data surveys as a basis.

5.2.4 Broadband

5.2.4.1 Introduction

By the end of the year 2004, approximately one quarter of Austrian households already had broadband Internet access.[14] In the last five years, the number of broadband connections in Austria has continued to grow, even tripling between 2004 and 2009. In addition, the available bandwidths have continued to rise, and a number of substantial changes have taken place in this segment. Mobile broadband access[15] has enjoyed increasing popularity and has advanced to become the third most popular main access technology after fixed-link technologies such as DSL (see section 5.2.4.2.1) via conventional telephone lines (copper-wire local loops) and coaxial cable access via cable television networks.

At present, four main forms of Internet access are implemented in Austria:

- Dial-up access (via PSTN/ISDN modems);
- Broadband access based on digital subscriber line technologies (xDSL via an operator's own local loops or unbundled local loops) or cable modems (cable television networks/HFC);
- Leased lines;
- mobile broadband access (3G/UMTS).

These forms of Internet access differ in terms of bandwidth, prices, pricing categories (e.g., based on data transmission volumes) and quality.

[14] With regard to data transmission rates, there is no (internationally) accepted standard definition of broadband access. Voice telephony can clearly be classified as a narrowband service. A conventional voice channel has a data rate of 64 kbit/s, while an ISDN line has 144 kbit/s (2x ISDN B channel + D channel). The regulatory authority has defined this data rate as the upper limit for narrowband services. The typical characteristics of broadband Internet access are thus as follows: Broadband Internet access provides downstream capacity greater than 144 kbit/s (corresponds to 2 x ISDN B-channel + D channel) and enables "always on" service.
Therefore, transmission speeds beyond that level cannot be considered narrowband, and thus they are classified as broadband. A transmission speed of 144 kbit/s cannot be described as "fast Internet access" and does not meet current and future communication requirements; moreover, classification based on download and upload speeds alone omits a number of parameters which are significant from the customer's perspective (latency time, jitter, end-to-end availability, mobility, etc.). Instead, this value simply serves as a means of delineating narrowband dial-up Internet for the purposes of economic market analysis. At present, dial-up Internet access cannot support data transmission rates above 144 kbit/s, and therefore bandwidths above that level are assigned to the broadband category. At present, providers are offering products on the market with download speeds of 8 to 16 Mbit/s (often on a best-efforts basis) and in many cases even higher (30 to 100 Mbit/s).

[15] The connections offered by mobile operators rely on various transmission standards, such as UMTS, HSDPA, etc.

This section deals with the past, present and future of broadband in Austria, from the origins of broadband to its current status and upcoming developments. Therefore, the subsections that follow first provide an overview of the technologies used and the wholesale products available for the provision of broadband services, as well as taking a brief retrospective look at the development of broadband in Austria. This is followed by a detailed discussion of the situation on the Austrian broadband market today. Under the heading of "next generation access" (NGA), the final subsection addresses future developments and network rollout scenarios in order to achieve far higher bandwidths on broadband networks.

5.2.4.2 Broadband basics

5.2.4.2.1 Access technologies

Various technologies used for broadband Internet access

This section discusses various technical means of implementing broadband Internet access:

- **Digital subscriber line (DSL):** DSL is a technical means of implementing high bit-rate services on a conventional telephone line (copper-wire pair). One of the best-known designs is available on the market by the name of "ADSL" (asymmetric digital subscriber line). The term "asymmetric" points to the difference in transmission speeds in the downlink (to the subscriber, high bit-rate) and in the uplink (to the exchange, low bit-rate). In addition to asymmetric transmission modes, there are also symmetric technologies (e.g., SDSL) in which the entire frequency spectrum available on the subscriber line is used for high bit-rate data transmission. At present, providers are offering DSL connections on the market with download speeds of 8 to 16 Mbit/s (often on a best-efforts basis depending on line lengths; in some cases considerably lower). In cases where the DSL transmission link can be shortened significantly (e.g., by using optical fiber instead of copper lines), then VDSL2 download speeds of 30 Mbit/s (and in the future even 100 Mbit/s) can be attained. At the end of 2009, DSL accounted for some 1,260,000 lines in Austria (approximately 40% of all broadband connections).[16]

- **Cable modem (CATV / HFC network):** The situation with regard to broadband access via cable modems is similar to that of DSL. In this form of broadband, the infrastructure (or bandwidth) is not dedicated exclusively to each customer, even in the final section of the line to the user (in contrast to DSL). However, the advertising, pricing, response behavior in the case of product changes/expansions as well as bandwidths indicate that in the residential segment, DSL and cable modem access are close substitutes for one another in both technical and economic terms. At present, cable Internet access is generally offered with download speeds of 16 to 30 Mbit/s. Networks which use more advanced technologies (e.g., DOCSIS 3.0) even advertise download speeds of up to 100 Mbit/s. At the end of 2009, the number of broadband lines implemented on cable television networks came to some 570,000, accounting for a share of about 18% of broadband access in Austria.

[16] The shares indicated here and below refer to all broadband technologies, including mobile broadband.

- **3G:** All of the mobile network operators which offer services in Austria also operate UMTS networks. Mobile broadband access has seen strong growth, especially since the year 2007. An RTR study revealed that many residential customers (but not business customers) regard mobile broadband access as a potential substitute for wired Internet access, and that a significant number of customers do, in fact, use mobile broadband as a replacement for wired access. Operators advertise bandwidths of up to 7.2 Mbit/s using HSPA technology. In ideal scenarios, HSPA+ is even said to enable download speeds of up to 21 Mbit/s. At the end of 2009, there were 1,290,000 mobile broadband connections in Austria, which equals approximately 41% of the total number of broadband connections.

- **W-LAN/WiFi/WiMAX:** These wireless access technologies have seen a certain degree of proliferation in Austria and are used for mobile ("nomadic")[17] broadband access at hot spots (airports, train stations, cafés) and as an alternative to line-based broadband Internet access in rural areas where such services are not available (fixed wireless access, or FWA). Although FWA spread relatively quickly until the end of 2007, the absolute number of end-users remained comparatively low and has even declined since 2007. At the end of 2009, there were approximately 33,000 FWA connections in Austria (1% of all broadband connections).

- **PLC (power line communication):** This form of access relies on power lines to cover the "last mile" to the customer's household. This technology has not proliferated to any noteworthy extent and faced persistent difficulties emerging from the testing phase. Pilot operations were partly discontinued after several years, as significant problems arose mainly in connection with high-frequency interference, which could have effects on the frequency bands used by amateur radio operators. Nevertheless, more than 5,000 broadband connections have been realized in Austria using this technology. PLC is considered to hold significant future potential for the purpose of connecting electricity meters ("smart meters"), covering the last mile in optical fiber-based broadband access for retail customers, and for networks in buildings.

- **Fiber to the home (FTTH):** At the moment, broadband access based on fiber optics is only used in a few individual cases in Austria. In Vienna, the power company Wienstrom provides a few hundred FTTH connections (Blizznet) under an open access model (i.e., retail customers receive broadband services from a provider which itself obtains FTTH access from Wienstrom). The provider Infotech Ried has connected several customers in its vicinity using FTTH, and for several years now Telekom Austria has been carrying out a trial project in Arnoldstein, a town in the province of Carinthia. In addition to combined scenarios such as FTTC and FTTB (fiber to the curb, fiber to the building), FTTH could see significant proliferation in especially thickly settled areas in the rollout of NGA. The bandwidth currently offered in such services is 100 Mbit/s.

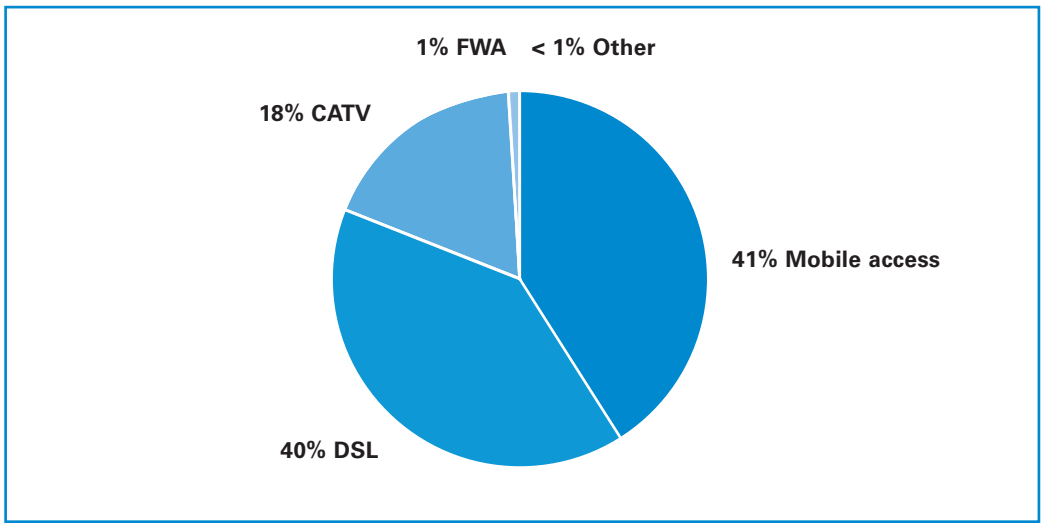
[17] i.e., without meeting all mobility requirements such as full coverage, handover, etc.

- **Leased lines:** Although broadband (Internet) access can be implemented using leased lines (depending on the capacity), the characteristics of these lines differ from those of DSL services and access via cable modem. In contrast to DSL services, leased lines provide dedicated capacity for exclusive use by the customer (instead of overbooking), thus ensuring consistent bandwidth and transmission quality over time. In the case of DSL services, this dedicated capacity is only available in the local loop. On the backbone, however, the joint and simultaneous use of transmission capacity (i.e., shared capacity) may create transmission bottlenecks, depending on the overbooking factors used. Broadband Internet access via leased lines is less significant in terms of the number of connections and is predominantly used by large companies.

Other access technologies such as satellite only play a secondary role in Austria.

The figure below shows the relative prevalence of the various access technologies in Austria at the end of 2009.

Figure 50: Prevalence of broadband access technologies (end of 2009)



Source: RTR

5.2.4.2.2 Wholesale products

Wholesale products and services refer to those which are offered by companies specifically for other, competing providers on the market and which enable the provision of services for retail customers. Two fundamental wholesale products are discussed below:

- **Unbundling of the local loop (ULL):** ULL refers to a wholesale product offered by Telekom Austria in accordance with a regulatory order. Unbundling allows alternative operators (referred to as "unbundling partners" in this context) to rent their customers' local loops (or subsections thereof) from Telekom Austria and to offer telecommunications services on those lines using their own technical equipment. In this context, unbundling partners are required to make considerable investments in collocation spaces (usually at Telekom Austria's MDFs) and in order to connect those spaces to their own core networks (backhauling). For broadband access, this involves the use of DSL technology and transmission speeds as discussed above. At the end of 2009, the number of broadband lines realized by means of ULL came to approximately 240,000, or some 8% of all broadband connections and 19% of all DSL connections in Austria.

- **Bitstreaming:** Like ULL, bitstreaming (also known as "bit stream access") is also a wholesale product, but its use is not limited to a single underlying technology. The wholesale service provider makes a broadband connection to the retail customer available and hands over the data stream to the wholesale customer at a point of presence (PoP) for further transmission, for example to the World Wide Web. Bitstreaming is offered by Telekom Austria on the basis of its regulatory obligations.[18] However, bitstreaming is also offered by alternative network operators on the basis of voluntary private contracts (e.g., by unbundling partners and CATV network operators). The bandwidths that can be attained depend on the access technologies used. At the end of 2009, some 75,000 broadband connections (approximately 2% of all broadband connections in Austria) were realized by means of bitstreaming.

Unbundling and bitstreaming: Wholesale services at different levels of the value chain

[18] With regard to bitstreaming for residential connections, this obligation was removed in the amendment to the TKMV 2008 at the end of 2009 (see http://www.rtr.at/en/tk/TKMV2008).

5.2.4.3 Development of broadband in Austria

5.2.4.3.1 Initial implementation of broadband in Austria

Fixed-link broadband technologies were launched on the market first and exhibited increasing availability

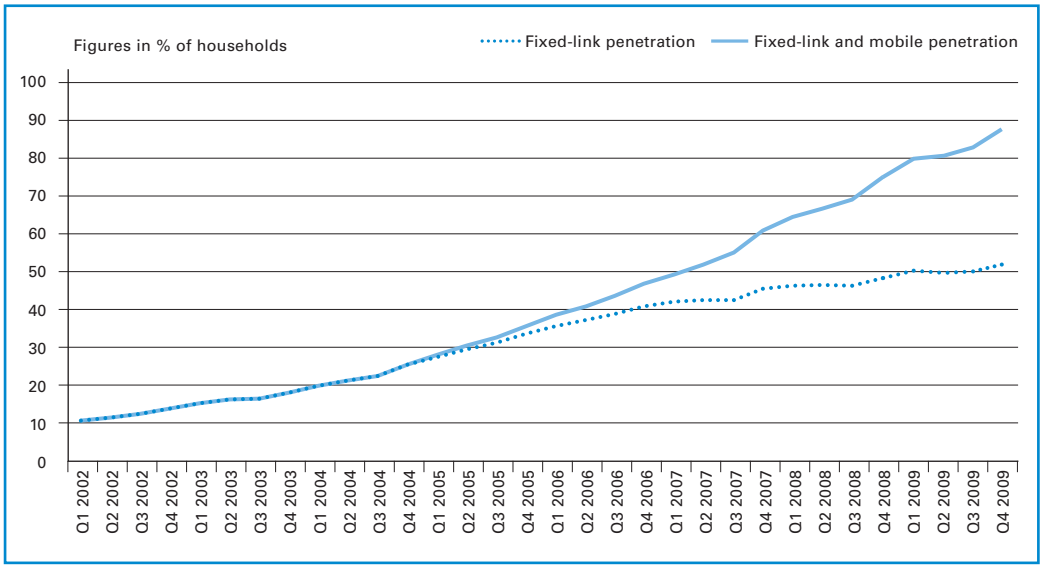
The first company to provide broadband Internet access on the retail market in Austria was Telekabel Wien (now UPC), which launched its "teleweb" product on the market in 1996. teleweb provided Internet access via the cable television network (HFC) and was renamed "chello" in June 1999. Three years after the teleweb service was launched (November 1999), Telekom Austria followed with an ADSL service. Since then, the prices of these two competing products have shown similar developments.

At the beginning, fixed-link broadband Internet access via cable television (CATV) and telephone (DSL) networks was not available everywhere in Austria. Over the years, however, the broadband coverage area or "footprint" has been expanded continuously. Cable networks offer broadband Internet access in the capitals of Austria's federal provinces and in areas of high population density as well as rural areas. Throughout Austria, approximately 100 operators offer broadband Internet via cable television networks. The market has seen some consolidation in recent years, as larger operators have bought up smaller networks (e.g., UPC's takeover of Telesystem Tirol or Kabelsignal's acquisition of B.net Burgenland). In total, broadband Internet access via cable television networks is available to at least half of Austria's households. In this context, the individual coverage areas virtually never overlap, meaning that consumers do not have a choice between individual cable television network operators. At the same time, however, consumers also have the option of using a DSL connection on a Telekom Austria local loop. Over the last few years, Telekom Austria has continuously expanded its DSL access network, and as a result this form of broadband access is now available to approximately 98%[19] of Austria's households. More than half of the households in Austria have already opted for broadband access via fixed-link infrastructure. If mobile broadband access is also included (in a simplified additive calculation), then approximately 88% of households now have broadband access.

The figure below shows the development of broadband penetration (measured in terms of households), which has seen consistent growth in Austria.

[19] http://unternehmen.telekom.at/Content.Node/innovation/netzinfrastruktur-facts.php

Figure 51: Broadband penetration (basis: households)



Broadband Internet penetration already very high in Austria

Source: RTR

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

5.2.4.3.2 Wholesale broadband access products

Unbundling allowed alternative operators to offer broadband services and to create essential competitive stimuli

Unbundling has been available in Austria since mid-1999.[20] Since that time, its potential uses have been expanded on an ongoing basis and the relevant provisions have been refined in Telekom-Control-Kommission decisions. For example, since the year 2000 unbundling has not only been available to alternative providers of fixed-link voice telephony services, but also to Internet service providers and leased-line operators on the same terms and conditions. This has created decisive incentives to offer cost-effective and innovative broadband services, mainly in the Internet segment. Alternative operators such as UTA (now Tele2) and Inode (now UPC) as well as numerous regional providers have made extensive use of ULL; given their attractive retail prices, these services have created significant competitive stimuli on the market and allowed those providers to expand their respective coverage areas (collocations at Telekom Austria's MDF locations) on an ongoing basis. Therefore, multiple unbundling partners now have a simultaneous presence in the capitals of Austria's federal provinces, meaning that retail customers can choose among various alternative operators (up to seven) as their broadband access provider, in addition to Telekom Austria and a local cable network operator. Unbundling also provides customers with alternatives to Telekom Austria's broadband products outside of CATV coverage areas. The access areas covered by unbundling partners now include more than 66% of Austria's households; this applies to 100% of the households in Vienna.

[20] For more detailed information on unbundling, please refer to Volume 2/2005 of RTR's publication series, "Unbundling Status Report 2005" (http://www.rtr.at/de/komp/SchriftenreiheNr22005/Band22005.pdf; in German).

Soon after the launch of its retail ADSL product, Telekom Austria also began to offer bitstreaming as a wholesale product for alternative operators in addition to local loop unbundling. Bitstreaming exhibited strong growth rates at the beginning, but later the number of connections realized using this wholesale product was surpassed by the number of ULL-based connections. The reasons for this development include the greater added value and the more flexible retail product design possibilities offered by unbundled local loops. Despite the advantages of unbundling, bitstreaming connections remained important to unbundling partners in particular because this wholesale product allows them to offer broadband Internet services nationwide, that is, beyond their local loop unbundling footprint. Bitstreaming has therefore represented a significant complement to – and even a precondition for – local loop unbundling.

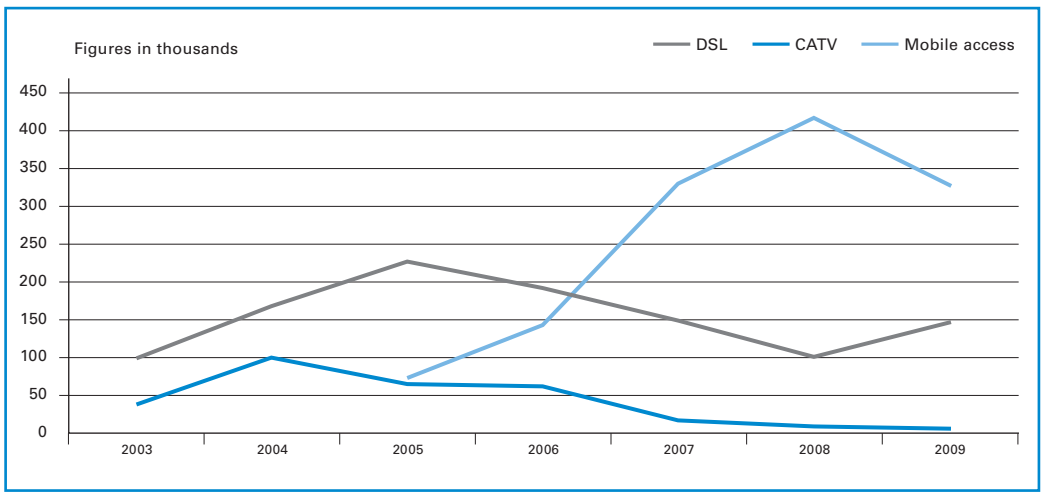
5.2.4.3.3 Growth in mobile broadband

Mobile service providers have been offering mobile broadband access since late 2004. At that time, mobile broadband was predominantly used by business customers and especially tech-savvy residential customers as a complement to fixed-link broadband connections (complementary use). In late February / early March 2007, the mobile network operator One (now Orange) launched a mobile broadband product named "hui" on the Austrian market at significantly reduced retail prices. Soon thereafter, other mobile operators followed suit with comparable products. As a result, mobile broadband access saw significant growth rates from early 2007 onward, even exceeding those of DSL access.

The figure below shows the development of broadband access technologies in Austria.

Figure 52: Broadband access technologies – Growth per year (absolute)

Rapid growth in mobile broadband since 2007



Source: RTR

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

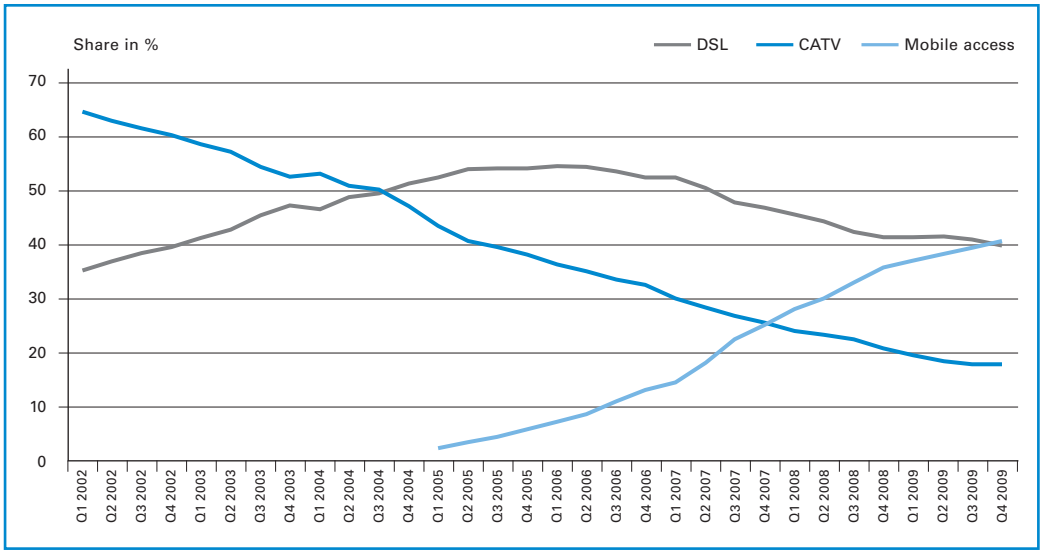
Once again, mobile service providers recorded high growth rates in 2009 by offering new and attractively priced mobile broadband products based on faster technologies, with prices comparable to (or even lower than) those of fixed-link introductory products. Compared to the rest of Europe, Austria appears to have taken the lead in the diffusion of mobile broadband.

5.2.4.3.4 Competitive pressure from mobile broadband

Even earlier, Telekom Austria was already confronted with an increasing trend toward fixed/mobile substitution. At first, some believed that the shift to mobile broadband ("line loss") could be kept in check by the increasing proliferation of DSL connections, as an existing fixed-link voice line was a prerequisite for DSL access. However, the success of mobile broadband has made those expectations appear unrealistic.

Figure 53: Broadband access technologies – Development of shares in %

Mobile broadband has overtaken DSL



Source: RTR

Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

Telekom Austria sets new price point in holiday season campaign

In its *Kombipaket* holiday season campaign in 2007, Telekom Austria responded to this development and significantly reduced its retail prices for broadband Internet access. This product bundle, which included a fixed-link voice line and ADSL broadband Internet access, was offered to new customers for EUR 19.90 per month (including VAT). This constituted a reduction of approximately 45% compared to the regular price at that time. In this way, Telekom Austria managed to halt the slowdown in broadband growth as well as line loss. Through this campaign, Telekom Austria was also able to address new target customers who were not willing to pay high prices and had therefore used dial-up Internet connections (or none at all) up to that point.

On the one hand, this significant price reduction was a positive development from the consumer's perspective; it also changed the public's perception of broadband Internet prices in Austria, which had been considered especially high by European comparison up to that point. Whereas unbundling partners such as Inode or cable network operators such as UPC had essentially dictated the pace and degree of recurring price reductions as well as continual increases in bandwidth up to that point (with Telekom Austria consistently charging premium prices on the market), in this case Telekom Austria took the first significant step and became the price leader on the market for the first time.

Wholesale prices reduced substantially, yet unbundled lines still on the decline

At the same time, this new price point exerted high pressure on other providers. As long as this occurs as the market result of independent infrastructure operators (mobile networks, CATV networks) competing with one another, then the regulatory authority cannot consider such a situation undesirable with regard to regulatory objectives.[21] At the same time, however, it was (and still is) necessary to ensure that those alternative operators who were (and still are) dependent on Telekom Austria's wholesale ULL and bitstreaming products are not exposed to a margin squeeze, which would make it impossible for them to offer competitive retail products on the market without suffering losses. Therefore, the regulatory authority launched procedures to determine whether the situation qualified as a margin squeeze; these procedures have prompted ongoing reductions in wholesale prices in recent years. For example, the monthly rental charge for an unbundled local loop has decreased from EUR 10.70 to EUR 5.87 (approximately -45%).

These measures have enabled unbundling partners to survive, but after a phase of continuous growth, the number of unbundled lines has fallen in the last two years. As a result, unbundling has lost ground not only vis-à-vis mobile service providers, but also in competition with Telekom Austria's DSL products. While unbundled local loops still accounted for 27% of all DSL lines at the end of Q3 2007, by the end of 2009 this percentage had dropped to a mere 19%, or 8% of the total number of broadband connections in Austria.

Mobile broadband and unbundling have not only had a decisive impact on price developments in recent years; they have also been a major driver of broadband development in Austria. The constantly increasing bandwidths offered by mobile Internet service providers and cable network operators have placed direct pressure on Telekom Austria to offer higher bandwidths.

[21] According to the Telecommunications Act, the objectives of regulation include "ensuring that all users derive maximum benefit in terms of choice, price and quality" as well as "preventing distortion or restriction of competition."

5.2.4.3.5 New definition of wholesale broadband access market includes mobile broadband

Mobile broadband used as a relevant substitute for fixed broadband service

The regulatory authority has been monitoring the development of mobile broadband very closely. The resounding success of mobile Internet services since the year 2007 as well as their clearly recognizable effects on fixed-link broadband access (in the form of declining growth) point to a noticeable mutual effect on competition. In preparation for the definition of the wholesale broadband access market, RTR conducted a study on the substitution relationships between different broadband products. One essential element of this analysis[22] was the demand-side survey carried out for the purposes of the study. In the course of this survey, retail customers were surveyed with regard to their product switching behavior.

Based on a representative sample, the regulatory authority's research revealed that many residential customers (but not business customers) regard mobile broadband access as a viable substitute for conventional wired Internet access, and accordingly that a majority of mobile connections (approximately three quarters) are, in fact, used as a substitute for wired access. At the same time, complementary use is far less prevalent. Even if some households are still reluctant to use mobile broadband access for technical reasons, such as the lower level of coverage or insufficient transmission speeds compared to fixed broadband, many consider the quality parameters of mobile broadband sufficient for their main uses of Internet access (sending and receiving e-mail, surfing the Web and searching for specific information).

As a result, mobile broadband has a limiting effect on fixed-link broadband access with regard to residential retail customers, and this effect is relevant to economic market delineation. In other words, a substantial increase in the price of DSL connections would prompt a significant number of retail customers to cancel the service and switch to mobile broadband access. In the case of business customers, however, this degree of substitutive use could not be detected; instead, mobile broadband appears to be used more as a complement to fixed broadband in this segment. Given the vast differences in prices and product characteristics between residential and business customers at the retail level, the regulatory authority also determined that the two groups have to be regarded as separate markets. Accordingly, a distinction was drawn between residential and business customers in the definition of the wholesale broadband access market, with mobile broadband and CATV-based broadband only regarded as substitutes for DSL in the case of residential customers.

Wholesale broadband access for residential service provision exempted from regulation

In the ensuing study conducted for the purpose of market definition,[23] the regulatory authority also concluded that regulation was no longer necessary on the wholesale broadband access market for services used to provide residential service at the retail level. At the same time, RTR still considered regulation necessary on the market for wholesale services used to provide

[22] The study "The Austrian broadband market from the demand-side perspective in 2007" can be found at http://www.rtr.at/de/komp/BerichtNASE2009/RTR_Studie_NASE_2009.pdf (in German).

[23] cf. RTR (2009), Delineation of the wholesale broadband access market, August 2009; http://www.rtr.at/de/tk/TKMV2008/Begleittext_TKMV_2008.pdf (in German).

retail services in the business segment. The wholesale broadband access market therefore (only) comprises those externally and internally provided DSL bitstreaming connections which are then sold to business customers on the retail market.[24]

An analysis of the wholesale broadband access market based on this definition was carried out in 2010.

5.2.4.4 Current situation

5.2.4.4.1 Retail market for broadband Internet access

Section 5.2.4.3 already revealed a number of facts regarding the current situation in Austria. For example, that section indicates that mobile broadband is already the dominant access technology, followed closely by DSL (cf. Figures 50 and 53).

Ten operators currently cover more than 90% of market demand

The largest providers of broadband Internet access based on the number of connections on the Austrian retail market are as follows (in descending order):

- Telekom Austria;
- UPC;
- mobilkom austria;
- T-Mobile;
- Hutchison;
- Tele2;
- Orange;
- Salzburg AG;
- LIWEST;
- Kabelsignal AG.

Taken together, these operators hold a 90% share of the retail broadband market, with their individual market shares ranging from 1.3% to 32%.

Cable network operators and mobile network operators have a great deal of their own access infrastructure. Other alternative providers predominantly use Telekom Austria's infrastructure in order to provide their services.

In addition to leased lines for the purpose of realizing connections within the operators' own core networks and connecting elements to those core networks (e.g., connecting mobile base stations or unbundling locations), local loop unbundling as well as bitstreaming (Telekom Austria's DSL broadband technology) are also used as wholesale products in the access segment. Both of those wholesale products are based on Telekom Austria's conventional subscriber lines.

[24] cf. RTR Ordinance amending the Telecommunications Markets Ordinance 2008 (TKMV 2008) (http://www.rtr.at/en/tk/TKMV_2008/TKMV_2008_e.pdf) and the Explanatory Remarks on the amendment to the Telecommunications Markets Ordinance 2008 (http://www.rtr.at/en/tk/TKMV_2008/EB_zur_TKMV_2008_e.pdf).

However, the need to use Telekom Austria's infrastructure creates dependence on the part of alternative providers. In contrast, situations where providers have their own infrastructure not only favor the provision of separate, differentiated products, but also support self-sustaining competition in the long term. With regard to providing broadband Internet services for retail customers, one key issue is the extent to which such services are provided entirely independently of Telekom Austria's access infrastructure (including mobilkom austria as a member of the same corporate group).

At the end of 2009, the share of broadband connections provided using different types of infrastructure owned by Telekom Austria came to 54%; this includes Telekom Austria's DSL infrastructure (bitstreaming and the company's own retail customers), unbundled lines, and mobile broadband connections provided by mobilkom austria. Despite the considerable growth rates observed in mobile broadband services, the overall share of broadband connections realized using Telekom Austria infrastructure has not changed drastically in recent years. The decline in the number of DSL connections provided by Telekom Austria has been offset by growth in mobile broadband services provided by mobilkom austria. The slight overall decrease in this share – from approximately 59% at the beginning of 2007 to 54% at the end of 2009 – can be attributed to a reduction in the number of unbundled lines. Despite increasingly fierce competition, Telekom Austria has been able to maintain its position on the Austrian market.

5.2.4.4.2 Wholesale market for bitstreaming

In addition to Telekom Austria's reference wholesale offer, ISPs also provide bitstreaming products via unbundled lines, and numerous wholesale products are offered by cable television operators which are either not vertically integrated as regards broadband and therefore do not provide Internet access services (including Internet connectivity) themselves, or which enable customers to obtain services from other ISPs in addition to offering their own broadband services.

The wholesale service based on DSL technology and referred to as "bitstreaming" is predominantly provided by Telekom Austria (more than 75%). Unbundling partners also offer wholesale broadband services like bitstreaming to other ISPs via unbundled local loops. In addition, a significant number of wholesale broadband connections (more than 10,000, not including universities) are also provided by cable network operators.

The delineation of the broadband market carried out in 2009 is discussed in Section 5.2.4.3.5. The ensuing market analysis will be carried out in 2010, meaning that the final results are not yet available.

5.2.4.4.3 Wholesale unbundling market

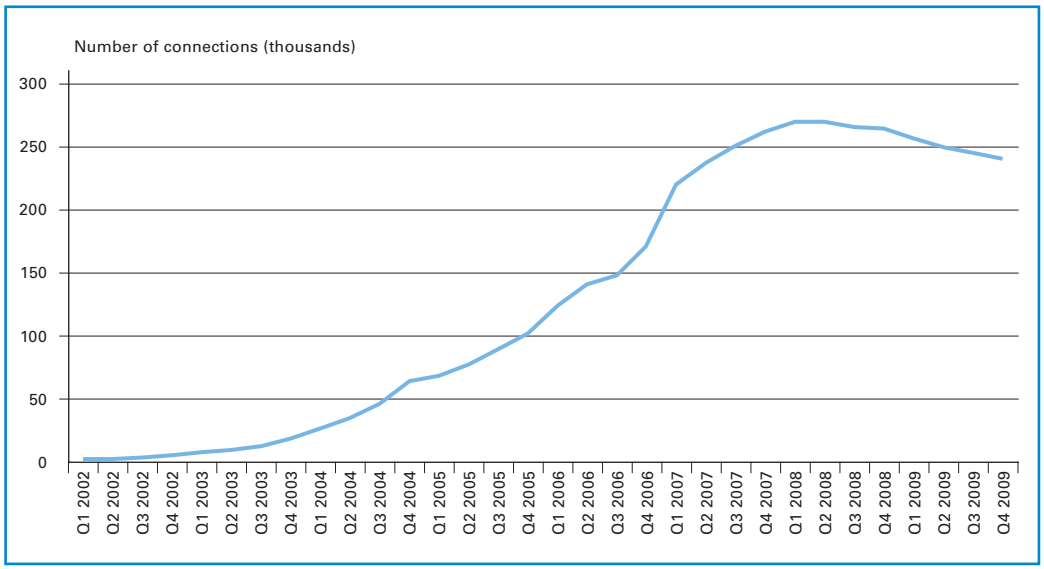
In the market analysis decision M 12/06, Telekom Austria – which virtually has a market share of 100% on the unbundling market – was ordered to offer unbundled local loops on non-discriminating terms and at cost-based prices. At the end of the year 2009, the monthly charge for the rental of a complete unbundled subscriber line came to EUR 6.35, and this price has since been reduced further to EUR 5.87. As a result, Austria's unbundling charges are in the lower range by comparison to the rest of Europe.

Especially in the capitals of Austrian provinces, multiple unbundling partners have a simultaneous presence, meaning that retail customers can choose one of various alternative operators (up to seven) as their (primary) broadband access provider, in addition to Telekom Austria and a local cable network operator.

The figure below shows the development of broadband access via unbundled lines in recent years.

Figure 54: Development of broadband access via unbundled lines

Over 90% of unbundled lines used for broadband access



Source: RTR

In recent years, unbundling has lost ground in both relative and absolute terms.

5.2.4.5 Upcoming developments: NGA

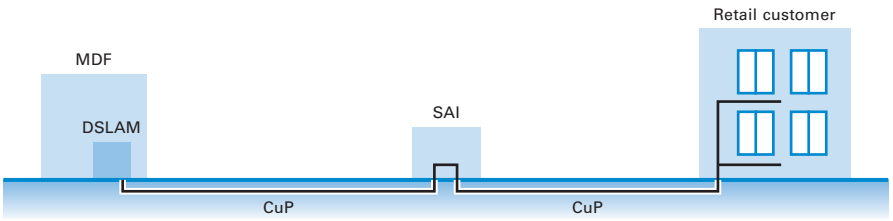
The rollout of broadband telecommunications networks has been a heavily discussed topic at both the national and international level in recent years. Operators of telecommunications networks see a fundamental need to adapt their networks to the growing demand for higher-speed broadband information and communications technologies (ICTs). From a product-oriented perspective, this demand is a result of (new) multimedia services (such as video on demand and HDTV) as well as interactive applications. The crucial future importance of broadband infrastructure is widely recognized as a decisive economic and sociopolitical factor. However, the rollout of optical fiber infrastructure for this purpose will involve not only considerable investments, but also a great degree of uncertainty for potential investors due to highly unpredictable demand in the desired business models and due to the long investment horizon.

5.2.4.5.1 NGA rollout scenarios

Traditional access networks use copper-wire pairs (CuP) as local loops to the subscriber. These networks, which were originally set up to provide voice telephony services (POTS/ISDN), were made capable of supporting broadband service by DSL transmission technology.

CuP/Unbundling

Figure 55: Current situation in conventional copper access network



CuP: copper-wire pair; DSLAM: digital subscriber line access multiplexer;
MDF: main distribution frame; SAI: serving area interface

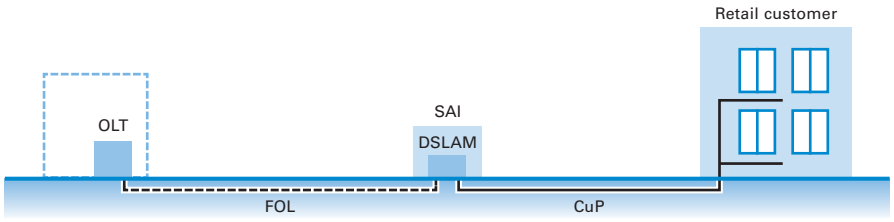
Source: RTR

In the context of unbundling, the local loop may also be rented from Telekom Austria by alternative providers, who can use their own DSL equipment to provide broadband services on the line. However, DSL technology is subject to certain technical limits regarding the provision of higher bandwidths: First, it would be necessary to shorten the length of lines to the customer in the access network in order to increase bandwidth any further. Second, mutual interference increases along with the number of DSL connections realized simultaneously on a given cable, meaning that the available bandwidth is also limited by the number of broadband customers actively using the same section of cable at the same time.

One possible way to meet the higher expected bandwidth needs in fixed-link access networks is to replace the existing copper-wire pairs partially or entirely with optical fiber. The various distances covered by fiber lines are generally denoted with the abbreviation "FTTx."

Fiber to the curb/cabinet

Figure 56: Rollout option 1 – Fiber to the curb/cabinet



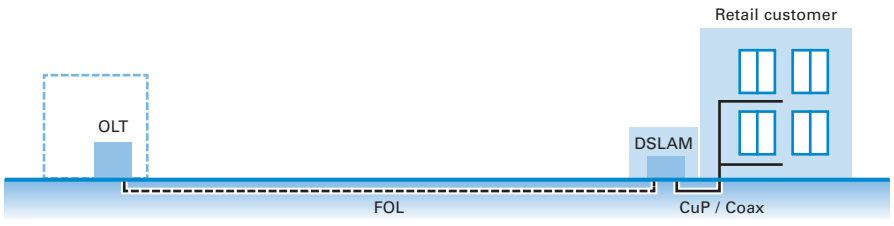
CuP: copper-wire pair; DSLAM: digital subscriber line access multiplexer;
SAI: serving area interface; FOL: fiber optic line; OLT: optical line terminal

Source: RTR

In order to shorten the length of copper lines used and thus to ensure higher data rates, it is necessary to place the technical equipment used for DSL transmissions (DSLAMs) closer to the retail customer in the network. This equipment could be placed in the cabinets which house serving area interfaces in access networks, which branch out to customers in a tree-like structure. Where a DSL transmission system is deployed in such a cabinet (SAI) and connected to the backbone network by means of optical fiber, the scenario is referred to as "fiber to the curb/cabinet" (FTTC). As the latest transmission technology, VDSL is then used in the remaining copper-wire section of the line. Depending on the length of the copper lines involved, this solution can produce bandwidths of approximately 20 Mbit/s to 50 Mbit/s.

Fiber to the building

Figure 57: Rollout option 2 – Fiber to the building



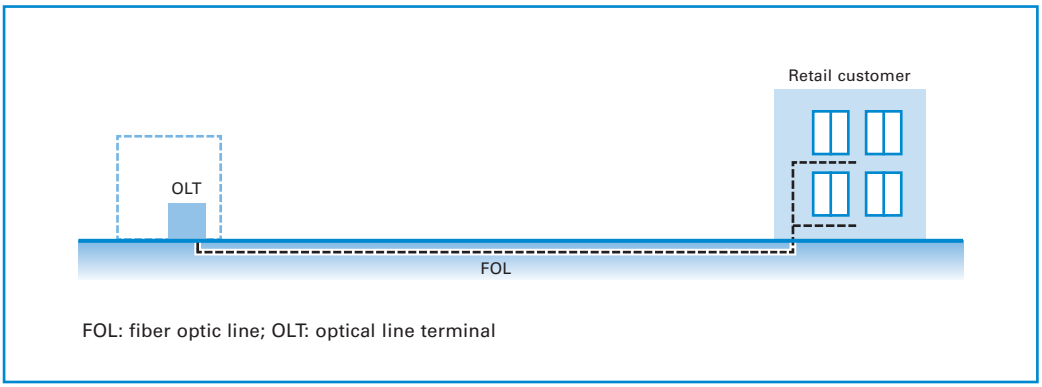
Coax: coaxial cable; CuP: copper-wire pair; DSLAM: digital subscriber line access multiplexer;
FOL: fiber optic line; OLT: optical line terminal

Source: RTR

Even higher bandwidths (up to 100 Mbit/s) can be achieved if the final copper-wire section of the line is shortened even further. Fiber to the building (FTTB) is an implementation scenario in which the optical fiber section of the line extends into the building, meaning that only the wiring inside the building relies on conventional copper lines. As laying optical fiber to each building is associated with high excavation costs, this solution is often only economically viable in cases where the investment costs can be distributed across a larger number of customers (households). Therefore, situations will often arise in which FTTB is only viable for buildings which house a large number of residential units.

Fiber to the home

Figure 58: Rollout option 3 – Fiber to the home



FOL: fiber optic line; OLT: optical line terminal

Source: RTR

FTTH rollout would enable far higher bandwidths

In cases where technical or economic considerations render it feasible to renew or replace in-house wiring, it is possible to eliminate the use of copper lines entirely. In such a scenario, the optical line then reaches the individual apartments or homes (fiber to the home, or FTTH). From a technical standpoint, this form of implementation would be the ideal solution, as from today's perspective it would make it possible to offer nearly unlimited bandwidth for a large number of services, as well as eliminating the possibility of mutual interference. Therefore, FTTH can be regarded as the most future-proof solution in terms of technology (often referred to as the "endgame").

In addition to the conventional fixed-link telephone network (CuP), cable television networks (CATV networks based on coaxial cable) and mobile networks might also be used to roll out high-speed communications networks. The latest CATV transmission technology (DOCSIS 3.0) has already made it possible to offer bandwidths of approximately 150 Mbit/s. The mobile communications industry expects the future deployment of Long Term Evolution (LTE)[25] technology to provide data transmission rates in the same range.

[25] Mobile broadband capabilities were increasingly enabled by the predecessor technologies GPRS, EDGE, UMTS und HSPA in the past.

5.2.4.5.2 Relevant economic and regulatory effects

The investment costs associated with NGA largely hinge on the excavation efforts required in order to lay optical cable. Since access networks branch out in a tree-like structure as they approach the final consumer, renewing line infrastructure involves fewer customers as one gets closer to the final consumer. This means that excavation costs will be distributed among fewer customers and the average cost per customer will be higher. Investments in the access network therefore depend heavily on "economies of density," that is, a high density of customers will bring about lower average costs. In many cases, access networks therefore represent spatially delineated "natural monopolies," that is, economies of scale (i.e., lower average costs per customer) make it less expensive to integrate additional (and possibly new) customers into an existing network than to provide them with an entirely separate (parallel) network. If an operator were to construct a second network of its own, the parallel line sections would lead to a "duplication" of network costs, which would be statically inefficient in any case.

The presence or absence of economies of density (critical mass) is also crucial for the purpose of ensuring that alternative providers can replicate NGA connections. In the regulation of access to date (unbundling), alternative operators have been able to connect individual customers to their networks e.g. at an MDF location by renting the local loop from the incumbent operator (the former monopolist, in this case Telekom Austria). In this context as well, the total number of customers reached determines whether the costs of establishing and connecting MDF unbundling locations can be recovered. This is why alternative operators have focused their unbundling efforts mainly on large MDF locations in densely populated areas (cities). At the same time, a serving area interface closer to the end-user provides service for a far smaller number of customers (by a factor of 10 to 100). Accordingly, the number of customers who could be reached by an alternative operator would be severely limited in the FTTx access scenarios, meaning that laying one's own optical cable would only be economically viable in rare exceptional cases.

Moreover, unbundling partners would only be able to provide DSL broadband access from the MDF (conventional full unbundling) to a very limited extent in areas where FTTx solutions are implemented. In such a scenario, it would also be extremely difficult to retain customers with comparatively low-bandwidth products. At the same time, in those areas where DSLAMs are shifted closer to the end-user, it may not be possible to provide services due to mutual technical interference.

If the competition-related effects of unbundling are to be maintained in a future NGA environment, then regulators will have to search for new solutions in this area.

5.2.4.5.3 Investment risk and incentives

The minimum requirement for an investment even to be considered is a positive business case (i.e., a positive net present value based on the sum of period profits discounted using a hurdle rate less initial investments). In this context, the following variables are especially relevant: amount of initial investment, period cash inflows from revenues, period cash outflows (costs/operating expenses), the hurdle rate applied and useful economic life (number of periods). The key value in determining an investment's economic viability is the revenues which can be attained, as they represent an essential investment incentive. However, such forward-looking calculations are characterized by uncertainty, especially with regard to revenues.

Rollout of optical fiber networks characterized by high investment costs and considerable investment risk

Investments mainly involve high risk in cases where they bring about significant sunk costs, and this is certainly the case in the rollout of fiber optic infrastructure. These sunk costs (e.g., excavation costs) cannot be completely recovered in cases where operations are discontinued or where demand and revenues underperform expectations.

In the case of new products and services, the customers' willingness to pay (i.e., the potential revenues) is unknown, as data material from the past is simply not available. As a result, this uncertainty also brings about the risk of inaccurate estimates of cash inflows. On the other hand, this risk may be offset by the opportunity to enjoy a first mover advantage, which would enable the provider to gain customers and market share before competitors can enter the market. This can create a significant competitive advantage. However, this also raises the central question of the additional benefit customers can derive from Internet access with significantly higher bandwidths compared to conventional broadband. Therefore, whether or not such high-speed services can generate revenues which justify the investments from a business perspective will depend on availability, the acceptance of the product on the market, and demand for especially high-bandwidth applications.

However, regulatory intervention may also have various impacts on the economic viability of an investment and on investment incentives: Official decisions ordering regulated (cost-based) prices may have an adverse effect on the revenues which can be generated, thus limiting the potential economic gains from an investment. At the same time, the amount of revenues which can be generated will depend on the specific competitive situation. The objective of competition regulation, namely to encourage sustainable competition (e.g., by lowering barriers to market entry or by requiring operators to share their infrastructure), may stand in the way of generating revenues. In addition, the cost side may also be affected by regulatory obligations (e.g., the obligation to reserve a certain amount of capacity for alternative providers). Moreover, parallel network infrastructures operated by alternative providers ("bypass investments") reduce the ability to take advantage of economies of scale, which creates higher average costs due to the reduced dilution of overhead costs.

These are also the most important reasons why incumbent operators have demanded considerable regulatory relief or even complete regulatory exemptions (in the form of "regulatory holidays" or a "hands-off" approach) for the rollout of NGA infrastructure. On the other hand, alternative providers see the danger of a (new) monopoly on infrastructure (i.e., a bottleneck facility), a disproportionate reinforcement and possible co-financing of such a monopoly, or at least the danger of a substantial and sustained competitive advantage for the incumbents (first mover advantage).

However, investments in NGA infrastructure are also characterized by higher investment risk due to the comparatively high sunk costs (especially excavation costs), and it appears necessary to account for this increased risk appropriately, especially in the context of regulated fees and charges.

In connection with infrastructure investments, therefore, one key question is the extent to which the investment risk in an unregulated competitive situation differs from the risk in a regulated environment. Given cost-based access charges, the risk is accounted for in the costs of capital. As regulatory price-setting policy explicitly provides for the consideration of risk, optimally implemented regulation should ideally not bring about an increase in risk. Nevertheless, it may appear reasonable to account for the high investment risk associated with the rollout of NGA by adding a separate risk premium to the interest rate used to calculate the cost of capital. In its draft recommendation on regulated access to NGA networks, the European Commission also notes that it will be necessary to compensate for the increased investment risk associated with NGA.

Where investments are also desirable for economic reasons (e.g., location competition, coverage of the rural population) above and beyond business-based justifications, it may also be useful to consider providing mainly financial support (with due attention to state aid regulations) for this purpose. In this way, the costs can be recovered on the revenue side, which is a necessary prerequisite for a positive investment decision. On the cost side, cooperation arrangements might also represent viable support measures. A joint rollout would mainly help to reduce excavation costs. Especially where other forms of infrastructure are currently being installed, it would be advisable to lay microducts in order to enable the later installation of optical cable. The shared use of existing ducts (possibly belonging to other infrastructure operators, such as electrical power companies) can also help reduce excavation costs, thus enabling a positive business case and triggering investments in NGA.

5.2.4.5.4 RTR's activities in the field of NGA

In late 2006 / early 2007 (and even earlier), RTR already began to examine the fundamental technical and economic changes to be expected from next generation access and the rollout of next generation networks.

RTR began to address the upcoming technological changes at an early stage

In mid-2007, RTR marked the 10th anniversary of market liberalization in Austria by holding a symposium which first took a retrospective look at the results of market liberalization. This was followed by a discussion of the outlook for the industry, which addressed future topics related to next generation networks as well as issues regarding functional separation. In the course of these activities, the regulatory authority also launched a consultation on selected issues which had been raised in the discussion documents "Next Generation Networks: Regulation" and

"Next Generation Networks: Investment incentives and Cost Accounting."[26] These documents focused on the resulting changes in requirements for future regulatory work and on investment incentives and investment risk. The responses showed that many market participants had not yet analyzed these topics in depth, and that it was too early to deal with them in concrete terms.

However, the first step toward creating more general awareness of these future issues had been taken. As a result, an industry working group devoted to next generation networks and next generation access was established at RTR in order to examine these issues at regular meetings.[27]

In addition, special attention was paid to the topics of cooperation models and financing to enable and support the NGA rollout in Austria. At two high-level specialist events held in April and May 2009, industry experts elucidated issues relevant to this topic, on which a volume of RTR's publication series ("Broadband access networks in Austria – Cooperation models and financing of infrastructure for next generation access" was also published.[28]

By defining a clear regulatory framework and ensuring continuity in the transformation process, the regulatory authority will be able to help enhance planning certainty in this context.

5.2.4.5.5 Competition for broadband customers: NGA vs. LTE

Competition for high bandwidths

The success of mobile broadband has put considerable pressure on fixed-link broadband service providers. Many residential customers regard mobile broadband connections as a (sufficient) substitute for a conventional fixed broadband line. Although mobile broadband cannot always compete in terms of the actual bandwidths available, its mobility and high convenience are very attractive advantages. If fixed broadband service providers wish to differentiate their services not only on the basis of price, then mainly the quality and the bandwidth of the services offered can serve as distinguishing criteria for purchase decisions. Fixed-link service providers are therefore confronted with a need to increase the bandwidths of their services substantially. As in the introduction of broadband in 1996, UPC took on a leading role in this field in Vienna. At the end of 2009, bandwidths of 100 Mbit/s were already offered via Vienna's cable television network using the DOCSIS 3.0 transmission standard.[29] In 2009, Telekom Austria announced that it wished to invest in the rollout of fiber optic infrastructure in its networks and began to install test implementations in Villach, Klagenfurt, and Vienna's 15th and 19th districts.

[26] The discussion documents and opinions received can be found on RTR's web site at http://www.rtr.at/de/komp/Symposium10y (in German).

[27] For more information on the industry working group's activities, see Volume 4/2008 of RTR's publication series, "Next Generation Access: A dialog between the regulatory authority and market participants" at http://www.rtr.at/de/komp/SchriftenreiheNr42008/Band4-2008.pdf (in German) as well as the group's web site and topics discussed at http://www.rtr.at/en/tk/ngn_kalender.

[28] The study in question and additional information on the topics discussed at these events can be found at http://www.rtr.at/de/tk/Infrastruktur (in German).

[29] See http://www.upc.at/ueber_upc/presse/presse2009/wien_surft_mit_100_mbit_s_von_upc_mit_fiber_power/2090/20909043.html (in German).

For their part, mobile network operators are making efforts to keep up with – or even pre-empt – this development themselves. In this context, mobile operators see great potential in the new mobile communications standard LTE (Long Term Evolution). In order to be able to transport large data volumes on mobile networks, however, it is not only necessary to connect base stations with far higher bandwidths (in many cases, 2 Mbit/s connections are still used for this purpose), but also to assign new frequencies which will enable the further expansion of networks in the first place. In this context, the industry has high expectations regarding the use of the frequencies made available by the migration of Austrian broadcasting from analog terrestrial technology to digital broadcasting based on the DVB-T standard.

The future use of the digital dividend is a hotly debated topic in Austria and throughout Europe.[30] The fundamental political decision to use the digital dividend for mobile broadband coverage in Austria will renew and stimulate competition between fixed and mobile broadband. Thanks to this development, we can expect a major increase in investment and innovation activity on the mobile and fixed broadband platforms as well as substantial improvements in coverage.

[30] This refers to the upper part of the digital dividend (790 to 862 MHz).

5.2.5 Leased lines

5.2.5.1 Introduction

Leased lines are exclusive lines for data transmission

Leased lines refer to symmetrical, bidirectional point-to-point connections which provide transparent transmission capacity between two network termination points located in Austria, but without allowing on-demand switching. This means that the user does not have individual control capabilities; the data is always exchanged between the same two predefined termination points. Leased lines are thus made available to the customer as exclusive and constant (24-hour/365-day) point-to-point connections with a guaranteed minimum bandwidth.

In principle, the technology used to realize a leased line is irrelevant for the purpose of this classification. Leased lines can be realized using radio links, copper-wire pairs, coaxial and fiber cables.

Leased lines required mainly by communications service providers and network operators as well as businesses

Many communications services and other business activities (e.g., logistics services) would not be possible without leased lines. At the wholesale level, communications service providers and network operators which do not have (sufficient) infrastructure of their own rely on leased lines to provide communications services for retail customers (e.g., mobile communications, Internet access).

Wholesale customers therefore require leased lines to supplement their own infrastructure (e.g., leased lines can be used to connect mobile radio transmitter antennas to a higher network level or to connect subscribers to a network).

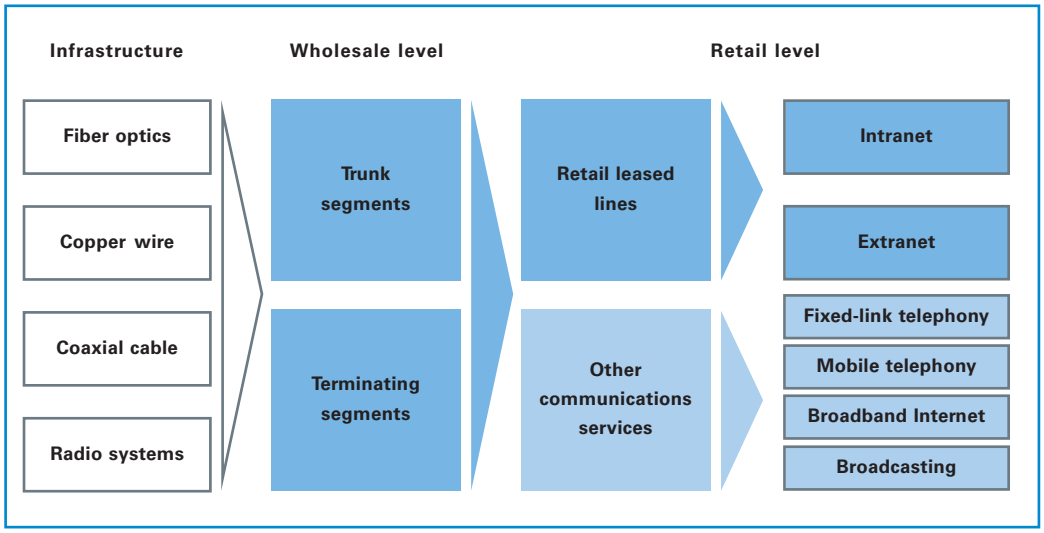
At the retail level, companies generally deploy leased lines for the following purposes:

- to network two or more of a company's offices or locations, e.g., to connect branches to the headquarters (Intranet); or
- to connect business partners, suppliers or customers to their networks (i.e., to create Extranets).

Depending on how they are used, leased lines might be required with various bandwidths, ranging from 64 kbit/s to 2 Mbit/s and even 155 Mbit/s or more.

The figure below illustrates the relationship between wholesale leased lines and retail leased lines as well as other communications services.

Figure 59: Levels of value creation in leased lines



Source: RTR

5.2.5.2 Leased line markets according to the TKMV 2008

Three relevant leased line markets

In line with the method applied in the delineation of markets for the TKMV 2008, three relevant leased line markets have been identified in Austria:

- Retail leased lines up to and including 2.048 Mbit/s (retail market);
- Terminating segments of leased lines with low bandwidths up to and including 2.048 Mbit/s (wholesale market);
- Terminating segments of leased lines with high bandwidths over 2.048 Mbit/s up to and including 155.52 Mbit/s (wholesale market).

The wholesale market for terminating segments is differentiated according to bandwidth, with a distinction being drawn between low bandwidths (up to and including 2.048 Mbit/s) and high bandwidths (over 2.048 Mbit/s up to and including 155.52 Mbit/s). Due to the high intensity of competition in the segment, terminating segments with very high bandwidths (over 155.52 Mbit/s) are not covered by the TKMV 2008.

Geographical differentiation of leased lines with high bandwidths

In addition, the market for terminating segments of leased lines with bandwidths over 2.048 Mbit/s up to and including 155.52 Mbit/s is differentiated geographically. Products where both ends of the line are located in one of the following municipalities are not considered part of this market: Bregenz, Dornbirn, Feldkirch, Graz, Hallein, Innsbruck, Klagenfurt, Linz, Salzburg, Steyr, Wels and Vienna.

Ethernet services as substitutes for wholesale leased lines

Compared to the definitions in the TKMVO 2003, the two relevant markets for terminating segments now also include Ethernet services in which a guaranteed bandwidth is provided between network termination points and in which the leased lines do not have user-side Ethernet interfaces.

In accordance with the European Commission's markets recommendation, the TKMV 2008 no longer defines the wholesale market for trunk segments as a relevant market. Trunk segments refer to those leased lines and sections thereof which generally do not reach the subscriber's network termination point but serve to link interconnection points in those 28 Austrian towns where Telekom Austria has realized points of interconnection (POIs) for the telephone network. As no competition problems were identified on this market and it was not subjected to sector-specific ex ante regulation in the past, the market is not included in the TKMV 2008.

Even in the past, retail leased lines with bandwidths higher than 2.048 Mbit/s and international leased lines were not considered relevant to the delineation of markets under the Three-Criteria Test used to assess whether sector-specific regulation is necessary.

In the sections that follow, the development of the leased line sector in Austria (and by international comparison) is discussed in detail.

5.2.5.3 Market data

5.2.5.3.1 Market participants

Table 24 lists the largest providers in the leased line sector (in terms of revenues) and indicates the markets on which those companies operate.

Table 24: Largest providers on the leased line markets

Company	Retail market ≤ 2 Mbit/s	Market for trunk segments	Market for terminating segments
Telekom Austria	■	■	■
Tele2	■	■	■
COLT	■	■	■
EVN		■	■
Salzburg AG	■	■	■
Elektrizitätswerk Wels	■	■	■
Energie AG Oberösterreich		■	■
T-Systems Austria	■		
Wienstrom			■

Source: RTR

A total of 39 companies serve the market for national leased lines in Austria, and Telekom Austria is by far the largest provider in the leased line sector. Table 24 shows that many of the largest companies operate on both the retail and wholesale leased line markets, albeit to different degrees (not shown).

5.2.5.3.2 Market volume

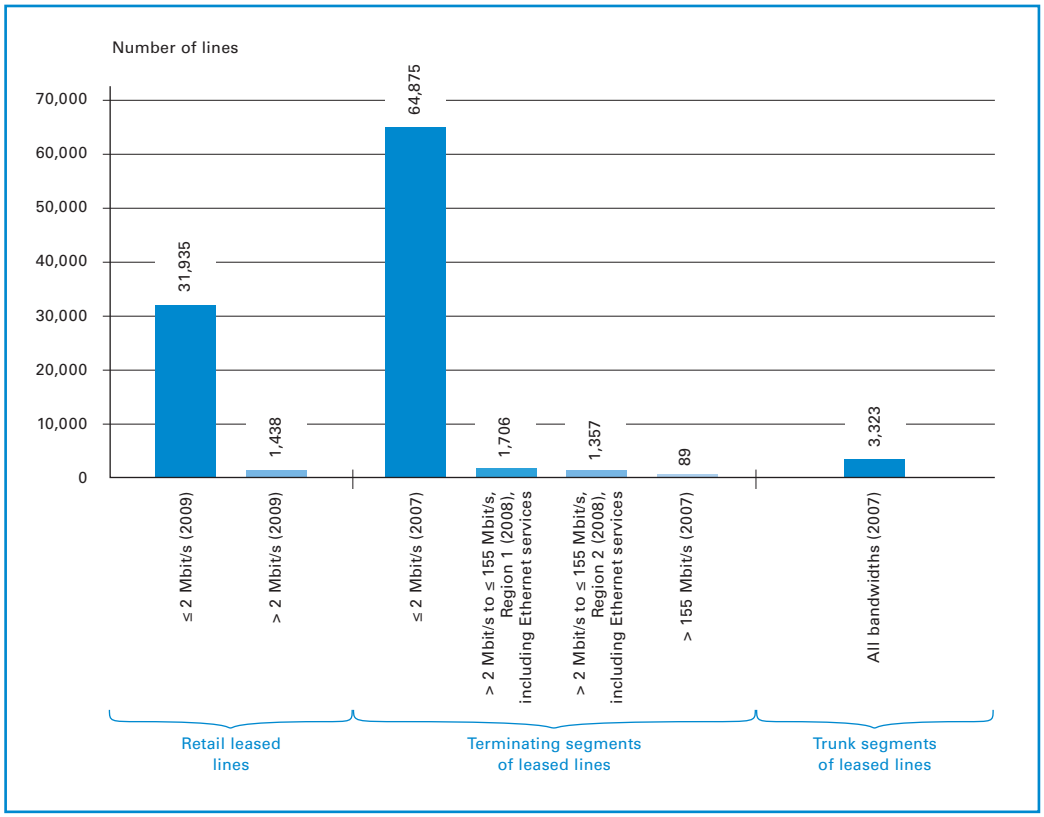
Figure 60 shows the size of each leased line market in Austria based on the number of leased lines; this chart also includes the relevant markets according to the TKMV 2008.

Most demand is for low-bandwidths leased lines

The chart shows that the bulk of demand (some 95,000 lines) refers to national leased lines with bandwidths up to and including 2.048 Mbit/s, and that the demand for wholesale leased lines is approximately twice as high as for retail leased lines.

With approximately 1,500 leased lines each, the markets for leased lines with a capacity exceeding 2.048 Mbit/s are comparatively small in size. In light of new developments in the field of mobile communications (i.e., LTE, mobile broadband), however, we can expect demand for high-bandwidth terminating segments to rise substantially in the future.

Figure 60: Leased line market volume



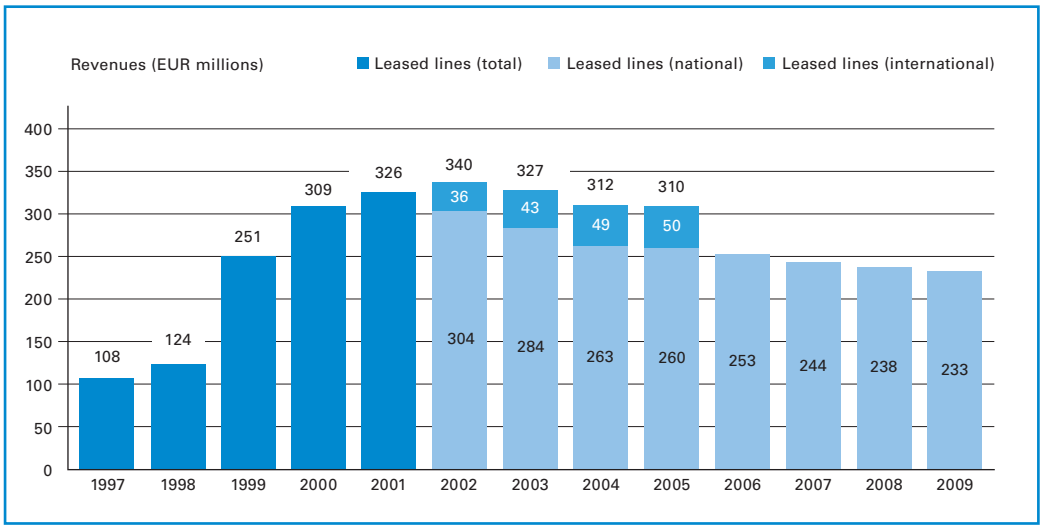
Source: RTR

5.2.5.3.3 Development of revenues

Decline in revenues continued in 2009

As in previous years, the declining trend in revenues from national leased lines also continued in 2009. Figure 61 provides an overview of the revenues generated by national leased lines since 1997, including revenues from wholesale as well as retail leased lines. In 2009, national leased lines generated revenues of approximately EUR 233 million, which represents a decrease of 2% compared to the previous year's figure. Unfortunately, no data on international leased lines is available from 2006 onward.

Figure 61: Development of revenues from leased lines



Source: RTR

For the period between 1997 and 2001, only aggregate data on national and international leased lines was available.
Due to subsequent corrections by the network operators, the values shown here may differ slightly from those indicated in the 2008 Communications Report.

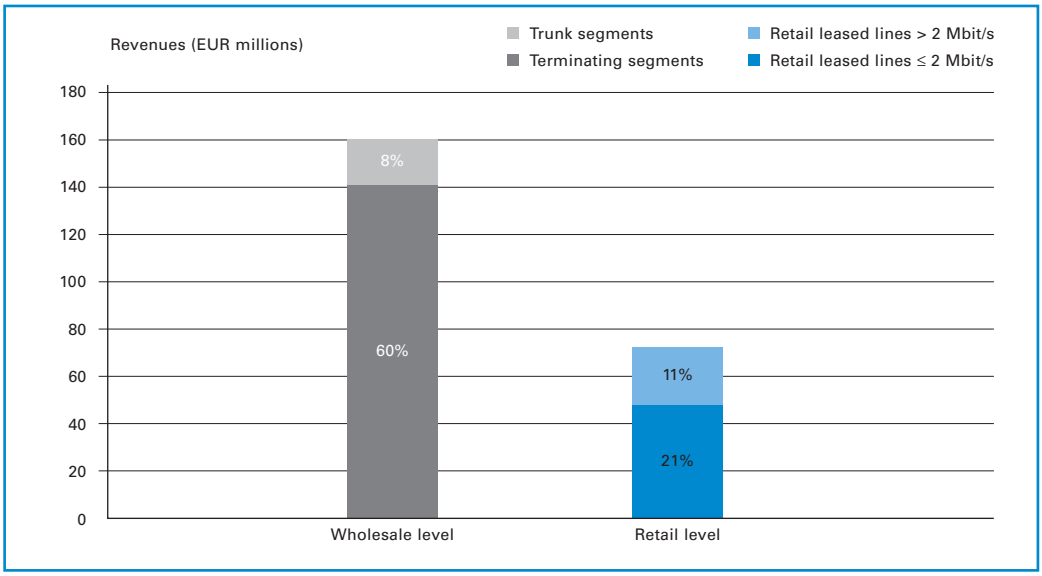
Decline in revenues mainly in retail segment

The declining tendency observed in revenues has manifested itself most clearly in the case of retail leased lines; in contrast to previous years, this decline mainly affected retail leased lines with high bandwidths (exceeding 2.048 Mbit/s). In this segment, revenues dropped by approximately EUR 6 million compared to the previous year. One possible reason for this decline might be found in the rising demand for Ethernet services with guaranteed bandwidths. Ethernet services provide similar functionality to leased lines but are priced more favorably (especially in cities) and enable greater flexibility with regard to bandwidths. Therefore, the increased demand for these services may be reflected in the declining demand for retail leased lines. In contrast, revenues from leased lines at the wholesale level (terminating segments) rose slightly in comparison to the previous year (+EUR 5.5 million); this increase was observed in low and high bandwidths equally.

Highest demand generated at the wholesale level

Most of the revenues from national leased lines are still generated at the wholesale level, in particular by terminating segments (60%). The retail market accounts for 32% of overall revenues from national leased lines; most of the demand in this segment is still for leased lines with bandwidths up to and including 2.048 Mbit/s (Figure 62). The large share of revenues from national wholesale leased lines makes it clear that the development of communications infrastructure – especially through terminating segments at the local level – is a major determinant of demand for leased lines.

Figure 62: Revenues by area in 2009



Source: RTR

5.2.5.3.4 International comparison of rates

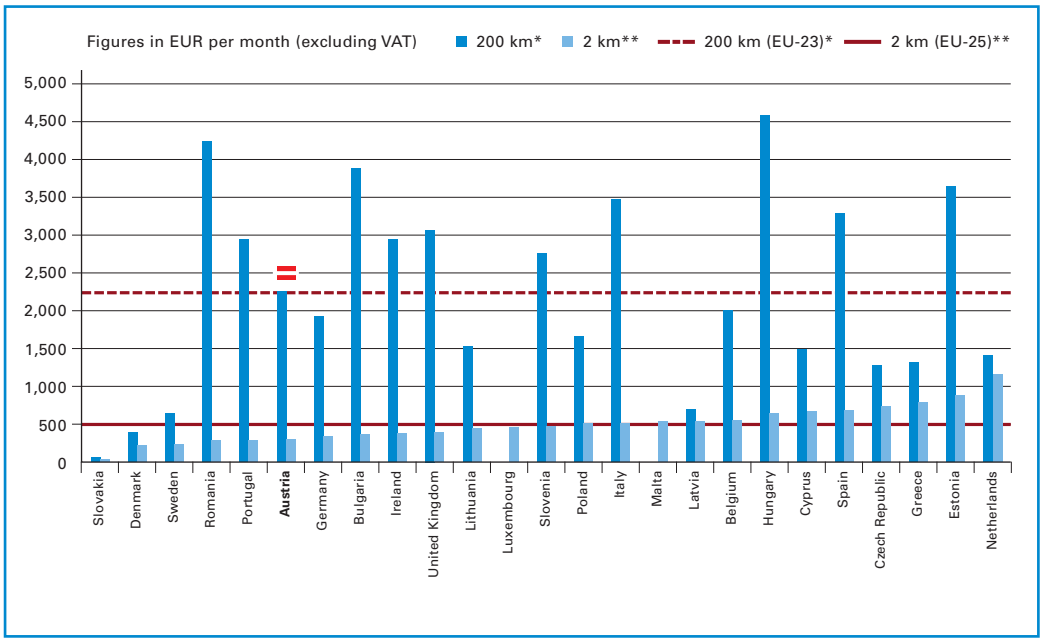
Austrian prices below EU average for short lines, above average for long lines

The Implementation Report published at regular intervals by the European Commission contains international comparisons of the leased line prices of the incumbent operator in each country and compares the annual expenditure (excluding setup charges and taxes) of retail customers for national leased lines with bandwidths of 2 Mbit/s and 34 Mbit/s and lengths of 2 km and 200 km.

Figure 63 provides an overview of the rates charged for 2Mbit/s leased lines throughout Europe. When interpreting this data, it is important to note that rate packages, billing structures, market structures, etc. are not homogeneous, which may lead to a certain degree of imprecision. Moreover, data in all of the categories examined was not available for all 27 EU member states, which may also lead to distortions in the calculation of averages.

This rate comparison makes it clear that Telekom Austria's prices for short 2 Mbit/s leased lines (2 km in length) are below the EU average, while the company's prices for 200 km lines are close to the EU average. The 15th Implementation Report shows similar data for 34 Mbit/s retail leased lines. In this context as well, Austria's prices are well below the EU average for short lines (2 km), but just above the average for longer lines (200 km).

Figure 63: International leased line prices (2 Mbit/s), 2009



Source: 15th Implementation Report of the European Commission

* No data was available on Luxembourg, Malta, Finland and France for the year 2009.
** No data was available on Finland and France for the year 2009.

6. RTR's activities as a competence center

With due consideration of the principles of economy and expedience, RTR is also responsible for acting as a competence center for broadcasting and telecommunications industry affairs.

In particular, this responsibility involves conducting analyses of topics related to the duties of KommAustria, the Telekom-Control-Kommission (TKK) and RTR by commissioning studies or preparing expert opinions.

In addition, the information resulting from these activities is to be disseminated to the public through publications and specialist events as well as the RTR web site.

Moreover, in its capacity as a competence center under the joint leadership of the managing directors of the Broadcasting and Telecommunications Divisions, RTR is also responsible for carrying out analyses, publishing information and organizing specialist events across the two fields, especially in matters related to the convergence of the broadcasting and telecommunications industries.

In the field of postal regulation, RTR is not required to operate a competence center.

6.1 Broadcasting Division

6.1.1 Research Institute for Electronic Mass Media Law (REM)

Once again, the Research Institute for Electronic Mass Media Law (*Forschungsinstitut für das Recht der elektronischen Massenmedien*, or REM), which was founded in early 2005, dedicated its efforts to academic research on electronic mass media law at the national and international level in 2009.

The REM was established as a non-profit association within RTR. The REM Board of Directors comprises Prof. Walter Berka (University of Salzburg), Prof. Christoph Grabenwarter (Vienna University of Economics and Business Administration), Prof. Michael Holoubek (Vienna University of Economics and Business Administration), Alfred Grinschgl (RTR), Hans Peter Lehofer (Austrian Administrative Court), Michael Ogris (KommAustria) and Matthias Traimer (Austrian Federal Chancellery).

Fall 2009: 5th Austrian Broadcasting Forum

Each year, the association organizes the Austrian Broadcasting Forum in order to support the exchange of ideas between academics, researchers and practitioners. Held in the fall of 2009, the 5th Austrian Broadcasting Forum was entitled "Public Value" and dealt with various perspectives on this issue, which is a major concern throughout Europe at the moment. The

topic was elucidated from the perspective of communications science as well as national law and Community law, with due attention to the views of private as well as public broadcasters. Experience in other European countries was also taken into account, including the three-step test in Germany and the public value test in the UK.

In addition, the REM also produces a publication series on the topics discussed at each year's Broadcasting Forum. After the third volume of proceedings on the topic of "Broadcasting Finance Law," the volume from the 4th Broadcasting Forum ("Media on the Web") was published in 2009.

6.1.2 Scientific studies commissioned by RTR

In 2009, RTR's Broadcasting Division commissioned several studies, each of which is described briefly below.

Advertising-based financing and mobile TV

Advertising-based financing and mobile TV

RTR commissioned Spoon Next Level Technology GmbH to prepare a study on "Advertising-based financing and mobile TV – International benchmarking for mobile TV advertising forms," which the authors presented at RTR's premises in December 2009. The objective of the study was to carry out a comparative analysis of business models for advertising-based financing and to address the potential for financing mobile television through advertising on the Austrian market.

The key proposals focus on expanding the reach of mobile television in order to cover as many regions of Austria as possible – especially key transport and traffic routes – and promoting the use of the DVB-H distribution channel for other data services, such as navigation systems for road traffic.

Television programming analysis – General-interest channels in Austria in 2009

Television programming analysis 2009

For the third time since 2006, RTR commissioned Jens Woelke of the University of Münster to carry out an analysis of Austria's general-interest television stations.

The results will be presented in a volume of RTR's publication series in 2010. Woelke presented initial findings from the study at the specialist event "Television programming analysis – Austrian general-interest channels in 2009" held in December 2009.

General summary of the programming analysis:

- With the entry of the private television station PULS 4, Austrian nationwide television offered more overall diversity in early 2009 compared to early 2007.
- As the first general-interest private television station included in the television programming analysis, PULS 4 exhibits greater internal diversity and a more differentiated programming profile compared to ORF 1 or ATV.

- ORF 1 and ORF 2 showed opposing developments in terms of diversity between the sampling weeks in 2007 and 2009: ORF 1 broadcasts more entertainment shows (which account for 69.1% of the 24-hour broadcasting day) and fewer television journalism shows (2.9% of the 24-hour broadcasting day), while ORF 2 broadcasts fewer entertainment shows (36.5% of the 24-hour broadcasting day) and more television journalism shows (44.6% of the 24-hour broadcasting day).

- In 2009, ORF 2 was the station with the largest share of television journalism (information) shows during prime time (6:00 pm to 11:00 pm; share of prime-time broadcasting: 56.6%), placing the station far ahead of all other German-language general-interest television channels in the 2009 sample (four Austrian, eight German channels).

- On ORF 1 and ORF 2, news reporting was substantially more pronounced in early 2009 compared to early 2007; the share of broadcasting time taken by reports on controversies in politics, the economy and society rose on ORF 1 and increased drastically on ORF 2.

- ATV broadcast more entertainment shows (which accounted for 53.2% of the 24-hour broadcasting day) and fewer television journalism shows (10.7% of the 24-hour broadcasting day) in 2009 compared to 2007, and its programming profile is developing toward content complementary to ORF 1.

TV brands in Austria

TV brands in Austria

In December 2009, Kati Förster and Johanna Grüblbauer of the St. Pölten University of Applied Sciences (FH St. Pölten) presented their study on "TV brands in Austria" to an expert audience at RTR's premises. The study surveys the economic value and perception of television station brands.

For ten channels (ORF 1, ORF 2, ATV, PULS 4, ProSieben, RTL, SAT.1, VOX, ARD and ZDF), economic data such as reach, gross advertising revenues and market share were supplemented by information on psychological effects, for example perceived competence, affinity or proximity. The study involved a survey of over 2,000 persons in the 14 to 49 age group in Austria, with more than 200 respondents from migrant backgrounds. The results not only show the current positioning of television stations, but also allow direct conclusions as to their future development.

Significance of private broadcasting in Austria

Study on private broadcasting in Austria

In mid-2009, Julia Wippersberg of Vienna University's Department of Journalism and Communications received the commission to carry out a study on "The significance of private broadcasting in Austria," which will be part of RTR's publication series in 2010. The study provides documentation and a systematic overview of the economic, journalism-related and social contributions of private broadcasters and highlights the significance of private broadcasting in Austria. The findings of the study will thus form the basis for further general analyses of private broadcasting and provide an overview of the contributions of individual broadcasters and the industry as a whole. The same volume of RTR's publication series will also include an essay by Susanne Lackner on "Public value and broadcasting."

6.1.3 Involvement in training and education measures for broadcasters

Continuing education for Austria's private television stations

Enhancing quality and competitiveness

RTR supports the training and continuing education efforts of the *Privatsenderpraxis* association in accordance with the authority's mandate under Art. 9 Par. 2 No. 3 KOG, with the overarching goal of enhancing the quality and thus also the competitiveness of private broadcasting in Austria. The training and education events offered cover the fields of programming, sales and broadcasting skills. The association includes 26 private broadcasters, and the courses offered are also open to non-members.

VFRÖ education program

3,000 participants, over 500 days of seminars

Since 2006, RTR has maintained a grant agreement with the *Verband Freier Radios Österreich* (Austrian association of independent radio broadcasters, or VFRÖ) to provide training and continuing education for employees in independent radio broadcasting. In cooperation with independent radio broadcasters and Okto (a Vienna community television station), the association organized over 500 workshop days with more than 3,000 participants in 2009. The VFRÖ's activities largely focused on harmonizing the different training approaches at individual radio stations for the sake of quality enhancement, and on the teaching of management tools such as management control and benchmarking; these measures were taken in order to make the activities of various radio stations comparable and to enable them to learn from one another.

6.2 Telecommunications Division

6.2.1 Information and communications technology (ICT)

On the basis of the measures developed by various experts in a number of initiatives related to ICT in recent years, a recommendation which had been brought up in numerous working groups was planned and launched in the year 2009:

ICT Project Platform

Platform launched for best-practice projects in the field of ICT

In many areas of ICT, Austrian companies deliver top-notch performance on an ongoing and sustained basis. For example, Austrian companies have consistently provided internationally sought-after know-how in the fields of visual design, security technology, medical technology, e-government and other areas for years now. Although these achievements are held in high regard in other countries, very few people in Austria are aware of them.

In response to this low level of awareness, experts participating in various initiatives have repeatedly suggested assembling a collection of successful projects and presenting them to a broader public. In its capacity as a competence center, RTR worked together with the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT) as well as the Federal Chancellery (BKA/Digital Austria Platform) to address and start implementing this proposal.

As a result, the parties involved have now launched a collection of best practice projects directed at businesses, policymakers, journalists and the interested public. On this Web 2.0 platform, companies and institutions in Austria will have the opportunity to present innovative projects in the ICT field. The main purpose of the platform is to make the public more aware of Austria's innovative power and outstanding achievements through brief and easily understandable project descriptions.

RTR is responsible for project execution and has provided the editorial team for the project.

Benchmarking

Benchmarking efforts to compile information on experience in top-ranking ICT countries

In order to enhance its knowledge and skills in the field of information and communications technology, RTR also conducts international research and analyses on experience in top-ranking ICT countries. Interviews with ICT stakeholders in those countries have provided an in-depth picture of decisive success factors. For example, RTR conducted detailed analyses of Denmark, Finland, Singapore and Malaysia in the year 2009. In the case of Scandinavian countries, it has become clear how high the level of awareness of the political, economic and social significance of ICTs is, and how systematic and concept-driven the development of ICTs has been in those countries. These activities also explain the top rankings Scandinavian countries have earned for many years.

Singapore has pursued the strategy of attracting internationally renowned specialists and global companies to the country and offering them the optimum conditions for their research and business activities. In this way, the country has been able to secure valuable know-how in many promising fields and to export that know-how to many other Asian countries. Thanks to the country's small size, cooperation between businesses, science and research institutions, and government authorities is fairly smooth.

In Malaysia, the coordination between individual ministries and institutions in the ICT field is especially striking. The various organizations involved work together closely to realize a common vision which is clearly reflected in their economic plans.

Results provide information on potential ICT strategies for Austria

Even if the experiences in those countries cannot be realized in exactly the same way in Austria, many of the resulting insights can help to define a general direction for Austria's ICT strategy, to avoid "dead ends" and to identify specific paths toward a knowledge-based society.

6.3 The Review

Telecoms reform package adopted

On December 18, 2009, the telecoms reform package was published in the Official Journal of the European Union. The three parts of the package are as follows:

1. Directive 2009/140/EC of 25 November 2009[31] amending the Framework, Access and Authorisation Directives;

2. Directive 2009/136/EC of 25 November 2009[32] amending the Universal Service and Data Protection Directives;

3. Regulation (EC) No. 1211/2009 of 25 November 2009[33] establishing the Body of European Regulators for Electronic Communications (BEREC) and the Office.

In addition, the Commission published a declaration on net neutrality (OJ L 337 of 18 December 2009, p. 69).

The Better Regulation Directive and the Citizens' Rights Directive are to be implemented at the national level by May 25, 2011, meaning that an amendment to the TKG 2003 can be expected by that time.

The regulation establishing the Body of European Regulators for Electronic Communications (BEREC) went into effect on January 7, 2010, although it can be assumed that the Office will only launch full operations at a later point in time.

The telecoms reform package was adopted in accordance with the (old) co-decision procedure under (the former) Article 251 of the EC Treaty; this procedure was replaced by the ordinary legislative procedure under Article 294 of the Treaty on the Functioning of the European Union when the Treaty of Lisbon went into effect.

The proposals for the telecoms reform package were published by the European Commission on November 16, 2007. After the European Economic and Social Committee adopted an opinion on May 29, 2008 and the Committee of the Regions finalized its opinion on June 19, 2008, the first reading of the reform package took place on September 24, 2008. The European Commission then amended its proposals and presented the new and adapted versions on November 7, 2008.

Once the European Council had issued a common position on February 16, 2009, intensive discussions were held at the informal level between the Czech EU presidency and the European Parliament in order to reach agreement at the second reading. The package was then voted down by the European Parliament on May 6, 2009, but only due to a single provision regarding the restriction of users' Internet access.

After the European Commission issued comments on July 30, 2009, the Council decided on October 9, 2009 not to adapt Directive 2009/140/EC in the version amended by the European

[31] OJ L 337 of 18 December 2009, p. 37.
[32] OJ L 337 of 18 December 2009, p. 11.
[33] OJ L 337 of 18 December 2009, p. 1.

Parliament, which meant that it was necessary to convene a Conciliation Committee. Under the Swedish EU Presidency, the European Parliament and Council were ultimately able to reach agreement in the Conciliation Committee on November 4, 2009. The outcome of the conciliation process was adopted by the Council on November 20, 2009, and by the European Parliament on November 24, 2009 (agreement at third reading).

In parallel, Directive 2009/136/EC and the BEREC Regulation were adopted by the Council on October 26, 2009 (agreement at second reading).

Main elements of the telecoms reform package

A number of key changes can be identified in the telecoms reform package.

The European Regulators Group (ERG) will be replaced by BEREC. The duties of this new body, the extent of financing provided by the European Union and the size of the Office will be decisive factors in determining this body's role at the EU level.

The initially proposed shift of broad frequency administration competences to the European Commission was not accepted by the Council and the European Parliament. Nevertheless, a number of important (albeit not entirely new) changes will be introduced with regard to frequencies (technology and service neutrality, frequency trading, verification of restrictions on existing rights, strategic frequency planning with heavier involvement of the European Parliament, etc.).

The reform package did not grant the European Commission the power to veto remedies, but the new legislation does provide for a new and complex procedure under Article 7a of the Framework Directive which is designed to reinforce cooperation between the European Commission, BEREC and the national regulatory authorities in the uniform application of remedies.

Incentives for investing in new infrastructure

In order to encourage infrastructure-based competition, the Council and European Parliament also made efforts to create incentives for the promotion of NGNs (see the considerations of the European Commission regarding a recommendation on NGNs/NGA.)

The legal framework for the functional separation of vertically integrated undertakings was also defined.

As a compromise, an agreement was made to expand harmonization measures for the European Commission in the field of market definition and analysis as well as number assignments.

Another major focus area was the strengthening of consumers' rights, which is to be ensured by expanding minimum content requirements for contracts, by requiring the publication of comparable information on prices, rates and standard terms and conditions, by accelerating the process of number porting (i.e., one day for activation) as well as expanding service quality requirements and ensuring better access to emergency call services.

However, the effects of these amendments to the directives will still depend on national implementation.

6.4 Convergence and the digital dividend

Digital dividend: 790-862 MHz band

Thanks to the digitization of broadcasting transmission platforms, it has been possible to make better use of the available frequency spectrum and network capacity. The term "digital dividend" refers to the additional frequency spectrum which becomes available in a completely digital environment once the frequency needs of previously existing broadcasting services have been covered. On the basis of considerations at the international level (especially the World Radio Conference 2007, or WRC-07), the current debate on how to allocate the digital dividend in Austria focuses on the 790-862 MHz frequency band, which is currently dedicated to television broadcasting.

Commission takes important steps in late 2009

In a communication to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions, the European Commission described the digital dividend as a "resource with exceptional social, cultural and economic value," which is why it is important to ensure optimum use of the spectrum from a social and economic standpoint (COM[2007]700). In the fall of 2009, the European Commission published the final version of a study it had commissioned ("'Exploiting the digital dividend' – A European approach"),[34] as well as a communication (COM[2009]586) and a recommendation on this topic (2009/848/EC). In its communication, the European Commission also emphasizes the benefits of using the digital dividend for mobile broadband services. The related Commission recommendation then addresses proposals from the communication and recommends that member states complete the full shutdown of analog television broadcasting transmissions by January 1, 2012 and advance technological harmonization in the 790-862 MHz frequency band.

For the latter objective, the European Commission plans to prepare a decision which will not force member states to allow services other than television broadcasting in the 790-862 MHz band; however, in cases where member states allow the digital dividend to be used for other services as well (e.g., mobile broadband), such use should be based on uniform technical parameters.

Competing uses for the digital dividend

This discussion is now in full swing in Austria as well. Since an event organized by Digital Platform Austria (RTR and KommAustria)[35] in January 2009, various interests have been articulated: Mobile operators see the use of the digital dividend as an excellent opportunity to offer broadband services economically in previously untapped areas, while television service providers believe that the digital dividend can also be used to offer high-definition television (HDTV) and other programs in terrestrial broadcasting. For their part, cable network operators have suggested that the use of the digital dividend could create interference in the reception of cable television channels. The users of radio microphones (e.g., concert organizers, etc.) and representatives of the relevant equipment industry note that their radio transmissions also use the 790-862 MHz band, meaning that they would have to "vacate" the frequency band if it were allocated for a different purpose. Moving to another frequency range would bring about high costs.

Amendment to Frequency Utilization Ordinance

In July 2009, the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT) amended the Frequency Utilization Ordinance (FNV) in line with international requirements so

[34] http://ec.europa.eu/information_society/policy/ecomm/radio_spectrum/_document_storage/studies/digital_dividend_2009/dd_finalreport.pdf

[35] http://www.rtr.at/de/komp/Veranstaltung27012009 (in German)

that mobile communications applications in the band in question will be regarded as permissible from June 2015 onward; the FNV also mentions that efforts should also be made to set an earlier date for this change.

The decision on when, for which services and under which conditions the use of the digital dividend will be allowed is a distribution policy decision on the use of scarce resources; it must therefore be made by policymakers (i.e., the relevant government ministers). RTR is involved in this discussion in multiple ways and is also highly committed to the topic: First of all, RTR advises policymakers on relevant issues in this context. To this end, RTR has commissioned a study on economic approaches (at the request of the BKA and BMVIT) which will build on the results of the aforementioned study carried out for the European Commission. The scenarios relevant to Austria must be developed and assessed against this backdrop, with due attention to Austria's specific situation regarding the plans presented by the European Commission. After a procedure in accordance with Austrian public procurement law, the contract for the study was awarded to the Hamburg-based consortium "AB Consulting (Arne Börnsen)/Infront Consulting & Management GmbH" at the end of December 2009. Among others, Professors Jörn Kruse and Michael Latzer will work on the study, which will be completed by the end of April 2010.

RTR commissions study

Study to be completed by end of April 2010

6.5 Public relations and service

The material work of KommAustria, the TKK and RTR as well as the organization's activities as a competence center are a field of great interest to the public. In order to ensure transparency and to meet the public's information requirements, the regulatory authority undertook numerous public relations activities in the reporting period.

Web presence

The regulatory authority's most important tool for communication with the outside world is its web site (http://www.rtr.at), which comprises some 9,000 pages and on which RTR provides a comprehensive description of the regulatory authorities' activities as well as the development of markets in the fields of broadcasting, telecommunications, electronic signatures, grant funds, collecting societies and postal services. In addition, RTR offers numerous e-government services for both consumers and market participants.

http://www.rtr.at comprised some 9,000 pages as of December 31, 2009

Publications

RTR's frequent publications are another major component of the authority's public relations work. RTR's annual publications include the Communications Report as well as the activities reports of RTR's conciliation body, the Austrian Digitization Fund and the Austrian Television Fund. These publications fulfill legal reporting obligations and provide comprehensive documentation on the work of the regulatory authorities. In December 2009, RTR published a catalog containing a broad overview of all television film projects supported between 2004 and 2008.

In addition, three new volumes in RTR's publication series were produced during the reporting period; these publications were studies composed by external experts.

Table 25: Titles in RTR's publication series in 2009

RTR publication series: Three studies published

Volume 1/2009	Regulatory options for unused capacity on fixed-link wholesale and retail markets
Volume 2/2009	Broadband access networks in Austria – Cooperation models and financing of infrastructure for next generation access
Volume 3/2009	Advertising-based financing and mobile TV

Source: RTR

RTR's periodic broadcasting and telecommunications newsletters provide information on regulatory decisions and topics of international interest from the two divisions at RTR.

RTR's Telecom Monitor, which is published on a quarterly basis, has attracted an especially high level of interest. This publication discusses the development of the telecommunications market and presents data on the fixed-link, mobile, leased-line and broadband market clusters.

Events

The regulatory authority conveys relevant topics to market participants and a broader audience at the national and international level through the presentation activities of RTR's managing directors and selected employees, and by organizing numerous specialist conferences and discussion forums.

In field of broadcasting, highlights in 2009 included Digital Platform Austria's General Assembly on the digital dividend, the presentation of the television programming analysis, the 5th Austrian Broadcasting Forum, and a seminar on the business aspects of television production. In May 2009, the Austrian Television Fund celebrated its fifth anniversary with an event dedicated to the topic of "The Austrian Television Fund and Austria as a media location."

In the Telecommunications Division, it is especially worth noting two multi-industry events in 2009, one on the topic of "Expansion and cooperation models for access infrastructure" and one on "Financing the expansion of broadband access networks." The Telecommunications Forum in Salzburg, which has gradually become an institution in the industry, was held for the tenth time and dealt with the topic of the EU's i2010 information society initiative.

Management of inquiries

2009: Nearly 3,300 written inquiries to rtr@rtr.at

RTR handles a large number of inquiries by telephone and in writing every day. In 2009, RTR replied to nearly 3,300 written inquiries submitted to the e-mail address rtr@rtr.at, which were largely answered individually. The average processing time was two working days.

Table 26: Number of inquiries sent to rtr@rtr.at, 2007 to 2009

Year	2007	2008	2009
Number of inquiries	3,763	3,872	3,277

Source: RTR

In terms of content, the inquiries cover the entire scope of RTR's activities, with the bulk of inquiries (63%) involving retail consumer concerns. In addition to answering written inquiries, RTR's experts frequently provided advice by telephone.

RTR's call center is also available for initial advising by telephone, and more than 5,600 calls were received by the hotline 0810 511 811 (subject to a charge) in 2009. The fact that users are now better informed is certainly one reason for the sharp decline (approximately -20%) in the number of telephone inquiries.

Table 27: Number of call center inquiries, 2007 to 2009

Year	2007	2008	2009
Number of calls	7,431	6,953	5,634

Source: RTR

Call center: Number of inquiries down approximately 20%

Media relations

In order to provide the public with timely and accurate information on the activities and decisions of the regulatory authorities, RTR organized seven press conferences and prepared 50 press releases in 2009, in addition to answering numerous press inquiries and holding individual interviews with media representatives.

50 press releases and 7 press conferences

7. The company

The Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR) was established under Austrian law as the successor to Telekom-Control GmbH in 2001. The purpose of the authority is to regulate the Austrian broadcasting and telecommunications markets (and now also the market for postal services) and to ensure competition on those markets. The duties of the regulatory authority are set forth in the KommAustria Act, the Telecommunications Act as well as the Postal Services Act and Postal Market Act. On the one hand, the authority is responsible for performing its own official duties, and on the other hand the organization is responsible for providing operational support for the relevant authorities, namely KommAustria, the Telekom-Control-Kommission (TKK) and the Post-Control-Kommission (PCK). RTR is also responsible for awarding grants from the Austrian Digitization Fund and the Austrian Television Fund, and – since the fall of 2009 – from the Non-Commercial Broadcasting Fund and the Private Broadcasting Fund.

As a private limited company wholly owned by the Austrian federal government, RTR is headed by two managing directors and is subdivided into two specialist divisions. During the reporting period, Alfred Grinschgl served as managing director of the Broadcasting Division, while Georg Serentschy was in charge of the Telecommunications Division, which also includes regulatory affairs related to postal services.

The regulatory authority is funded from various sources depending on the relevant areas of activity. On the one hand, market participants are required by law to provide partial funding for the authority, and on the other hand the organization is supported with funds from the Austria's federal budget.

7.1 Staff structure and development

As noted above, two new funds were established in the Broadcasting Division for the purpose of promoting the activities of private and non-commercial broadcasters. In addition, the gradual development of RTR's regulatory operations for postal services (a process which began in 2008) also continued in 2009 with an expansion to additional areas of responsibility.

This placed new demands on the company as a whole and had effects on its personnel as well as its financing structure.

On average, the company had a total of 93.085 full-time equivalents (FTEs) based on a contract of employment with RTR in 2009, meaning that the company's average head count decreased by 2.905 FTEs compared to the previous year.

As of December 31, 2009, RTR's staff comprised 95.954 full-time equivalents (FTEs), which was 0.5 FTEs less than one year earlier.

Despite additional responsibilities in both specialist divisions of the company, RTR managed to decrease the number of FTEs in the Broadcasting, Telecommunications and Service Divisions by maximizing efficiency in the use of human resources in 2009.

In the field of broadcasting regulation, the number of staff members fluctuated over time due to employee turnover and leaves of absence. On average, staff in this field was reduced by nearly 2 FTEs compared to the previous year.

The Non-Commercial Broadcasting Fund and the Private Broadcasting Fund were integrated into the organization in the fourth quarter of the year, for which staff requirements amounted to nearly 1 FTE (or 0.17 FTEs on average for the year).

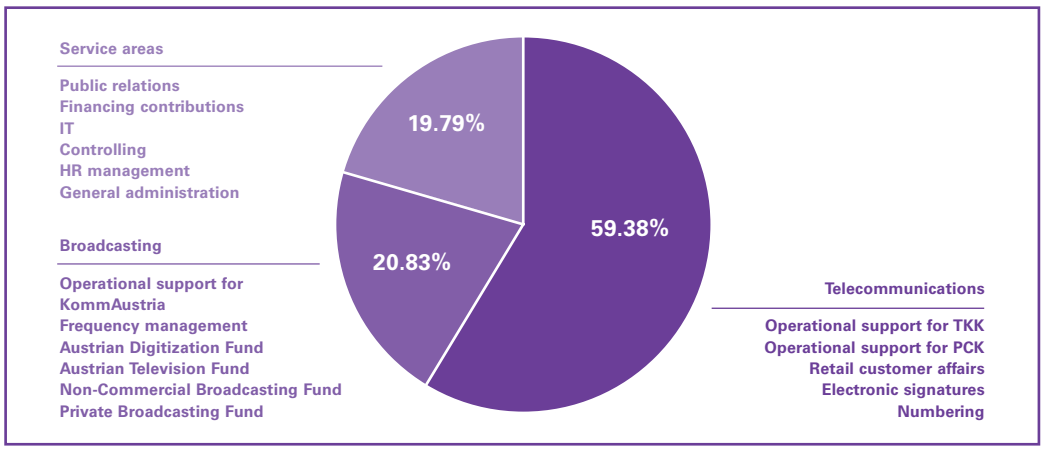
The number of FTEs in the field of telecommunications regulation remained constant over the year 2009. Compared to 2008, the authority's head count in this field decreased by approximately 1 FTE.

The authority's legal mandate to carry out preparatory activities for the PCK's regulation of the postal services market made it necessary to increase staff by approximately 0.5 FTEs on average over the year.

Due to employee turnover, the average number of FTEs in the Service Division was reduced by roughly 0.5 compared to the previous year; part of this reduction was offset by the use of temporary staff from employee leasing companies.

In order to ensure the optimum use of human resources, RTR's employees perform tasks in various areas of the company. Despite a large number of different cost categories, the company's tailored timesheet system and project-based work tracking system ensure a clear assignment of individual work activities to the relevant areas in cost accounting. This makes it possible for employees to perform activities for different cost centers in different divisions and to capture those activities accordingly in the systems. In this way, the company's divisions can exchange services at the current hourly rates using the internal cost allocation system. These measures ensure that RTR's personnel resources are used efficiently throughout the company.

Figure 64: Staff structure and size as of December 31, 2009



Source: RTR

7.2 RTR's financial statements for 2009

These financial statements were prepared in accordance with the Austrian Commercial Code (UGB) in its current version.

The external auditors at Leitner + Leitner have issued an unqualified audit certificate confirming RTR's financial statements for the 2009 business year (January 1, 2009 to December 31, 2009).

RTR's income statement and balance sheet from the 2009 financial statements are presented below.

The company's revenues consist of financing contributions from broadcasters established in Austria (Art. 10a Par. 2 KOG) and from operators/providers of public communications networks and services (Art. 10 Par. 2 KOG), allocations from Austria's federal budget (Art. 10 Par. 1, Art. 10a Par. 1, Art. 9b Par. 9 and Art. 9f Par. 3 KOG) as well as payments from the federal government for activities related to postal market regulation (2005 Amendment to the Postal Services Act) and for RTR's activities as the supervisory authority for collecting societies (Art. 28 VerwGesG). The latter revenues are raised by means of financing contributions which the supervisory authority receives from collecting societies (Art. 7 Par. 5 VerwGesG).

The company closed the 2009 business year with a loss of approximately EUR 2,000.00 resulting from duties assigned under the Austrian Postal Services Act 1997 (2005 Amendment to the Postal Services Act). This loss will be offset in the business year 2010.

Compared to the previous years, the development of RTR's expenditures is balanced.

Table 28: Income statement for the 2009 business year (January 1, 2009 to December 31, 2009)

		2009		2008	
		EUR		EUR '000	
1.	Net revenues		10,674,206.24		10,355
2.	Other operating income				
	a) Income from disposal of fixed assets	8,288.87			
	b) Income from reversal of provisions	24,907.80		1,773	
	c) Other	59,640.89	92,837.56	164	1,936
3.	Personnel expenses				
	a) Salaries	-5,651,026.94		-5,659	
	b) Severance payment expenses	-141,489.37		-127	
	c) Pension insurance expenses	-177,524.41		-163	
	d) Cost of statutory social insurance contributions as well as remuneration-dependent charges and mandatory contributions	-1,389,837.32		-1,387	
	e) Voluntary benefit expenses	-92,525.54	-7,452,403.58	-104	-7,439
4.	Depreciation: Intangible fixed assets and property, plant and equipment		-242,878.13		-215
5.	Other operating expenses				
	a) Other	-3,265,191.73	-3,265,191.73	-3,185	-3,185
6.	**Operating income**		**-193,429.64**		**1,452**
7.	Income from other securities held as financial assets		105,186.78		105
8.	Miscellaneous interest and similar income		42,750.48		133
9.	Income from write-ups of financial assets		0.00		51
10.	Expenses from financial assets				
	– Depreciation of financial assets	-24,506.64	-24,506.64		0
11.	Interest and similar expenses		-1.11		0
12.	**Financial result**		**123,429.51**		**289**
13.	**Result from ordinary activities**		**-70,000.13**		**1,741**
14.	**= Net annual loss**		**-70,000.13**		**1,741**
15.	Reversal of capital reserves				
	a) Reversal of appropriated capital reserves		11,759.05		34
16.	**Loss for current year**		**-58,241.08**		**1,775**
17.	Loss carried forward		55,865.24		-1,719
18.	**Accumulated loss**		**-2,375.84**		**56**

Sector-specific expenses in the Broadcasting and Telecommunications Divisions

RTR's financial statements do not contain a breakdown of resource allocations by division. For this reason, Table 29 below provides a breakdown of the main items in RTR's income statement for the Telecommunications and Broadcasting Divisions. In the business year 2009, income and expenses were distributed as follows:

Table 29: RTR income and expenses by division

Amounts indicated in EUR '000	Broad-casting	Telecom-munications	Total
Net revenues	3,456	7,218	10,674
Other operating revenues	41	52	93
Personnel expenses	-2,054	-5,398	-7,452
Depreciation	-88	-155	-243
Other operating expenses	-1,392	-1,873	-3,265
Operating result	**-37**	**-156**	**-193**
Financial result	37	86	123
Result from ordinary activities	**0**	**-70**	**-70**
Reversal of capital reserve	0	12	12
Profit carried forward	0	56	56
Accumulated profit/loss	**0**	**-2**	**-2**

Source: RTR. Differences in sums are due to rounding.

The table below breaks the company's income and expenses down into individual areas of activity within the Telecommunications Division (i.e., telecommunication regulation, electronic signatures and postal services regulation) and the Broadcasting Division (i.e., broadcasting regulation, Austrian Digitization Fund, Austrian Television Fund, Non-Commercial Broadcasting Fund, Private Broadcasting Fund, and supervisory authority for collecting societies).

Table 30: Income statement broken down by specific area of activity in 2009

	EUR	RTR total	Telecom regulation	Electronic signatures
1.	Net revenues	10,674,206.24	6,888,129.23	129,466.42
2.	Other operating income	92,837.56	49,476.91	1,684.41
3.	Personnel expenses	-7,452,403.58	-5,128,304.12	-99,187.67
4.	Depreciation of intangible fixed assets and property, plant and equipment	-242,878.13	-137,675.19	-15,462.76
5.	Other operating expenses	-3,265,191.73	-1,753,999.45	-30,697.44
6.	**Subtotal of items 1 to 5**	**-193,429.64**	**-82,372.62**	**-14,197.04**
7.	Income from other securities held as financial assets	105,186.78	71,357.32	1,240.88
8.	Miscellaneous interest and similar income	42,750.48	27,719.77	1,483.85
9.	Income from write-ups of financial assets	0.00	0.00	0.00
10.	Expenses from financial assets	-24,506.64	-16,703.73	-286.73
11.	Interest and similar expenses	-1.11	-0.74	-0.01
12.	**Sub-total of items 7 to 11**	**123,429.51**	**82,372.62**	**2,437.99**
13.	**Result from ordinary activities**	**-70,000.13**	**0.00**	**-11,759.05**
14.	**Net annual loss**	**-70,000.13**	**0.00**	**-11,759.05**
15.	Reversal of capital reserves	11,759.05	0.00	11,759.05
16.	**Loss for current year**	**-58,241.08**	**0.00**	**0.00**
17.	Profit carried forward	55,865.24	0.00	0.00
18.	**Accumulated loss**	**-2,375.84**	**0.00**	**0.00**

	EUR	Postal regulation	Broadcasting regulation	Austrian Digitization Fund
1.	Net revenues	200,000.00	2,374,263.93	356,649.78
2.	Other operating income	697.97	30,557.22	1,784.58
3.	Personnel expenses	-170,606.51	-1,333,976.68	-254,304.30
4.	Depreciation of intangible fixed assets and property, plant and equipment	-1,807.61	-65,837.60	-8,820.57
5.	Other operating expenses	-88,083.85	-1,030,055.83	-99,544.18
6.	**Subtotal of items 1 to 5**	**-59,800.00**	**-25,048.96**	**-4,234.69**
7.	Income from other securities held as financial assets	1,483.38	21,418.01	3,253.99
8.	Miscellaneous interest and similar income	526.47	8,383.03	1,654.67
9.	Income from write-ups of financial assets	0.00	0.00	0.00
10.	Expenses from financial assets	-450.92	-4,751.84	-673.93
11.	Interest and similar expenses	-0.01	-0.24	-0.04
12.	**Sub-total of items 7 to 11**	**1,558.92**	**25,048.96**	**4,234.69**
13.	**Result from ordinary activities**	**-58,241.08**	**0.00**	**0.00**
14.	**Net annual loss**	**-58,241.08**	**0.00**	**0.00**
15.	Reversal of capital reserves	0.00	0.00	0.00
16.	**Loss for current year**	**-58,241.08**	**0.00**	**0.00**
17.	Profit carried forward	55,865.24	0.00	0.00
18.	**Accumulated loss**	**-2,375.84**	**0.00**	**0.00**

	EUR	Austrian Television Fund	Non-Commercial and Private Broadcasting Funds	Supervisory authority for collecting societies
1.	Net revenues	597,772.64	29,767.84	98,156.40
2.	Other operating income	6,577.35	148.26	1,910.86
3.	Personnel expenses	-402,392.88	-23,921.15	-39,710.27
4.	Depreciation of intangible fixed assets and property, plant and equipment	-7,699.61	-495.52	-5,079.27
5.	Other operating expenses	-201,445.67	-5,823.28	-55,542.03
6.	**Subtotal of items 1 to 5**	**-7,188.17**	**-323.85**	**-264.31**
7.	Income from other securities held as financial assets	5,954.06	479.14	0.00
8.	Miscellaneous interest and similar income	2,609.00	109.38	264.31
9.	Income from write-ups of financial assets	0.00	0.00	0.00
10.	Expenses from financial assets	-1,374.82	-264.67	0.00
11.	Interest and similar expenses	-0.07	0.00	0.00
12.	**Sub-total of items 7 to 11**	**7,188.17**	**323.85**	**264.31**
13.	**Result from ordinary activities**	**0.00**	**0.00**	**0.00**
14.	**Net annual loss**	**0.00**	**0.00**	**0.00**
15.	Reversal of capital reserves	0.00	0.00	0.00
16.	**Loss for current year**	**0.00**	**0.00**	**0.00**
17.	Profit carried forward	0.00	0.00	0.00
18.	**Accumulated loss**	**0.00**	**0.00**	**0.00**

Table 31a: Balance sheet as of December 31, 2009 – Assets

A s s e t s

		December 31, 2009		December 31, 2008	
		EUR		EUR '000	
A.	**Fixed assets**				
I.	Intangible assets				
	1. Rights	129,612.78		214	
	2. Prepayments on intangible assets	12,780.00	142,392.78	0	214
II.	Property, plant and equipment				
	1. Buildings on third-party land	49,222.58		43	
	2. Other fixed assets, furniture, fixtures and fittings	249,166.51	298,389.09	115	159
III.	Financial assets				
	1. Securities held as financial assets		3,326,686.54		3,345
			3,767,468.41		**3,718**
B.	**Current assets**				
I.	Receivables and miscellaneous assets				
	1. Trade accounts receivable	273,847.95		652	
	2. Other receivables and assets	18,343.55	292,191.50	85	737
II.	Cash on hand and at banks, checks		3,149,415.39		3,414
			3,441,606.89		**4,152**
C.	**Prepaid expenses and deferred charges**				
	1. Other prepaid expenses and deferred charges		88,271.22		127
D.	**Trustee accounts – funds**		**21,000,513.33**		**13,771**
			28,297,859.85		**21,766**

Table 31b: Balance sheet as of December 31, 2009 – Liabilities

Liabilities

		December 31, 2009		December 31, 2008	
		EUR		EUR '000	
A.	**Equity**				
I.	Capital stock	3,633,641.71		3,634	
II.	Capital reserves				
	1. Appropriated	94,723.34		106	
III.	Accumulated loss	-2,375.84	**3,725,989.21**	56	**3,796**
B.	**Provisions**				
	1. Provisions for severance payments	147,600.00		257	
	2. Other provisions	1,253,605.00	**1,401,205.00**	1,232	**1,489**
C.	**Liabilities**				
	1. Trade accounts payable	204,699.16		277	
	2. Other accounts payable	1,872,462.37	**2,077,161.53**	2,066	**2,343**
	(taxes payable: EUR 331,955.33; 2008: EUR 416,000; social security obligations: EUR 129,541.45; 2008: EUR 127,000)				
D.	**Trustee obligations – funds**		**21,093,504.11**		**14,138**
			28,297,859.85		**21,766**

7.3 Notes on the structure of RTR financing

Financing for the regulatory authority's activities in both divisions is governed by the KommAustria Act (KOG), which was amended in 2009 to include provisions regarding the new broadcasting funds.

For its broadcasting regulation activities, the regulatory authority is allocated funds from the federal budget in the amount of EUR 750,000.00 per year (adjusted from 2007 onward), and parties subject to the financing contribution requirement under the KommAustria Act contribute a maximum of EUR 2.25 million per year (adjusted from 2007 onward).

For telecommunications regulation, the authority is allocated federal funds in the amount of EUR 2 million per year (adjusted from 2007 onward), and parties subject to the financing contribution requirement under the KommAustria Act pay a maximum of EUR 6 million per year (adjusted from 2007 onward).

In an amendment to the KommAustria Act, the Austrian Digitization Fund and the Austrian Television Fund were established at RTR at the beginning of 2004; both are to be administered by the managing director of RTR's Broadcasting Division. The Digitization Fund is endowed with an annual budget of EUR 500,000.00 (retroactively from 2009 onward), while the Television Fund receives an annual endowment of EUR 13.5 million. The funds are allocated from the federal budget, specifically from fees collected under Art. 3 Par. 1 of the Broadcasting Fees Act (RGG).

The legal bases for the funds can be found in Articles 9a to 9e KOG (Digitization Fund) and Articles 9f to 9h KOG (Television Film Fund). These provisions describe the purposes of grants and contain specific stipulations as to how the funds are raised and allocated as well as the definition of guidelines for grant awards.

In another amendment to the KommAustria Act, the Non-Commercial Broadcasting Fund and the Private Broadcasting Fund were established at RTR in 2009; these funds are also administered by the managing director of RTR's Broadcasting Division. The two funds receive annual endowments of EUR 1 million and EUR 5 million, respectively. The funds are administered by RTR and must be allocated in accordance with the relevant provisions of the KommAustria Act (Articles 9i to 9l KOG).

Therefore, RTR's financing structure has been expanded to include another source of funding. This means that overhead costs can now be allocated among a larger number of cost units, thus creating additional synergy effects for RTR as an organization and reducing the costs incurred by each unit.

The expenses incurred in the administration of these funds are delineated in RTR's cost accounting systems and covered by each respective fund. By March 30th of each year, RTR is required to submit an annual report on the use of funds in the Digitization Fund, the Television Fund, the Non-Commercial Broadcasting Fund and the Private Broadcasting Fund in the previous year to the Federal Chancellor, who then presents the report to the Austrian National Council.

The resources in the funds established within RTR developed as follows in the year 2008:

Table 32: Austrian Television Fund: Excerpt from 2009 financial statements

	EUR	EUR
Balance in trustee account as of December 31, 2008	3,524,462.60	3,524,462.60
Income		
Increase from credits in 2009	13,500,000.00	
Surplus from administrative expenses from 2008	76,047.23	
Interest	84,485.16	13,660,532.39
Payments		
Administrative expenses from 2009	-609,500.00	
Grant payments from 2004	-8,013.00	
Grant payments from 2006	-127,122.40	
Grant payments from 2007	-323,473.94	
Grant payments from 2008	-2,014,176.79	
Grant payments from 2009	-6,562,054.17	-9,644,340.30
Balance of initial funds, debits and credits in 2009 **= Balance in trustee account as of December 31, 2009**		**7,540,654.69**
Administrative expenses from 2009 to be repaid to the fund in 2010		11,727.36
Balance of trustee obligations as of December 31, 2009		**7,552,382.05**
Grants approved but not yet paid out		-5,276,247.83
Appropriated amounts from 2007	-150,000.00	
Appropriated amounts from 2008	-192,934.00	
Appropriated amounts from 2009	-4,933,313.83	
Funds available in 2010		2,276,134.22

Source: RTR

Table 33: Austrian Digitization Fund: Excerpt from 2009 financial statements

	EUR	EUR
Balance in trustee account as of December 31, 2008	10,246,864.91	10,246,864.91
Income		
Increase from credits in 2009	500,000.00	
Surplus from administrative expenses in 2008	291,106.27	
Repayment of grants	4,741.58	
Interest	156,678.98	952,526.83
Payments		
Administrative expenses in 2009 and RTR's participation in projects in 2009	-678,800.00	
Grant payments from 2009	-2,865,966.85	-3,544,766.85
Balance of initial funds, debits and credits in 2009 **= Balance in trustee account as of December 31, 2009**		**7,654,624.89**
Administrative expenses from 2009 to be repaid to the fund in 2010 and RTR's participation in projects in 2009		111,031.26
Balance of trustee obligations as of December 31, 2009 (including grants not yet paid out)		**7,765,656.15**

Source: RTR

Table 34: Non-Commercial Broadcasting Fund: Excerpt from 2009 financial statements

	EUR	EUR
Balance in trustee account as of December 31, 2008	0.00	0.00
Income		
Increase from credits in 2009	1,000,000.00	
Interest	4,759.78	1,004,759.78
Payments		
Grant payments from 2009	-375,000.00	-375,000.00
Balance of initial funds, debits and credits in 2009 **= Balance in trustee account as of December 31, 2009**		**629,759.78**
Administrative expenses from 2009 to be paid out in 2010		-19,845.23
Balance of trustee obligations as of December 31, 2009		**609,914.55**
Grants approved but not yet paid out		0.00
Funds available in 2010		609,914.55

Source: RTR

Table 35: Private Broadcasting Fund: Excerpt from 2009 financial statements

	EUR	EUR
Balance in trustee account as of December 31, 2008	0.00	0.00
Income		
Increase from credits in 2009	5,000,000.00	
Interest	24,629.71	5,024,629.71
Payments		
Grant payments from 2009	0.00	0.00
Balance of initial funds, debits and credits in 2009 **= Balance in trustee account as of December 31, 2009**		**5,024,629.71**
Administrative expenses from 2009 to be paid out in 2010		-9,922.61
Balance of trustee obligations as of December 31, 2009		**5,014,707.10**
Grants approved but not yet paid out		0.00
Funds available in 2010		5,014,707.10

Source: RTR

When the 2006 Amendment to the Collecting Societies Act (VerwGesRÄG 2006) went into effect on July 1, 2006, KommAustria was assigned the function of supervisory authority for collecting societies under Art. 28 Par. 1 of the amended act. Pursuant to Art. 28 Par. 2 VerwGesG, RTR's Broadcasting Division is responsible for providing KommAustria with the necessary office space, including infrastructure, in exchange for reimbursement. In order to compensate the authority for performing these duties, the federal government makes an annual reimbursement contribution in the amount of EUR 100,000.00 plus value-added tax. For additional costs incurred by KommAustria in connection with its activities as the supervisory authority for collecting societies, the federal government provides a budget in the amount of EUR 20,000.00 plus value-added tax (for information on how the funds are raised, see Art. 7 Par. 5 VerwGesG).

For its activities under the Austrian Signatures Act (SigG), RTR charges fees to market participants. However, those fees do not cover the full costs of the authority's activities. The excess costs are offset by an annual grant of EUR 90,000.00 from the federal budget.

In the period from January 1 to December 31, 2009, RTR-GmbH incurred costs in the total amount of EUR 145,634.61 in performing the tasks assigned under the SigG. On the other hand, revenues amounted to EUR 133,875.56 (including the grant from the federal budget). The excess expenses were covered by partially reversing capital reserves in the amount of EUR 11,759.05.

For RTR's activities pursuant to the Postal Services Act 1997 (2005 Amendment to the Postal Services Act), the federal government allocated EUR 200,000.00 for the year 2009. In total, RTR's costs in this area amounted to EUR 260,948.90 in the reporting period, while additional revenues came to EUR 2,707.82. The resulting loss of EUR 58,241.08 was partly offset by profits carried forward from the previous year (EUR 55,865.24). This leaves a loss in the amount of EUR 2,375.84, which will be carried forward to the year 2010.

Therefore, the company's equity as of December 31, 2009 was as follows:

Table 36: Equity as of December 31, 2009

	EUR	EUR
Capital stock as of December 31, 2009		3,633,641.71
Capital reserves as of December 31, 2009		94,723.34
Loss from performance of duties under the Postal Services Act (January 1 to December 31, 2009)	-58,241.08	
Loss from performance of duties under the Signatures Act (January 1 to December 31, 2009)	-11,759.05	
Result from ordinary activities = Net annual loss	-70,000.13	
Reversal of capital reserve	11,759.05	
Profit carried forward	55,865.24	-2,375.84
Accumulated profit		
Equity as of December 31, 2009		**3,725,989.21**

Source: RTR

7.4 RTR Supervisory Board

As of December 2009, the RTR Supervisory Board consisted of the following members:

Josef Halbmayr (ÖBB Holding AG),
Chairman of the Supervisory Board;

August Reschreiter (Austrian Federal Ministry of Transport, Innovation and Technology), Deputy Chairman of the Supervisory Board;

Alfred Ruzicka (Austrian Federal Ministry of Transport, Innovation and Technology);

Matthias Traimer (Austrian Federal Chancellery);

Brigitte Hohenecker (Member of the Works Council, RTR);

Martin Ulbing (Member of the Works Council, RTR).

August Reschreiter (Head of Cabinet for Federal Minister Bures at the Federal Ministry of Transport, Innovation and Technology) and Alfred Ruzicka (Federal Ministry of Transport, Innovation and Technology) were appointed to the Supervisory Board to replace Johannes Strohmayer (ECP EURO CAPITAL PARTNERS) and Franz Semmernegg (Kapsch AG), who resigned from the Supervisory Board in May 2009.


8. Appendix

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8.2 Abbreviations

2G	2nd generation (GSM)
3G	3rd generation (UMTS)

A

ABGB	General Civil Code *(Allgemeines Bürgerliches Gesetzbuch)*
ADSL	Asymmetric digital subscriber line
ALM	Association of State Media Authorities for Broadcasting in Germany *(Arbeitsgemeinschaft der Landesmedienanstalten in der Bundesrepublik Deutschland)*
ANO	Alternative network operator
ATM	Asynchronous Transfer Mode
ATO	Analog turn-off

B

BAKOM	Swiss Federal Communications Office *(Bundesamt für Kommunikation)*
BEREC	Body of European Regulators for Electronic Communications
BGBl.	Federal Law Gazette *(Bundesgesetzblatt)*
BKA	Federal Chancellery *(Bundeskanzleramt)*
BKS	Federal Communications Senate *(Bundeskommunikationssenat)*
BMVIT	Federal Ministry of Transport, Innovation and Technology

C

CATI	Computer-assisted telephone interviews
CATV	Cable television
CbC	Call-by-call
CEAM	Central European Administration Meeting
CEPT	European Conference of Postal and Telecommunications Administrations *(Conférence Européenne des Administrations des Postes et des Télécommunications)*
CERP	European Postal Regulation Committee *(Comité Européen de Régulation Postale)*
CLI	Calling line identification
Coax	Coaxial cable
CoCom	Communications Committee
CPNP	Calling party network pays
CPS	Carrier pre-selection
CSP	Certification service provider
CuP	Copper-wire pair

D

DAB	Digital Audio Broadcasting
DRM	Digital Radio Mondiale / Digital Rights Management
DSL	Digital subscriber line
DSLAM	Digital subscriber line access multiplexer
DVB-C	Digital Video Broadcasting – Cable
DVB-H	Digital Video Broadcasting – Handheld

DVB-S	Digital Video Broadcasting – Satellite
DVB-T	Digital Video Broadcasting – Terrestrial

E

ECC	Electronic Communications Committee
ECG	E-Commerce Act *(E-Commerce-Gesetz)*
ECJ	European Court of Justice
EDGE	Enhanced Data Rates for GSM Evolution
EEA	European Economic Area
EEN-V	Itemized Billing Ordinance *(Einzelentgeltnachweis-Verordnung)*
ENUM	Electronic Number Mapping
ERG	European Regulators Group
ESI	Electronic Signatures and Infrastructures
ETSI	European Telecommunications Standards Institute
EU	European Union

F

FBZV	Frequency Range Allocation Ordinance *(Frequenzbereichszuweisungsverordnung)*
FESA	Forum of European Supervisory Authorities for Electronic Signatures
FL-LRAIC	Forward-looking long-run average incremental cost
FL-LRIC	Forward-looking long-run incremental cost
FM PT	Frequency Management Project Team
FNV	Frequency Utilization Ordinance *(Frequenznutzungsverordnung)*
FOL	Fiber optic line
FTE	Full-time equivalent
FTTB	Fiber to the building
FTTC	Fiber to the curb/cabinet
FTTH	Fiber to the home
FWA	Fixed Wireless Access
FWV	Frequency Allocation Ordinance *(Frequenzwidmungsverordnung)*

G

GE06	Geneva Agreement 2006
GHz	Gigahertz
GPRS	General Packet Radio Service
GSM	Global System for Mobile Communication

H

HD	High definition
HDTV	High-definition television
HFC	Hybrid fiber coax
HH	Households
HHI	Hirschman-Herfindahl Index
HLR	Home Location Register
HSDPA	High Speed Downlink Packet Access
HSPA	High Speed Packet Access

I

IC	Interconnection
ICT	Information and communications technology
IFES	Institute for Empirical Social Research *(Institut für empirische Sozialforschung)*
IOT	Inter-Operator Tariff
IP	Internet Protocol
IP-TV	Internet Protocol television
IRG	Independent Regulators Group
IRT	Broadcast Technology Institute *(Institut für Rundfunktechnik)*
ISDN	Integrated Services Digital Network
ISP	Internet service provider
ITU	International Telecommunication Union

J

JTG	Joint Task Group

K

kbit/s	Kilobits per second
KEM-V	Communications Parameters, Fees and Value-Added Services Ordinance *(Kommunikationsparameter-, Entgelt- und Mehrwertdiensteverordnung)*
KEM-V 2009	Communications Parameters, Fees and Value-Added Services Ordinance 2009 *(Kommunikationsparameter-, Entgelt- und Mehrwert-diensteverordnung 2009)*
KEV	Communications Survey Ordinance *(Kommunikations-Erhebungs-Verordnung)*
KIG	Internet Society Competence Center *(Kompetenzzentrum Internetgesellschaft)*
KOG	KommAustria Act *(KommAustria-Gesetz)*
KommAustria	Austrian Communications Authority *(Kommunikationsbehörde Austria)*
KSchG	Consumer Protection Act *(Konsumentenschutzgesetz)*

L

LTE	Long Term Evolution

M

MB	Megabyte
Mbit/s	Megabits per second
MDF	Main distribution frame
MHP	Multimedia Home Platform
MHz	Megahertz
MNO	Mobile network operator
MSC	Mobile switching center
MT	Mobile terminated
MMS	Multimedia Messaging Service
MUX	Multiplexer

MUX-AG-V 2007	Multiplex Operator Selection Principles Ordinance 2007 *(MUX-Auswahlgrundsätzeverordnung 2007)*
MVNO	Mobile virtual network operator

N

NGA	Next generation access
NGN	Next generation network
NRA	National regulatory authority
NÜV	Number Porting Ordinance *(Nummernübertragungsverordnung)*

O

OECD	Organization for Economic Cooperation and Development
OLT	Optical line terminal
ORF-G	ORF Act *(ORF-Gesetz)*

P

Par.	Paragraph
PCK	Post-Control-Kommission
PDH	Plesio-synchronous digital hierarchy
PLC	Power line communication
PMG	Postal Market Act
PN	Private network
PoP	Point of presence
PostG	Postal Services Act 1997 *(Postgesetz 1997)*
POTS	Plain old telephone service
PresseFG 2004	Press Subsidies Act 2004 *(Presseförderungsgesetz 2004)*
PrR-G	Private Radio Act *(Privatradiogesetz)*
PrTV-G	Private Television Act *(Privatfernsehgesetz)*
PSTN	Public switched telephone network
PT	Project team
PubFG	Journalism Subsidies Act 1984 *(Publizistikförderungsgesetz 1984)*

R

RFMVO 2004	Broadcasting Market Definition Ordinance 2004 *(Rundfunkmarktdefinitionsverordnung 2004)*
RFMVO 2009	Broadcasting Market Definition Ordinance 2009 *(Rundfunkmarktdefinitionsverordnung 2009)*
RGG	Broadcasting Fees Act *(Rundfunkgebührengesetz)*
RRC	Regional Radio Conference
RRV 2009	Broadcasting Reference Rate Ordinance 2009 *(Rundfunk-Richtsatzverordnung 2009)*

S

SAI	Serving area interface
SAT	Satellite
SD	Standard definition
SDH	Synchronous digital hierarchy
SDSL	Symmetric digital subscriber line

SigG	Signatures Act *(Signaturgesetz)*
SigV	Signatures Ordinance *(Signaturverordnung)*
SigV 2008	Signatures Ordinance 2008 *(Signaturverordnung 2008)*
SIM	Subscriber Identity Module
SKP-V	Special Communications Parameters Ordinance *(Spezielle Kommunikationsparameter Verordnung)*
SMS	Short Messaging Service
SVO-RF 2006	Broadcasting Threshold Value Ordinance 2006 *(Schwellenwert-Verordnung Rundfunk 2006)*

T

T-DAB	Terrestrial Digital Audio Broadcasting
TKG (1997)	Telecommunications Act 1997 *(Telekommunikationsgesetz 1997)*
TKG 2003	Telecommunications Act 2003 *(Telekommunikationsgesetz 2003)*
TKK	Telekom-Control-Kommission
TKKP	Telekom-Control-Kommission Postal Regulation Committee
TKMV 2008	Telecommunications Markets Ordinance 2008 *(Telekommunikationsmärkteverordnung 2008)*
TKMVO 2003	Telecommunications Markets Ordinance 2003 *(Telekommunikationsmärkteverordnung 2003)*
TRV 2009	Telecommunications Reference Rate Ordinance 2009 *(Telekom-Richtsatzverordnung 2009)*

U

UDV	Universal Service Ordinance *(Universaldienstverordnung)*
UGB	Austrian Commercial Code *(Unternehmensgesetzbuch)*
ULL	Unbundled local loop
UMTS	Universal Mobile Telecommunications System
ÜVO	Monitoring Ordinance *(Überwachungsverordnung)*
UVS	Independent Administrative Board *(Unabhängiger Verwaltungssenat)*

V

VBKG	Cooperation of Consumer Protection Authorities Act *(Verbraucherbehörden-Kooperationsgesetz)*
VDSL	Very high speed digital subscriber line
VerwGesG 2006	Collecting Societies Act 2006 *(Verwertungsgesellschaftengesetz 2006)*
VerwGesRÄG 2006	Amendment to the Collecting Societies Act 2006 *(Verwertungsgesellschaftenrechtsänderungsgesetz 2006)*
VfGH	Constitutional Court *(Verfassungsgerichtshof)*
VHF	Very high frequency
VoB	Voice over broadband
VoI	Voice over Internet
VoIP	Voice over Internet Protocol
VStG	Administrative Penalties Act *(Verwaltungsstrafgesetz)*
VwGH	Administrative Court *(Verwaltungsgerichtshof)*

W	
WettbG	Competition Act *(Wettbewerbsgesetz)*
WG	Working group
WiFi	Wireless fidelity
WiMAX	Worldwide Interoperability for Microwave Access
W-LAN	Wireless local area network
WRC	World Radio Conference

Z	
ZaDiG	Payment Services Act *(Zahlungsdienstegesetz)*
ZuKG	Access Control Act *(Zugangskontrollgesetz)*

8.3 Selection of relevant legal sources

8.3.1 EU legislation

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 (OJ L 108 of 24 April 2002, p. 7)
Audiovisual Media Services Directive (formerly: Television Directive)	Directive 89/552/EEC of the European Parliament and of the Council 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 (OJ L 331 of 16 November 1989, p. 1, amended by Directive 97/36/EC, OJ L 202 of 30 July 1997, p. 60, and by Directive 2007/65/EC, OJ L 332 of 18 December 2007, p. 27)
Authorisation Directive	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 (OJ L 108 of 24 April 2002, p. 21)
Competition Directive	Commission Directive 2002/77/EC of 16 September 2002 on competition on the markets for electronic communications networks and services (OJ L 249 of 17 September 2002, p. 21)

E-Privacy Directive	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 (OJ L 201 of 31 July 2002, p. 37, as last amended by Directive 2006/24/EC, OJ L 105 of 13 April 2006, p. 54)
EU Roaming Regulation	Regulation (EC) No 717/2007 of the European Parliament and of the Council of 27 June 2007 on roaming on public mobile telephone networks within the Community (OJ L 171 of 29 June 2007, p. 32, amended by Regulation (EC) 544/2009, OJ L 167 of 29 June 2009, p. 12)
Framework Directive	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 (OJ L 108 of 24 April 2002, p. 33, amended by the EU Roaming Regulation)
Regulation on Consumer Protection Cooperation	Regulation (EC) No. 2006/2004 of the European Parliament and of the Council of 27 October 2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws (OJ L 364 of 9 December 2004, p. 1, amended by Directive 2005/29/EC, OJ L 310 of 25 November 2005, p. 28, and by the Audiovisual Media Services Directive)
Signatures Directive	Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures (OJ L 13 of 19 January 2000, p. 12)
Universal Service Directive	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 (OJ L 108 of 24 April 2002, p. 51)

8.3.2 Austrian legislation

8.3.2.1 Laws

Access Control Act (ZuKG)	*(Zugangskontrollgesetz)* Federal Act on the Protection of Services Subject to Access Control, Federal Law Gazette I No. 60/2000 as last amended by Federal Law Gazette I No. 32/2001
Administrative Penalties Act (VStG)	*(Verwaltungsstrafgesetz)* Administrative Penalties Act, Federal Law Gazette No. 52/1991 as amended by Federal Law Gazette I No. 20/2009
Broadcasting Fees Act (RGG)	*(Rundfunkgebührengesetz)* Federal Act Enacting a Law on Broadcasting Fees and Amending the Telephone Rates Act, the Broadcasting Ordinance, the Telecommunications Act, the Broadcasting Act, and the Act on Contributions to the Promotion of the Arts, Federal Law Gazette I No. 159/1999 as last amended by Federal Law Gazette I No. 71/2003
Cartels Act 2005 (KartG 2005)	*(Kartellgesetz)* Federal Act on Cartels and Other Restrictions on Competition, Federal Law Gazette I No. 61/2005 as last amended by Federal Law Gazette I No. 2/2008
Collecting Societies Act 2006 (VerwGesG 2006)	*(Verwertungsgesellschaftengesetz 2006)* Federal Act on Collecting Societies, Federal Law Gazette I No. 9/2006 as last amended by Federal Law Gazette I No. 82/2006
Competition Act (WettbG)	*(Wettbewerbsgesetz)* Federal Act on the Establishment of a Federal Competition Authority, Federal Law Gazette I No. 62/2002 as last amended by Federal Law Gazette I No. 2/2008
Consumer Protection Act (KSchG)	*(Konsumentenschutzgesetz)* Federal Act Enacting Provisions for the Protection of Consumers, Federal Law Gazette 140/1979 as last amended by Federal Law Gazette I No. 66/2009
Cooperation of Consumer Protection Authorities Act (VBKG)	*(Verbraucherbehörden-Kooperationsgesetz)* Federal Act on the Cooperation of Authorities in Consumer Protection, Federal Law Gazette I No. 148/2006
E-Commerce Act (ECG)	*(E-Commerce-Gesetz)* Federal Act on the Regulation of Specific Legal Aspects of Electronic Commerce, Amending the Signatures Act and the Civil Procedure Code, Federal Law Gazette I No. 152/2001

E-Government Act (E-GovG)	*(E-Government-Gesetz)* Federal Act Defining Regulations to Facilitate Electronic Correspondence with Public-Sector Authorities, Federal Law Gazette I No. 10/2004 as last amended by Federal Law Gazette I No. 125/2009
Federal Constitutional Act (B-VG)	*(Bundes-Verfassungsgesetz)* Federal Constitutional Act, Federal Law Gazette No. 1/1930 as last amended by Federal Law Gazette I No. 127/2009
Federal Constitutional Broadcasting Act	*(BVG-Rundfunk)* Federal Act Ensuring the Independence of Broadcasting, Federal Law Gazette No. 396/1974
General Administrative Procedures Act (AVG) 1991	*(Allgemeines Verwaltungsverfahrensgesetz)* General Administrative Procedures Act, Federal Law Gazette No. 51/1991 as last amended by Federal Law Gazette I No. 20/2009
Journalism Subsidies Act 1984 (PubFG)	*(Publizistikförderungsgesetz 1984)* Federal Act on Subsidies for Political Educational Work and Journalism, Federal Law Gazette No. 369/1984 as last amended by Federal Law Gazette I No. 113/2006
KommAustria Act (KOG)	*(KommAustria-Gesetz)* Federal Act on the Creation of the Austrian Communications Authority (KommAustria) and the Federal Communications Senate, Federal Law Gazette I No. 32/2001 as last amended by Federal Law Gazette I No. 52/2009
ORF Act (ORF-G)	*(ORF-Gesetz)* Federal Act on the Austrian Broadcasting Corporation, Federal Law Gazette No. 379/1984 as last amended by Federal Law Gazette I No. 102/2007
Postal Market Act (PMG)	Federal Law Gazette I No. 123/2009
Postal Services Act 1997 (PostG)	*(Postgesetz 1997)* Federal Act on Postal Services, Federal Law Gazette I No. 18/1998 as last amended by Federal Law Gazette I No. 123/2009
Press Subsidies Act 2004 (PresseFG 2004)	*(Presseförderungsgesetz 2004)* Federal Act on Press Subsidies, Federal Law Gazette I No. 136/2003 as last amended by Federal Law Gazette I No. 52/2009
Private Radio Act (PrR-G)	*(Privatradiogesetz)* Federal Act Enacting Provisions on Private Radio Broadcasting, Federal Law Gazette I No. 20/2001 as last amended by Federal Law Gazette I No. 7/2009

Private Television Act (PrTV-G)	*(Privatfernsehgesetz)* Federal Act Enacting Provisions on Private Television, Federal Law Gazette I No. 84/2001 as last amended by Federal Law Gazette I No. 7/2009
Signatures Act (SigG)	*(Signaturgesetz)* Federal Act on Electronic Signatures, Federal Law Gazette I No. 190/1999 as last amended by Federal Law Gazette I No. 59/2008
Telecommunications Act 2003 (TKG 2003)	*(Telekommunikationsgesetz 2003)* Federal Act Enacting a Law on Telecommunications and Amending the Federal Law on Traffic and Work Inspection as well as the KommAustria Act, Federal Law Gazette I No. 70/2003 as last amended by Federal Law Gazette I No. 65/2009

8.3.2.2 Ordinances

Broadcasting Market Definition Ordinance 2009 (RFMVO 2009)	*(Rundfunkmarktdefinitionsverordnung 2009)* 12th Ordinance of the Austrian Communications Authority (KommAustria) on the relevant national markets for broadcasting transmission services for the provision of broadcasting content to end-users, subject to sector-specific regulation under the Telecommunications Act 2003 (TKG 2003, Federal Law Gazette I No. 133/2005)
Broadcasting Reference Rate Ordinance 2009 (RRV 2009)	*(Rundfunk-Richtsatzverordnung 2009)* 13th Ordinance of the Austrian Communications Authority (KommAustria) defining a uniform nationwide reference rate for one-off compensation for the use of lines or systems secured by rights, also for the installation, operation, expansion or replacement of communication lines by their owners
Broadcasting Threshold Value Ordinance 2006 (SVO-RF 2006)	*(Schwellenwert-Verordnung Rundfunk 2006)* 9th Ordinance of the Austrian Communications Authority (KommAustria) defining a threshold value below which the revenues of a party subject to the financing contribution are not included in calculation of overall sector-specific revenues
Communications Parameters, Fees and Value-Added Services Ordinance 2009 (KEM-V 2009)	*(Kommunikationsparameter-, Entgelt- und Mehrwertdienste-verordnung 2009)* RTR Ordinance defining regulations regarding communications parameters, fees and value-added services, Federal Law Gazette II No. 212/2009 as last amended by Federal Law Gazette II No. 265/2009
Communications Survey Ordinance (KEV)	*(Kommunikations-Erhebungs-Verordnung)* Ordinance of the Austrian Federal Minister of Transport, Innovation and Technology ordering statistical surveys in the field of communications, Federal Law Gazette II No. 365/2004

Frequency Allocation Ordinance (FWV)	*(Frequenzwidmungsverordnung)* Ordinance of the Austrian Federal Minister of Science, Transport and Arts allocating frequencies and frequency bands for harmonized European radio systems, Federal Law Gazette No. 313/1996
Frequency Range Allocation Ordinance (FBZV)	*(Frequenzbereichszuweisungsverordnung 2005)* Ordinance of the Austrian Federal Minister of Transport, Innovation and Technology on the allocation of frequency ranges, Federal Law Gazette II No. 306/2005 as last amended by Federal Law Gazette II No. 332/2009
Frequency Utilization Ordinance (FNV)	*(Frequenznutzungsverordnung)* Ordinance of the Austrian Federal Minister of Transport, Innovation and Technology on frequency utilization, Federal Law Gazette II No. 307/2005 as last amended by Federal Law Gazette II No. 333/2009
Interconnection Ordinance	*(Zusammenschaltungsverordnung)* Ordinance of the Austrian Federal Minister of Science and Transport specifying requirements with regard to interconnection, Federal Law Gazette II No. 14/1998
Itemized Billing Ordinance (EEN-V)	*(Einzelentgeltnachweis-Verordnung)* 4th RTR Ordinance specifying the level of detail and the form of provision for itemized billing (http://www.rtr.at/een-v), Federal Law Gazette II No. 85/2006
Monitoring Ordinance (ÜVO)	*(Überwachungsverordnung)* Ordinance of the Austrian Federal Minister of Transport, Innovation and Technology on the monitoring of telecommunications traffic, Federal Law Gazette II No. 418/2001 as last amended by Federal Law Gazette II No. 559/2003
Multiplex Operator Selection Principles Ordinance 2007 (MUX-AG-V 2007)	*(MUX-Auswahlgrundsätzeverordnung 2007)* 11th Ordinance of the Austrian Communications Authority (KommAustria) specifying the selection principles for the issuance of terrestrial multiplex licenses in 2007
Number Porting Ordinance (NÜV)	*(Nummernübertragungsverordnung)* Ordinance of the Austrian Federal Minister of Transport, Innovation and Technology on number porting in mobile communications networks, Federal Law Gazette II No. 513/2003
Postal Service Cost Accounting Ordinance	*(Post-Kostenrechnungsverordnung)* Ordinance of the Austrian Federal Minister of Science and Transport on a cost accounting system for universal postal services, Federal Law Gazette II No. 71/2000

Signatures Ordinance (SigV)	*(Signaturverordnung)* Ordinance of the Austrian Federal Chancellor on electronic signatures, Federal Law Gazette II No. 30/2000 as last amended by Federal Law Gazette II No. 527/2004
Signatures Ordinance 2008 (SigV 2008)	*(Signaturverordnung 2008)* Ordinance of the Austrian Federal Chancellor on electronic signatures, Federal Law Gazette II No. 3/2008
Special Communications Parameters Ordinance (SKP-V)	*(Spezielle Kommunikationsparameter-Verordnung)* 2nd RTR Ordinance defining a partial plan for communications parameters
Telecommunications Markets Ordinance 2003 (TKMVO 2003)	*(Telekommunikationsmärkteverordnung 2009)* 1st RTR Ordinance identifying the relevant national markets susceptible to sector-specific ex ante regulation in the telecommunications sector, as last amended by Federal Law Gazette II No. 93/2009
Telecommunications Markets Ordinance 2008 (TKMV 2008)	*(Telekommunikationsmärkteverordnung 2008)* RTR Ordinance identifying the relevant national markets susceptible to sector-specific regulation in the telecommunications sector, Federal Law Gazette II No. 505/2008 as last amended by Federal Law Gazette II No. 265/2009
Telecommunications Reference Rate Ordinance 2009 (TRV 2009)	*(Telekom-Richtsatzverordnung 2009)* RTR Ordinance defining a uniform nationwide reference rate for one-off compensation for the use of lines or systems secured by rights, also for the installation, operation, expansion or replacement of communication lines by their owners, Federal Law Gazette II No. 238/2009
Telecommunications Threshold Value Ordinance 2006 (SVO-TK 2006)	*(Schwellenwert-Verordnung Telekommunikation 2006)* Ordinance of the Telekom-Control-Kommission (TKK) defining a threshold value below which the revenues of a party subject to the financing contribution are not included in calculation of overall sector-specific revenues
Universal Service Ordinance (UDV)	*(Universaldienstverordnung)* Ordinance of the Austrian Federal Minister of Science and Transport defining quality criteria for universal service, Federal Law Gazette II No. 192/1999 as last amended by Federal Law Gazette II No. 400/2006

8.4 Abbreviated company, association and organization names

Abbreviation	Full name
AGTT / TELETEST	Teletest working group *(Arbeitsgemeinschaft Teletest)*
A-Trust	A-Trust Gesellschaft für Sicherheitssysteme im elektronischen Datenverkehr GmbH
ATV	ATV Privat TV GmbH & Co KG
AUSTRIA 9	Austria 9 TV GmbH
COLT	COLT Telecom Austria GmbH
EPI	Erich Pommer Institute
eTel	eTel Austria AG
FEEI	Association of the Austrian Electrical and Electronics Industries *(Fachverband der Elektro- und Elektronikindustrie)*
GfK / GfK Austria	GfK Austria GmbH
Hutchison	Hutchison 3G Austria GmbH
KRONEHIT	KRONEHIT Radiobetriebs GmbH.
mobilkom austria	mobilkom austria AG
Mundio	Mundio Mobile (Austria) Limited (formerly Barablu Mobile Austria Limited)
One	ONE GmbH
Orange	Orange Austria Telecommunication GmbH (previously ONE GmbH)
ORF	Austrian Broadcasting Corporation *(Österreichischer Rundfunk)*
ORS	Österreichische Rundfunksender GmbH & Co KG
ProSieben / ProSieben Austria	ProSieben Austria GmbH
ProSiebenSat.1	ProSiebenSat.1 Media AG
PULS 4	PULS 4 TV GmbH & Co KG
Radio Maria	Radio Maria Österreich (Catholic radio broadcasting service)
REM	Research Institute for Electronic Mass Media Law *(Forschungsinstitut für das Recht der elektronischen Massenmedien)*
Salzburg AG	Salzburg AG für Energie, Verkehr und Telekommunikation
SAT.1	Sat.1 Privatrundfunk und Programmgesellschaft mbH
ServusTV	ServusTV Fernsehgesellschaft m.b.H
Tele2	Tele2 Telecommunication GmbH
Telekom Austria	Telekom Austria TA AG
T-Mobile	T-Mobile Austria GmbH
UPC	UPC Austria GmbH
VFRÖ	Austrian Association of Free Radio Broadcasters *(Verband Freier Radios Österreichs)*
VÖP	Austrian Association of Private Broadcasters *(Verband Österreichischer Privatsender)*
Wienstrom	Wienstrom GmbH
WKO	Austrian Federal Economic Chamber *(Wirtschaftskammer Österreich)*

Publishing information

Owner and publisher: Austrian Regulatory Authority for Telecommunications and Broadcasting (Rundfunk und Telekom Regulierungs-GmbH), Mariahilfer Strasse 77-79, A-1060 Vienna. Tel.: +43 (0)1 58058-0, Fax: +43 (0)1 58058-9191, e-mail: rtr@rtr.at, Internet: http://www.rtr.at.
Responsible for content: Alfred Grinschgl (Managing Director, Broadcasting Division) and Georg Serentschy (Managing Director, Telecommunications Division), Austrian Regulatory Authority for Broadcasting and Telecommunications.
Conceptual design and text: Austrian Regulatory Authority for Broadcasting and Telecommunications
Editors and coordinators: Daniela Andreasch, Monika Bauer, Anita Haspl, Michaela Ilming
Graphic design and layout: Johannes Bulgarini, Gföhl 8, A-3053 Laaben, Tel.: +43 (0)2774 8725, e-mail: jo@bulgarini.at
Printing: H+S Druck, Gadering 30, A-4921 Hohenzell
Translation: Christopher Anderson, e-mail: chris@anderson.at

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