Communications Report 2006

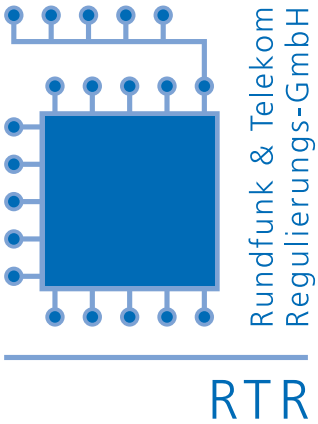


Table of contents

Preface

Information and communications technologies (ICT), which include a broad range of applications, services, technologies and equipment, will continue to have a substantial impact on social, cultural and economic structures at the national and global level. With its i2010 initiative, the European Union has defined the key objective of promoting these new technologies and thus increasing Europe's productivity and competitiveness as well as enhancing the quality of life for society. One of the EU's main concerns here is to create a uniform legal framework which is market-oriented and future-proof in order to rise to the challenges created by the information society. In this context, the top priority for Austria's legislature is to ensure that Austria earns a top spot in international rankings and to create the conditions necessary to achieve this goal.

This is the backdrop against which Austria's regulatory institutions KommAustria, RTR and the TKK operate. As an active regulatory authority, we pursue the rapid and forward-looking implementation of the duties set forth under Austrian law, with due consideration of overarching relationships and the priority of ensuring continuity in regulatory decision-making.

In addition to licensing and supervising additional broadcasters as well as other regulatory measures such as KommAustria's management of frequencies, our Broadcasting Division saw a decisive year in the digitization of broadcasting: On October 26, 2006, digital terrestrial television was launched in Austria. By the end of the year, more than one third of Austria's households were already receiving digital television signals.

In addition to its usual regulatory duties, the Telecommunications Division focused on cooperating in the revision of the European legal framework. Another major area of activity was the creation and publication of an ICT benchmarking study which, after the publication of the ICT Master Plan in 2005, provides substantial input for Austria's positioning in this field as well as additional ideas to stimulate the ICT discussion in Austria.

With due attention to the increasing importance of communications markets, this year's Communications Report documents the authority's official activities in 2006 with regard to broadcasting, the Austrian Television Fund, press and journalism subsidies, electronic signatures and telecommunications, as well as the authority's activities as a competence center and the development of the communications markets in general. In addition, we provide a brief description of RTR as an organization managed according to the principles of economy, thrift and expedience as prevalent in the private sector. With our efficient structural and process organization as well as our targeted deployment of the available resources, we were able to handle our duties in 2006 – as in the previous years – with the same number of employees and with a minimum of overall expenditure.

We sincerely hope that this publication provides a comprehensive and interesting picture of our activities as a regulatory authority.

Vienna, May 2007 *Alfred Grinschgl* *Georg Serentschy*

1. Management summary

1.1 Introductory remarks

Objective of the report: Fulfillment of legal reporting obligations

The 2006 Communications Report serves to meet all of RTR's legal reporting requirements under the KommAustria Act (KOG) as well as the Austrian Telecommunications Act 2003 (TKG 2003):

- Represented by its two managing directors for the Telecommunications and Broadcasting Divisions, RTR is required under Art. 7 Par. 2 KOG to report to its owner (the Austrian federal government) on the company's business activities. In this context, the Communications Report must provide a specific account of the duties RTR fulfilled, its staff development as well as its operating expenses for the year.

- 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 regulatory objectives established in the relevant material laws. This requirement is mainly based on RTR's reporting obligations under Art. 34 Par. 2 TKG 2003. Pursuant to Art. 24 Par. 2 TKG 2003 (cf. Section 4.2.16), this report must also include information on dishonest practices in the provision of value-added services as well as the measures taken to combat such practices.

- Finally, the Communications Report provides in-depth and realistic insight into the problems and challenges involved in RTR's legally founded efforts to enhance competition and service diversity in the broadcasting and telecommunications industries in the interest of consumers and the economy.

In this year's report, content which has been described extensively in previous years has been abridged in such a way that the complex concepts and circumstances remain understandable for first-time readers but do not burden our "veteran" readers with repeated information.

The main topics covered in the 2006 Communications Report are as follows:

1. **Management summary:** In addition to providing the reader with a brief overview of RTR's reporting obligations and the additional information contained in the report, this section summarizes the report's main content and describes the outlook for the year 2007.

2. **Regulatory activities:** Objectives, authorities, duties and environment: This section discusses how the regulatory institutions contributed to the attainment of regulatory objectives as specified in the relevant legislation (TKG 2003, KOG, SigG) and describes the national and international regulatory environment.

3. **Decisions of the high courts, Administrative Court and Constitutional Court:** In this section, the relevant lines of command are described in brief, and proceedings before the Austrian Administrative Court and Constitutional Court are discussed.

4. RTR's activities in 2005: This part provides information on RTR's regulatory work in the Broadcasting and Telecommunications Divisions with due attention to the achievement of regulatory objectives.

5. The Austrian communications markets: This section contains a variety of information and data on the development and state of the advertising market (broken down into major media categories) as well as the markets for listeners, viewers and readers. The information on advertising and consumer markets is based on data which is collected regularly and generally acknowledged by market participants (e.g., data from FOCUS Media Research and the Austrian Media Analysis).

Based on the overall development of the telecommunications market, this section also provides detailed information on rates and charges as well as revenues and market volumes.

6. RTR as a competence center: This section describes the activities undertaken by RTR in its capacity as a competence center in the year 2006.

7. The company: In this section, we provide information on the development of RTR's staff size, its financial statements and the members of the RTR Supervisory Board.

In this report, RTR's management gives an account of the operational implementation of its regulatory objectives in the interest of all market participants and for the benefit of the consumer. For RTR's management, striving for efficiency in execution and for effectiveness in attaining regulatory objectives as well as international benchmarking are important elements in the authority's provision of services and its activities as a competence center.

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

The objectives to be pursued by KommAustria and thus also by the Broadcasting Division in their regulatory activities are defined as follows in Art. 2 Par. 2 of the KommAustria Act:

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 dual broadcasting 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 utilization of Austria's broadcasting frequency range;
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 the high quality of Austria as a media location.

All of the activities carried out by KommAustria and RTR's Broadcasting Division can be attributed to these seven legally required objectives. Below we provide a description of how our activities in 2006 served to achieve specific objectives under Art. 2 Par. 2 KOG.

KommAustria and RTR's core regulatory work encourages the market entry of new providers on an ongoing basis, specifically through procedures for the licensing and allocation of frequencies in radio broadcasting. In the year 2006, one particular highlight was the licensing procedure for the 98.3 MHz frequency in Vienna.

The licensing selection procedure (or "beauty contest") required by law ensures that decisions always account for the need to secure a diversity of opinions in the media for the relevant coverage area.

The authority promotes the quality of broadcasting programs by means of various education and training measures for broadcasters, to name one example. In its capacity as a competence center, RTR has provided expertise as well as financial support since autumn 2005 for two initiatives launched by private broadcasters.

Another constant endeavor in the authority's regulatory work is to promote the technical prerequisites for the dissemination of broadcasting programs. In coordination with the frequency administrations in neighboring countries, our primary concern in these activities is to optimize the performance parameters of frequencies used in Austria. In addition, all activities related to the launch of digital broadcasting ultimately contribute to improving technical dissemination capabilities.

Since the amendment of the Austrian Private Radio Act (PrR-G) in 2004, KommAustria can choose not to put transmission capacities out to tender for coverage areas where one can not expect radio broadcasting to be financially viable in the long term due to a low technical range or an already intense competitive situation. Instead, KommAustria can "pool" these frequencies and (wherever possible) put them out to tender in combination with additional transmission capacities. This actively encourages the development of technical and economic schemes for the dual broadcasting market. The continued development of the dual broadcasting market is also a key premise of strategic efforts in the introduction of digital broadcasting.

In its capacity as the legal supervisory authority for private television and radio broadcasters, KommAustria works constantly to ensure and enforce minimum European standards, especially in the interest of child, youth and consumer protection. In particular, the authority's activities in advertising monitoring represent an ongoing contribution to ensuring these standards.

All activities in the field of broadcasting frequency management and a great deal of work related to broadcasting digitization are guided by the objective of optimizing the use of the frequency spectrum. Broadcasting frequencies are a scarce commodity, especially in a country such as Austria (due to its topography and numerous neighboring countries). As a result, the efficient use of transmission capacities also plays an especially important role in licensing selection procedures.

The provision of expert knowledge on the convergence of audiovisual media and telecommunications concurs with RTR's self-perception as an independent and transparent service organization for all stakeholders, such as market participants, consumers and politicians. This expertise is disseminated through publications, events and ongoing responses to specialist inquiries of all kinds.

All of RTR's activities in connection with broadcasting digitization pursue the ultimate goal of creating modern, high-quality communications infrastructure in order to promote Austria's location quality at a high level. This objective is especially important to Austrian television broadcasters. In an even broader context, sustainable communications infrastructure is also a significant factor in maintaining Austria's cultural identity. In this area, one particular highlight was the launch of regular operation of digital terrestrial television (DVB-T) on October 26, 2006.

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

The objectives of regulation and the duties of the regulatory authorities are set forth in the Austrian Telecommunications Act 2003 (TKG 2003). Through its specific activities in the year 2006, RTR was able to make substantial contributions to the attainment of these objectives.

In brief, all activities pursue the following objectives:

- to ensure clarity in general conditions for the market;
- to enforce obligations and rights;
- to allocate scarce resources fairly, transparently and in a non-discriminating manner;
- to ensure consumer protection;
- to promote investment and innovation;
- to support harmonization at the EU level.

These goals are pursued in the interest of equitable, sustainable and functioning competition.

Below we provide a several examples of RTR's specific contributions in 2006.

Cooperation in developing the legal framework at the European level

Due to current market developments (e.g., increasing convergence) and experience gained on the basis of the legal framework introduced in 2002, the European Commission launched a public consultation on the future of the legal framework in mid-2006. RTR contributed actively to this process and submitted comments on all major questions. The European Commission is expected to publish proposals for directives in 2007.

Ensuring competition

The regulatory authority is required by law to review the results of market analysis procedures at least every two years. For this reason, the second wave of market analyses was initiated in 2006. The first step involved a review of the relevant markets and has already been completed. Regular market analyses make it possible to account for the latest market developments immediately in competition regulation.

Enforcement and adaptation of imposed obligations

On the basis of the market analyses, companies deemed to possess significant market power are subjected to regulatory measures which represent suitable remedies for existing or potential competition problems. This is done in the course of the market analysis procedures. In many

cases (e.g., in the area of interconnection), it is then necessary to carry out further procedures in order to enforce these obligations on the market. Rates and charges have also been an important issue in these procedures.

Allocation of frequencies

In 2006, an auction was carried out in order to allocate frequencies in the 450 MHz range. Thanks to their favorable propagation characteristics, these frequencies are especially well suited for covering large areas, thus making them ideal for providing services in rather thinly populated rural areas. The two companies which won frequencies in the auction will be able to offer transmission rates of more than 1 Mbit/s throughout Austria. This is expected to improve coverage and to intensify competition on the broadband market.

Mergers and frequencies

In connection with T-Mobile Austria's acquisition of tele.ring, which was already initiated in 2005, the regulatory authority had to review the effects this merger would have on competition, especially in light of the frequencies involved. If this merger had been approved without additional requirements, T-Mobile Austria would have possessed far more spectrum than its competitors. In order to prevent potential distortions of competition, the authority approved the proposed change in ownership on the condition that T-Mobile Austria must sell off its two UMTS frequency packages within a period of nine months. This will help ensure sustained competition on the market for mobile telecommunications.

Adaptation of communications parameters

The Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V) was amended on the basis of experience to date. This amendment served to improve protection against the abuse of value-added text messaging services (SMS), to increase transparency in rates by specifying information obligations more precisely, and to implement new protective measures in the case of dialer programs abroad. At the same time, regulations from the previous version of the KEM-V were relaxed in line with the needs of the market in areas where no problems have arisen. Overall, these activities served to enhance the level of consumer protection in Austria substantially.

New services

Austria has taken a leading role worldwide in the field of ENUM. In order to maintain this position, the original contract signed by RTR and enum.at in 2004 was expanded to include infrastructure ENUM in 2006.

With regard to VoIP, RTR published a series of publications which were written in cooperation with market participants and cover a cross-section of technical, regulatory and market-relevant topics in connection with VoIP. One of the main topics was the treatment of VoIP in the context of market definition.

Convergence

Convergence has become a reality on multiple levels of the market. In order to be prepared for future challenges, we closely examined the fundamentals of convergence and the effects of this development on regulation in 2006.

Information and communications technologies (ICT)

Following up on the ICT Master Plan 2005, which was commissioned by the Austrian Federal Ministry of Transport, Innovation and Technology, RTR carried out benchmarking studies and released a series of publications on the planning and implementation of ICT strategies in especially successful countries such as Sweden, Finland and Korea. The goal of these activities is to provide substantial contributions to the Austrian discussion in the field of ICT. These reports can be downloaded at http://www.rtr.at.

1.4 Outlook

1.4.1 Focus areas in the Broadcasting Division

Facilitating market access for new providers

This objective in the KommAustria Act (KOG) covers all of KommAustria's activities in the field of licensing and frequency allocation procedures for private radio and television broadcasting. One special focus in the year 2007 will be the preparations for the next invitation to tender for the 21 radio broadcasting licenses granted in 1998, as their validity is limited to ten years and will expire on August 31, 2008. The preparation and timely execution of these 21 procedures, in which a large number of applicants are expected to participate, will certainly be a major focus in the regulatory activities of KommAustria and RTR's Broadcasting Division.

Ensuring the diversity of opinions and encouraging quality in broadcasting programs

This objective is supported by all of KommAustria's activities in its legal supervision of private radio and television broadcasters, especially with regard to ownership, etc. Moreover, RTR also provides financial support for the education programs of private broadcasters. These activities will remain an important part of the authority's work in 2007.

Developing technical and economic plans for dual broadcasting in Austria

This objective forms the basis for KommAustria's and RTR's activities in connection with the digitization of broadcasting. In preparing for the digitization of radio broadcasting in particular, it will be necessary to observe the general (frequency-related) technical and economic conditions for the further development of the dual broadcasting market.

Enforcing regulations for child, youth and consumer protection as well as advertising regulations

In its capacity as the legal supervisory authority for private broadcasters and in its advertising monitoring activities for private broadcasters and the Austrian Broadcasting Corporation (ORF), KommAustria ensures that regulations pertaining to child, youth and consumer protection are observed. One focus of these activities in 2007 will be the preparation of guidelines for broadcasters on the legal interpretation of advertising regulations in the Private Radio Act (PrR-G) and Private Television Act (PrTV-G).

Creating and maintaining modern communications infrastructure

One special focus in the fulfillment of this objective is RTR's regulatory support for the transition to digital terrestrial television (DVB-T). Starting in March 2007, Austria's provincial capitals will begin shutting down analog terrestrial television broadcasting, then the second DVB-T coverage will be launched with capacities for additional (especially regional) television broadcasters. Another focus area in the upcoming year will be the preparation of any additional invitations to tender for terrestrial multiplex licenses in cooperation with the Austrian Federal Chancellor and the Digital Platform Austria working group.

1.4.2 Focus areas in the Telecommunications Division

Competition and market analyses

In the field of competition regulation for telecommunications, the series of market analysis procedures launched in 2006 will be completed in early 2007. This will be supplemented by the national implementation of the new Commission recommendation on relevant product and service markets in the electronic communications sector (expected in early 2007), as well as a more in-depth examination of the effects of innovations in network technology and operation on sectoral competition. A new study analogous to the supply and demand-side substitution study conducted in 2005 is planned for the next round of the market analysis process. The purpose of this study is to generate current demand-side data in order to derive empirically founded insights regarding this side of the market and to answer questions related to the first stage of the process, namely market delineation.

International roaming

The European Commission plans to issue a regulation governing roaming fees in Europe, and this regulation is meant to go into effect in 2007. At the time this report was compiled, the European Commission's initiative was still being discussed at the relevant political institutions (European Council and Parliament). Should the Commission's proposal be passed in its intended form or in a similar form (which currently appears probable), then the regulatory authorities will be responsible for regulating wholesale as well as retail roaming rates.

Frequencies

In the year 2007, the regulatory authority will carry out one frequency allocation procedure and prepare another such procedure.

In early 2007, frequencies in the 26 GHz range will be auctioned off. These frequencies, which are designated for point-to-point and point-to-multipoint radio systems, were put out to tender in November 2006, and the application period ended in February 2007. The auction is scheduled to begin in March 2007.

According to current plans, the IMT2000 expansion bands will be allocated in early 2008. The relevant preparations (e.g., clarification of conditions for allocation) will be carried out in 2007.

In addition to frequency allocations, it will also be necessary to prepare for a review of coverage requirements for 3.5 GHz frequencies.

Communications parameters

An amendment to the KEM-V will serve to adapt the national legal framework for the purpose of implementing the EU decision to introduce the 116 number range throughout Europe.

New services and infrastructure

In connection with the above-mentioned focus areas for the year 2007, which either result directly from regulatory needs and requirements or can be seen as a complement to the Review, the regulatory authority will also deal with the key long-term issues of service and infrastructure development as well as technological development in 2007. This includes concepts such as NGNs (service-neutral integrative infrastructure in access as well as core networks), convergence (between fixed-link, mobile and broadcasting networks and the Internet; between classic telecommunications and broadcasting services and Internet services; and even in terminal devices) and related issues such as the creation of new essential facilities, potential future developments in services, new requirements applying to network and service interoperability, etc. In 2007, our comprehensive discussion of this topic will become more and more intense, and the results of this discussion will have an impact well beyond the year 2007.

2. Regulatory activities: Objectives, duties, authorities and environment

2.1 Regulatory duties and objectives

The regulatory authorities are required to carry out various duties and to achieve different objectives in accordance with the relevant Austrian laws. Article 1 of the Austrian Telecommunications Act 2003 (TKG 2003) defines the following duties and objectives on the basis of technological neutrality:

Objectives and duties of regulatory authorities defined in Austrian law

1. to create a modern electronic infrastructure in order to promote high-level locational quality;

2. to ensure equal opportunities and operative competition in the provision of communications networks and communications services by ensuring that all users derive maximum benefit in terms of choice, price and quality; preventing distortion or restriction of competition; encouraging efficient investment in infrastructure and promoting innovation; ensuring efficient use and effective management of frequencies and numbering resources;

3. to promote the interests of the citizens by ensuring that all citizens have access to universal service; ensuring protection for consumers, transparency in tariffs and general terms and conditions; ensuring the integrity and security of public communications networks.

The KommAustria Act (KOG) defines the following duties:

- Issuing broadcasting licenses as well as licenses for the operation of the technical equipment required for broadcasting;
- Legal supervision of private broadcasting organizations;
- Administration of resources in the Austrian Digitization Fund and the Austrian Television Fund;
- Monitoring adherence to advertising regulations on the part of private broadcasters and ORF.

The relevant objectives are as follows:

- to promote market access for new providers, and to create and maintain high-quality communications infrastructure in order to promote high-level locational quality;
- to ensure the diversity of opinions and to encourage quality in broadcasting programs;

- to develop technical and economic plans for dual broadcasting in Austria;
- to ensure that content providers adhere to European minimum standards, especially in the interest of child, youth and consumer protection;
- to optimize the utilization of Austria's broadcasting frequency range;
- to provide expert knowledge on the convergence of audiovisual media and telecommunications.

2.2 The regulatory authorities

In implementing the Austrian Telecommunications Act 1997 (TKG [1997]; Federal Law Gazette I No. 100/1997), two regulatory authorities for telecommunications were established in Austria: The Telekom-Control Commission (TKK) and Telekom-Control GmbH (TKC), which was transformed into the Telecommunications Division of the Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR) as of April 1, 2001. The responsibilities of RTR's specialist divisions, the Telekom-Control Commission and KommAustria are governed by the KOG as well as the TKG 2003 (Federal Law Gazette I No. 70/2003 as amended by Federal Law Gazette I No. 178/2004).

2.2.1 Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR)

RTR as a convergent regulatory authority

RTR is a convergent regulatory authority which is wholly owned by the Republic of Austria.

The company has two managing directors: The managing director of the Broadcasting Division is appointed by the Federal Chancellor, while the managing director of the Telecommunications Division is appointed by the Federal Minister of Transport, Innovation and Technology. With regard to 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.

During the business year 2006, the managing directors at RTR were:

- Broadcasting Division: Alfred Grinschgl, who was confirmed for an additional five-year term in May 2006;
- Telecommunications Division: Georg Serentschy.

Operational support and duties

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

1. Operational support for the TKK and KommAustria;
2. Execution of official duties in the Telecommunications Division (e.g., powers to issue ordinances and to carry out procedures in the field of numbering);
3. Administration and allocation of grants from the Austrian Digitization Fund and Austrian Television Film Fund (handled by the Broadcasting Division);

4. Management of a competence center for issues related to media and telecommunications convergence (both divisions);

5. Administration of the list specified under Art. 7 ECG.

Activities for achievement of objectives

All of the activities carried out in 2006 contributed to achieving the regulatory authorities' objectives as defined in the relevant Austrian laws.

2.2.2 Telekom-Control Commission (TKK)

TKK decides on telecommunications issues.

The Telekom-Control Commission was set up as a panel authority with the powers of a court (Art. 133 No. 4 B-VG) and makes major decisions in connection with telecommunications regulation. Under Art. 117 TKG 2003, the following duties are assigned to the TKK:

- Ordering shared use in cases of dispute under Art. 9 Par. 2;
- Decisions in procedures pertaining to telephone directory assistance services (Art. 18 Par. 3);
- Exercising the right to raise objections (Art. 25);
- Calculation of financial compensation to be paid from the Universal Service Fund (Art. 31) and of contributions to be paid into the Universal Service Fund (Art. 32);
- Identification of companies with significant market power on each relevant market, and imposition of specific obligations (Art. 37);
- Decisions in dispute procedures under Articles 23 Par. 2, 38, 41, 44 Par. 1 and 2, 46 Par. 2, 47, 48, and 49 Par. 3;
- Approval of general terms and conditions as well as rates/charges, exercise of the right to raise objections (Articles 26 and 45);
- Allocation of frequencies (Art. 54 Par. 3 No. 2), decisions on the transfer of frequencies (Art. 56), changes and revocations of frequency allocations (Art. 57 and 60);
- Decisions on the right to operate communications networks or to provide communications services (Art. 91 Par. 3);
- Decisions regarding injunctions (Art. 91 Par. 4);
- Identification of infringements, skimming off of gains (Art. 111);
- Submission of requests to the Cartel Court (Art. 127).

In 2006, the Commission comprised the following members:

- Eckhard Hermann (Chairman);
- Erhard Fürst;
- Gottfried Magerl;
- Elfriede Solé (Alternate Member);
- Martin Hagleitner (Alternate Member);
- Peter Knezu (Alternate Member).

2.2.3 Austrian Communications Authority (KommAustria)

KommAustria reports directly to the Austrian Federal Chancellor and was established in 2006 by Michael Ogris, who still heads the authority today. In its business operations, KommAustria acts as an independent body and relies on RTR for operational support in the performance of its duties in broadcasting regulation.

KommAustria as broadcasting regulator

Within the scope of its official activities, the authority makes first-instance decisions and performs its duties in broadcasting regulation in accordance with the following laws:

- KommAustria Act (KOG);
- Private Radio Act (PrR-G);
- Private Television Act (PrTV-G);
- Telecommunications Act 2003 (TKG 2003);
- Access Control Act (ZuKG).

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

Additional responsibilities of KommAustria

- For example, 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 July 1, 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 on RTR's activities.

2.3 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)

RTR cooperates with numerous Austrian authorities relevant to regulation.

As authorities which are subordinate to the BKA, KommAustria and RTR are bound by the instructions of the Federal Chancellor in broadcasting affairs. At the operational level, RTR co-operates closely with the Media Department (V/4) in the BKA's Constitutional Service, especially in legal matters as well as matters related to broadcasting digitization and the continued development of a dual broadcasting market, and in events pertaining to media policy.

Federal Ministry of Transport, Innovation and Technology (BMVIT)

The Federal Ministry of Transport, Innovation and Technology is responsible for defining the general conditions for the telecommunications market. The managing director of the Telecommunications Division is bound by the instructions of the Federal Minister of Transport, Innovation and Technology. On the basis of experience in day-to-day implementation (e.g., in the Communications Committee, or CoCom), RTR advises the Ministry on the further development of these general conditions.

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 the 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 allocating frequencies.

KommAustria is responsible for managing the frequency spectrum for terrestrial broadcasting and for issuing building and operating permits for terrestrial broadcasting facilities. Monitoring adherence to the technical parameters approved for such facilities is the responsibility of the telecommunications authorities.

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 scheme for the introduction of digital broadcasting. The group's activities are managed by the regulatory authority (KommAustria) and by RTR. The working group consists of some 300 experts representing broadcasters, service providers, network operators, industry, trade, science and research, as well as consumer protection organizations.

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 made.

In 2006, the Broadcasting Advisory Board consisted of six members appointed by the Austrian federal government:

- Eduard Pesendorfer (Chairman);
- Christian Jelinek (Deputy Chairman);
- Milan Frühbauer;
- Karl-Heinz Petritz;
- Michael Rami;
- René Tritscher.

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).

The five members of the BKS must be appointed judges in Austria, are independent in the performance of their duties in accordance with Art. 12 Par. 1 KOG, and are not bound by instructions. The members of this body are nominated by the federal government and appointed by the Austrian president.

Federal Competition Authority

The regulatory authorities also cooperate with the Federal Competition Authority, which has the right to submit comments and motions in matters related to general competition law.

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).

2.4 International regulatory environment

The i2010 initiative, which aims to realize an overall strategic plan for the creation of a single European information space, as well as the creation and securing of the single European market require close international coordination and cooperation among the regulatory authorities of all EU member states. Regulatory aspects and their potential effects on the market must always be considered in the context of building a single European market. This is especially true in areas of regulation where regulatory decisions have direct or indirect effects on the quality of Austria as a business location.

Priorities in current topics

The expert contributions made by RTR at the international level are a key component of its regulatory activities and serve to protect the interests of Austria in the future development of communications technologies and markets.

One highlight in the Broadcasting Division in 2006 was RTR's participation in the ITU conference in Geneva for the coordination of digital broadcasting services. In addition, RTR also took part in the European INTERREG IIIC project "Digital Innovation through Cooperation in Europe." In the Telecommunications Division, these activities included participating in the European Regulators Group (ERG), the Independent Regulators Group (IRG) and the Communications Committee (CoCom).

Table 1: Key information on the ERG, IRG and CoCom

	ERG European Regulators Group	**IRG** Independent Regulators Group	**CoCom** Communications Committee
Founded in	2002	1997	2002
Participants	EU Commission, Independent regulatory authorities	Independent regulatory authorities	EU Commission, Ministries, Regulatory authorities
Purpose	Advising the EU Commission on implementation issues	Cooperation among regulatory authorities	Advising the EU Commission on implementation issues
Web site	http://www.erg.eu.int	http://irgis.icp.pt	http://forum.europa.eu.int /Public/irc/infso/cocom1/ home

Source: RTR

The work of the ERG/IRG was dominated by the review of the legal framework in 2006. In this context, ERG submitted two responses regarding relevant markets and the review of the legal framework in general. In addition to several status reports (e.g., on broadband, VoIP and mobile termination), the ERG's common position on remedies from the year 2004 was revised on the basis of experience to date.

Figure 1: IRG/ERG work program

Topic	IRG/ERG Documents 2006					IRG/ERG Documents 2007				
	Q1	Q2	Q3	Q4	Details	Q1	Q2	Q3	Q4	Details
Review 2006	●			●					■	Focus on implementation
Relevant markets	●			●			❊			Implementation of recommendation
SMP				◆	Joint dominance				■	SMP identification
Market analysis & Art. 7			▼		Mkt 18 + Exchange Art. 7 cases		❊			Art. 7 process
Remedies		●			Revision of version from 2004					Divided into 8 subject areas
Broadband			■	◆	Competition & duct sharing	●				ULL, bitstreaming
VoIP			■		Consumer aspects		◆		●	
NGN/IP interconnection						■	●			NGN principles
Cost accounting	●	■			CCA, practice report, WACC	●	◆		●	
Mobile termination		■		■	Snapshots, benchmarks		◆		●	Rates
International roaming		❖	■		Update transparency from 2005			■		Regulatory aspects
Transparency					Broadband: consumer aspects	■	◆		●	
Fixed termination							◆		●	Rates
Convergence								■●		
Leased lines							◆		●	
Universal service							❊			

■ ERG Report ❖ ERG Response ▼ ERG Internal Report ■ IRG/ERG Report ● IRG PIBs

● ERG Common Position ❊ ERG Opinion ● IRG/ERG Response ◆ Interim Report

Source: RTR

Additional topics such as fixed-link termination, convergence, leased lines and universal services are also planned for 2007.

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

3.1 Lines of command and levels of appeal

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. Instructions to the managing director of the Broadcasting Division must be issued in writing and justified accordingly.

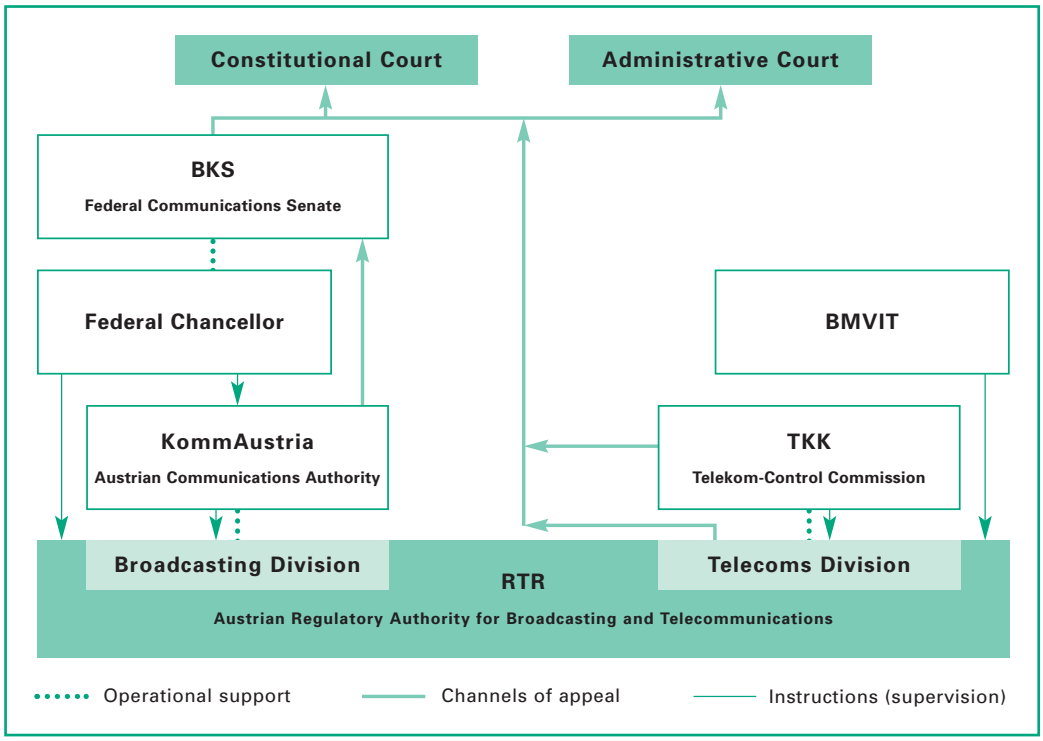
In the field of telecommunications, the Austrian Federal Minister of Transport, Innovation and Technology is authorized to issue instructions for the Managing Director of RTR's Telecommunications Division; these instructions likewise have to be in written form and be justified accordingly.

Finally, the chairperson of the Telekom-Control Commission (or the member designated in TKK's rules of procedure) 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.

Levels of appeal are clearly defined.

The Telekom-Control Commission is organized as a panel authority with the powers of a court, and it is not bound by instructions from any authority (Art. 133 No. 4 B-VG). TKK decisions can be contested by means of complaints filed with Austria's supreme courts of public law (i.e., the Austrian Administrative Court and/or the Austrian Constitutional Court). RTR also makes final decisions against which complaints can be submitted to the Administrative Court and/or the 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 supreme courts of public law.

Figure 2: Lines of command and levels of appeal



Source: RTR

3.2 Broadcasting Division

3.2.1 Federal Communications Senate (BKS) and Independent Administrative Board (UVS) in Vienna

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

Nearly all KommAustria decisions confirmed in second instance

In the reporting period, the BKS issued 17 decisions in response to appeals. Five of those decisions were related to radio licenses or frequency allocations, with one decision made in a substitute procedure after being overturned by the Administrative Court. In all cases, the decisions of KommAustria were confirmed, including the granting of a license to Radio Arabella in Salzburg (102.5 MHz) and the renewal of Antenne Steiermark Regionalradio GmbH & Co KG's license for the province of Styria.

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 one case, the BKS partly confirmed the appeal, while in the other cases the decisions of KommAustria were confirmed in their entirety.

Three decisions on appeals pertained to procedural issues (submission of opinions and rejection of an incomplete request), one was related to the obligation to pay financing contributions for past periods, and one decision was made in a procedure under the Duty to Grant Information Act. Two additional procedures involved a broadcaster which had changed its programming substantially compared to the official licensing decision: In this case, a revocation procedure and an assessment procedure were carried out. In all of these cases, the official decisions handed down by KommAustria were confirmed by the BKS. The BKS rejected two additional procedural requests (one for the devolution of responsibility to BKS due to the alleged failure of KommAustria to observe a deadline, one for the resumption of a licensing procedure due to new information coming to light).

Since an amendment to the KOG went into effect on July 1, 2006, appeals against KommAustria's official decisions are no longer automatically accorded suspensory effect in certain cases (in the context of the European legal framework for public communications networks and services). However, suspensory effect can be granted by the BKS upon request. In the reporting period, the BKS rejected two requests of this type (cf. results of broadcasting market analyses, Section 4.1.6).

At the end of the reporting period, twelve appeal procedures were still pending with the BKS. 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 4.1.5). In the reporting period, seven official decisions of this kind were issued in content-related issues. In addition, two official decisions relating to procedure were issued (on the suspension of one procedure and the right to submit opinions in another).

During the reporting period, the Independent Administrative Board (UVS) in Vienna had to rule on two administrative penal decisions in matters related to advertising monitoring. In line with the decisions of the BKS in the parallel administrative procedure, these were overturned in part.

Outside of the field of broadcasting regulation, appeals against KommAustria's official decisions are handled by the Copyright Senate in matters related to the supervision of collecting societies, and otherwise the Federal Chancellor is called upon (in exceptional cases, for example in connection with press subsidies). In the reporting period, the Federal Chancellor confirmed KommAustria's decision that official decisions are not to be issued in relation to press subsidies, as these are part of private-sector administration activities for the federal government.

3.2.2 Proceedings before the Administrative Court (VwGH)

BKS decisions on appeals are subject to review by the 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 issue a new decision.

Administrative Court confirmed most BKS decisions.

In the reporting period, the Administrative Court issued rulings in seven procedures pertaining to radio licenses and radio frequency allocations. In two cases, the Administrative Court overturned the BKS decision, which meant that a substitute procedure was required.

In four other cases, the Administrative Court confirmed the decisions issued by the BKS: These cases related to the identification of a substantial programming change due to failure to ensure a certain share of shows in minority languages; the revocation of three ORF frequencies in Linz (Freinberg) due to double coverage (by the Linz Lichtenberg station); the rejection of a belated request for the resumption of a television licensing procedure; and the rejection of a premature request for devolution.

3.2.3 Proceedings before the Constitutional Court (VfGH)

Constitutional Court expressed doubts regarding frequency sharing regulation.

Complaints regarding BKS appeal decisions can also be filed with the Constitutional Court. In the course of hearing the complaint regarding the frequency sharing order between Puls City TV GmbH (Puls TV) and ORF for the use of television channel 34 in Vienna, the Constitutional Court expressed doubts as to the constitutionality of the provision in Art. 13 PrTV-G. As a result, the Constitutional Court officially initiated a legal review procedure.

The legislature responded to these reservations and amended the relevant provisions retroactively to account for the Constitutional Court's concerns. The Constitutional Court was thus able to discontinue the legal review procedure (G 10/06 of September 28, 2006). However, the frequency sharing decision was overturned, thus requiring the BKS to carry out a substitute procedure based on the new legal situation.

The suit filed by a broadcaster for repayment of financing contributions which, according to the broadcaster, were charged wrongfully by RTR was rejected by the Constitutional Court, as the power of disposal over financing contributions is not granted to a territorial authority (A 19/05 of September 30, 2006).

Finally, in a rejection at the end of the year (B 554/05 of December 1, 2006), the Constitutional Court denied the legitimation of a complaint filed by an applicant in a radio licensing procedure in the second instance (after the initial decision was overturned), as the decision had already become uncontestable in the first-instance procedure.

3.3 Telecommunications Division

3.3.1 Proceedings before the Administrative Court (VwGH)

22 complaints filed with the Administrative Court

During the reporting period, 22 complaints regarding TKK decisions were filed with the Administrative Court. These complaints pertained to 13 interconnection procedures, four procedures in which a company was identified as possessing significant market power (SMP) and was thus subjected to obligations under Articles 38 to 47 TKG 2003, two procedures under Art. 18 TKG 2003, one procedure under Art. 56 TKG 2003, one supervisory procedure under Art. 91 TKG 2003 and one additional procedure. In this context, the regulatory authority's activities involved preparing refutation documents.

Administrative Court issued nine decisions.

The Administrative Court handed down a total of nine decisions in the reporting period. These decisions pertained to four interconnection procedures, three procedures under Art. 56 TKG 2003, one procedure under Art. 18 TKG 2003, and one procedure in which a company was identified as possessing significant market power (SMP) and was thus subjected to obligations under Articles 38 to 47 TKG 2003. In four cases, the Administrative Court confirmed the official decision issued by the TKK; four TKK decisions were overruled due to content-related legal violations, and one procedure was declared invalid and discontinued.

At present, a total of 29 complaints regarding TKK decisions are pending with the Administrative Court.

3.3.1.1 Administrative Court confirms TKK's substitute decision on interconnection

Complaint deemed unfounded

On September 12, 2006, the Administrative Court rejected a complaint filed by Telekom Austria regarding the TKK's substitute decision of June 10, 2003, in Procedure Z 2/00 as unfounded.

In Procedure Z 2/00, the terms of low-level network interconnection between Telekom Austria and UPC Telekabel were ordered in May 2000. Among other things, the fee for termination services provided by UPC Telekabel (traffic type V39) was set at the same level as Telekom Austria's regional termination fee (traffic type V3). This order was based on the determination that the parties' network structures are not comparable because UPC Telekabel does not have a hierarchically structured network (i.e., a network with different types of switching stations) like that of Telekom Austria. In December 2002, the Administrative Court overturned this initial decision on formal grounds, among other things due to errors made by the external expert with regard to the interest rate applied to capital costs for Telekom Austria.

In the now-confirmed substitute decision issued on June 10, 2003, the TKK ordered regulations which are identical in content to the initial decision – after correcting the identified procedural defects by having a supplementary opinion drawn up by a non-official expert. In particular, the termination fee to be charged by UPC Telekabel (traffic type V39) was again set at the same level as Telekom Austria's fee for regional traffic (traffic type V3) instead of the far lower charge for local traffic (traffic type V33). As a result, Telekom Austria filed another complaint regarding the decision with the Administrative Court.

The Administrative Court rejected this complaint as unfounded, explaining that in its justification of the substitute decision, the TKK "addressed elements which must be taken into account when calculating the amount of reasonable costs in light of the ... legislation. The explanations in the complaint do not indicate that the relevant authority's ruling on why the same fee was set for traffic type V39 as for type V3 can be considered inappropriate."

The actual amount of Telekom Austria's fee for regional termination (which was used as a benchmark) was calculated using a method analogous to the one used in Procedure Z 30/99 ff ("IC-2000"), which was carried out in parallel to Z 2/00 in the year 2000. The above-mentioned Administrative Court ruling which overturned the initial decision in Procedure Z 2/00 in late 2002 was the first ruling in which the Administrative Court dealt extensively with the fundamentals of the calculation of cost-based charges (FL-LRAIC approach, bottom-up model, efficiency deduction, etc.) and essentially confirmed those fundamentals, despite overruling the decision on formal grounds.

3.3.1.2 Administrative Court discontinues procedure after withdrawal of request

Fixed-link fee decisions from 2003 now finally completed.

In its ruling of September 12, 2006, the Administrative Court discontinued the procedure pertaining to the TKK's decision in Procedure Z 12/03 after the relevant complaint was withdrawn by Tele2UTA. In this decision as well as the analogous decision Z 10/03, the fixed-link termination fees for the period starting on October 1, 2003 were ordered in 2004. As no follow-up requests have been filed, these fees are still in effect today. Since UTA Telekom AG (as the company was called at the time) did not contest the analogous decision issued for that company in Procedure Z 10/03, the "IC 2003" fee decisions in fixed-link telephony were therefore finally completed with the discontinuation of the Administrative Court procedure regarding Decision Z 12/03.

3.3.2 Proceedings before the Constitutional Court (VfGH)

Seven TKK decisions brought before the Constitutional Court

During the period under review, a total of seven complaints were filed with the Constitutional Court in connection with TKK decisions. All of those complaints were related to interconnection procedures, including three complaints about orders to enable mobile number porting. In this context, the regulatory authority's activities involved preparing refutation documents. In the reporting period, the Constitutional Court refused to hear complaints in eleven interconnection procedures.

At the end of the reporting period, no procedures were pending.

4. RTR's activities in 2006

4.1 Broadcasting Division

In terms of regulatory activities, 2006 was a busy year for the Broadcasting Division. In addition to the division's ongoing "core business," a number of activities attracted heavy attention among the interested public, including the licensing procedure for the radio frequency Vienna 98.3 MHz, which – with 25 parties submitting applications at first – was KommAustria's largest individual procedure to date. The final preparations for the launch of digital terrestrial television (DVB-T) also represented a special focus area in the Broadcasting Division's regulatory work.

4.1.1 Regulatory activities in radio broadcasting

4.1.1.1 Licensing procedures

Applications can be submitted at any time.

Applications for the allocation of new transmission capacities can be submitted to KommAustria at any time. Such applications must include the essential technical parameters regarding planned usage; credible evidence of the applicant's fulfillment of technical, financial and organizational requirements; and information on technical range/coverage deficiencies.

Technical range as a key criterion

Since the Private Radio Act (PrR-G) was amended on August 1, 2004, applications for the creation of new coverage areas are to be rejected under Art. 12 PrR-G in cases where the technical range comprises a population of less than 50,000 and the applicant does not provide evidence indicating that an independent radio station in the coverage area would serve special local needs and that radio broadcasting can be financed in the long term despite its low range. Applications are also to be rejected in cases where the technical range covers a population of 50,000 to 100,000 – with due attention to the existing coverage level with Austrian private radio stations and the competitive situation on the radio market – and one can not reasonably expect radio broadcasting to be financially viable in the requested coverage area in the long term.

Invitation to tender

Otherwise, new transmission capacities to be used for the creation of a new coverage area, the expansion of an existing coverage area, or the expansion of coverage by a nationwide licensee must be put out to public tender (*Wiener Zeitung*, daily newspapers, RTR web site), unless they are reserved by a KommAustria ordinance for the planning of new coverage areas. This makes it possible for other interested parties to submit applications within a time period of at least two months as specified by KommAustria. If different applications are then submitted for the improvement/expansion of an existing coverage area, the creation of a new coverage area, or the expansion of a nationwide license, they must be reviewed according to the sequence specified in Articles 10 and 12 PrR-G.

Sequence of allocations

Article 10 PrR-G defines the objectives to be pursued in allocating transmission capacities in the interest of a dual broadcasting system and sets the sequence of priorities for allocation:

- The allocation of transmission capacities to ORF takes top priority, but only if such capacities are actually required to meet coverage obligations pursuant to Art. 3 ORF-G.

- The next level of priority is the allocation of transmission capacities to improve coverage provided by previously licensed radio broadcasters. However, this does not include expanding such coverage areas.

- At the next level, transmission capacities are allocated for the purpose of expanding nationwide licenses.

- Finally, KommAustria has to review whether the requested transmission capacity will be used to create a new coverage area or to expand an existing coverage area. Both possibilities are considered to be legally equivalent alternatives. The decisive criteria in this context include the diversity of opinions in media, economic efficiency in radio broadcasting, as well as political, social and cultural considerations.

29 allocation procedures

In the business year 2006, a total of 29 allocation procedures for radio broadcasting pursuant to the Private Radio Act (PrR-G) were completed by means of official decisions. These procedures were carried out at the request of the relevant parties or due to official invitations to tender. Private radio broadcasters were issued four radio broadcasting licenses which created new coverage areas; two frequencies were allocated to existing private radio broadcasters for the purpose of expanding or improving their coverage areas, and a total of 15 frequencies were assigned to Austria's only nationwide radio broadcaster during the reporting period - KRONEHIT Radio BetriebsgmbH – for the purpose of expanding its nationwide license. ORF was allocated six frequencies in order to ensure coverage with its radio stations. In addition, 26 allocation procedures were initiated in 2006 but not completed during the reporting period.

4.1.1.2 Allocation of transmission capacities to create new coverage areas

Four new coverage areas

In 2006, four radio broadcasting licenses were granted for the creation of new coverage areas: Sunshine Radio GmbH was granted a radio broadcasting license for the "Vienna 98.3 MHz" coverage area, and the Österreichische Christliche Mediengesellschaft – Verein zur Förderung wertorientierter Lebenskultur was granted a license for the "Baden" coverage area. In addition, Radio – TV GRÜN WEISS Betriebs GmbH Nfg. KEG was given a radio broadcasting license for the "Bruck an der Mur/Mur-, Mürztal 106.6 MHz" coverage area. Finally, Radio Arabella GmbH received a license for the "Town of Salzburg 102.5 MHz" coverage area.

4.1.1.3 Allocation of transmission capacities to expand or improve existing coverage areas

Restricted tender procedure for applications involving coverage expansions

In the case of an application for expansion, the public invitation to tender for transmission capacities which have a technical range comprising a population of less than 50,000 can be restricted to existing radio broadcasters for the purpose of expanding existing coverage areas (Art. 13 Par. 3 PrR-G).

Two existing coverage areas expanded

One procedure carried out on the basis of such a restricted invitation to tender under Art. 13 Par. 3 PrR-G led to the expansion of a previously existing coverage area:

- "ZELL AM SEE 1 107.1 MHz" and "SAALFELDEN 2 104.3 MHz" to expand the existing coverage area "Town of Salzburg 106.2 MHz and Salzachtal Valley" (Welle Salzburg GmbH).

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

- "B GLEICHENBERG 3 100.4 MHz" and "GLEISDORF 95.9 MHz" to expand the coverage area "Hartberg 102.2 MHz" (Medienprojektverein Steiermark).

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, then 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.

Two allocations for coverage improvement

Two allocation procedures carried out under Art. 12 in conjunction with Art. 10 PrR-G served to improve the quality of coverage in existing coverage areas:

- "BADEN 3 100.2 MHz" to improve the "Districts of Wiener Neustadt and Neunkirchen, town of Wiener Neustadt" coverage area (Party FM NÖ Süd RadiobetriebsgesmbH);

- "EBENSEE 106.0 MHz" to improve the "Salzkammergut" coverage area (Freies Radio Salzkammergut - Verein zur Förderung freier, nichtkommerzieller Radioprojekte im Salzkammergut [FRS]).

In two licensing procedures, the applications which triggered the procedures were withdrawn due to technical infeasibility. Moreover, one application for the allocation of a frequency had to be rejected due to non-fulfillment of a request to remedy defects, and two additional allocation procedures ended in rejections due to double coverage.

4.1.1.4 Nationwide broadcasting license

Status at end of 2005

On December 6, 2004, KommAustria issued KRONEHIT Radio BetriebsgmbH the first license for nationwide private terrestrial radio broadcasting in Austria. Based on the allocation of 28 frequencies issued together with the license, the company was allocated seven further

frequencies in 2005, meaning that by the end of that year KRONEHIT reached more than 70% of the Austrian population with its adult contemporary program broadcast under the name "Kronehit".

15 additional frequencies

In 2006, the licensee was allocated the following 15 frequencies to expand its coverage, and its license was amended accordingly:

- Radio broadcasting station: FREISTADT 4, location: Schlag, frequency: 105.6 MHz;
- Radio broadcasting station: BLEIBURG, location: Weissenegger Berg, frequency: 103.4 MHz;
- Radio broadcasting station: LIENZ 2, location: Hochstein, frequency: 107.1 MHz;
- Radio broadcasting station: SCHLADMING 5, location: Planai, frequency: 105.6 MHz;
- Radio broadcasting station: UNTERACH ATTS, location: Ackerschneid, frequency: 105.5 MHz;
- Radio broadcasting station: WOLFSBERG 2, location: Riesberg, frequency: 94.0 MHz;
- Radio broadcasting station: BLUDENZ 2, location: Schlot train station, frequency: 100.4 MHz;
- Radio broadcasting station: IMST 3, location: Osterstein Arzl, frequency: 100.3 MHz;
- Radio broadcasting station: LANDECK 3, location: Krahberg, frequency: 107.6 MHz;
- Radio broadcasting station: HAIMING, location: Haiminger Alm, frequency: 102.0 MHz;
- Radio broadcasting station: KOEFLACH 2, location: Gößnitzberg, frequency: 105.8 MHz;
- Radio broadcasting station: HERMAGOR, location: Kreuth, frequency: 98.4 MHz;
- Radio broadcasting station: KLAGENFURT 3, location: Pyramidenkogel, frequency: 103.7 MHz;
- Radio broadcasting station: FELDKIRCH 2, location: Auf der Egg, frequency: 90.4 MHz;
- Radio broadcasting station: STEYR 3, location: Steyrwerke, frequency: 92.2 MHz.

Coverage: over 80% of population

The allocation of these frequencies served to close coverage gaps, especially in the provinces of Carinthia, Tyrol and Vorarlberg. With the 50 frequencies allocated to the company as of late 2006, KRONEHIT covered more than 80% of the Austrian population.

4.1.1.5 Event and educational radio programs

Event and educational radio stations – licenses limited to three or twelve months

Event radio refers to radio licenses which are granted for a maximum of three months under Art. 3 Par. 5 PrR-G and which are used in the local area surrounding an independent public event at and around the time of the event.

In 2006, the following event radio licenses were granted:

One program broadcast in Vienna by Education Congress Research GmbH in the course of the European Congress of Radiology in March; one program broadcast by WERT-Impulse Beratungsgesellschaft für ganzheitliches Management GmbH for the opening of the Bad Vöslau Health Resort from January 28 to February 15, 2006; one program broadcast by Campusradio Klagenfurt – Verein zur Förderung der Medienvielfalt und Freiheit der Meinungsäußerung to accompany the week-long focus on "Free Radios in Europe" organized in March by the Campusradio association at Klagenfurt University; one pilot program broadcast by Österreichische Rundfunksender GmbH & Co KG in late February to calibrate the broadcasting system for the program broadcast by Education Congress Research GmbH; one program broadcast in the course of the Raimund Festival in Gutenstein from late June to mid-August; and one program broadcast in early August by Wiesen Festival & Concerts Veranstaltungs GmbH for the Urban Art Forms Festival in the town of Wiesen.

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 tasks to be fulfilled by these institutions. These licenses can be granted for a maximum of one year.

The following educational radio licenses were granted in 2006:

One educational radio station at a secondary school in Freistadt for "Radius 106.6 MHz"; one educational radio license for the Basic Vocal association in the "HLW media" education program at the HLW Deutschlandsberg secondary school; and one independent campus radio station at the university of applied sciences (FH) in St. Pölten, which had already been licensed in 2003, 2004 and 2005.

4.1.1.6 Legal supervision of radio broadcasting organizations

4.1.1.6.1 Infringement and license revocation procedures under the Private Radio Act

Legal violations and license revocations

Under Art. 25 PrR-G, KommAustria decides on complaints and on PrR-G violations by private radio broadcasters.

In the reporting period, one radio broadcaster filed a complaint regarding another radio broadcaster due to fundamental programming changes under Art. 25 in conjunction with Art. 28a PrR-G.

However, the complaint was subsequently withdrawn by the broadcaster and the procedure was discontinued.

During the reporting period, official monitoring activities largely focused on reviewing compliance with advertising regulations (see Section 4.1.5 on advertising monitoring) as well as the associated infringement procedures due to failure to provide recordings for the purpose of advertising monitoring. In the reporting period, KommAustria initiated infringement procedures against two radio broadcasters due to failure to provide recordings. In one case, the official infringement decision issued has already gone into effect, while the other procedure was not completed during the reporting period.

In addition, under Art. 28 PrR-G KommAustria is required to initiate a license revocation procedure in the case of repeated or severe violations of the law, in the case of fundamental programming changes without prior approval, and in cases where a radio broadcaster no longer fulfills the relevant legal requirements after a change in ownership structure (Articles 7 to 9 PrR-G). In the first step, such a procedure ends with a request to restore legal compliance and to make arrangements to avoid such infringements in the future. If the broadcaster fails to fulfill this request or if such a violation has been identified more than once, it is possible to revoke the broadcaster's license.

KommAustria was forced to carry out one procedure on the basis of Art. 28 Par. 2 PrR-G due to fundamental programming changes after a random sample-based review of a licensee's radio program gave reason to suspect fundamental changes in the program approved in the licensing decision. In an official decision issued on July 27, 2006 (KOA 1.375/06-008), KommAustria stated that Antenne Oberösterreich GmbH (a licensee in Wels, Upper Austria)

had fundamentally changed the nature of programming as described in the license application and approved by the BKS decision on July 1, 2003 (GZ 611.077/001-BKS/2003) by broadcasting programming content other than that described in the application and approved in the licensing decision from the time the station went on the air. In an official decision issued on December 20, 2006 (GZ 611.077/0002-BKS/2006), the BKS rejected the appeal raised against KommAustria's infringement decision as unfounded.

4.1.1.6.2 Approval procedure for programming changes

Programming changes

Since an amendment to the PrR-G went into effect in August 2004 (Federal Law Gazette I No. 97/2004), under Art. 28a Par. 2 PrR-G private radio broadcasters are allowed to request an official decision from KommAustria on whether or not planned changes in programming can be considered fundamental changes. The assessment of whether a change in programming can be considered fundamental is to be carried out with due attention to the original licensing decision. In the first case, KommAustria can approve the programming change at the radio broadcaster's request after a hearing with those radio broadcasters whose stations can be received by terrestrial means in the same area, as long as the radio broadcaster has been broadcasting for at least two years and the intended change is not expected to bring about any severely detrimental effects on the competition situation, the economic efficiency of existing radio broadcasters in the coverage area, or the diversity of content offered to listeners. The provincial government as well as the Broadcasting Advisory Board are also to be consulted in these matters. In cases where KommAustria determines that a planned change does not constitute a fundamental change in programming, no official approval is necessary in order to carry out the programming change. Art. 28a Par. 1 PrR-G specifies what can be regarded as a fundamental programming change and what was already considered a fundamental change under Art. 28 Par. 2 PrR-G prior to the amendment in question.

In the reporting period, a total of three procedures were initiated with KommAustria in order to determine whether or not such changes should be deemed fundamental changes in the nature of programming. Antenne Oberösterreich GmbH (Wels, Upper Austria) requested a determination as to whether a planned change in its music format would be considered fundamental, at the same time requesting KommAustria's approval if the changes were indeed considered fundamental. KommAustria ruled that changing from a radio station which predominantly broadcasts hit songs in German language and folk hits to a music program focusing on current hits, soft pop and oldies can be expected to bring about a major shift in the target group, which would be considered a fundamental change in programming as defined under Art. 28a Par. 1 No. 1 PrR-G. In an official decision issued on December 20, 2006 (GZ 611.077/0001-BKS/2006), the BKS rejected Antenne Oberösterreich's ensuing appeal as unfounded.

During the reporting period, Unterländer Lokalradio GmbH (eastern part of North Tyrol) communicated to KommAustria that it wished to introduce a separate one-hour local broadcast for Kufstein starting in 2007. This is not an actual change in programming as defined in the legal provisions mentioned above, as a one-hour deviation in programming for specific information broadcasts can be regarded as part of the programming approved in the licensing decision.

Finally, Bregenzer Lokalradio GmbH (Bregenz) requested a determination as to whether discontinuing a five-hour program window developed in cooperation with Freies Radio Proton

would be deemed a fundamental change in programming, at the same time requesting approval for the change if deemed fundamental. In a decision issued on October 13, 2006 (KOA1.671/06-002), KommAustria determined that the program window in question had been a decisive factor in the original selection decision with regard to the diversity of opinions, that the share of spoken-word content in the radio program would change substantially in terms of content and quantity if the program window were discontinued, and that a change in the target group and category could also be expected on the basis of the program window's specific orientation toward various interest groups. As a result, discontinuing the program window would generally constitute a fundamental change in the nature of programming. No appeal was filed against the decision, thus KommAustria subsequently initiated the approval procedure for the requested programming change and requested opinions from the relevant radio broadcasters in the coverage area, from the provincial government and from the Broadcasting Advisory Board. As no objections were raised, KommAustria approved the requested programming change in a decision issued on December 22, 2006 (KOA 1.671/06-006).

4.1.1.6.3 Obligation to report changes in ownership under Art. 22 Par. 4 and 5 PrR-G

Ongoing monitoring of ownership structures

Another major area of legal supervision covered by KommAustria involves monitoring the ownership structures of private radio broadcasters. This is intended to ensure that the legal requirements for radio broadcasting (Articles 7 to 9 PrR-G), such as professional and financial qualifications, the absence of reasons for disqualification, and the safeguarding of a diversity of opinions (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.

In order to enable the regulatory authority to monitor compliance with these provisions, Art. 22 Par. 4 PrR-G stipulates that any and all (direct or indirect) changes in ownership or partnership structures must be reported to the regulatory authority. In cases where new partners acquire more than 50% of the shares in a radio broadcaster, Article 22 Par. 5 requires an official assessment to be obtained from KommAustria before the change in ownership is effected in order to determine whether the changes comply with the provisions of Articles 7 to 9 PrR-G.

During the reporting period, numerous changes in ownership structure under Art. 22 Par. 4 PrR-G were reported; some changes did not exceed the 50% threshold, while others related to the accompanying changes in management. One noteworthy change in this context was the transfer of shares and merger of Antenne Tirol GmbH (the licensee for "Innsbruck 105.1 MHz" and "Lower Inntal Valley including the town of Hall") as the transferring company with Antenne Salzburg (the licensee for the "Salzburg" province and "Lienz") as the acquiring company. This transaction means that Antenne Salzburg is now the licensee for the following coverage areas: "Innsbruck 105.1 MHz," "Lower Inntal Valley including the town of Hall," "Salzburg" and "Lienz."

Based on the provision in Article 22 Par. 5 PrR-G, a procedure was also carried out in the reporting period with regard to the acquisition of all shares in Lokalradio Völkermarkt/Wolfsberg GmbH (the licensee for the "Districts of Völkermarkt and Wolfsberg," which is not on the air due to a complaint against the licensing decision still pending with the Austrian Constitutional Court) by a wholly owned subsidiary of Styria Medien AG. The procedure was completed by a decision issued on December 12, 2006 (KOA 1.218/06-003) which determined that the provisions of Art. 5 Par. 3 and Articles 7 to 9 PrR-G would still be fulfilled even after the

transfer of 100% of the shares in Lokalradio Völkermarkt/Wolfsberg GmbH to Lokalradio Beteiligungs GmbH & Co KEG.

4.1.1.7 Procedures under telecommunications law in the field of radio broadcasting

4.1.1.7.1 Private broadcasters

KommAustria as a "one-stop shop" responsible for broadcasting licenses as well as telecommunications procedures

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. The latter responsibility applies to the radio systems of private broadcasters as well as those belonging to ORF.

If an application pursuant to TKG 2003 for the construction and operation of a new radio system also refers to the allocation of a new transmission capacity to the broadcaster, this will lead to a tender procedure (or the announcement of applications for improvement) under Articles 12 and 13 PrR-G.

In contrast, applications under telecommunications law without direct reference to broadcasting law generally pertain to planned technical changes in radio systems, such as the use of new transmitter antennas, site changes or output enhancements.

All such applications are reviewed for compatibility with existing domestic and foreign transmitters by RTR's Broadcasting Frequency Management Department. In most cases, this requires an international coordination procedure in the course of which it is necessary to obtain the consent of the neighboring countries which may be 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, the procedure provided for under broadcasting law is continued and the telecommunications permit is issued together with the final broadcasting permit.

In 2006, KommAustria approved 17 applications for changes in radio systems for private radio broadcasters. One application was rejected due to technical infeasibility. At the end of the year, four additional applications were still pending.

4.1.1.7.2 ORF

In light of its responsibility for all broadcasting organizations, KommAustria continued to document and record all radio and television transmitter stations belonging to ORF and private broadcasters. ORF has approximately 1,800 transmitter stations at some 470 different locations in Austria.

Changes in existing permits / tunnel radio

One application submitted by ORF for the modification of a license to construct and operate rebroadcast receiver and transmitter stations for terrestrial analog radio (VHF) was approved; in this case, ORF planned to increase the station's maximum radiated power. With regard to two additional transmitter stations at the same location, the applications were withdrawn due to technical infeasibility. In addition, ORF's installation and operation of eight VHF tunnel radio systems was also approved.

Single-frequency and short-wave broadcasting

In the field of analog short-wave radio, ORF was granted a temporary permit to use frequencies from the WARC 92 band extensions for the period from October 29, 2006 to March 24, 2007. In digital radio broadcasting, the permit issued to ORF for the construction and operation of several transmitter stations for additional technical testing of the T-DAB single-frequency network in Innsbruck was extended until April 1, 2008. In Vienna, a new permit valid until June 30, 2007 was issued due to a channel change which had become necessary due to frequency planning considerations.

Pilot broadcasts in digital short-wave – "Digital Radio Mondiale"

Due to the success of ORF's initial pilot broadcasts of digital short-wave radio in the "Digitale Radio Mondiale" system in 2006, the relevant broadcasting permit was extended for the period from January 1, 2007 to December 31, 2007.

Assignment of new frequencies to ORF

Finally, at ORF's request, a total of six new frequencies were allocated along with the corresponding permits under telecommunications law for the purpose of ensuring coverage with the ORF radio stations Ö1, Ö2 (Radio Vorarlberg) and Ö3 at the WARTH and STUBEN – Albona locations in Vorarlberg. As it was necessary to initiate an international coordination procedure in each case, the permits were subject to the condition that they could be used for experimental purposes only and could be revoked at any time until the completion of the co-ordination procedure.

Another request submitted by ORF for the allocation of three frequencies in POYSDORF in Lower Austria was still pending at the end of the year.

4.1.1.7.3 Consent of KommAustria to frequency allocations

KommAustria's consent required for certain frequency allocations

Pursuant to Art. 4 Par. 1 TKG 2003, the Austrian Federal Minister of Transport, Innovation and Technology is in charge of issuing permits for the installation and operation of radio systems for the purpose of technical testing. If the allocation includes frequencies which are also provided for broadcasting within the meaning of the Federal Constitutional Broadcasting Act in the frequency usage plan, then the allocation and any modifications thereof require the consent of KommAustria under Art. 4 Par. 2 TKG 2003.

Under Art. 54 Par. 4 TKG 2003, KommAustria's consent is also required for the allocation of frequencies which are also provided for broadcasting within the meaning of the Federal Constitutional Broadcasting Act (BVG-Rundfunk) in the frequency usage plan but shall not be used for broadcasting within the meaning of the BVG-Rundfunk, as well as any modifications of such allocations. In such cases, responsibility for issuing the permit is assigned to the telecommunications authorities.

In 2006, KommAustria gave its consent in two cases under Art. 4 Par. 2 TKG 2003 and in three cases under Art. 54 Par. 4 TKG 2003.

4.1.2 Regulatory activities in television broadcasting

4.1.2.1 Digitization of television broadcasting

Launch of regular DVB-T operation

In February 2006, KommAustria completed the first licensing procedure for a nationwide terrestrial multiplex license (DVB-T), thus completing the preparations for digital terrestrial television throughout Austria. The license was issued to Österreichische Rundfunksender GmbH & Co KG (ORS), a subsidiary of ORF and Medicur Holding, in an official decision on February 23, 2006. No applications were received from other applicants during the tender submission period.

ORS was the only applicant.

The multiplex license refers to two nationwide coverages (MUX A and MUX B): MUX A is intended to broadcast the channels ORF1, ORF2 (in two regional versions each) and ATV, as well as additional services in the form of an Electronic Program Guide (EPG) operated by ORS and MHP MultiText services offered by the broadcasters. This coverage must reach at least 90% of the population by March 1, 2009, and further expansion to 95% is planned in accordance with the existing analog coverage level. MUX B offers the possibility of broadcasting additional regional and supraregional programs and services, and must be put into operation with a technical range of 60% by January 1, 2008.

In addition to these requirements, the licensing decision includes specific provisions regarding technical and commercial parameters as well as the assignment of channel spots and data rates. The multiplex operator is required to carry out these assignments in accordance with the PrTV-G using a procedure similar to the tender procedures conducted by the regulatory authority. Unsuccessful applicants can consult the authority for an ex post review.

In time for the commercial launch of DVB-T on the Austrian national holiday (October 26) in 2006, ORS was allocated the required frequencies and permits for 15 broadcasting stations for the MUX A simulcast phase in an official decision on August 29, 2006. In another decision issued on October 25, 2006, ATV Privatfernseh-GmbH was issued a license to broadcast its channel "ATV" by digital terrestrial means using MUX A.

Prior to the launch of regular DVB-T operation, ORF had been issued several pilot operation permits which lapsed when ORS launched regular commercial operation.

Permit for pilot testing of DVB-H

In a decision issued on May 29, 2006, ORF was also granted a permit for pilot television broadcasting operations based on the DVB-H standard, which enables terrestrial broadcasting to handheld devices (such as mobile telephones). Together with its cooperation partners Siemens, Mobilkom, Hutchison 3G, Salzburg University of Applied Sciences and ORS, ORF is

DVB-H test operation

conducting DVB-H pilot operations in Salzburg and Vienna. The purpose of these pilot operations is to test the technology, market acceptance and the commercial feasibility of mobile broadcasting. In this context, Hutchison 3G was issued a license to broadcast two channels ("3Live!" and "Urban TV") by digital terrestrial means in a decision issued on October 27, 2006.

4.1.2.2 Activities in the Digital Platform Austria working group

The Digital Platform Austria working group is managed by KommAustria and RTR. The group's ongoing work is characterized by numerous specialist events covering specific areas in the digitization of broadcasting. At first, the approximately 300 members were divided into three expert panels covering the fields of law, technology and market/content according to their relevant areas of expertise. In these expert panels, reports and scientific studies were presented, and lectures as well as discussions on specialist topics were held.

In the summer of 2006, this subdivision into three fields was dissolved, as ongoing work has revealed that all of the subject areas now require the inclusion of technical, legal and market-related know-how. Since the summer of 2006, therefore, all members of the platform have been invited to every event.

In the year under review, a plenary assembly (Linz, February 27, 2006) as well as three expert panels on "The future of cable networks," "Mobile TV" and "Digital Radio – When, how and why" were held. The results of these events and discussions were integrated into the regulatory authority's activities in the creation and implementation of Austria's digitization strategies.

One focus area in the field of digitization was support for the market launch of digital terrestrial television (see also Section 4.1.8).

In order to meet the specific information needs of consumers affected by digitization, RTR created a web site at http://www.digitaler-rundfunk.at in August. This site explains all aspects of the complex topic of broadcasting digitization in a clearly understandable manner. At the same time, RTR also set up a call center to provide assistance with regard to broadcasting digitization.

4.1.2.3 Proceedings of the ORF under telecommunications law

KommAustria is also responsible for granting permits under telecommunications law for the construction and operation of ORF's broadcasting transmitter stations (i.e., not only those belonging to private broadcasters). The relevant activities in the field of radio broadcasting as well as the documentation and registration of all radio and television transmitter stations are discussed in Section 4.1.1.6.

Changes in existing permits

In the field of analog television, one application submitted by ORF for changes in the permits for two rebroadcast receiver and transmitter stations (ORF1 and ORF2) was approved by means of an official decision. The application referred to changes in the antenna heights in each case and an increase in maximum radiated power for one channel. As it was necessary to initiate an international coordination procedure, the permit was subject to the condition that it can be used for experimental purposes only and can be revoked at any time until the end of that procedure.

Channel switch in Tyrol due to MUX planning

Finally, the authority also approved one application from ORF for a frequency change at the Kössen broadcasting facility in Tyrol (Channel 38 instead of Channel 35) due to the planned setup of a multiplex platform on Channel 35 in Bavaria. As it was necessary to initiate an international coordination procedure, the permit was subject to the condition that it can be used for experimental purposes only and can be revoked at any time until the end of that procedure.

4.1.3 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 ff of the Private Television Act.

New satellite broadcasting licenses

In 2006, KommAustria granted new satellite broadcasting licenses for a total of 12 television channels:

- BELAGRO MEDIEN UND HANDEL GmbH: In an official decision issued on February 17, 2006, licenses were granted for the channels "Happy XX" and "Volksmusik-TV." In another official decision issued on July 17, 2006, licenses were also granted for the channels "Happy XX 2" and "Lifestyle-TV."

- MOSTAFAVI-RAD KEG: In an official decision issued on June 22, 2006, a license was issued for the channel "Firebird TV," a music channel which plays Middle Eastern and Central Asian music in Arabian, Turkish, Russian and Persian language and is intended for audiences in the Middle East, especially in Iran, Iraq and Saudi Arabia.

- Kanal Telemedial Privatrundfunk GmbH: In an official decision issued on June 29, 2006, a license was granted for the channel "PRIMETIME-TV," a 24-hour teleshopping channel offering telephone advising services (astrology, tarot card reading, etc.) as well as mainly esoteric merchandise.

- Alpenglühen Media GmbH: The channel "Alpenglühen TVX" is an erotic television channel in German language which is broadcast daily from 10:00 pm to approximately 5:30 am. The channel shows erotic films as well as its own productions of erotic video clips and is broadcast as pay TV in scrambled form. The license was issued by means of an official decision on September 14, 2006.

- StarSat Werbevertriebs GmbH: In an official decision issued on November 30, 2006, licenses were granted for the 24-hour erotic channels "VivaGina," "TeleSünde," "UschiTV," "Liebeskanal" and "Canal Amor."

Changes in satellite broadcasting licenses

Substantial changes in satellite channels are subject to approval under Art. 6 PrTV-G. The following changes were approved by KommAustria in 2006:

- Franz Ressel Handels GmbH: In an official decision issued on January 25, 2006, a modification in the "EUROTIC-TV" channel broadcast by digital satellite was approved under Art. 6 PrTV-G: As of January 27, 2006, the channel previously broadcast via the EutelSat Hotbird 6 satellite (transponder 117) was changed into a teleshopping channel and also broadcast on the Astra satellite 19.2° east (transponder 112). In addition, a decision was issued on September 6, 2006 to approve a change in the channel "X-PLUS TV" broadcast by digital satellite under Art. 6 PrTV-G: This channel was to be shut down and replaced by the teleshopping channel "EUROTIC TV 3."

- Kanal Telemedial Privatrundfunk GmbH ("PRIMETIME-TV"): In accordance with Art. 6 PrTV-G, KommAustria approved the change in transmission of the channel via the ASTRA 1G digital satellite 19.2° east (transponder 1.108) instead of the originally approved digital satellite ASTRA 1H 19.2° east (transponder 112; official decision of August 3, 2006).

Lapse of satellite broadcasting license

In one case, KommAustria ascertained the lapse of a satellite broadcasting license in 2006:

- Radio-Television-Communications-HandelsgmbH (R.T.C.): In a decision issued on July 31, 2006, KommAustria stated that R.T.C.'s satellite broadcasting license had lapsed in accordance with Art. 5 Par. 1 No. 7 PrTV-G, as R.T.C. had not carried out regular broadcasting operation in accordance with the license over a continuous period of one year for reasons within the company's control.

4.1.4 Public communications networks and services

Communications networks must be reported under Art. 15 TKG 2003.

Public communications networks and services which (also) support radio or television broadcasting transmission and additional broadcasting services are subject to supervision by the broadcasting authorities. The planned provision of such services must therefore be reported to KommAustria, which then issues a confirmation (general approval) pursuant to Art. 15 Par. 3 in conjunction with Art. 120 TKG 2003. This notification requirement replaced the previous obligation to report broadcasting cable networks under the PrTV-G.

In practice, this reporting obligation is especially important in the broadcasting activities of cable network operators. In this context, fundamental issues of delineation need to be resolved in connection with new convergent transmission modes for broadcasting or broadcasting-related services. In the reporting period, KommAustria issued 12 confirmations under Art. 15 Par. 3 TKG 2003 to cable network operators. In several cases, KommAustria did not issue a confirmation because the cases did not involve broadcasting transmissions.

Competition regulation for broadcasting networks

Public communications networks and services for broadcasting are also subject to competition regulation by KommAustria under the TKG 2003. The relevant activities in the course of the market analysis are described in Section 4.1.6.

4.1.5 Advertising monitoring

Monitoring of compliance with advertising regulations

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 regulations under Austrian broadcasting law.

For decisions on possible violations of the law, the KommAustria Act maintains the "dual system" of organization in broadcasting regulation: KommAustria is responsible for decisions related 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 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.).

4.1.5.1 Channels monitored

ORF and private stations

In the reporting period, ORF channels as well as those of private broadcasters were generally evaluated every month.

Among the ORF's radio channels, the regional channels in Vienna, Lower Austria, Burgenland, Carinthia, Styria, Salzburg, Tyrol and Vorarlberg were monitored in 2006.

Moreover, the ORF1 television channel was reviewed six times and ORF2 was reviewed four times (once including the provincial show "Wien heute" in Vienna); in these reviews, random samples from different shows were evaluated. In the course of these monitoring measures, no reasons to suspect violations of advertising measures were detected on ORF2 in two cases and on ORF1 in one case.

For the other shows monitored on ORF1, the BKS identified two legal violations, and two additional violation reports from KommAustria are still pending with the BKS. At present, two procedures have reached the stage in which KommAustria requests comments on the suspected violations. As for the shows monitored on ORF2, two reports are currently pending with the BKS.

Likewise, BKS procedures are also pending with regard to the shows monitored on the Ö3 radio station and Radio Tirol during the reporting period. The BKS identified legal violations in the case of the Radio Kärnten radio station. The BKS did not pursue a KommAustria report on suspected advertising violations at Radio Niederösterreich. In the case of Radio Burgenland, KommAustria discontinued the procedure on the basis of the comments received from ORF. KommAustria did not find reason to suspect violations of advertising regulations in the shows monitored on Radio Wien, Radio Vorarlberg and Radio Salzburg. The procedure involving Radio Steiermark is currently pending with KommAustria.

Among the private radio broadcasters, shows on the following radio channels were reviewed (or requested for review) in addition to the nationwide radio broadcaster KRONEHIT: Vienna: Radio Energy and 88.6 Der Supermix für Wien; Burgenland: Hit FM Burgenland; Lower Austria: Gym Radio, Hit FM Mostviertel and Radio Maria (Waidhofen/Ybbs); Upper Austria: Life Radio and Radio Arabella Linz; Styria: Antenne Steiermark; Carinthia: Radio Harmonie (Spittal) and Antenne Kärnten; Salzburg: Antenne Salzburg and Radiofabrik; Tyrol: Freirad, Radio Osttirol, Life Radio Tirol, Oberländer Welle, Antenne Tirol (Unterland) and Außerferner Welle; Vorarlberg: Antenne Vorarlberg.

Violations of advertising regulations (or of the obligation to provide recordings) were identified by KommAustria in only two of these cases. The decision on an appeal filed against one of those decisions is still forthcoming. Eight other procedures have not yet been completed.

As for the private television broadcasters, shows on ATVplus, SAT.1 Österreich, Premiere Blue Movie, Puls TV, BKK-TV, Bezirks-TV/Info-kanal (Vöcklabruck) and K-TV were evaluated on the basis of random samples. In five cases, violations of advertising regulations (or of the obligation to provide recordings) were identified. Appeals were filed against three of those decisions; two procedures are still pending with the BKS, and in one procedure KommAustria's first-instance decision was confirmed in its entirety.

4.1.5.2 Decisions of the Federal Communications Senate (BKS)

As in the previous year, the BKS completed a large number of legal supervisory procedures which had been initiated by KommAustria reports on ORF as well as procedures involving those private broadcasters which appealed against KommAustria's identification of advertising law violations during the reporting period. The BKS essentially maintained its interpretation of advertising regulations under Austrian broadcasting law.

Once again, the BKS (as the legal supervisor and authority for appeals) concurred with KommAustria's legal views regarding violations of advertising law in a vast majority of cases. A large number of procedures were dominated by issues related to separation requirements as well as the requirement that advertising be made clearly recognizable as such. Under these requirements, advertising must be made clearly recognizable and be unequivocally separated from other programming content by acoustic – or visual, in the case of television – cues (Art. 13 Par. 3 ORF-G, Art. 38 PrTV-G and Art. 19 Par. 3 PrR-G). The BKS also issued decisions on labeling obligations for sponsored programs and disclosures regarding product placement (Art. 17 ORF-G). Likewise, the BKS agreed with KommAustria's interpretation with regard to violation reports on advertisements for periodicals on ORF.

4.1.6 Broadcasting market analysis

Market analysis: Consultation and coordination of draft measures

Under the TKG 2003, KommAustria is required to carry out regular reviews and analyses of broadcasting-specific markets for the provision of communications services ("broadcasting transmission services"). In the first quarter of 2006, KommAustria carried out a national consultation procedure and a coordination procedure at the European level in accordance with Articles 128 and 129 TKG 2003 with regard to the regulatory measures KommAustria proposed for the markets identified as relevant (i.e., the market for analog terrestrial transmission of television signals and the market for terrestrial transmission of VHF radio signals).

The draft regulatory measures submitted for consultation referred to the identification of Österreichische Rundfunksender GmbH & Co KG (ORS) as a company with significant market power on the wholesale market for "(Analog) terrestrial transmission of television signals to the final consumer" and on the wholesale market for "Terrestrial transmission of VHF radio signals to the final consumer", as well as the imposition of specific obligations on ORS in accordance with Article 37 Par. 2 TKG 2003.

With due consideration of the comments received in the course of the national consultation as well as the comments received from the European Commission on April 12, 2006, in which the Commission did not raise any objections to the proposed measures, KommAustria issued official decisions (KOA 6.300/06-014 and KOA 6.300/06-015) regarding the two wholesale markets for the provision of broadcasting transmission services on May 29, 2006. In accordance with Art. 4 Par. 1 (last sentence) of the Framework Directive, KommAustria ruled out the suspensory effect of appeals against the official decisions. ORS filed an appeal against both of the decisions and at the same time petitioned for suspensory effect. In its official decisions on August 10, 2006 (GZ 611.188/0002-BKS/2006 and GZ 611.189/0002-BKS/2006), the BKS rejected the requests for suspensory effect in accordance with Art. 67 Par. 7 PrTV-G. The appeals procedure before the BKS regarding the contested decisions was not completed during the reporting period.

As suspensory effect had been ruled out, ORS was ordered during the reporting period to publish standard offers and to disclose its costs to KommAustria in accordance with the regulatory measures imposed.

Review of ordinance identifying relevant markets

Pursuant to Art. 36 Par. 1 TKG 2003, a review of the ordinance identifying relevant markets susceptible to sector-specific regulation (RFMVO 2004) was initiated.

4.1.7 Broadcasting frequency management and frequency coordination

4.1.7.1 Working basis for frequency management

Frequency management and frequency coordination form the basis for the use of terrestrial transmission capacities at specific transmitter locations.

Coordination ensures interference-free operation of broadcasting transmitters

Coordination activities are necessary in order to ensure the efficient use of the frequency spectrum and to avoid interference between individual radio services or broadcasting stations.

Specifically, the following international broadcasting agreements have governed the co-ordination of broadcasting services since June 2006:

- Geneva 06 (ITU conference; in force since June 17, 2006);
- Geneva 84 (ITU conference);
- Special agreement of Maastricht 2002, L-Band (CEPT conference);
- Geneva 75 (ITU conference).

The Geneva 06 Agreement was signed in the course of a conference held in Geneva in 2006 and replaces previous CEPT and ITU agreements. All coordination activities for digital broadcasting services in frequency bands III, IV and V will be handled in accordance with these agreements. Compared to the previous agreements, the Geneva 06 Agreement contains a frequency plan which enables the flexible utilization of frequencies by means of the "mask" principle. In this way, efforts were made to ensure that the agreement remains future-proof despite rapid technological developments in the radiocommunications sector. Under this principle, new radiocommunications systems can be integrated into the frequency plan without disturbing the complicated structure of the plan.

4.1.7.2 Frequency coordination procedures

New transmission capacities require international coordination procedures.

Terrestrial transmission capacities to be used by broadcasting operators can only be opened up by means of coordination procedures, which generally last three to six months.

Table 2 below shows the number of coordination procedures carried out for new frequency planning and modifications in the year 2006.

Table 2: **Number of coordination procedures**

Country	Analog radio	Digital radio	Analog television	Digital television
Austria	27	3	4	11
Germany	10	15	0	40
France	8	0	0	0
Croatia	2	0	4	36
Liechtenstein	2	0	0	0
Luxembourg	0	0	0	3
Poland	13	0	0	0
Switzerland	80	42	5	92
Serbia and Montenegro	0	0	1	0
Slovakia	13	0	1	0
Slovenia	169	0	18	2
Czech Republic	46	0	0	14
Hungary	7	0	1	0
Total	**377**	**60**	**34**	**198**

Source: RTR

In the field of television broadcasting, analog frequency coordination activities under the Stockholm 61 Agreement were replaced by the new Geneva 06 agreement. This agreement has introduced far-reaching changes in international coordination procedures, which are described in the GE06 Final Acts, Art. 4 (Definition of Coordination Procedures) and Art. 5 (Definition of Notification Procedures).

In particular, Austria's neighboring countries of Germany and Switzerland plan to make a rapid transition to the new digital frequency plan. As lower-power transmitters were not accounted for in the digital plan, one essential task will be to carry out technical tests for the analog transmitters in operation. In some critical regions, it will be necessary to negotiate temporary replacement frequencies in order to ensure a smooth transition. This mainly applies to medium and low-power transmitters.

4.1.7.3 Participation in licensing and allocation procedures

In the year under review, expert opinions largely focused on VHF radio in the provincial capitals of Austria. For example, licenses were issued and renewed in the cities of Graz, Klagenfurt, Innsbruck, Bregenz, Linz and Vienna. In addition, numerous expert opinions were drawn up in connection with the expansion of the nationwide chain. Finally, a large number of procedures were related to changes in technical parameters for existing transmission capacities which were subjected to technical reviews.

Due to the launch of DVB-T in Austria on October 26, 2006, frequency allocations mainly focused on the two coverages for MUX A and MUX B. For this purpose, a working group was set up in cooperation with the licensee (ORS) during the reporting period in order to coordinate the individual stages of expansion at the national and international levels. By the end of 2008, approximately 70 transmitters will go into digital operation, for which it will be necessary to develop a detailed analog-digital switchover scenario.

During the reporting period, the authority also issued licenses for DVB-H test broadcasts. The primary objective of these test operations, which usually involved low power levels, was to demonstrate this technology at exhibitions and events. In this context, RTR's Broadcasting Frequency Management Department was required to conduct frequency research and to compose technical comments.

4.1.7.4 Frequency register

Another duty of the regulatory authority under the Private Radio Act (PrR-G) and Private Television Act (PrTV-G) is to maintain the Austrian frequency register, in which all licensed analog and digital broadcasting transmitters must be entered.

Current information on all licensed broadcasting transmitters at http://www.rtr.at

This data is also available to the public on the RTR web site (http://www.rtr.at). In order to account for the introduction of DVB-T in Austria, the graphic transmitter map and the frequency register were expanded to include the newly licensed digital television transmitters in 2006.

At present, some 2,300 broadcasting transmitters are included in the frequency register and transmitter map. Of those transmitters, approximately 2,000 are ORF stations (including transmitters belonging to municipalities), while the remaining 300 transmitters are operated by private broadcasters.

4.1.7.5 Measurement activities

Measurements provide data for expert opinions.

In the reporting period, expert opinions were supported by data collected using RTR's measurement vehicle, which provided technical measurements for support and review purposes in a large number of procedures. Especially in the procedure concerning the revocation of ORF frequencies in Linz as well as a number of smaller procedures, the conclusions drawn were often based on the results of these measurements.

In addition to mobile measurements for KommAustria licensing procedures, measurement activities were also carried out in order to evaluate the impact of television transmitters located in neighboring countries. The results were used as a basis for frequency negotiations in preparation for RRC06 and in the implementation of DVB-T during the transition period. Measurements were taken in Lower Austria, Upper Austria, Salzburg and Carinthia during the reporting period.

4.1.7.6 Regional Radiocommunication Conference (RRC06)

The second session of RRC04/06 was held in Geneva from May 15 to June 16, 2006.

Participation in international administrative conferences to secure frequency resources for Austria

Austria was represented at the conference by KommAustria and by RTR's Broadcasting Frequency Management Department.

The objective of the conference was to draw up a joint frequency plan for digital terrestrial broadcasting services in the 174 to 230 MHz and 470 to 862 MHz frequency ranges and to sign an agreement on the administration of the frequency plan.

Four planning iterations were carried out in the course of the conference.

Between these planning iterations, frequency negotiations were held between the relevant administrations.

Austria was one of the countries to be allocated all of the frequency channel allotments and assignments requested at the beginning of the conference.

A total of 123 allotments for DVB-T (11 of which are in Band III), 25 allotments for T-DAB, and 179 assignments for DVB-T channels or blocks (21 of which are in Band III) were allocated. The allotment plans, which consist of area definitions and frequencies, are shown in the figures below. Figure 3 shows the allotment areas for DVB-T along with the assigned frequency channels, and Figure 4 shows the allotment regions for T-DAB as well as their frequency blocks. The frequency channels for DVB-T have a bandwidth of 7 MHz (Band III) or 8 MHz (Bands IV and V), while the frequency blocks for T-DAB have a bandwidth of 1.5 MHz each.

The GE06 Agreement on the planning of digital terrestrial broadcasting services in parts of Region 1 and 3 in the 174 to 230 MHz and 470 to 862 MHz frequency bands consists of 12 articles, five technical annexes, two resolutions and the accompanying frequency plans. Article 4 governs coordination, and Article 5 as well as the Radio Regulations (RR) govern the notification of broadcasting transmitters.

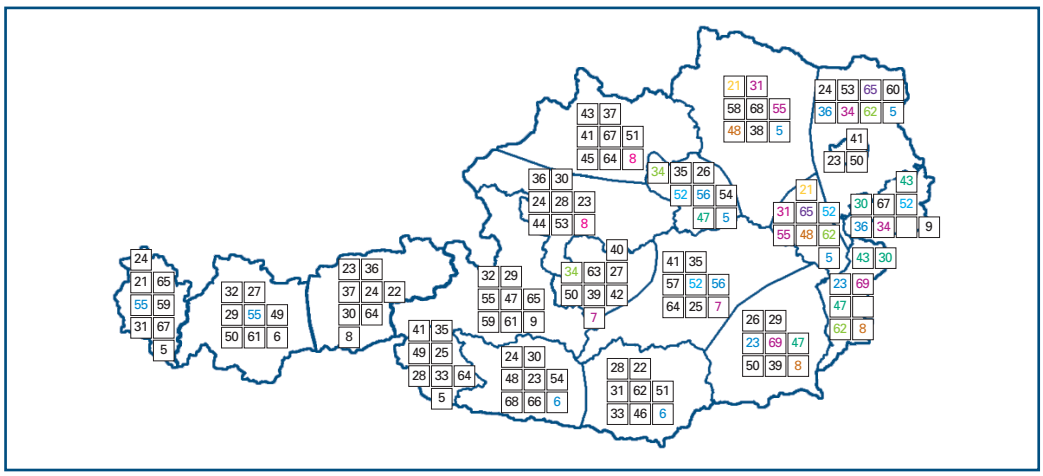
An analog frequency plan will continue to exist alongside the new digital plan until the end of the transition period.

After the transition period, all analog entries will be deleted from the frequency plan, and only the digital plan entries will remain.

The colored boxes or numbers generally indicate that two neighboring sub-regions use the same channels and are to be regarded as a single area.

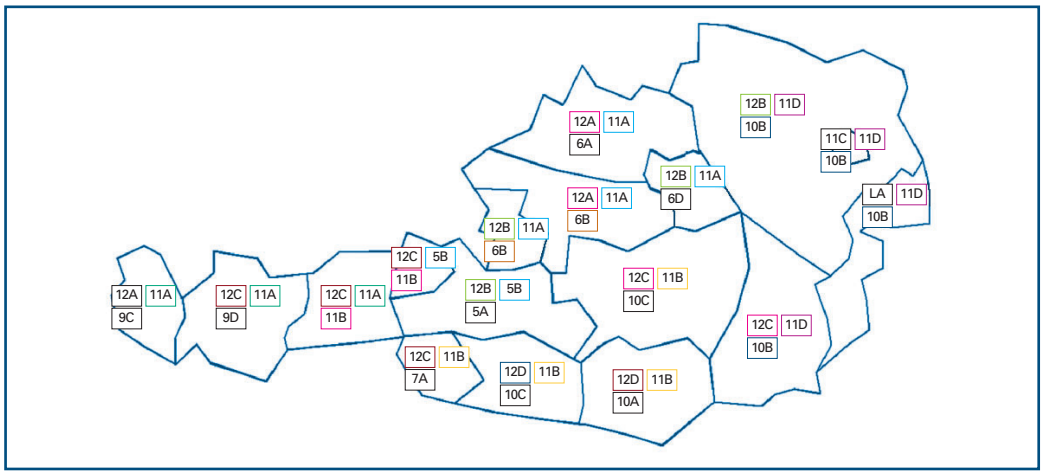
In exceptional cases, the channels shown in color merely provide an indication that the same channel is used in neighboring sub-regions.

Figure 3: DVB-T allotment plan



Source: RTR

Figure 4: T-DAB allotment plan



Source: RTR

4.1.7.7 Participation in international working groups

Strategies are coordinated and joint activities are agreed on in international working groups.

International activities related to broadcasting frequency management were dominated by the RRC06 conference in 2006.

4.1.7.7.1 Working Group RRC06, PT1 and PT2 project teams

The objectives and strategies of CEPT countries for RRC06 were articulated in "European Common Proposals" (ECPs) by the Working Group RRC06 and its project teams PT1 and PT2. A total of 15 ECPs were passed.

After RRC06 was successfully completed, its final session was held in October 2006. In this session, the results of the conference were discussed, and on the basis of PT2's proposals a recommendation document defining which broadcasting topics still deserve attention within CEPT was prepared for the ECC. The main proposals relate to the L-Band and the "Digital Dividend." Further activities identified by PT2 included the following: Creation of a document collection with all relevant documents in connection with RRC06, definition of technical conditions for transforming DVB-T allotments into T-DAB assignments, possible ways of integrating new services in a non-harmonized frequency landscape, and the derogation of the Chester 97 and Wiesbaden 95 (Maastricht 02 revision) agreements.

4.1.7.7.2 Working groups concerned with frequency policy in the EU

Frequency policy: between RTR and BMVIT

Within the framework of the activities of the Radio Spectrum Policy Group (RSPG), its sub-groups and the Radio Spectrum Committee (RSC), the Broadcasting Frequency Management Department represented the interests of Austria in frequency policy together with Department PT3 in Section III of the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT). For this purpose, it was necessary to participate in the relevant working groups and to coordinate with the BMVIT during the reporting period in order to present a united front in representing Austria's interests with regard to frequency utilization.

4.1.7.7.3 DICE working group

After several years of operation, the DICE (Digital Innovation through Cooperation in Europe) working group completed its experience/status report in the fall of 2006. Austria's digitization changeover strategy turned out to be an especially interesting option for the Polish and Hungarian participants.

4.1.8 Austrian Digitization Fund

The Digitization Fund is endowed with EUR 6.75 million each year. These funds are derived from Austrian broadcasting fees which are collected jointly with ORF programming fees but are generally allocated to the federal budget.

RTR issued the guidelines for grant awards from the Digitization Fund on April 8, 2005, once these guidelines had been approved by the European Commission under state aid regulations (European Commission decision of March 16, 2005, C (2005) 586 fin, State Aid No. N 622/2003). The guidelines form the decision-making basis for grant awards. According to the guidelines,

grants can be awarded for projects which pursue one of the following objectives under Art. 9b KOG:

- Pilot projects and research projects related to digital broadcasting and additional services;
- The development of programs and additional services which make use of the additional programming and interactive benefits of digital transmission and go beyond the limits of conventional broadcasting programs;
- Grants to broadcasters to facilitate the transition from analog to digital transmission;
- Measures intended to create financial incentives for consumers to switch to digital terrestrial reception at an early stage;
- Grants promoting the purchase of terminal devices required for the reception of digitally transmitted broadcasting programs.

In early 2006, KommAustria granted the license to operate Austria's first terrestrial multiplex platform to ORS, a company owned by ORF (60%) and Medicur Holding (40%). ORS then launched regular DVB-T operation in the fall of 2006.

Support for early adopters and socially disadvantaged groups

Through its subsidiary DFFG (Digitales Fernsehen Förder GmbH), ORS requested support for a project to assist early adopters and socially disadvantaged households in the purchase of MHP-compatible DVB-T receivers. Providing subsidies and support for this project was among the main focuses of the Digitization Fund's activities in 2006.

Grants for digital cable in first half of 2007

Another focus area in the reporting period was the provision of support for a project to subsidize devices for digital cable broadcasting reception (DVB-C and IP) by the Austrian Federal Economic Chamber (WKÖ). In the fall of 2006, RTR and the Federal Economic Chamber signed a memorandum of understanding which defined the main requirements and pillars of the project. This campaign is scheduled for the first half of 2007 and targets consumers who switch to digital cable reception using terminal devices which support additional interactive services (such as video on demand, voting, etc.) in addition to displaying linear content. The objective of the project is to accelerate the digitization of cable infrastructure in Austria.

Finally, the following projects were also supported or financed by RTR in 2006:

- DVB-H test operation in Salzburg and Vienna: Trials are being conducted by ORF, ORS, Siemens, Mobilkom, Hutchison 3G and Salzburg University of Applied Sciences from summer 2006 to summer 2007; the objective is to test mobile TV broadcasting via DVB using mobile telecommunications for the return channel;
- Ongoing monitoring and documentation of the DVB-H project by evolaris research & development GmbH;
- The development of a terrestrial infocasting platform for weather and traffic information services as well as other current information by deuromedia technologies Entwicklungs und Vertriebs GmbH.

In 2006, grants from the Digitization Fund were approved in the amount of approximately EUR 6.8 million. Some 14% of the resources in the Digitization Fund were used for administrative activities at RTR, the reimbursement of costs arising from the implementation of the Digitization Plan, and for opinions and studies commissioned in connection with broadcasting digitization. A total of EUR 4.4 million from previous years was carried forward to the 2007 business year.

4.1.9 Austrian Television Fund *(Fernsehfonds Austria)*

Endowment: EUR 7.5 million less administration costs

The Austrian Television Fund was established at RTR by an amendment to the KommAustria Act (KOG) as of January 1, 2004. RTR administers this fund and receives EUR 7.5 million 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. This amount (less the personnel and material expenses incurred by RTR in administering the fund) is used to support the production of television films, series and documentaries. Production grants for such films are intended to make a contribution to improving the quality of television production and the capacity of the Austrian film industry, as well as reinforcing Austria as a media location and ensuring the diversity of the cultural landscape. Another purpose of the fund is to contribute to strengthening the audiovisual sector in Europe.

The legal basis for the fund is defined in Articles 9f to 9g in conjunction with Articles 9c to 9e of the KommAustria Act (KOG). These provisions describe the objectives of grants and how the funds are raised. Art. 9h KOG stipulates the establishment of a review board consisting of five members, each of whom is appointed by the Federal Chancellor for a term of three years. This board is responsible for submitting comments on the extent to which the projects submitted are worthy of funding.

The grant decisions themselves are made by the managing director of RTR's Broadcasting Division on the basis of the grant guidelines after due consideration of the review board's comments.

In 2006, the Television Fund's review board consisted of the following members:

- Werner Müller, Chairman (Austrian Association for the Audiovisual & Film Industry; Austrian Federal Economic Chamber);
- Georgia Tornow, Deputy Chair (film20);
- Gerlinde Seitner (Austrian Film Institute);
- Kurt Mayer (director and producer, kurt mayer film);
- Reinhard Schwabenitzky (director and producer, Star Film).

4.1.9.1 Guidelines on grants from the fund

Preparation for the re-notification of guidelines

Activities in the year 2006 also included a review of the existing guidelines, which were approved by the European Commission for the period ending June 30, 2007 (decision of July 13, 2005, K(2005)2571, State Aid No. N 77/2005). For this purpose, starting in early 2006 opinions were requested from major Austrian and German television broadcasters, from the Austrian Association for the Audiovisual & Film Industry at the Austrian Federal Economic Chamber, and from the Erich Pommer Institute in Berlin. In addition, the Digitization Fund held

a forum at Filmstadt Wien on September 4, 2006. Finally, the notification to the European Commission was prepared after comments were received from the review board.

Austrian Television Fund forum

The forum held by the Television Fund was organized in cooperation with the State Secretariat for the Arts and Media and addressed the general topic of "Future prospects for Austria as a media location and for television production." In addition to an interesting panel discussion on the topic of "Opportunities for the Austrian television industry," Mathias Schwarz gave a talk on "Government regulation of terms of trade" and presented the regulatory model used by Ofcom in Great Britain. A text version of this lecture also appeared in a periodical on copyright and media law *(Zeitschrift für Urheber- und Medienrecht)*.[1]

4.1.9.2 Projects supported

Due to limited grant funds and the size of grant requests for projects submitted on the first, second and third application dates in 2006, the fourth application date had to be canceled. A total of 60 different projects were submitted as of those three application dates in 2006. Of those project applications, nine were permanently withdrawn, while 19 projects did not fulfill the purpose of grants as defined in the guidelines and in the KommAustria Act (KOG) or were considered less worthy of funding compared to the other projects submitted. As a result, they were not awarded grants, especially due to limited funds.

32 projects supported in 2006

Approvals were granted for 32 projects, with total grants amounting to approximately EUR 7.2 million (11 television films, 19 television documentaries and one television series). Various producers submitted applications for projects of varying length and content. One producer decided not to accept the grant after its approval. Therefore, 31 grant awards from the year 2006 were still active as of December 31, 2006.

The grant decisions can be viewed at http://www.rtr.at/fernsehfonds or http://www.fernsehfonds.at (in German).

4.1.10 Press and journalism subsidies

4.1.10.1 Press subsidies

144 applications for press subsidies

In 2006, KommAustria decided on 144 applications under the Press Subsidies Act 2004 (PresseFG 2004). In 133 cases, subsidies were granted, while 11 applications had to be rejected due to non-fulfillment of the relevant legal requirements. The group of recipients remained largely unchanged compared to the previous years.

[1] ZUM 2006, No. 11, 810-818, Nomos Verlagsgesellschaft, Baden-Baden, Germany.

The Press Subsidies Commission provided support for KommAustria in the decision-making process. In 2006, there was no change in the composition of this advisory body, which prepares evaluations on grant applications and is given the opportunity to submit comments on grant guidelines before they are adopted: As in previous years, the Chairman was Otto Oberhammer, and the members appointed by the Austrian Federal Chancellor were Clement Achammer (an attorney at law in Vorarlberg) and Claus Hörr, a department head in the Federal Chancellery. The Association of Austrian Newspapers (VÖZ) was represented by its managing director Walter Schaffelhofer and *Gewinn* magazine publisher Georg Waldstein, while the trade union was represented by Gisela Vorrath and Fritz Wendl, head of ORF Radio's editorial office for consumer affairs and chairman of the ORF Editors' Board.

In March 2006, the last-instance decision was made in a subsidies dispute which originally started in 2004. At that time, a weekly newspaper publisher applied for a special grant for the preservation of regional diversity, although these grants are reserved for daily newspapers under Section III of the PresseFG 2004. As expected, this application was rejected by KommAustria. In a ruling handed down on March 8, 2006 (GZ 7Ob248/05d), the Austrian Supreme Court (OGH) rejected the revision for lack of a substantial legal issue. The Supreme Court did not share the doubts expressed by the plaintiff regarding the constitutionality of Art. 8 PresseFG 2004. The court ruled that the legislature's differentiation between daily newspapers and weekly newspapers is materially justified in light of their significance for political opinion formation and decision-making. The reason cited by the court is that daily newspapers respond immediately to day-to-day political events and developments and – even through their repeated and ongoing coverage of certain topics – can exert greater influence on political opinions and decision-making than weekly periodicals due to their lower frequency of publication. As the subsidies are also specifically aimed at supporting the continued existence of daily newspapers, a materially justified differentiation can also be seen in the different costs arising from the differing frequencies of publication.

2006: Evaluation of press subsidies

In the course of its evaluation of press subsidies, KommAustria conducted a survey in the fall of 2006 among the publishers of those daily and weekly newspapers which had submitted at least one application for subsidies under the PresseFG 2004 between 2004 and 2006. With a return rate of just over 65%, the survey revealed that a vast majority of respondents gave a positive overall assessment of the 2004 reform, with daily newspaper publishers tending to agree substantially more often than weekly newspaper publishers.

In early November 2006, KommAustria passed grant guidelines for the 2006 period and published them on the Internet. Aside from general explanations, the guidelines contain detailed descriptions of the individual areas for which subsidies are available in order to provide applicants with the best possible information prior to the start of the relevant period. Compared to the guidelines for 2006, no significant changes in content were made.

Subsidies allocated:

In 2006, subsidies totaling EUR 12,837,949.80 were paid out.

Table 3: Press subsidies allocated in 2006

Type of subsidy		Amount paid out (EUR)	Applications received	Applications approved
Distribution subsidies under Section II		**4,525,049.80**	**66**	**60**
Amount awarded to:	▪ daily newspapers	2,443,526.80	15	15
	▪ weekly newspapers	2,081,523.00	51	45
Special subsidies for daily newspapers under Section III		**6,644,500.00**	**10**	**8**
Promotion of quality and security for the future under Section IV		**1,668,400.00**	**68**	**65**
Amount awarded to:	▪ Internal training and education for next-generation journalists	279,408.54	24	24
	▪ Association for Journalist Education	650,676.00	8	6
	▪ Foreign correspondents	234,319.74	7	7
	▪ Reading promotion	387,943.72	18	18
	▪ Research projects	66,000.00	5	4
	▪ Press clubs	50,052.00	6	6
Total		**12,837,949.80**	**144**	**133**

Source: RTR

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

4.1.10.2 Journalism subsidies – Promotion of print periodicals

In awarding journalism subsidies, which are intended to promote the education of citizens under Section II of the Federal Act on Subsidies for Political Education Work and Journalism 1984 (PubFG 1984), the federal government is required to "promote print periodicals for the sake of preserving their diversity and multitude."

In 2006, KommAustria was responsible for decisions on subsidies for print periodicals with advisory support from the Journalism Subsidies Advisory Board. The 17 members of this board represent various areas of the public sphere: The political parties represented in Austria's National Council, the relevant trade union, 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 have the right to submit suggestions.

107 print periodicals supported

In 2006, grants totaling EUR 353,301.70 were paid out to support 107 print periodicals. Nine applications were rejected because they did not fulfill the grant requirements defined in Section II of the Journalism Subsidies Act 1984 (PubFG 1984).

4.2 Telecommunications Division

4.2.1 Regulatory framework and central issues

Milestone in the liberalization process: Green Paper of 1987

The process of liberalizing the telecommunications sector in all EU member states by eliminating the predominantly state-run monopolies began with the Green Paper of 1987 (Green Paper on the development of the common market for telecommunications services and equipment COM(87)290, June 30, 1987).

At first, the European legal framework with which the national regulatory authorities were to accelerate and promote the opening of markets consisted of various EU directives, Commission recommendations and key documents published by the ONP Committee. In Austria, this first European regulatory framework was implemented in the Telecommunications Act 1997 (TKG 1997).

The TKG 2003 implemented the package of EU directives passed in 2002.

However, the progress of liberalization made it necessary to refine the definition of regulatory duties and instruments. As a result, a new package of EU directives was announced in 2002. This framework was implemented under national law by the Austrian Telecommunications Act 2003 (TKG 2003), which took effect on August 20, 2003. Under the TKG 1997 (Federal Law Gazette I No. 100/1997), two regulatory authorities had been set up: the Telekom-Control Commission (TKK) and Telekom-Control GmbH (TKC). As of April 1, 2001, TKC was merged into RTR. The separation of responsibilities between the Broadcasting and Telecommunications Divisions as well as the TKK and KommAustria is also clearly defined in the new legal framework. Art. 115 TKG 2003 assigns RTR's Telecommunications Division general competence in all duties assigned to the regulatory authorities unless such duties are specifically reserved for the TKK.

Review 2006

In 2006, the European Commission began to revise the EU legal framework in the course of the Review 2006, mainly as a result of experience to date with the legal framework from 2002 and market trends such as convergence and VoIP. The revision process began with consultation procedures, the results of which will be included in the initial draft directives in 2007.

Focus area: International roaming

With regard to international roaming, the European Commission decided in 2006 to pass a special regulation for the entire EU. As in the Review 2006, the Commission also launched a consultation procedure on this topic. The Commission is expected to issue this regulation in 2007.

The sections below describe the regulatory work carried out by both RTR and the TKK during the reporting period. The relevant procedure numbers are also indicated in order to facilitate the retrieval of specific decisions on the RTR web site.

4.2.2 Market definition and analysis

4.2.2.1 Review of the Telecommunications Markets Ordinance 2003 (TKMVO 2003)

The three-stage market analysis process to be carried out in this context comprises the following steps:

1. Market definition;
2. Market analysis and (where applicable) SMP identification;
3. Imposition of regulatory instruments.

Regular review of sector-specific market delineation

Art. 36 Par. 1 TKG 2003 requires RTR to review and define the relevant national markets subject to sector-specific regulation according to national circumstances, in line with the principles of general competition law, and taking into account the requirements of sector-specific regulation. This must be done by issuing (new) ordinances as necessary under Art. 36 TKG 2003 at regular intervals (at least every two years).

As a result, it was necessary to review the conditions underlying the Telecommunications Markets Ordinance 2003 (TKMVO 2003), which has been in effect since October 17, 2003. The regulatory authority began the review process on October 13, 2005.

The basis of the review performed was once again the European Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector as well as the relevance criteria contained in that recommendation. For all of the markets listed in the recommendation, it was necessary to review whether the legal requirements for sector-specific regulation in the field of electronic communications were still fulfilled.

Once the substitution considerations underlying the delineation of markets had been evaluated, the public consultation on the draft "RTR review of the markets identified in the TKMVO 2003 (as last amended by Federal Law Gazette II No. 117/2005), in which the relevant national markets subject to sector-specific regulation were identified according to national circumstances, in line with the principles of general competition law, taking into account the requirements of sector-specific regulation and including new considerations on market delineation" was launched in accordance with Art. 123 TKG 2003 on December 22, 2005.

Redefinition of relevant national markets

After completing the consultation procedure and duly considering the comments received in the consultation, RTR published the following list of relevant national markets subject to sector-specific regulation on February 6, 2006:

1. Access to the public telephone network at a fixed location for residential customers (retail market) under Art. 1 No. 1 TKMVO 2003;
2. Access to the public telephone network at a fixed location for non-residential customers (retail market) under Art. 1 No. 2 TKMVO 2003;
3. Publicly available local and/or national telephone services provided at a fixed location for residential customers (retail market) under Art. 1 No. 3 TKMVO 2003;
4. Publicly available local and/or national telephone services provided at a fixed location for non-residential customers (retail market) under Art. 1 No. 4 TKMVO 2003;

5. Publicly available international telephone services provided at a fixed location for residential customers (retail market) under Art. 1 No. 5 TKMVO 2003;
6. Publicly available international telephone services provided at a fixed location for non-residential customers (retail market) under Art. 1 No. 6 TKMVO 2003;
7. Call origination on the public telephone network provided at a fixed location (wholesale market) under Art. 1 No. 7 TKMVO 2003;
8. Call termination on individual telephone networks provided at a fixed location (wholesale market) under Art. 1 No. 8 TKMVO 2003;
9. The minimum set of leased lines, which comprises specified types of leased lines up to and including 2 Mbit/s (retail market) under Art. 1 No. 10 TKMVO 2003;
10. Trunk segments of leased lines (wholesale market) under Art. 1 No. 11 TKMVO 2003;
11. Terminating segments of leased lines (wholesale market) under Art. 1 No. 12 TKMVO 2003;
12. Unbundled access (including shared access) to metallic loops and sub-loops for the purpose of providing broadband and voice services (wholesale market) under Art. 1 No. 13 TKMVO 2003;
13. Call termination on individual mobile networks (wholesale market) under Art. 1 No. 15 TKMVO 2003.

After completing another consultation procedure and again considering the comments received, RTR published a decision on October 10, 2006 stating that the market for transit services in the fixed public telephone network (wholesale market) under Art. 1 No. 9 TKMVO 2003 was also subject to sector-specific regulation.

4.2.2.2 Market analyses

4.2.2.2.1 Market for broadband access – M 1/05

Telekom Austria as an SMP operator

Prompted by a TKK decision on May 2, 2005, a market analysis procedure under Art. 37 TKG 2003 was initiated under the code M 1/05 for the purpose of determining whether one or more companies possess significant market power or effective competition prevails on the wholesale market for broadband access under Art. 1 No. 17 TKMVO 2003 (as last amended on May 2, 2005). After completing the consultation procedure and duly considering the comments received in the consultation, the TKK concluded this procedure by means of an official decision on February 28, 2006. The TKK determined that Telekom Austria possesses significant market power on this market, and therefore the company was subjected to specific obligations with regard to access, non-discrimination, price regulation and accounting separation.

4.2.2.2.2 Markets for leased lines

Three markets

Minimum offer

Trunk segments

In the course of the market analysis procedures initiated by the TKK in February 2006, three markets for leased lines were investigated once again: the retail market for the minimum set of leased lines, which comprises specified types of leased lines up to 2 Mbit/s, as well as the wholesale markets for trunk segments and terminating segments of leased lines. The two wholesale markets comprise leased lines which are used as upstream products by communications network operators and service providers in order to offer their own leased-line products to retail customers. Trunk segments refer to those leased lines or 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

Terminating segments

interconnection (POIs) for the telephone network. In contrast, terminating segments refer to all leased lines (or sections thereof) at the wholesale level which are not classified as trunk segments.

Once the TKK had initiated the appropriate procedures on February 6, 2006, RTR's official experts drew up market analysis opinions on whether effective competition prevails on these markets. The opinions were written on the basis of data collected by RTR for the purpose of the market analysis. Based on these expert opinions, the TKK made the preliminary determination in July 2006 that Telekom Austria possesses significant market power on the retail market for the minimum set of leased lines, which comprises specified types of leased lines up to 2 Mbit/s, and on the wholesale market for terminating segments of leased lines. The expert opinions identified specific competition problems in both markets. In the absence of regulatory remedies, these problems could include excessively high prices or price discrimination and market entry barriers due to long contract periods, penalties for the premature termination of contracts, or the loss of discounts on the retail market for the minimum set of leased lines up to 2 Mbit/s.

Competition problems: Excessive prices, barriers to market entry

The competition problems identified on the retail market also exist on the wholesale market for terminating segments. In addition, the latter market also is also susceptible to transfers of market power into neighboring markets, both from the market for terminating segments into the market for trunk segments by offering (non-reproducible) bundles of trunk segments and terminating segments, and from the wholesale market into the retail market.

Wholesale market for trunk segments – M 10/06

Effective competition

The market analysis procedure regarding the wholesale market for trunk segments of leased lines was discontinued on September 4, 2006, as effective competition was deemed to prevail on this market: No company possesses a significant level of market power, and the number of companies already operating on the market as well as their geographical presence and network capacities ensure a sufficient degree of competition. In particular, in the medium term no operator would be able to raise prices above costs for connections between "trunk towns" without losing market share.

Retail market for the minimum set of leased lines, which comprises specified types of leased lines up to and including 2 Mbit/s – M 9/06

Telekom Austria as a significant market power operator

With regard to the retail market for leased lines comprising specified types of leased lines up to and including 2 Mbit/s, and the wholesale market for terminating segments of leased lines, the TKK issued decisions on November 27, 2006 determining that Telekom Austria possesses significant market power on these two markets.

As regards the retail market for leased lines comprising specified types of leased lines up to and including 2 Mbit/s, Telekom Austria was obliged to offer a minimum set of specified leased lines up to and including 2 Mbit/s (analog leased lines with voice bandwidth of normal or special quality and digital leased lines with data rates of 64 kbit/s and 2,048 kbit/s), as well as leased lines with data rates of n x 64 kbit/s up to and including 2 Mbit/s, with due adherence to the principles of non-discrimination, cost orientation and transparency.

In connection with this minimum offer, the TKK also required Telekom Austria to observe the principle of non-discrimination and to base its leased line charges on forecast costs. In contrast to the market analysis decision of October 27, 2004 (M 10/03-52), Telekom Austria was required to submit its general terms and conditions as well as its rates for advance approval by the regulatory authority, but only with reference to leased lines within the scope of the minimum offer. In contrast, Telekom Austria's general terms and conditions and its rates for retail leased lines with data rates of n x 64 kbit/s up to and including 2 Mbit/s are only subject to a notification requirement in which the regulatory authority has the right to raise objections in the case of violations of certain end-user protection provisions within eight weeks after publication pursuant to Art. 25 TKG 2003.

Moreover, Telekom Austria is required to publish easily accessible information on technical features and specifications, rates and charges (including setup charges and regular base fees), as well as delivery terms and conditions with information on ordering procedures, typical delivery periods, the minimum contract period, typical repair times and reimbursement procedures. Telekom Austria was also subjected to the obligation to maintain accounting separation and a cost accounting system.

Wholesale market for terminating segments – M 11/06

Telekom Austria as a significant market power operator

With regard to the wholesale market for terminating segments, the TKK issued an official decision on November 27, 2006 (once again after completing a consultation and coordination procedure) which identified Telekom Austria's position of significant market power on this market.

Telekom Austria was also subjected to specific obligations in this case. In general, Telekom Austria is required to provide non-discriminatory access to terminating segments of leased lines in response to reasonable demand. In contrast to Decision M 12/03 of October 27, 2004, this obligation was restricted to terminating segments of leased lines with bandwidths of up to 155 Mbit/s and, in Austria's provincial capitals, to terminating segments within existing municipal borders with bandwidths of more than 34 Mbit/s. The TKK justified this decision with the fact that Telekom Austria has no share of the market for leased lines above 155 Mbit/s at all, and its market share for leased lines above 34 Mbit/s is only 30%. As a result, more intense competition is found in the case of higher data rates and in high-population areas. This requirement stipulates that Telekom Austria is required to enable access to terminating segments of various bandwidths at locations specified by the customer, or (upon request) the interconnection of terminating segments to its own infrastructure as well as that of third parties. In addition, Telekom Austria must enable the coupling of low bit-rate terminating segments and high bit-rate terminating segments to 2 Mbit/s and 155 Mbit/s interfaces, at least in those towns where the "town rate" approved by the TKK in Decision G 8/03-16 applies. Telekom Austria is required to grant access in unbundled form and to provide access to all necessary infrastructure elements and services (e.g., collocation) as well as annex services upon request. Finally, Telekom Austria is not allowed to refuse access to terminating segments once such access has been granted.

For all of the above-mentioned services on the market for terminating segments, Telekom Austria is required to publish a reference offer comprising sufficiently detailed sub-services by March 31, 2007. In addition, the reference offer must break down the relevant service offers

into components according to the market's needs and state the associated terms and conditions (including prices and any discounts). Moreover, the reference offer must contain information on the minimum contract period, termination provisions, information on setup dates outside of planning rounds, provisions on service level agreements as well as conditions for the migration of retail leased lines to terminating segments.

Until the publication of the reference offer, Telekom Austria is required to provide leased lines under the previously applicable terms and conditions; existing contracts with communications network operators and service providers must be changed over retroactively to the reference offer's terms and conditions as applicable to the corresponding terminating segments. This is to be done upon request for an indefinite period of time.

While Telekom Austria's rates and charges for access to terminating segments at locations specified by the customer must be based on the costs of efficient service provision, the fees for other access services are to be based on actual costs.

In addition, Telekom Austria is subject to a non-discrimination obligation which requires the company to give companies which provide similar services equal treatment to Telekom Austria's own services or those of its affiliates.

Telekom Austria was also subjected to an obligation to maintain accounting separation and a cost accounting system for this market.

4.2.2.2.3 Wholesale market for fixed-link termination – T-Mobile Austria GmbH and One GmbH – significant market power – M 8/05 and M 9/05

T-Mobile Austria and One: Significant market power

On August 21, 2006, the TKK issued two decisions in Procedures M 8/05 and M 9/05 (initiated by the authority) in which the TKK determined that T-Mobile Austria GmbH (T-Mobile Austria) and One GmbH (One) each have significant market power on their fixed-link termination markets.

"Mobile PBX"

The background to this decision is the fact that the two companies have been offering their retail customers "private branch exchange" (PBX) products since late 2005: T-Mobile Austria's "Replace" and One's "Mobile Nebenstellenanlage." In these services, geographical telephone numbers are predominantly used to reach mobile subscribers. The private branch exchange is connected to (at least) one fixed network termination point which is addressed by the geographical telephone number and through which the subscriber gains access to the public communications network. This fixed termination point can be realized by means of a line or a radio interface. In addition, extensions are set up in this system to reach mobile numbers using call forwarding in individual cases or on an ongoing basis. This call forwarding can be handled by the network or implemented directly at the retail customer's location. The traffic streams to the fixed network termination point (i.e., to the private branch exchange) constitute termination traffic to a telephone network subscriber at a fixed location, regardless of whether (and to which number) the traffic is forwarded. The forwarding of calls itself represents a new call originating from the fixed-link network. For this reason, the traffic reaching the private branch exchange must be classified as termination traffic in public telephone networks at a fixed location and thus constitutes an individual termination market on the part of each company according to the TKMVO 2003.

Termination in fixed-link networks

Ex ante obligations

As in all other termination markets operated by alternative fixed-link network operators, the market analysis commissioned by the TKK also identified a potential competition problem, that is, an incentive to charge excessively high prices for termination services. As in the previous decisions regarding the termination markets of alternative fixed-link network operators, T-Mobile Austria and One were therefore subjected to regulatory price controls based on benchmarking, with Telekom Austria's regional termination charge serving as a point of reference.

Price regulations

In connection with these decisions, it is necessary to mention that an additional specific non-discrimination obligation under Art. 38 TKG 2003 was also imposed on the other mobile network operators in addition to T-Mobile Austria and One in the TKK decisions issued on February 6, 2006 in order to prevent potential market protection strategies vis-à-vis other fixed-link operators. Under this obligation, all of the mobile operators – which were already identified as possessing significant market power on their individual termination markets in Decisions M 15a-f/03 – are required to offer the same terms, including prices, to other operators as they provide for their own fixed-link operations arising from the PBX products offered (see above). Therefore, mobile operators may not offer the mobile termination services required for call forwarding from the fixed-link PBX to a mobile handset in their own operations (on net) at a lower price than the one charged to external parties (e.g., to other fixed-link network operators).

4.2.2.2.4 Wholesale market for unbundled access – M 12/06

Telekom Austria as an SMP operator

In an official decision issued on December 18, 2006 (Procedure M 12/03-52, initiated by the authority), the TKK determined that Telekom Austria has significant market power on the wholesale market for "Unbundled access (including shared access) to metallic loops and sub-loops for the purpose of providing broadband and voice services" as specified in Art. 1 No. 13 TKMVO 2003, also known as the "market for unbundled access."

Obligations renewed

As in 2004 (Procedure M 13/03-52), the following regulatory remedies were again imposed on Telekom Austria:

- A special access obligation under Art. 41 TKG 2003;
- A non-discrimination obligation under Art. 38 Par. 1 and Par. 2 TKG 2003;
- An obligation under Art. 38 Par. 3 TKG 2003 to publish a reference offer for unbundling services;
- An obligation under Art. 42 TKG 2003 to base charges for unbundling services on the forward-looking long-run average incremental costs (FL-LRAIC) of an efficient operator (price regulation);
- An obligation under Art. 40 Par. 1 TKG 2003 to maintain accounting separation and to set up a cost accounting system.

In the procedure, the TKK also dealt extensively with the issue of proportionality, coming to the conclusion that these obligations are indeed necessary and proportional, and do not constitute an unacceptable intervention in Telekom Austria's legal sphere.

4.2.2.2.5 Wholesale market for transit services in the fixed-link public telephone network

In a resolution issued on October 10, 2006, RTR determined in Procedure RVON 2/05 that there is no need to amend the definition of the market for transit services in the fixed-link public telephone network (transit market), and as a result there was no need to change the TKMVO 2003 (as last amended by Federal Law Gazette II No. 117/2005).

Analysis still underway

The TKK subsequently initiated a procedure under Art. 37 et seq. TKG 2003 for the analysis of the transit market and instructed RTR's official experts to draw up an economic opinion on this subject. At the end of the reporting period, the market analysis procedure M 16/06 was still pending.

4.2.2.2.6 Wholesale market for origination and termination in fixed-link networks – M 7/06 and M 8/06 (subsequently M 8a/06 – M 8m/06)

In a resolution issued on February 6, 2006, the TKK initiated procedures under Art. 37 TKG 2003 under the code M 7/06 for the fixed-link origination market and M 8/06 (subsequently continued as M 8a/06 to M 8m/06) for operator-specific fixed-link termination markets.

Based on economic opinions drawn up by RTR's official experts in July and September 2006, draft decisions were prepared and the consultation procedure under Art. 128 TKG 2003 as well as the coordination procedure under Art. 129 TKG 2003 were initiated on November 15, 2006.

Obligations likely to be renewed

The draft decisions which underwent the consultation process provide for the following regulatory remedies to be imposed on Telekom Austria once again due to its position of significant market power on the origination market and on its operator-specific termination market, as was already the case in 2004 (TKK decisions on M 7/03 and M 8a/03):

- An interconnection obligation under Art. 41 TKG 2003;
- An obligation under Art. 42 TKG 2003 to base charges for origination and termination services on the forward-looking long-run average incremental costs (FL-LRAIC) of an efficient operator (price regulation);
- A non-discrimination obligation under Art. 38 Par. 1 and Par. 2 TKG 2003;
- An obligation under Art. 38 Par. 3 TKG 2003 to publish a reference offer for origination and termination services;
- An obligation under Art. 40 Par. 1 TKG 2003 to maintain accounting separation and to set up a cost accounting system.

In contrast, the alternative termination network operators will only be subject to price regulation in the form of benchmarking, as was already the case in the TKK's decisions in 2004 (M 8b-k/03). The regional fee charged by Telekom Austria will again serve as the point of reference in this context.

At the end of the reporting period, the market analysis procedures M 7/06 and M 8a/06 to M 8m/06 were still pending.

4.2.2.2.7 Wholesale market for international roaming – M 10/05

No company with SMP

Based on a TKK resolution issued on June 27, 2006, the procedure under Art. 37 TKG 2003 for the analysis of the "National wholesale market for international roaming in public mobile telephone networks" as defined in Art. 1 No. 16 TKMVO 2003 was discontinued, as no company on this market was identified as having significant market power.

4.2.2.2.8 Wholesale market for mobile termination – M 13a-f/06

In official decisions issued on December 18, 2006, the TKK determined in Procedures M 13a-f/06 (initiated by the authority) that the mobile network operators Mobilkom, T-Mobile Austria, One, Hutchison 3G and Tele2UTA have significant market power on their individual markets for termination in public mobile telephone networks as defined in Art. 1 No. 15 TKMVO 2003.

Obligations renewed

As was generally the case in 2004 (M 13a-f/03), the following regulatory remedies were again imposed on all of the mobile network operators:

- An interconnection obligation under Art. 41 TKG 2003;
- Various forms of non-discrimination obligations under Art. 38 Par. 1 and Par. 2 TKG 2003;
- An obligation under Art. 38 Par. 3 TKG 2003 to publish a reference offer for mobile termination on their respective company web sites;
- An obligation under Art. 42 TKG 2003 to base charges for mobile termination services on the long-run average incremental costs (LRAIC) of an efficient operator (price regulation);
- An obligation to enable interconnection partners to rescind the terms of contracts for the service of termination in their public mobile telephone network in writing at any time with a maximum notice period of two months.

4.2.3 Services subject to reporting requirements / general approvals

As mandatory licensing was eliminated when the TKG 2003 went into effect, access to the market was facilitated even further: It is now only necessary to report the operation or provision of a public communications network or service to the regulatory authority. As early as 2003, the regulatory authority had already developed a web interface which made registration easier and far less bureaucratic.

Web interface facilitates processes

Users can also log on to the web interface using a signature card. In practice, reports under Art. 15 TKG 2003 (General approval notifications) are now submitted exclusively via the web interface, meaning that correspondence between the regulatory authority and companies is now handled completely by electronic means (with the exception of written confirmations of report submissions). A list of companies which have reported the operation or provision of a public communications network or service can be found on the RTR web site.

The web site also enables companies subject to reporting requirements to submit their general terms and conditions as well as their rates and charges, to request and return telephone numbers, and to submit information relevant to financing contributions, the Communications Survey Ordinance (KEV) and market analyses by electronic means.

4.2.4 Network access

Conditions of network access as a key issue

Creating the conditions necessary to enable new entrants to provide services on the market is a crucial area of activity. In this context, (open) network access, especially in the form of interconnection, is especially important. The interconnection of communications networks supports interoperability among the subscribers of all public telephone networks. Interconnection is defined as "the physical and logical linking of public communications networks used by the same or a different undertaking in order to allow the users of one undertaking to communicate with users of the same or another undertaking, or to access services provided by another undertaking. Services may be provided by the parties involved or other parties who have access to the network. Interconnection is a specific type of access implemented between public network operators."

Under Art. 48 Par. 1 TKG 2003, each operator of a public communications network is required to provide upon request a reference offer for other operators of such networks. 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 an agreement on interconnection under Art. 48 TKG 2003 not be reached between these operators, then any party involved can call upon the regulatory authority (Art. 50 Par. 1 TKG 2003). In order to involve the regulatory authority, a request for the corresponding interconnection service must have been submitted and the operators must have attempted to negotiate an agreement on this interconnection service for at least six weeks. As the regulatory authority only acts in a subsidiary role, another requirement is that no valid agreement on the respective interconnection service exists between the communications network operators and that no order has been issued by the regulatory authority in lieu of the agreement which could not be reached.

The regulatory authority's order, which defines the terms and conditions of interconnection, then serves as a substitute for the agreement which could not be reached (Art. 121 Par. 3 TKG 2003).

New fees for unbundling services

In a decision issued on January 23, 2006 (Z 7/04-111), the TKK redefined the fees charged by Telekom Austria for unbundling services at the request of Tele2UTA.

Cost-based charges

Based on the TKK decision of October 27, 2004 in Procedure M 13/03, Telekom Austria was required to price its services based on the costs of efficient service provision in line with the FL-LRAIC approach.

A monthly charge of EUR 10.70 per local loop was calculated and ordered in Decision Z 7/04-111, thus replacing the previously applicable charge of EUR 10.90. The fees for one-time services such as setup or cut-over, the regulations pertaining to the monthly rental charge for Telekom Austria's collocation spaces as well as the general regulations on fee settlement (e.g., invoicing, payment due dates) largely correspond to the previous (and proven) regulations, with several adaptations required due to the specific request and material circumstances. As in the previous procedures (Z 12/00 et seq.), the order was based on the costs of efficient service provision calculated using an analytical bottom-up model. The permissibility of using such a bottom-up model to calculate costs had already been confirmed in principle by the Austrian Administrative Court in a ruling handed down in June 2005 (Procedure Z 14/00).

Calculation using a bottom-up model

Right to termination

In general, the new fees and other regulations ordered will be valid for an indefinite period; a right to termination has existed since the market analysis for the unbundling market was completed in Procedure M 12/06.

Collection fees 1: Telekom Austria AG vs. atms Telefon- und Marketing-Services GmbH

For the use of value-added services, the retail customer is required to pay a service charge to the source network operator, which passes the payment on to the service network (target network) operator after deducting its own collection expenses (including collection risk). In turn, the service network operator pays to the value-added service provider an amount specified in a private-law agreement.

The amount deducted by the source operator from interconnection fees to be paid to the service network operator for connections to target network-priced value-added services is referred to as the "collection fee." In Decision Z 3/04-71 of September 26, 2005, the TKK had set Telekom Austria's collection fee at 10%. This decision was overturned in part by a ruling on Case 2005/03/0228-7 by the Austrian Administrative Court on June 30, 2006 due to a complaint filed by Telekom Austria. The decision ordered the previously applicable terms (collection fee: 10%) for the period until December 31, 2004 and new terms for the period after January 1, 2005 (objections handled according to the "WKÖ process"; 10% collection fee; one-off fee for each subscriber objection if a certain threshold value is exceeded). The Administrative Court ruling which overturned part of the decision referred to the provisions defined for the period up to December 31, 2004 under Decision Z 3/04. The Administrative Court deemed these provisions to be a material violation of the law, as the TKK – despite being requested to do so by Telekom Austria – did not review whether and to what extent there may have been materially justified reasons for differentiating the amount of the collection fee (due to the disproportionate frequency of objections involving services in the atms network) instead of basing the 10% collection fee solely on the obligation of non-discrimination. The TKK should have reviewed the reasons which may have justified the unequal treatment of interconnection partners on the basis of Telekom Austria's request. Procedure Z 3/04 was subsequently discontinued on July 24, 2006 due to a private-law settlement reached by the parties.

Collection fees 2 – Finarea S.A. vs. Telekom Austria AG

The decision issued by the TKK in Procedure Z 4/04 was also overturned in part by the Austrian Administrative Court in Case 2005/03/0228-7 on June 30, 2006 after a complaint was filed by Finarea S.A. due to violations of procedural regulations. As for the provisions applying to the period after January 1, the Administrative Court explained that the authority did not respond to the argument that Annex 17 had not been concluded by Telekom Austria with any mobile operator as ordered, and that in this regard Telekom Austria had violated the non-discrimination obligation. In addition, neither the expert opinion nor the additional opinion prepared by the official expert indicated that the additional processing fee of EUR 35.00 had been subjected to review with regard to the requirement of cost orientation. The statement in the legal assessment that the collection fee ordered on the basis of the available values and the reimbursement in the amount of EUR 35.00 per subscriber objection once a defined number of subscriber objections is exceeded was, in the TKK's opinion, "the best possible approximation of cost-based fees under the FL-LRAIC approach," is not in line with the determination in the official decision, which states that the total collection fee in the amount of 10.89% corresponds to the costs of efficient service provision. In this case as well, Procedure Z 4/04 was subsequently discontinued on November 6, 2006 due to a private-law settlement reached by the parties.

Collection fees 3: atms Telefon- und Marketing-Services GmbH vs. Telekom Austria AG

Once the order in Z 3/04 had been reversed in May 2006, in Procedure Z 6/06 atms requested a reduction in the collection fee ordered between atms and Telekom Austria to 3% as well as the elimination of any processing fees for subscriber objections, a simplification of the standardized multi-operator process for the handling of subscriber objections against target network-priced value-added services as defined in Decision Z 3/04 (the "WKÖ process"), and the elimination of the setup fee for connections to services subject to event-based charges.

atms primarily justified its request by stating that the costs to Telekom Austria underlying the collection fee are actually far lower than 8% or 10%, that Telekom Austria was able to achieve additional savings due to the new regulations in the KEM-V, that the WKÖ process caused unnecessary costs due to its complexity, and that the setup fee was unjustified in the case of services subject to event-based charges. In response, Telekom Austria stated that it was willing to reduce the collection fee to 8%. In RTR's mandatory dispute resolution procedure prior to initiating official proceedings, the parties were unable to reach an agreement, thus the procedure was first continued before the TKK and the corresponding expert opinion was commissioned. Subsequently, the request which had triggered the procedure was withdrawn due to a private-law settlement between the parties, and therefore the procedure was discontinued.

Mobile origination and termination / Collection fees 4

In Procedures Z 10/06, Z 11/06 and Z 14/06, atms submitted a request in May 2006 for lower mobile termination and origination fees as well as a reduction of the contractually agreed collection fee of 10% for fees generated by target network-priced value-added services, and a reduction of the setup charge for services subject to event-based charges in atms' interconnection relationships with (at that time) tele.ring Telekom Service GmbH, T-Mobile Austria and Mobilkom.

While atms justified its requests by citing lower costs for the source network operators in this case as well, all of the mobile network operators involved in the procedure were for maintaining the 10% collection fee, citing the costs incurred in the course of handling objections. In RTR's mandatory dispute resolution procedures prior to official proceedings, the parties were unable to reach agreement, thus the procedures were continued before the TKK and the corresponding expert opinions were commissioned. The requests in the above-mentioned procedures were withdrawn due to a private-law settlement between the operators, and therefore the procedures were discontinued.

Payphone access charge

After the TKK decisions on the payphone access charge at Telekom Austria's public pay telephones in Procedures Z 8-11/04 were overturned by the Administrative Court (Ruling 2005/03/0200 of December 19, 2005) in response to complaints from the alternative network operators concerned, the TKK rejected Telekom Austria's requests submitted on February 6, 2006 for the issuance of partial interconnection orders with replacement decisions, citing that the payphone access charge is not a fee for an interconnection service, as public pay telephones are not provided and operated as a service to the interconnection partner but as a service to the public.

Subsequently, Telekom Austria made an unsuccessful attempt to persuade the alternative network operators involved to conclude private-law settlements on the payment of a payphone access charge. This eventually led to the announcement that if the alternative network operators failed to pay the requested amount, then Telekom Austria would no longer enable access from public pay telephones to numbers in the (0)800 range in the alternative operators' networks. In response, the TKK initiated a supervisory procedure and stated in Decision S 2/06-4 of February 6, 2006 (in which the TKK rejected eTel Austria AG's request for the initiation of a supervisory procedure on formal grounds) that, due to the company's obligation to ensure interoperability, Telekom Austria did not have the right to refuse access to numbers in the alternative operators' networks.

Amendment to Universal Service Ordinance

Additional conciliation attempts moderated by the Federal Competition Authority and the Public Attorney for Cartel Matters were unsuccessful. On October 24, 2006, an amendment to Art. 23 Par. 1 No. 4 of the Universal Service Ordinance was published in which the (0)800, (0)810 and (0)820 number ranges (in addition to the number range for public carrier networks) were excepted from the universal service provider's obligation to make numbers accessible from public pay telephones.

Mobile number portability

Mobile number portability has been possible in Austria since October 2004 and is now part of everyday practice in the industry. The legal basis for mobile number portability was created by Art. 23 TKG 2003 as well as the Number Porting Ordinance (NÜV).

Purpose: Elimination of barriers to switching

The idea behind number portability is to enable retail customers to switch telecommunications service providers without having to change their telephone numbers in the process.

Mobile number porting can refer to any mobile number, regardless of whether the subscriber has a long-term contractual relationship with the telecommunications service provider or the services are provided on the basis of prepaid cards. In general, all additional numbers associated with a subscriber's telephone number are transferred along with it, in particular the voice mail telephone number.

TKK decisions

TKK decisions

After parts of the initial TKK decisions on mobile number porting were overturned by the Administrative Court, in the course of the continued procedures the TKK issued four new decisions on March 6, 2006 after completing a public consultation and coordination procedure and duly considering the comments received. The proposed technical solutions coordinated by the working groups were decisive considerations in the new decisions. However, individual companies also filed complaints with the Constitutional Court as well as the Administrative Court regarding this second set of TKK decisions.

Constitutional Court rulings

While no complaints were filed regarding the TKK's official decisions in Procedures Z 25/03 (Hutchison 3G – Telekom Austria) and Z 26/03 (Hutchison 3G – UTA) and these decisions thus entered into legal force in formal and material terms after the first round of procedures, complaints were submitted to the Constitutional Court or Administrative Court regarding Decisions Z 16/03 (Hutchison 3G – T-Mobile Austria), Z 24/03 (Mobilkom – Hutchison 3G), Z 01/04 (One – tele.ring) and Z 05/04 (tele.ring – Mobilkom). All of the additional petitions for suspensory effect were rejected by those courts, especially as the public's interest in the realization of number portability was a higher priority.

In two rulings on December 4, 2006, the Constitutional Court refused to hear the complaints because they did not have sufficient prospects of success and because the cases could not be expected to clarify issues related to constitutional law. In addition, the Constitutional Court also stated that all operators are required to enable number porting, that all operators benefit from number porting, and that it therefore appears appropriate to impose the relevant system setup costs on the operators. Thus the TKK's decision was confirmed in this respect.

The rulings of the Administrative Court were still pending at the end of the reporting period.

216,000 numbers ported to date

Since the launch of number porting on October 16, 2004, over 216,000 subscribers have taken advantage of this possibility (as of late December 2006).

4.2.5 Frequencies

4.2.5.1 450 MHz frequency range – F 6/04

Potential broadband coverage in thinly populated regions

In early 2006, the regulatory authority held an auction for frequencies in the 450 MHz range which were previously used for the Austrian automobile telephone network (the "C Network"). Due to their propagation characteristics, these frequencies are especially well suited for covering large areas efficiently and effectively, thus making them ideal for providing services in rather thinly populated rural areas. The frequency spectrum was divided into three packets

to be allocated nationwide. In contrast to the previous allocation procedures, this procedure was carried out as a sealed bid auction. The applicants were thus required to submit their final bids along with their applications, and changes were no longer possible after submission.

As a result of this procedure, T-Mobile Austria was allocated the following frequencies for use throughout Austria: 451.300-452.900/461.300-462.900 (2x1.600 MHz). The other two frequency bands (452.900-455.740/462.900-465.740, or 2x2.840 MHz) were allocated to the Swedish company Green Network AB, likewise for nationwide use.

Commercial services expected soon

The two companies are expected to offer wireless Internet services as well as voice telephony services via the Internet throughout Austria starting in 2007. The required terminal devices are already available. This wireless access will create competition for the monopoly on fixed-link access in rural areas. The new wireless technology provides 10 to 15 times more network coverage per transmitter station than UMTS technology. This will create services which not only cover larger areas but are also more favorably priced. The transmission rates in these services will be at least 1 Mbit/s.

4.2.5.2 26 MHz frequency range – F 3/06

Preparations completed

At the end of 2006, the TKK published the tender documentation for the allocation of frequencies in the 26 GHz range, in which six regions with three or four frequency packets each will be auctioned off. The regions were divided up according to the criteria of sociodemographics, geographical business considerations and technical demands.

The auction will be carried out in an open, ascending, simultaneous, multiple-round format. In the course of this procedure, all frequency packets will be auctioned off at the same time. According to the frequency utilization plan (Federal Law Gazette II No. 307/2005), the frequency spectrum must be used to set up microwave radio systems, that is, either point-to-multipoint radio systems or point-to-point radio systems, for the purpose of providing communications services.

These frequencies will be allocated to the operators until December 31, 2020. Frequency spectrum allocations will be subject to the requirement that the operator is able to attain a certain minimum usage level in the allocated spectrum. The final allocation of the frequencies can be expected in early 2007.

4.2.6 Effects of major ownership changes on frequency usage rights

Merger of T-Mobile Austria and tele.ring

Core issue: UMTS frequencies

On August 12, 2005, T-Mobile Austria submitted an application together with tele.ring, EHG Einkaufs- und Handels GmbH and TRA 3G Mobilfunk GmbH for the TKK to approve the transfer of 99.999% of the shares in the overall tele.ring group and the transfer of 99.999% of the shares in EHG Einkaufs- und Handels GmbH to T-Mobile Austria, as well as the transfer of the remaining 0.001% of shares to T-Mobile Austria Global Holding Nr. 3 GmbH.

The complexity of this request arose from the structure of the tele.ring group and can partly be attributed to the fact that the rights to the UMTS frequencies used by tele.ring were assigned to TRA 3G, which was a wholly owned subsidiary of EHG Einkaufs- und Handels GmbH at the time of the request. Even before the decisions of the European Commission and the TKK, EHG Einkaufs- und Handels GmbH was merged with tele.ring Telekom Service GmbH, meaning that the latter was eliminated as an applicant. As a result, tele.ring is now the sole owner of TRA 3G. The division of shares into 99.999% and 0.001% is apparently due to technical considerations at the T-Mobile Austria Group and was not of any further relevance to the approval.

TKK responsibility

The TKK was required to review this transaction on the basis of Art. 56 TKG 2003, which states that essential changes in the ownership structure of undertakings that have been granted rights of use for frequencies shall require prior approval by the regulatory authority. In this context, the regulatory authority is required to assess the technical effects and in particular the effects of frequency transfers on competition, and the authority can include incidental provisions in the approval in cases where this appears necessary in order to avoid an adverse effect on competition. The approval is to be refused if an adverse effect on competition is likely to arise as a result of the transfer despite the imposition of incidental provisions.

Merger Regulation: Basis for control of mergers by European Commission

Due to the particularly high importance of these companies on the mobile market, the planned acquisition was also subject to Council Regulation (EC) No. 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the "EC Merger Regulation"). The Merger Regulation stipulates that concentrations between companies which exceed certain overall revenue thresholds must be reviewed by the European Commission to ensure that they are compatible with the common market. In its review, the European Commission is to account for the need to maintain effective competition within the common market. According to the Merger Regulation, concentrations which would significantly impede effective competition on the common market or in a substantial part of it, in particular as a result of the creation or strengthening of a dominant position, are to be declared incompatible with the common market and thus prevented. For this reason, the applicants were also required to file a report with the European Commission due to the Community dimension of the acquisition. The European Commission may attach conditions and obligations to its decision. The companies involved, on the other hand, are allowed to modify their request in the course of the procedure and to impose restrictions on themselves in order to enable the planned concentration to be deemed compatible with the common market.

The Merger Regulation also stipulates that the European Commission should carry out its appraisal procedure in close and constant liaison with the competent authority in the member state. For this purpose, RTR and the TKK supported the European Commission in the course of the appraisal procedure by providing the requested comments and information regarding the situation on the Austrian mobile telecommunications market. In this context, RTR and the TKK were also able to use the expert opinions already prepared in the TKK's parallel procedure under Art. 56 TKG 2003. The European Commission also requested comments from the other Austrian mobile telecommunications companies on the market situation and the expected effects of the concentration.

Support of competitive situation

In particular, the European Commission examined the competitive position tele.ring had attained on the Austrian mobile telecommunications market, arriving at the conclusion that the

acquisition could only be cleared if the continuing existence of a "maverick" on the Austrian market was ensured. The role of a maverick on the market is to discipline the more dominant competitors by pricing its offers aggressively (i.e., offering favorable prices for the retail consumer) so that it is no longer worthwhile for other participants to divide the market up among each other by coordinating their offers.

The ensuing negotiations between the applicants and the European Commission therefore pursued the objective of creating a situation which could ensure to the greatest possible extent that at least one competitor on the market would still take on the "maverick" role on the mobile telecommunications market after the acquisition. Strengthening the position of competitors with smaller market shares was identified as a suitable means of attaining this objective. This was to be achieved by T-Mobile Austria selling off the UMTS frequency blocks licensed to tele.ring as well as the "mobile locations" (i.e., rights to use transmitter stations) not required in order to ensure nationwide coverage to competitors with smaller market shares.

Art. 56 TKG 2003: Legal basis for review by TKK

The TKK, which was mainly required to review the effects of transferring frequency usage rights on competition, also acknowledged the transfer (which was to be ensured by subjecting the approval to the corresponding obligations) of tele.ring's UMTS frequency blocks to competitors with smaller market shares as a suitable means of preventing disproportionate impediments to competition. In addition to analyzing the question of whether strengthening the position of competitors with smaller market shares was a suitable means of ensuring that retail consumers would still be offered attractive prices regardless of the market leaders' offers, the TKK had to discuss which measures appeared necessary in order to ensure fair, sustainable and in particular equitable competition in the future as well. For this purpose, it was necessary to analyze the potential effects of a redistribution of frequencies for the competitors with smaller market shares. In this context, the TKK came to the conclusion that an imbalanced distribution of frequencies would lead to deterioration in the competitive opportunities of the smaller operator which was not able to acquire the frequency usage rights in question.

Sale of two UMTS frequency packets

The acquisition of tele.ring by T-Mobile Austria would reduce the number of mobile network operators to four in Austria. In addition to Mobilkom, which is the market leader, One as well as Hutchison 3G (under the "3" brand) also operate their own mobile networks. The TKK came to the conclusion that the transfer of UMTS frequency usage rights would significantly strengthen the competitive position of One as well as Hutchison 3G. However, if T-Mobile Austria were allowed to transfer both of the UMTS frequency blocks in question to One or Hutchison 3G alone, the preferential treatment of one of the two operators would endanger the competitive position of the other, thus undermining the objective of strengthening competition. For this reason, the TKK considered the possibility of selling both packets to H3G or One to be counterproductive.

TKK issued decision on April 26, 2006

On April 11, 2006, the TKK published a draft measure which stipulated that approval of the change in ownership would be issued with additional obligations, at the same time inviting interested parties to submit written comments on the draft. On April 26, 2006 – the day on which the European Commission also approved the acquisition after securing commitments from T-Mobile Austria to sell the two UMTS frequency packets to competitors with smaller market shares – the TKK issued its final decision (F 2/05-76) after a thorough discussion of the comments received during the consultation procedure.

The authority approved the proposed change in ownership on the condition that T-Mobile Austria must sell off the two UMTS frequency packets within a period of nine months. In this context, One and Hutchison 3G are first to be given the opportunity to buy one packet each. Should one of the two operators not show serious interest in acquiring the frequency usage rights, one of the two packets may be sold to a company which does not operate on the Austrian market and is independent of Austrian mobile operators. Should neither of the two operators show serious interest in acquiring the rights, the two packets can be offered for sale to a company which does not operate on the Austrian market and is independent of Austrian mobile operators. Should the sale not take place within the required nine-month period, the frequency usage rights in question will be returned to the Federal Minister of Transport, Innovation and Technology without compensation.

4.2.7 Shared use of communications lines – D 1/06

Section 2 Art. 5 et seq. of the TKG 2003 defines regulations regarding wayleave rights and rights of joint use, and the TKK is assigned responsibility for procedures concerning rights of joint use and site sharing.

First procedure initiated

On November 20, 2006, the TKK received a request from a network operator for the right to share another network operator's communication lines in accordance with Art. 8 Par. 1 TKG 2003. This was the first request of its kind to be submitted since the TKG 2003 went into effect. The procedure is still pending.

4.2.8 Conciliation procedures

4.2.8.1 Dispute settlement procedures pursuant to Art. 122 TKG 2003

RTR as conciliation body

Under Art. 122 Par. 1 TKG 2003, RTR can act as a conciliation body in cases where disputes between a customer and an operator can not be settled in a satisfactory manner (No. 1) and in cases of alleged violations of the TKG 2003 (No. 2). The complainants may be users, operators/providers of communications networks/services, or interest groups.

Under 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 conciliation procedures. By law, KommAustria has placed RTR in charge of conducting these procedures.

In the reporting period, 2,852 dispute settlement procedures were carried out.

4.2.8.2 Mandatory dispute settlement procedures under Art. 121 Par. 2 TKG 2003

Preliminary dispute settlement procedure involving RTR

Article 121 TKG 2003 requires RTR to conduct dispute settlement procedures before the following requests are handled by the TKK: requests regarding the shared use of communications networks, the provision of data for subscriber directories or directory assistance services, charges for number portability, non-discrimination obligations, access to network facilities and network functions, the provision of leased lines, charges for call-by-call and carrier pre-selection, additional obligations regarding access and interconnection, as well as the costs of interconnection.

In such cases, RTR must attempt to negotiate an amicable solution within six weeks. If the parties are able to reach an agreement, the procedure before the TKK is to be discontinued; otherwise, the procedure resumes before the TKK, which has to decide within four months of receipt of the request.

In the reporting period, 25 dispute settlement procedures were carried out.

4.2.8.3 Alternative dispute resolution (ADR)

ADR: Out-of-court negotiation of disputes

In Article 115 Par. 3 TKG 2003, the Austrian legislature provides for another out-of-court negotiation procedure for conflicts between market participants (i.e., companies or interest groups). Under this provision, RTR may be called upon to take part in negotiations regarding any disagreements resulting from the TKG 2003 according to criteria to be published by RTR and to support the parties in settling the conflict on their own. However, the parties to the dispute must have attempted to resolve the conflict independently before calling upon the regulatory authority. The subject of such negotiated settlements under Art. 115 Par. 3 TKG 2003 can only be disputes which arise from the TKG 2003 or its accompanying ordinances and which are related to communications services. Another requirement for the involvement of RTR is that each party must fill out and submit the ADR questionnaire (see http://www.rtr.at/adr).

Role of RTR as a mediator in ADR

ADR has been offered to market participants since 2003. In 2006, however, this procedure was hardly used, as only one procedure was carried out.

4.2.9 Supervisory procedures

The duties of RTR and the TKK also include monitoring the enforcement of general conditions as well as the provisions of the TKG 2003 and the relevant ordinances. This is achieved by means of the supervisory procedure under Art. 91 TKG 2003. This refers to a multi-stage procedure in which a company which violates the provisions of the TKG 2003, or an ordinance or official decision issued on the basis of the TKG 2003, is first informed about the (suspected) violation and given an opportunity to submit comments regarding the allegation or to restore legal compliance within (at least) one month.

If these requirements are not met, the second step may involve issuing a decision which imposes the appropriate measures on the company in question. In the third and final step, it is possible to suspend or refuse the company's right to operate/provide communications networks or services, and allocated frequencies and communications parameters may be revoked. Section 7 of the TKG 2003 also specifically defines provisions regarding the revocation of communications parameters. The supervisory process described above generally applies to any procedures carried out in this context.

SMS and VoIP

As in the year 2005, RTR also carried out numerous supervisory procedures in connection with the use of communications parameters during the reporting period. In particular, the number of complaints submitted to RTR's conciliation body regarding value-added text messaging (SMS) services increased, and therefore a number of monitoring procedures were carried out in this field. One of the main problems in this context was compliance with the appropriate information obligations vis-à-vis the user. Another point was (and still is) the increase in the

number of VoIP providers and the accompanying violations in the use of geographical numbers, for which certain requirements must be met. In this field as well, telephone numbers were sometimes assigned in violation of the relevant regulations.

Directory assistance services

In the reporting period, reviews mainly focused on existing directory assistance services in the 118 number range. In this context, there were repeated violations in which telephone numbers in this range were not used for directory assistance services, but for company hotlines and other services. For the first time, the authority also initiated procedures against mobile operators, as the introduction of new rate plans with increased billing increments in this area meant that the provisions regarding charges for value-added services were not (or not completely) fulfilled. In the course of one such procedure, the telecommunications office imposed an administrative fine on one operator.

Reachability of telephone numbers

In individual cases, there were also problems related to the reachability of numbers in the (0)720 number range for location-independent fixed-link telephone numbers. These numbers are mainly used by VoIP service providers. In order to ensure that these numbers are reachable from all networks in the future, the allocation holder must ensure that these numbers are set up in all networks. However, this was not done or only done incompletely in some cases, which thus brought about customer complaints.

In all of the procedures carried out by RTR in this area, however, it turned out that the resulting initiation of supervisory procedures and further discussions with companies made it possible to remedy problems in the first stage of the procedure. Beyond that, the underlying allegations are passed on to the competent telecommunications office for the initiation of any necessary administrative penal procedures under Art. 109 TKG 2003.

4.2.9.1 Examination of Telekom Austria's discounts – R 1/06

Investigation of Telekom Austria's discounting practices

On January 9, 2006, the TKK decided to initiate a procedure under Art. 91 TKG 2003 (R 1/06) to examine Telekom Austria's suspected violation of Art. 34 TKG (1997) in conjunction with Art. 133 Par. 7 TKG 2003 and the TKK's official decision of February 21, 2005 in Procedure M 3/03-59.

The object of this procedure was to review the suspicion that Telekom Austria granted discounts to retail customers which might not fulfill the obligation of cost orientation according to the requirements imposed on Telekom Austria. Specifically, it was necessary to investigate whether Telekom Austria had exceeded the maximum limit in its discounting practices for retail customers in the public sector; this refers in particular to Austrian municipalities which purchase voice telephony services through Bundesbeschaffung-GmbH, a federal procurement agency.

In the course of an extensive investigation, which included requests for information, witness interviews and an evaluation of the contract components submitted, the suspicion that impermissibly large discounts were being granted was not confirmed, and therefore the procedure was discontinued on October 2, 2006.

4.2.9.2 TKK identifies abuse of market power by Telekom Austria – R 4/06

Delays and non-fulfillment of unbundling orders

In an official decision issued on December 11, 2006 in Procedure R 4/06 (initiated by the authority), the TKK ruled that Telekom Austria had violated the special access obligation and non-discrimination obligation imposed by the TKK in Decision M 13/03-52 of October 27, 2004 by causing delays and not executing unbundling orders in the realization of an unbundling project. Telekom Austria was ordered to fulfill the outstanding unbundling orders in the project within a reasonable period of time.

4.2.9.3 Alleged violation of non-discrimination obligation in Telekom Austria's setup fees for unbundled lines – R 3/06

Compatibility of different setup charges with the non-discrimination obligation

In Procedure R 3/06, the TKK reviewed – as suggested by Tele2UTA – whether Telekom Austria's charging of different setup fees to its unbundling partners complied with the non-discrimination obligation imposed in the relevant market analysis procedure. In Tele2UTA's opinion, the package offer agreed upon by Telekom Austria and other operators, which involved more favorable connection fees than those charged to Tele2UTA, was discriminating because Telekom Austria had allegedly applied the time windows from the package offer to Tele2UTA against its will. This package offer provides for reduced setup charges and at the same time maintains the monthly fee of 10.90 (which was reduced to EUR 10.70 in January 2006) for an additional 12 months as well as reduced transfer and connection fees if the time windows defined by Telekom Austria are observed. In response to Tele2UTA's allegations, Telekom Austria maintained that it had also originally offered Tele2UTA the package solution with a twelve-month period of commitment to a monthly fee of EUR 10.90 during the year 2005 and again on May 15, 2006. The reduction of setup charges in the package offer (from EUR 109.01 to EUR 69.40) was not based on the time windows but on the minimum contract period of 12 months. Both reductions in charges were offered jointly to all unbundling partners.

"Package offer"

No supervisory measures taken

The TKK did not take supervisory measures, as from a legal standpoint no objections could be raised with regard to the package offer agreed upon between the other unbundling partners and Telekom Austria in comparison to the regular official regulations on fees in Decision Z 7/04-111 of January 23, 2006. The non-discrimination obligation does not indicate that Telekom Austria is required to combine parts of the package offer with the lower monthly fee of 10.70 defined in the decision mentioned above. In this context, it is necessary to consider the fact that Telekom Austria offered the package solution in the wake of a series of dispute settlement procedures in early 2005 at the express request of individual unbundling partners, and that the corresponding agreements had been concluded by a large number of unbundling partners in order to reduce costs. In Procedure Z 7/04 regarding unbundling charges, it was not possible to order the package offer (suggested by Telekom Austria), as Tele2UTA did not grant its consent. Moreover, lower setup charges may be justified if Telekom Austria can realize potential savings in planning the cut-over time window according to its own schedule so that its technical staff can carry out cut-overs for various unbundling partners within certain time periods.

Savings potential for cut-overs

The fact that Tele2UTA did not take advantage of the package offer (which was also offered to Tele2UTA) with the possibility of profiting from the reduced setup charges for each new local loop, given a minimum contract period of 12 months and a monthly fee of EUR 10.90, could not be interpreted to the detriment of Telekom Austria. In line with the TKK's consistent

decision-making practices, it is possible at any time to change the terms of an order replacing a contractual agreement under Art. 50 TKG 2003 in a private, autonomous agreement, and this also applies to Tele2UTA with regard to the conditions of the package offer. Moreover, in the course of the procedure it was revealed that Tele2UTA pays a lower fee (EUR 31.50, not including work at the retail customer's location) if the provision regarding time windows defined by Telekom Austria is observed.

Procedure discontinued

Therefore, a violation of the non-discrimination obligation could not be identified and the procedure was discontinued.

4.2.9.4 Alleged violation of non-discrimination obligation in Telekom Austria's free setup campaigns – R 5/06

Price squeeze due to free setup?

After receiving a letter from Internet Service Providers Austria (ISPA) in July 2006, the TKK initiated a supervisory procedure to review the question of whether Telekom Austria's free setup campaigns for its own retail customers (at the same time maintaining the standard setup charges for unbundling partners) violate the non-discrimination obligation imposed on Telekom Austria in the market analysis decision on unbundling.

In the course of the investigation, cost accounting data was requested from Telekom Austria on multiple occasions; in addition, several inspections were carried out at Telekom Austria and meetings were held with several unbundling partners. The current status of insights into the question of whether this can be considered a margin squeeze has already been presented to the TKK; however, it will be necessary to evaluate additional cost accounting data before reaching a final assessment of the situation. Therefore, the procedure was still pending at the end of the reporting period.

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

In market analysis procedures, an operator identified as possessing significant market power on a market relevant to telecommunications law can, among other things, be subjected to a specific obligation to have its general terms and conditions of business approved by the regulatory authority. The authority is required to issue a decision on each request for approval within eight weeks. If a company subject to this requirement requests approval for its rates and charges, then these have to meet the standard of cost orientation. In the approval of general terms and conditions, the regulatory authority reviews compliance 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 (ex ante review).

At the end of the year 2006, Telekom Austria and its group subsidiary Mobilkom were obliged to have their general terms and conditions of business as well as their rates and charges approved in advance by the TKK. This obligation pertains to the following markets:

- International telephone services for non-residential customers (fixed-link network);
- Local and/or national telephone services for non-residential customers (fixed-link network);
- Local and/or national telephone services for residential customers (fixed-link network);
- Access to the public telephone network at a fixed location for non-residential customers;
- Access to the public telephone network at a fixed location for residential customers;
- Specified types of leased lines.

Four approval procedures

In 2006, the regulatory authority carried out four approval procedures of this kind:

Decision G 124/05-08 of January 23, 2006 referred to Mobilkom's description of services and provisions regarding rates and charges for the product "A1 Convergence."

In Decision G 132/05-23 of March 14, 2006, the TKK approved Telekom Austria's general terms and conditions of business as well as its rates and charges for voice telephony. This decision brought about major changes in billing increments for telephone calls and in monthly base fees.

In Decision G 15/06-08 of April 18, 2006, the TKK approved Mobilkom's terms governing rates and charges for voice telephony and data services via the Mobilkom A1-Total carrier network (A1-Total rates and charges) as well as the rates and charges for the provision of voice telephony and data services via the Mobilkom A1-COMPANY LINE carrier network.

In Decision G 59/06-10 of July 10, 2006, the TKK approved Telekom Austria's rates and charges as well as its description of services for public pay telephones.

In the field of leased lines, Telekom Austria did not submit any requests for approval in 2006.

4.2.11 Communications parameters

4.2.11.1 Amendment to the Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V)

Amended requirements

The legal basis for RTR's administration of telephone numbers in Austria is the Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V), which defines a public numbering plan and a public dialing plan as part of Austria's communications parameters as well as regulations with regard to value-added services. After two years, RTR has now introduced an amendment to the KEM-V, mainly in order to account for the changing requirements of the market and consumer protection, especially in the field of value-added services.

Amendment creates clear framework

In addition, the assignment of emergency numbers in general has been adapted to the number assignment system. As a result, emergency numbers will also be assigned by official decision in the future. The issue of authorization to use those numbers as well as the requirements for number-specific and location-dependent routing destinations have also been clarified. The amendment, which went into effect on November 1, 2006, also contained minor adaptations in other specific areas. In this context, it is worth mentioning the new regulations pertaining to the resale of telephone services, which will enable smaller operators in particular to use numbers in the (0)720 range, geographical numbers and mobile numbers from their (wholesale) partners. In general, it is now necessary to name an authorized recipient in Austria when submitting requests for numbers to RTR.

Value-added services

Improvements with regard to value-added text message services

Value-added text message services (SMS) in particular have caused repeated problems in the past. Users have experienced major problems with subscription text message services which they often did not even know they had ordered and were then unable to cancel. Moreover, frequent cases of abuse were reported in chat services offered by dubious providers. Once the amendment goes into effect, service providers will be required to enable service termination upon receipt of a "stop" message: In the future, when a user sends a message with the word "stop" (German: *Stopp*) to the relevant value-added service number, then all subscription services provided for the customer from that number must be discontinued. This is especially helpful if the consumer does not know (or no longer knows) how many or which subscriptions are still active under the relevant value-added service number.

More transparency in rates and charges

In the case of subscription services where charges of less than EUR 10.00 per month are incurred, the provider is also required to inform the subscriber by SMS of the fee per message each time the charges reach EUR 10.00 (regardless of the period of time in which the charges are incurred). If this (repeated) charge information is not reconfirmed by the user, the subscription service in question must be terminated in any case. For subscription services in which charges exceeding EUR 10.00 per month are incurred, it was already the case that the user had to be informed of the accumulated charges in ten-euro increments. Moreover, this information must be explicitly confirmed by the user before the service can be resumed.

The new ordinance also introduces a provision to ensure consumer (user) protection with regard to SMS chat services. In the future, providers will only be able to charge for these services on the basis of the text messages sent by the user. Text messages sent by the chat partner (i.e., the service provider), for example as replies to the user's text messages, can no longer be charged to the recipient. This also includes any messages sent by the service provider to remind the user to continue chatting.

It was also necessary to expand the usage regulations applying to value-added voice services which involve a fixed charge of up to EUR 0.70 per call ((0)901 and (0)931 number ranges). These services are often used in connection with audience voting for television shows, to name but one example. In the past, subscribers who called numbers in this range often heard recordings which did not clearly indicate whether charges applied to the call ("Sorry, you did not get through this time," or "Sorry, you did not reach the winning line," etc.). Many callers interpreted those recordings to mean that the connection had failed (and thus no charge was incurred), so they tried the number again and again. This behavior was encouraged by the radio or television host, who urged callers to keep trying the number. The amendment to the KEM-V now requires that (fee) announcements inform the caller unmistakably whether the call is subject to a charge.

Relaxation of provisions in line with needs of market

The amended ordinance also contains adaptations in the provisions applying to advertising for value-added service numbers. As RTR had identified no problems in certain areas since the introduction of the KEM-V, it was possible to relax certain regulations. For example, in advertisements for value-added services subject to a rate of less than EUR 1.00, it is also possible to indicate the price in euro cents, or to omit the information altogether in the case of (0)810, (0)820 and (0)821 numbers, which are subject to a maximum rate of EUR 0.10 or 0.20. In radio advertising, it is possible to advertise a value-added service number without indicating

the charges as long as they do not exceed EUR 0.70 per minute, per call, or per text message, but only in cases where the user is informed of the applicable charge (for free) in the course of using the service. However, this exceptional provision for the indication of charges only applies to radio advertising, not television or print advertising.

New measures to protect consumers from foreign dialer programs

Finally, an important new provision regarding dialer programs was introduced in the field of value-added services. Since the KEM-V was passed and its opt-in system for the (0)939 number range was introduced, dialer services using Austrian telephone numbers have generally no longer been a problem. However, many of these dialer services have gradually "migrated" to international numbers, thus bringing about a sharp increase in the number of complaints in that area. In principle, value-added services using foreign phone numbers were already prohibited in the past. However, such dialer services are frequently offered without the knowledge of the Austrian operator. The new regulations require every Austrian fixed-link network operator to take the appropriate protective measures. For example, the operator can inform its retail customers accordingly, offer protective mechanisms such as blocks for certain international calling zones, and implement the appropriate monitoring functions which can detect the usual "calling behavior" in the case of dialer services. This should enable the operators to provide their customers with early warnings and if necessary to block international numbers identified as dialer services.

Emergency calls

In general, telephone numbers in Austria are assigned for use upon request in an official decision issued by RTR. In the past, this system has proven its worth and created clear conditions with regard to the party authorized to use a telephone number. The authorized party has the corresponding obligations and rights arising from the assignment of the number. The only area where this was not the case was in short public numbers for emergency services (emergency numbers). For historical reasons, the KEM-V passed in 2004 only defined numbers for certain emergency services, for example 122 for the fire department, 133 for the police and 144 for rescue/ambulance services. Unfortunately, in the case of problems it was not possible (or very difficult) to identify the appropriate contact due to a lack of clarity in the relevant legal regulations. Problems and confusion also arose in the definition of number-specific location-dependent routing for emergency numbers.

Improvements with regard to emergency calls

The amendment to the KEM-V accounts for these circumstances. In the future, emergency numbers will be assigned by official decision, as is the case with all other telephone numbers. However, the relevant parties authorized to request these numbers were also defined in this case.

The Austrian Federal Ministry of the Interior is entitled to request the emergency numbers 133 (police) and 112 (uniform European emergency number), while the governments of Austria's provinces are authorized to request the emergency numbers 144 (rescue/ambulance) and 122 (fire department). The allocation holders can specify routing requirements for their assigned numbers.

Further refinements planned for 2007

These requirements must be made available to all operators in an electronically retrievable form. In the past, telephone network operators were only able to obtain the necessary information with great difficulty. For their part, the operators are required to implement these routing requirements in their networks in the best possible manner. Moreover, the operators are obligated to make information on the actual implementation available to allocation holders in electronic form.

Geographical telephone numbers

The existing regulations regarding geographical telephone numbers will remain the same. Any conceivable future changes in these regulations will have far-reaching effects and will also have to be harmonized with the results of the recently initiated review of the European legal framework, among other factors. The interpretation of the current regulations for VoIP operators in particular can be found at http://www.rtr.at/voip (in German).

4.2.11.2 Web portal for telephone numbers

Since March 20, 2006, the web telephone number portal has been available to the public as part of RTR's e-government initiative. The portal now makes it possible to submit telephone number requests/returns and to retrieve the corresponding completion reports via a web interface.

Web portal facilitates processes

This means that all correspondence in the course of the allocation procedure can be handled via the web interface. All of RTR's written correspondence in this context (e.g., number allocation decisions) is signed electronically by RTR in accordance with the Signatures Act (SigG; for more information, see http://www.rtr.at/num/eRTR).

Already in 2006, one third of all requests were submitted via this web interface.

4.2.11.3 Statistical analyses in telephone number administration

Increasing number of geographical telephone numbers

Table 4 provides a quantitative overview of the telephone number allocation decisions issued over the last six years. In this context, the increasing number of allocation decisions for geographical telephone numbers is especially conspicuous. In 2006, the regulatory authority issued nearly five times as many decisions as in 2004. This increase can primarily be attributed to requests submitted by VoIP operators which offer telephone services in Austria. Under the KEM-V passed in May 2004, geographical telephone numbers – in line with the principle of technological neutrality – can also be used for VoIP services as long as the relevant prerequisites are met.

Table 4: Number of decisions issued

	2002	2003	2004	2005	2006
Number of affirmative decisions	**502**	**600**	**494**	**871**	**834**
for geographical numbers	22	20	31	79	150
for non-geographical numbers	480	580	463	792	684
Number of negative decisions	**25**	**82**	**41**	**47**	**68**
Total	**527**	**682**	**535**	**918**	**902**

Source: RTR

In its administration of special communications parameters,[2] RTR issued a total of 16 affirmative decisions in 2006.

Under the TKG 2003, the regulatory authority is required to decide on requests within three weeks of receiving the complete application. As shown in Table 5, RTR has met this requirement and even exceeded it by a wide margin. Here it is important to note that the figures indicated do not refer to 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 5: Processing times for telephone number requests (as of December 31, 2006)

Processing time for telephone number requests (days)	2002	2003	2004	2005	2006
Average processing time	5	4	3	3	2.5
50% of all requests	4	3	2	2	2
90% of all requests	7	8	6	5	4

Source: RTR

Processing times reduced even further

[2] The 2005 Communications Report contains an overview of the parameters administered by RTR.

Increased use of geographical telephone numbers

Table 6 gives an overview of all telephone number ranges administered by RTR as of December 31, 2006, including each range's level of utilization. As of that date, alternative network operators used 20% more geographical numbers than on December 31, 2005. This trend can be explained by the increased use of geographical numbers by VoIP providers. A drastic increase was also recorded in the range for location-independent fixed-link numbers, which are predominantly used by VoIP providers. As of December 31, 2006, approximately 250% more location-independent numbers were in use than one year before.

Table 6: Allocated and utilized telephone numbers in Austria

	Range(s)	Allocated	Used	Level of utilization
Geographical subscriber numbers Telekom Austria	(0)1, (0)2xx, (0)3xx, (0)4xx, (0)5xx, (0)6xx, (0)7xx	25,709,300*	16,484,364* (3,052,494**)	64%*
Geographical subscriber numbers Alternative network operators	(0)1, (0)2xx, (0)3xx, (0)4xx, (0)5xx, (0)6xx, (0)7xx	2,418,300*	324,130* (242,437**)	13%*
Area codes for private networks	(0)5	316	246	78%
Area codes for mobile networks	(0)6xx	12	8	67%
Dial-up Internet access	(0)718	7,200	128	2%
Location-independent fixed-link numbers	(0)720	235,200	18,262	8%
Convergent services	(0)780	2,574	2,574	100%
Toll-free services	(0)800	80,316	12,000	15%
Toll-free dial-up Internet access	(0)804 00	231	31	13%
Services with regulated fee limits	(0)810, (0)820, (0)821	90,737	8,220	9%
SMS services in the range for services with regulated fee limits	(0)828 2	1,509	22	1%
Value-added services	(0)900, (0)930	118,894	25,111	21%
Value-added services subject to event-based charges	(0)901, (0)931	40,976	1,265	3%
Dialers (value-added services)	(0)939	10,400	76	1%
Carrier selection prefix (public carrier networks)	10	39	30	77%
Telephone troubleshooting hotlines	111	71	35	49%
Telephone directory assistance services	118	56	38	68%
Routing numbers for number portability	86	52	20	38%
Routing numbers for mobile number portability	87	12	8	67%
Routing numbers for services	89	36	8	22%

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.

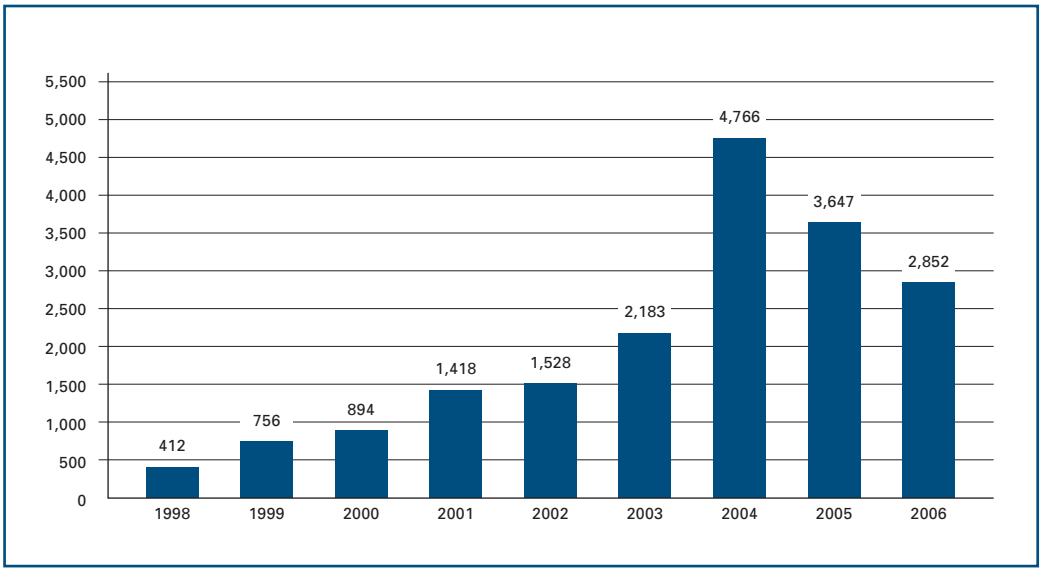
** Actual numbers in use

4.2.12 Conciliation for retail consumers

Decreasing overall number of cases

RTR is also required to act as a conciliation body in disputes between customers and operators. The prerequisite for the initiation of a conciliation procedure under Art. 122 TKG 2003 is that the customer first attempts to reach an agreement with the operator independently. If it is not possible to reach such an agreement, the complaint can be submitted to the conciliation body, which will then make efforts to find an amicable solution or communicate its opinion on the case in question to the parties involved.

Figure 5: Number of conciliation cases, 1998 to 2006



Source: RTR

Protective measures beginning to take effect

After the record number of cases in 2004, which can largely be attributed to the rampant abuse of dialer programs, the KEM-V's introduction of the opt-in principle for dialer services made it possible to reduce the number of complaints in this area to zero, at least as far as dialup access to domestic value-added service numbers is concerned. Likewise, the number of complaints regarding foreign dialer numbers also decreased. It is not possible to identify the reason for this development with complete certainty. To some extent, we can assume that the operators have reinforced their networks' protection measures. The increasing prevalence of broadband connections probably also contributed to this development, as dialer programs always require a conventional modem connected to the telephone network in order to incur damage. With regard to dialer programs which use international numbers, it is also necessary to note that the amendment to the KEM-V substantially intensified the standards of prudence for operators, who are now explicitly required to take suitable preventive measures in order to ensure that dialer programs can not establish undesired connections.

Mobile Internet as a new challenge

The growing prevalence of mobile Internet access services has increasingly made itself noticed in the content of the regulatory authority's conciliation activities. As most of these UMTS-based services also involve charges based on the data volume transferred, objections to invoices and complaints in this regard have begun to arise more and more often. At the same time, the corresponding complaints regarding fixed-link Internet access have been losing significance, as the data volumes included in base fees are constantly increasing and the charges for exceeding those data volumes have been decreasing steadily.

Value-added services of all kinds are, of course, still among the main concerns in conciliation activities. This is particularly true of SMS/MMS-based value-added services. Abuses of value-added text message services which involve charges for merely receiving text messages have been identified repeatedly. In these cases, users were sent value-added text messages subject to a charge even though the users never requested the services.

The amendment to the KEM-V included additional provisions to protect users in this area as well. It remains to be seen whether these provisions will be sufficient in the future, and it will also depend on the efforts of the operators to put a stop to the activities of these "black sheep" in the value-added services business.

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

One of the TKK's main duties in the context of consumer protection is its power to review the general terms and conditions of business used by Austrian telecommunications service providers. Together with the reporting and promulgation obligations set forth in Art. 25 TKG 2003, this ensures a high level of transparency for customers as well as certain minimum standards with regard to the content of contractual agreements used. The terms and conditions reported to the regulatory authority can be viewed on RTR's web site.

The same applies to rates and charges, with the exception of the content-related review by the TKK.

This set of obligations therefore creates the following possibilities for the user:

- The terms and conditions and the fees used by the provider are published (generally on its web site) and can be retrieved and viewed there.

- In addition, users can also query the RTR web site (also by report date). This ensures that each applicable version of a provider's terms and conditions can always be determined (even after the fact).

- The terms and conditions themselves are reviewed by the TKK for compliance with essential provisions related to consumer protection and telecommunications law. The relevant review standards are based on Art. 25 Par. 6 TKG 2003.

Terms and conditions / rates and charges are reviewed for the sake of consumer protection.

The principles described above apply to the initial definition of terms and conditions as well as any ensuing modifications. Should a provider fail to meet this reporting requirement, an administrative fine of up to EUR 58,000.00 can be imposed.

In practice, the content-related review of terms and conditions is handled as follows:

The provider sends its (new or modified) terms and conditions to RTR by e-mail (anzeige@rtr.at). At this point, an initial review is carried out, and if any objections arise regarding individual clauses or legally required content is missing, the provider is contacted in order to discuss the required changes. Then the terms and conditions are reported again. If the next review shows that changes are still necessary, the next feedback loop with the operator begins. This process must be repeated until the provider's terms and conditions comply with the relevant legal requirements.

If the terms and conditions are not changed appropriately, the TKK will raise an objection to them in the form of an official decision within eight weeks. The provider is then no longer allowed to use the terms and conditions in question.

153 procedures involving terms and conditions, 276 involving rates and charges

A total of 153 procedures of this kind were completed in the year 2006, and 276 reports on rates and charges were handled. The reports are available on the RTR website at http://www.rtr.at/agb-eb (in German).

4.2.14 User rights

Given the great variety of rate plans available on the market for communications services, the ability to analyze one's own usage behavior on the basis of itemized bills can be very helpful to the consumer. The same applies to reviewing the fees charged by the operator.

Accordingly, Article 100 TKG 2003 stipulates that users also have the right to receive itemized bills free of charge.

This right, which has been in place since the TKG 2003 went into effect, was specified for the second time by an RTR ordinance in 2006.

In the wake of complaints regarding value-added text message services and subscriptions, RTR noted that prepaid customers generally do not receive an itemized bill from most mobile network operators. In the eyes of the mobile operators, Art. 100 TKG 2003 did not apply to prepaid customers. This inaccurate legal interpretation meant that prepaid customers had hardly any means of reviewing and monitoring charges, especially when attempting to gain a clear picture of the value-added services charged to them. In particular with regard to passive charges for value-added text message services, this situation was unacceptable. In some cases, users did not even notice that incoming messages had reduced their credit balance.

Itemized billing also for pre-paid customers

As Art. 100 TKG 2003 clearly stipulates that being a subscriber is the sole requirement for the right to receive itemized bills – and this is undoubtedly the case with prepaid customers – RTR passed an ordinance to clarify this issue. The relevant ordinance went into effect on July 1, 2006.

From that time onward, the right of prepaid customers to receive itemized bills was clearly established.

Subsequently, RTR monitored whether these requirements were observed by the operators. The two ordinances regarding itemized billing can be found at http://www.rtr.at/een-v (in German).

Experience with spam

Since the E-Commerce Act (ECG) went into effect, RTR has maintained an automated registry of persons and companies pursuant to Art. 7 ECG ("Robinson list") who do not wish to receive commercial communication via electronic mail. These parties can have their names entered in this registry free of charge. For permissible e-mail dispatches, it is necessary to query this list and remove any addresses entered in it from the list of recipients. The list can be queried by information service providers who submit a form with an authorized company signature. The year 2006 saw substantial growth in the number of entries in this list. While the list contained a total of 6,169 e-mail addresses at the end of 2005, it had nearly tripled in size to 17,880 entries by the end of 2006.

Entries as of Dec. 31, 2006: 17,880

RTR receives frequent complaints regarding unwanted advertising text messages in which the addressees are asked to call (0)930 numbers, for example. In some cases, it is also very difficult for the user to discern whether such text messages are subject to charges or not. In these cases, RTR advises the customers accordingly and makes extensive information available.

Billing increments for telephone calls

The question of the differing billing increments used in various rate plans has once again become an increasingly important issue. Many operators, especially mobile network operators, have switched to 60/30 billing increments. In some cases, even 60/60 or 90/60 billing increments are used. The billing mode can have a substantial impact on the amounts actually charged, especially in cases where the customer makes a large number of very brief telephone calls.

Rate information generally contains an additional indication consisting of a pair of numbers separated by a forward slash (e.g., 1/1 or 30/30). The first number indicates the minimum number of seconds charged per call, while the second number shows the duration of the ensuing billing increments in seconds, which are rounded up in each case.

In time-based billing, the duration of the call is measured from the time the connection is established until the end of the call. If one-second billing (1/1) is used, the customer only pays for the exact number of seconds in each call. If 30-second billing increments (30/30) are used, the customer pays the applicable rate for every 30 seconds or part thereof. When charging for calls, some operators define a longer billing increment at the beginning of a call followed by shorter increments. For example, one-second billing after the first minute (60/1) involves a minimum billing increment of one minute.

More transparency required with regard to billing increments

RTR has always communicated to consumers the fact that the calculation of charges per minute, which are sometimes promoted quite heavily, should only be one of various criteria when choosing a provider. For this purpose, RTR provides consumers with the appropriate information on the meaning of billing increments on its web site (www.rtr.at/taktung, in German).

This topic will certainly be a special focus of attention in 2007, as the Austrian Consumer Information Association (VKI) has filed suit against an Austrian mobile network operator due to the billing scheme defined in the operator's general terms and conditions.

4.2.15 Universal service

Universal service refers to a minimum set of public services to which all end users must have access, regardless of their place of residence or business (Art. 26 TKG 2003). 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:

1. Access at a fixed location to the public telephone network, including the operation of fax equipment and modems as well as data transmission at data rates that are sufficient for functional Internet access;
2. Creation of a comprehensive subscriber directory for all operators as well as access to this directory;
3. Nationwide coverage with public pay telephones.

Under the transitional provision in Art. 133 Par. 9 TKG 2003, Telekom Austria was obligated to provide universal service until December 31, 2004. After that date, the Federal Minister of Transport, Innovation and Technology was required to examine whether the prerequisites for an invitation to tender are met. The providers of universal service are to remain subject to their obligations until a procedure under Art. 30 TKG 2003 (tender procedure) has been completed. The amendment to the Telecommunications Act (Federal Law Gazette No. 133/2005) brought about a change in this area: If the universal service of directory assistance is provided in a competitive environment, the Federal Minister of Transport, Innovation and Technology can issue a decision relieving the organization previously obligated to provide this universal service.

Directory assistance service provided in a competitive environment

In an official decision issued on March 22, 2006, the Austrian Federal Minister of Transport, Innovation and Technology relieved Telekom Austria, the universal service provider up to that point, of the obligation to provide the universal service of directory assistance after RTR had provided the Minister with an analysis which states that several market participants already provide this universal service in a competitive environment.

Under Art. 31 Par. 1 TKG 2003, the provider of universal service is to be compensated upon request for the verifiable costs incurred in the provision of universal service which can not be recovered despite efficient management where these costs constitute an unreasonable burden. For the years in which it provided universal service (up to and including 2004), Telekom Austria had reached a private-law settlement on the compensation amount with the alternative telecommunications providers. Toward the end of 2006, Telekom Austria submitted a request for remuneration of the costs of providing universal service in the year 2005.

Telekom Austria is still the provider of universal service in Austria. This is especially important in the approval of charges pertaining to universal service. In Procedure G 59/06, which dealt with the charges for calls from public pay telephones (i.e., part of universal service), the TKK quite clearly stated the criteria according to which it reviews the legally defined requirement of affordability when increases are requested.

In fact, neither Austrian nor EU legislation defines clearly measurable criteria for determining an affordable price. The only point of reference in this regard is Art. 9 Par. 1 of Directive 2002/22/EC, which requires national regulatory authorities to monitor the evolution and level

of retail rates charged for the services identified as part of universal service obligations and provided by designated undertakings, especially in relation to national consumer prices and income. In light of this requirement, the TKK considered it a substantial criterion for affordability that any rate increases must show a reasonable relation to the increase in consumer prices and income over time. Moreover, the effects of the rates submitted for approval were not reviewed in light of the individual prices but in light of all charges arising from public pay telephones as a whole.

The basis defined for the corresponding basket of goods was thus the price and the underlying rates from the year 1997. The development of the price for this basket of goods was shown for those years in which changes in pricing for public pay telephones were made. This development was then placed in relation to the consumer price index as well as the increase in per capita income.

As the concept of affordability also refers to disadvantaged groups in society, additional decision-making factors such as those groups' specific usage behavior and substitution possibilities for the service (0800 numbers, calling cards and prepaid mobile telephones) were also included in the assessment of affordability for the rate plan requested. In this procedure, the TKK concluded that the rates requested do, in fact, meet the requirement of affordability. The relevant decision can be found on the RTR web site.

4.2.16 Report pursuant to Art. 24 Par. 2 TKG 2003

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. As explained in the previous issue of the Communications Report,[3] the Communications Parameters, Fees and Value-Added Services Ordinance passed in mid-2004 and amended in October 2006 is especially important in this context. This ordinance created Austria's first framework of rules defining the essential general conditions for the provision of value-added services. For details, please refer to the relevant issues of the Communications Report from previous years or to the discussion of the KEM-V amendment in Section 4.2.11.1.

KEM-V: Regulations on international dialer programs

As in the year 2005, the field of value-added services saw another change of trend in 2006. Dialer services using Austrian telephone numbers, which have all but disappeared due to the opt-in regulation in the KEM-V, have been revived to a certain extent in the form of dialer services based on international numbers. For this area, therefore, the amended KEM-V contains suitable adaptations in order to enable more effective protection for users in this regard.

Contests and voting functions offered on the radio and television in which listeners/viewers can participate by dialing value-added service numbers in the (0)901 range also led to complaints with RTR. These numbers involve "event-based" charges, meaning that a fixed

[3] Cf. Communications Report 2005

amount is charged per call (regardless of its duration). Information on the charges is provided in the telephone number itself. The first two digits after 0901 or 0931 reflect the amount charged for each call in increments of EUR 0.10; for example, in the number 0901 074353, 07 indicates that the price per call is EUR 0.70 (i.e., 07 x EUR 0.10). For charge indications up to "07," the fixed charge can be read directly from the phone number. From "08" upward (e.g., 0901 084353), this indication refers to a maximum permissible amount, in which case an additional recording must be included in order to inform the caller of the charges.

The KEM-V's advertising regulations and fee information requirements were sufficient for services subject to event-based charges. As a result, the conciliation body received only few complaints in which the users claimed not to have been aware of the costs of a successful connection. However, a number of users complained to RTR that they had mistakenly assumed that the calls were free of charge unless they were actually connected to the show's host at the studio. Thus the problem often appears to have been the subjective perception of the users as to whether a connection was established (and thus charged) from a technical standpoint. A connection is considered to be successfully established (and thus subject to a charge) when it is accepted at the service provider's network termination point. In this context, it is completely irrelevant whether the call is accepted by a recorded message from the service provider or the caller is connected directly to the studio. The content of the recorded messages used at these telephone numbers is also especially important: If these recordings include statements such as "Your call could not be connected" or the like, it is difficult for the user to determine what this actually means. On the one hand, these recordings invite the interpretation that no connection was established, and on the other hand one could assume that the caller was simply unlucky and could not participate in the contest.

In order to prevent these misunderstandings, the KEM-V was adapted accordingly in this area. As a result, the ordinance now requires an announcement which informs the caller that his/her call is subject to a charge immediately after the connection is established.

An increase in the number of complaints was also recorded in the field of value-added text message services (SMS), which are becoming increasingly prevalent. The greatest problem in the reporting period was encountered in MT-billed text message services. In MT billing, charges are not only incurred for value-added text messages sent by the user, but also for those received by the user. There were cases in which subscribers were sent random MT-billed text messages without ever having requested such a service. A number of additional problems also arose in this context, especially with regard to chat services in which the user sent a text message and then immediately received three or four replies.

Such cases are no longer possible, as another regulation in the KEM-V amendment stipulates that SMS chat services can now only be charged on the basis of the text messages sent by the user. However, this does not protect the user from receiving random MT-billed value-added service messages. Prohibiting MT-billed value-added text message services would have rendered many useful services impossible (e.g., subscription services). In this context, it is necessary for the user to be especially cautious by checking each monthly invoice and itemized bill very carefully. Should the user find such unsolicited text messages on his/her monthly bill, s/he may need to raise an objection with the communications service provider.

Monitoring compliance with the rules pertaining to value-added services in the KEM-V is an important task at RTR. For example, RTR reviews whether erotic services are offered in the (0)900 range (which is against regulations) and takes the appropriate countermeasures if necessary. The same applies to the 118 number range, which is reserved for directory assistance services. The importance of these measures becomes especially clear if we consider the situation in Germany, where many directory assistance service numbers are used to conceal erotic hotlines. In line with the policy applied to date, the amendment to the KEM-V passed in the year 2006 introduces necessary adaptations to protect consumers in Austria.

4.2.17 ENUM – Electronic Number Mapping

Austria was the first country in the world to launch commercial ENUM (Electronic Number Mapping) operations. Since December 9, 2004, end-users have been able to register geographical numbers, mobile numbers, and numbers in the (0)5 (private networks), (0)720 and (0)800 ranges with ENUM registrars; telephone numbers in the (0)780 range, in which an ENUM domain must be assigned to each number used, have also been delegated since May 17, 2005.

Expansion of contract with enum.at

In keeping with Austria's leading role in this area, the legal basis for infrastructure ENUM was also created in 2005. For this purpose, an expansion of the contract of August 24, 2004 between RTR and enum.at on the operation of the central ENUM infrastructure for Austria's ENUM domain (3.4.e164.arpa) was concluded on April 18, 2006.

ENUM supports the mapping of telephone numbers to addresses which can be used on the Internet (domain names), thus it can be seen as a bridge between conventional telephone networks and the Internet.

One technology, two varieties

The contract concluded by RTR and enum.at in 2004 made it possible to offer services on the basis of (retail) user ENUM. In this type of ENUM, it is up to the retail customer alone to decide whether (and which) data should be entered in ENUM. Operators and other end users can then query and use these entries as necessary. As user ENUM involves responsibility and effort (registration of the ENUM domain, maintenance of entries) for the end user, while its advantages mainly benefit the operators (more efficient and less expensive routing) or the subscribers making calls (i.e., the ability to select whether the connection is made via the Internet or the conventional telephone network), user ENUM has not spread to the full extent of its potential.

The expansion of the above-mentioned contract to include infrastructure ENUM now also enables communications service operators to enter the numbers of their subscribers in a separate subdomain and to store operator-relevant data there (e.g., for routing or call charging).

In infrastructure ENUM, both the effort and the benefits lie with the operators. This is expected to increase their willingness to make the corresponding ENUM entries markedly compared to user ENUM. In addition, we can assume that operators will enter entire number spaces used in infrastructure ENUM, while only individual numbers are delegated in user ENUM. Any existing entries in user ENUM will remain unaffected, and their use can continue as in the past. Therefore, infrastructure ENUM is a tool intended purely for operators.

Although the willingness to use ENUM currently appears higher among Internet operators than among conventional telephony providers, the significance of (infrastructure) ENUM could again increase with the switch to next-generation networks (NGNs) using the Internet Protocol. Both the contract and the addendum to the contract can be downloaded from the RTR web site (http://www.rtr.at/enum).

Higher potential

The year 2006 was characterized by further developments in international standardization (IETF) as well as an increasing number of countries which launched commercial ENUM operation. The lasting interest in ENUM inspires hopes that the technology's potential will be realized even more effectively in the near future. In addition, the concept of ENUM is also included in the standards for next-generation networks.

Table 7 shows the development of user ENUM domains delegated in Austria since the technology was launched in 2004. The (0)780 number range is shown separately because the KEM-V stipulates that each number assigned in this range must be allocated an ENUM domain.

Table 7: Number of ENUM domains assigned

	Dec. 31, 2005	Dec. 31, 2006
ENUM domains (except in the +43780 range)	1,544	3,018
ENUM domains in the +43780 range	583	2,582
Total	**2,127**	**5,600**

Source: RTR

4.2.18 International activities

In 2006, RTR was very active in contributing its expertise to international bodies. Through the close cooperation of independent European regulatory authorities in the European Regulators Group (ERG) and the Independent Regulators Group (IRG), it was possible to contribute to ongoing harmonization in Europe and to exchange experiences from day-to-day regulatory practice. Depending on the focus areas involved, RTR participates in a wide variety of working groups, such as CEPT/ECC, OECD and the Forum of European Supervisory Authorities for Electronic Signatures (FESA). In addition to its activities as a direct member of those working groups, RTR also acts as an advisor to Austrian representatives, for example in the European Commission's Communications Committee (CoCom).

The ERG/IRG paid special attention to the following topics in 2006:

Content focus in 2006: Review of legal framework

1. Review 2006: The European Commission published initial working documents on the revision of the European legal framework for electronic communications. The ERG/IRG submitted common positions on those documents.

2. Market definition: In the field of market definition, the European Commission prepared a draft of a new relevant markets recommendation. In this context, the IRG/ERG participated actively in the consultation process.

3. Market analysis: A number of especially interesting cases were discussed, and a study was prepared on market analyses in broadcasting.

4. Remedies: The ERG's common position from the year 2004 was revised.

5. Cost accounting: In addition to ongoing monitoring of the implementation of cost accounting systems in member states, PIBs (Principles of Implementation and Best Practices) were prepared on the costs of capital and valuation.

6. The European Commission plans to pass a regulation on international roaming in 2007. IRG/ERG also participated actively in the consultations on this topic.

7. Topics covered in 2006 were rounded off by reports on VoIP, broadband and NGNs.

In order to accelerate harmonization even more efficiently within the IRG/ERG, plans were prepared in 2006 for increased formalization within the working groups and additional topics were chosen for more in-depth analysis in 2007.

In addition to the Review 2006, which will also be a major focus area in 2007, the topic of harmonization will again be an especially important issue in the coming year. In this context, RTR has been especially active in promoting increased transparency with regard to the current status of harmonization in Europe. As a result, RTR will be heading an IRG project team (IRG PT Visibility) in 2007 which will work on enhancing the IRG web site to become a comprehensive information portal on the status of liberalization and harmonization in Europe.

The work program for 2007 focuses on four main pillars (see also Figure 6):

1. Regulation

This area deals with the continued development of the legal framework, for example in relation to the Review 2007, the revision of the European Commission's SMP guidelines, the practical handling of Article 7 procedures and the revised recommendation on relevant markets. In this area, major topics will also include the regulation on international roaming planned for 2007 and the revision of the Universal Service Directive.

2. Harmonization

In this area, the objective is to make concrete progress toward the harmonized implementation of the legal framework, especially in the field of regulatory measures. Topics in this area include unbundling, bitstream access, VoIP, cost accounting, mobile termination, fixed-link termination, leased lines and the transparency of rates and charges.

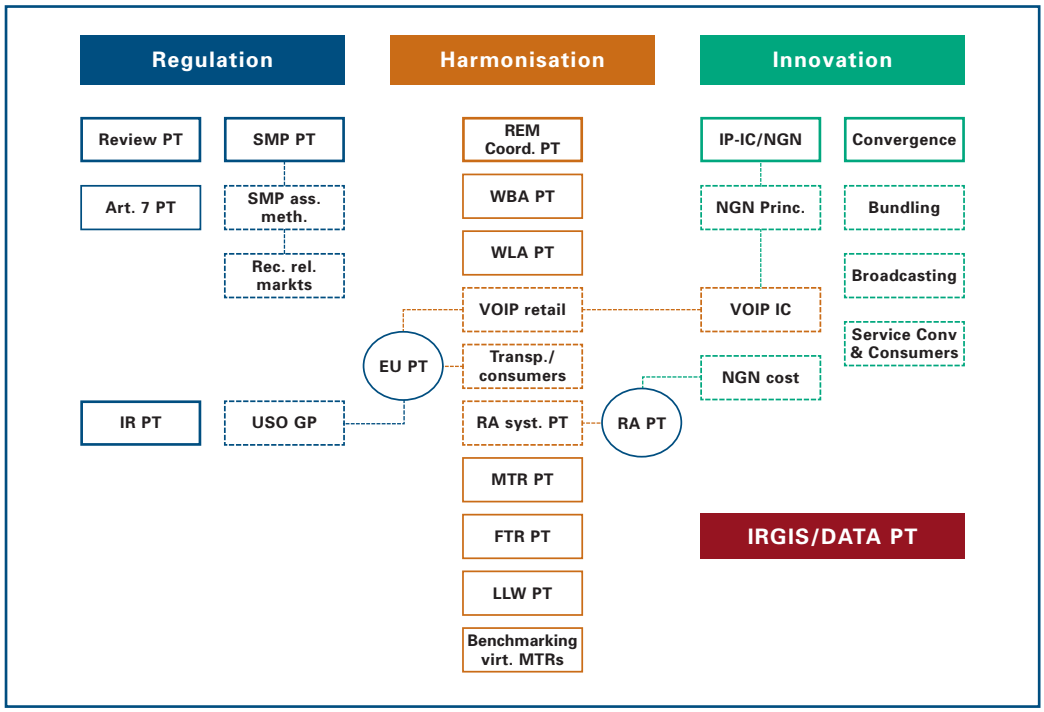
3. Innovation

In this area, the topics of next-generation networks (NGNs) and convergence will be addressed in greater detail. With regard to convergence, it is worth noting that the ERG is now dealing with this issue for the first time.

4. Visibility

In order to ensure more effective progress monitoring, greater clarity in the field of harmonization and faster access to regulatory information in Europe, a project was launched in 2007 for the purpose of enhancing the IRG web site (IRGIS). RTR was heavily involved in launching this initiative and has assumed responsibility for leading the project team in cooperation with the Portuguese regulatory authority (ANACOM), which is operating the technical platform.

Figure 6: PT structure in IRG/ERG's work program for 2007



Source: RTR

4.3 Electronic signatures

The Signatures Act (SigG) empowered the TKK to act as Austria's supervisory authority for electronic signatures in addition to its existing responsibilities as a regulatory authority. Under the Signatures Act, RTR is required 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.

22 procedures conducted under the Signatures Act in 2006

In 2006, the TKK conducted 22 procedures under the Signatures Act. 19 of those procedures (as well as six additional cases from the years 2004 and 2005 which were still pending at the end of 2005) were completed in 2006.

The certification service provider A-Trust Gesellschaft für Sicherheitssysteme im elektronischen Datenverkehr GmbH has been the only Austrian provider of qualified certificates since September 2002, when it took over the certification services of Datakom Austria GmbH. A-Trust also issues non-qualified certificates in addition to its qualified certificates. In 2006, A-Trust submitted a certification practice statement for the new certification service "a.sign SSL," in which non-qualified certificates are issued for computer

authentication. In addition, A-Trust also submitted eight change reports regarding existing certification services. Two of those reports dealt with the labeling of pseudonyms in qualified and non-qualified certificates. Several others referred to additional products which were added to A-Trust's list of recommended technical components and processes for the creation of secure electronic signatures (e.g., a smart card reader for creating batch signatures, that is, multiple electronic signatures created with only one PIN entry). One report referred to supporting an additional secure signature creation device, namely a newer version of the ACOS card (bank card for cash dispensers). The CardOS card previously issued to the Vienna University of Economics and Business Administration, on the other hand, could only be used to create secure electronic signatures until the end of 2006 due to the expiration of the Austrian certification and of the German confirmation.

Telekom Austria entered the market for certification services in 2006. As the overall legal successor to Datakom Austria, Telekom Austria had already been responsible for revocation services in connection with Datakom's certification services, which were discontinued in September 2002. Telekom Austria now offers various certification services under the brand names "eSignature Basic," "eSignature Advanced" and "eSignature SSL."

Secure timestamp service reported for the first time in Austria in 2006

For the first time in Austria, the Federal Office of Metrology and Surveying offered a secure timestamp service with which the existence of data as of a specific point in time can be certified electronically. Among other uses, timestamps are employed to ensure reliable indications of time in certificates and revocation lists, and in the electronic documentation of certification service providers. Moreover, timestamps make it possible to verify that a secure electronic signature was created before the expiration of the security period applicable to the algorithms and parameters used for that purpose. For example, timestamps can also be used in allocation procedures in order to document the timely receipt of offers.

A new certification service was also reported by an existing certification service provider, namely Arge Daten, an Austrian association for data protection. In contrast to the A-CERT ADVANCED service, which the association has offered since 2004, the new service GLOBALTRUST also provides signature creation units which have been evaluated according to the Common Criteria for Information Security Evaluation (ISO/IEC 15408).

Two certification service providers reported a change in their name or in the legal form of their business organizations. First, Trosoft Entwicklungs u. Vertriebs GmbH was renamed xyzmo Software GmbH. The certification service provided by this company is no longer called "Trodat Seal," but "xyzmo Seal." In addition, mobilkom austria AG & Co KG (the provider of the "A1 Signatur" certification service) was renamed mobilkom austria AG.

Various changes in certification practice statements were also reported by Energie-Control Österreichische Gesellschaft für die Regulierung in der Elektrizitäts- und Erdgaswirtschaft mit beschränkter Haftung, the Main Association of Austrian Social Security Institutions, the Institute for Applied Information Processing and Communications Technology (IAIK), and the City Administration of Vienna.

The supervisory authority also officially initiated one regular review and two random sample-based reviews of certification service providers. None of these reviews revealed severe defects which would warrant supervisory measures.

Maintaining the secure directory of certification service providers launched in September 2002 is a substantial part of RTR's duties in the fulfillment of its statutory mandate under Art. 13 Par. 3 SigG. The public key infrastructure (PKI) used for this purpose, which was formerly housed in an IT center, has been integrated into RTR's in-house infrastructure since 2005. In 2006, additional measures were taken to ensure the sustained and uninterrupted operation of the directory. These measures included the redundant implementation of critical system components (e.g., power supply and Internet access).

Since 2006, the supervisory authority has also been able to issue qualified certificates for secure timestamp services.

The qualified certificates issued by providers of secure timestamp services must also be included in the directory of certification service providers. Certificates for secure timestamp services exhibit a number of special characteristics: For example, the specified purpose of the keys certified in the certificate can only be the creation of timestamps. Due to the expected report on the operation of a secure timestamp service, the supervisory authority's certification practice statement as well as the PKI operated by RTR were adapted in order to meet the requirements for issuing qualified certificates for secure timestamp services.

New legislation came about in the form of an act amending the vocational law for notaries, attorneys and civil engineers in 2006 (BRÄG 2006; Federal Law Gazette I No. 164/2005): While electronic signatures previously fulfilled formal requirements only in the case of written form, these signatures now also fulfill "public form" requirements under certain circumstances (mainly for legal transactions requiring notorial deeds, declarations of intent and legal transactions which must fulfill the requirement of public notarization or certification in order to be considered effective).

In addition, the amendment to the SigV in Federal Law Gazette II No. 527/2004 also adapted the algorithms and parameters for secure electronic signatures in line with the "Algorithm Report" (ETSI SR 002 176) prepared at the European level. The expiration of the security period is no longer governed by an ordinance, but algorithms and parameters have to meet the latest technological standards. In March 2005, RTR first published a recommendation for interpreting this regulation in cooperation with the confirmation authority A-SIT *(Zentrum für sichere Informationstechnologie – Austria)*; this recommendation is updated at least annually in order to reflect the state of the art. The document was last updated in April 2006.

At the European level, RTR continued its activities in the Forum of European Supervisory Authorities for Electronic Signatures (FESA) founded in 2002. The forum now has 23 member organizations and is dedicated to cooperation between the various European supervisory authorities and the harmonization of their respective activities. In particular, the "Report on the operation of Directive 1999/93/EC on a Community framework for electronic signatures" (COM(2006) 120 final) was also discussed with representatives of the European Commission.

RTR participating in the standardization of algorithms and parameters for secure electronic signatures

Likewise at the European level, RTR is represented in the European Telecommunications Standards Institute (ETSI) working group STF 317, which is to prepare the adaptation of the ETSI TS 102 176 technical specification to the current state of technology. This technical standard aims to define which algorithms and parameters are suitable for the creation of secure electronic signatures. The standard can also be used as a supplement in the evaluation of signature products based on generally recognized standards (Art. 3 Par. 5 of the Signature Directive).

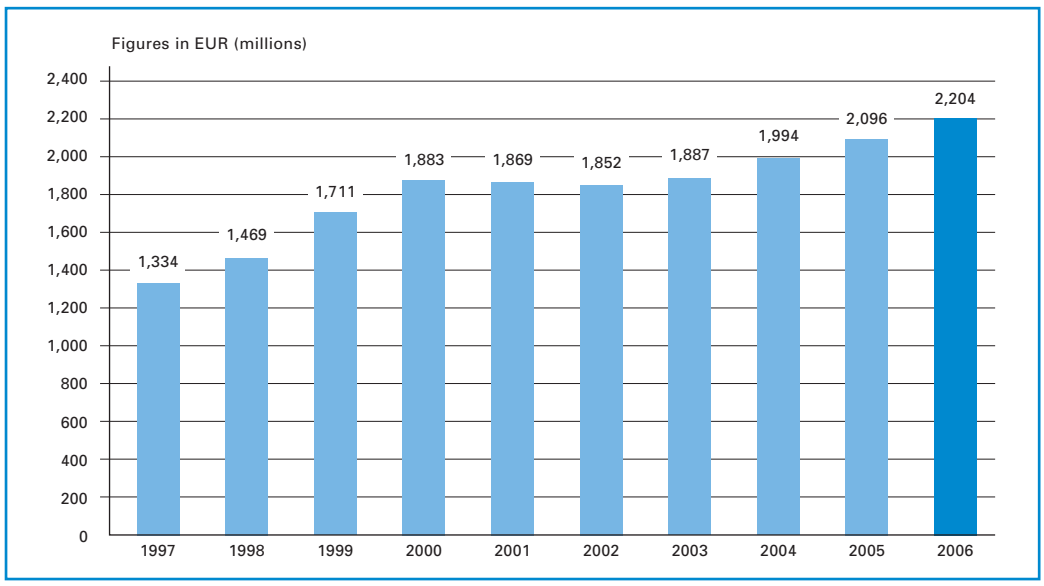
5. The Austrian communications markets

5.1 Development of the Austrian media markets

5.1.1 General remarks on the year 2006

After highly adverse developments in Austrian advertising expenditure at the start of the new millennium, the trend began to show signs of reversal in 2003. This favorable development has continued ever since, and a new high was also recorded in 2006: At EUR 2.204 billion, advertising expenditure increased by a full 5.2% compared to 2005. This increase exceeds the previous year's growth figure by 0.1 percentage point, which can be regarded as a sign of steady growth on the Austrian advertising market.

Figure 7: Development of overall advertising expenditure



Advertising expenditure rose 5.2% on the previous year

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

With regard to advertising revenues as well as opinion formation, the Austrian Broadcasting Corporation (ORF) still dominates the electronic sector of Austria's relatively small media market, while Mediaprint (with its *Kronen Zeitung* and *Kurier* newspapers) and Styria Medien AG (*Kleine Zeitung*, *Presse* and *Wirtschaftsblatt*) prevail among daily newspapers, and the News publishing group dominates the magazine sector.

High concentration in all media sectors

In the television sector, the nationwide television channels ORF1 and ORF2 are the most significant on the market by far. ORF's television channels not only compete with ATV and Austria's other private channels, but also with a large number of private and public channels from abroad, which engage in intense competition with ORF in cable and satellite television households. Of those channels, a majority of the private German-language stations offer partly Austria-specific content, thus providing an additional broadcasting platform for the Austrian advertising industry as well as a number of separate television programs. Given the ongoing digitization of satellite reception, these channels with "Austria windows" will soon reach 70% of all television households in Austria.

Private radio broadcasters have a market share of 22%.

ORF's dominance is also highly conspicuous in the field of radio broadcasting. With its three nationwide radio stations Ö1, Ö3 and FM4 as well as its nine regional stations, ORF recorded a market share of 79% in 2006. In the advertising-relevant 14 to 49 age group, ORF holds a market share of 74%. This age group is crucial to ensuring the marketability of private radio stations. For their part, the private radio stations attained a market share of 22% in the 14 to 49 age group, which clearly reveals the imbalance on the dual broadcasting market in Austria.

In the print media segment, the *Kronen Zeitung*, 50% of which is owned by the German WAZ Group *(Westdeutsche Allgemeine Zeitung)* and 50% by Hans Dichand, is still the undisputed market leader. This newspaper's market position – which is unparalleled worldwide – is clearly visible in its daily reach of 43.8% in 2006.

Apart from the high level of concentration, another unique situation in Austria (in the daily newspaper and magazine segments of the print sector) is that a considerable number of published and market-relevant titles are under the control of owners which are not headquartered in Austria but elsewhere in the EU, especially in Germany. This applies, for example, to the following companies:

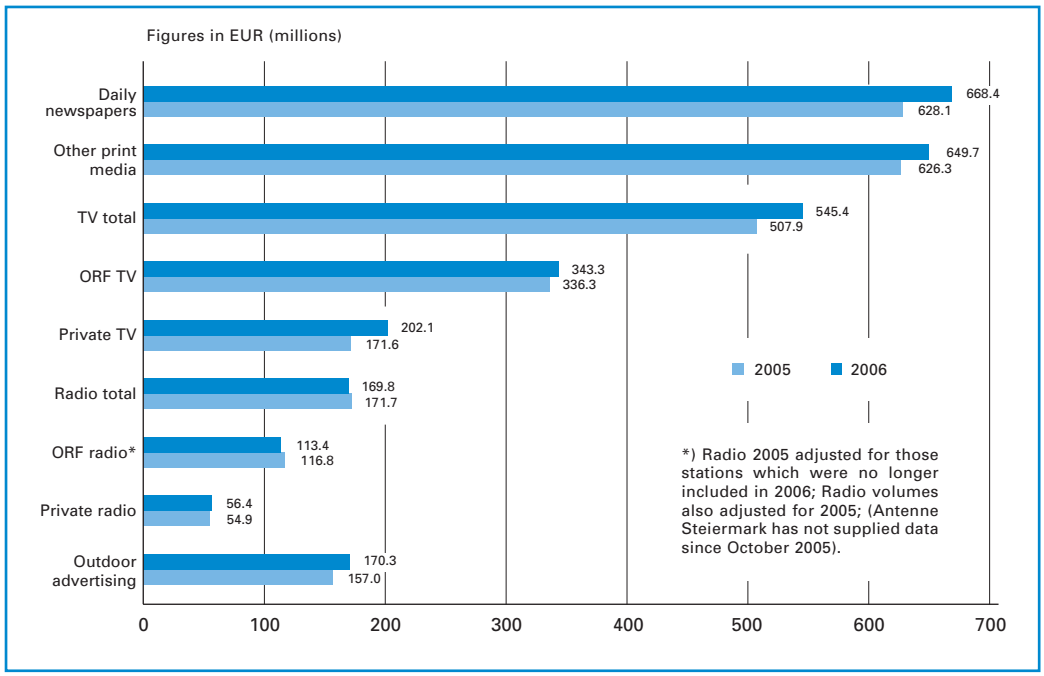
- *Kronen Zeitung* daily newspaper (50% share held by the German WAZ Group);
- *Kurier* daily newspaper (WAZ Group's stake: 49.44%)
- *Tiroler Tageszeitung* daily newspaper (wholly owned by Moser Holding AG, 50% of which is owned by Athesiadruck Bozen in Italy);
- *Der Standard* daily newspaper (49% owned by Süddeutscher Verlag in Germany);
- *NEWS* publishing group (52.5% owned by the German publishing house Gruner + Jahr, which is part of the Bertelsmann Group; 30% owned by ZVB AG, a wholly owned subsidiary of the Kurier publishing house, in which WAZ holds a 49.44% stake).

5.1.2 Advertising expenditure

Private television again sees highest growth rate in advertising revenues.

Nearly all sectors of the media industry were able to profit from the increase in advertising expenditure in 2006, with private television stations once again seeing the largest percentage gains. Growth in this area had already reached 23.2% in 2005, and the corresponding figure for 2006 came to 17.8% or EUR 202.1 million in absolute terms. ORF's television stations were able to reverse their slightly downward trend from 2005, with advertising revenues recording a slight increase – from EUR 336.3 million to EUR 343.3 million – in 2006.

Figure 8: Advertising expenditure: 2005 vs. 2006



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

The clearly visible shift in advertising expenditure from ORF to private television channels once again showed itself in the narrowing margin between their advertising revenues in 2006: The advertising revenues of private television stations now equal nearly two thirds of those taken in by ORF's public television stations. However, this only refers to gross advertising revenues, which are substantially higher than net revenues at private stations compared to ORF.

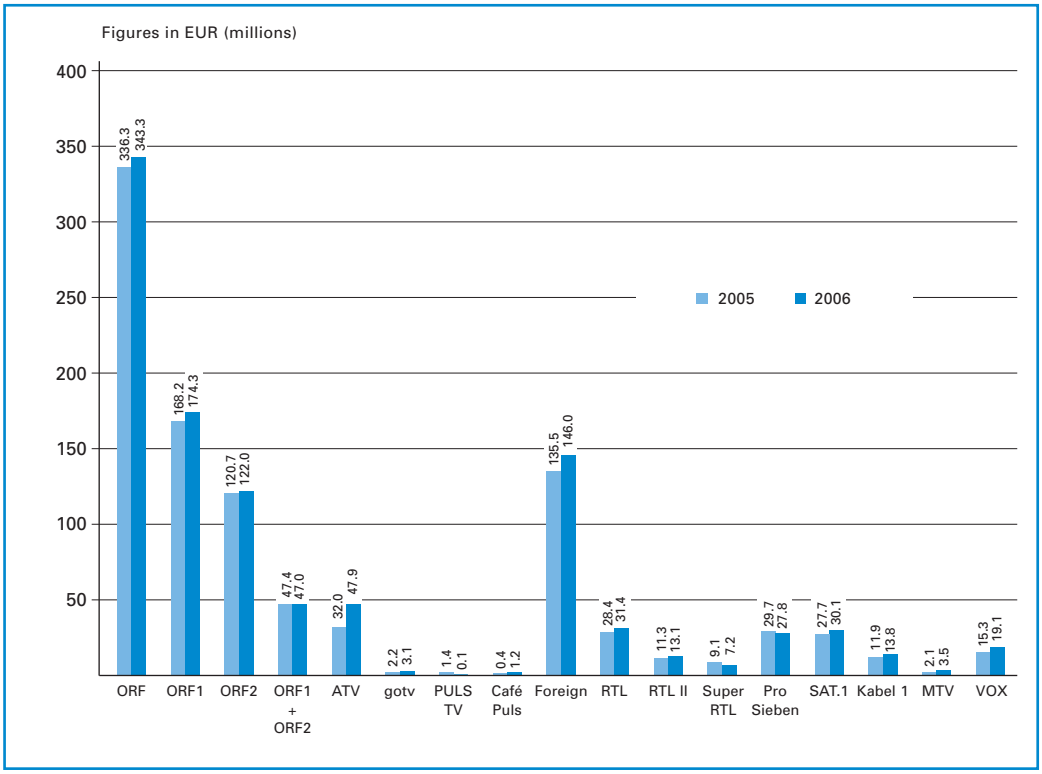
The print media sector once again saw gains in advertising revenues in 2006. Austria's daily newspapers alone were able to increase their share of advertising revenues by a full 6.4% to EUR 668.4 million.

Debate on foreign channels offering partly Austria-specific content continues.

Once again due to the sharp increase in advertising volume on the private television market, the debate regarding German channels which offer partly Austria-specific content in Austria also continued in 2006. The proponents of this practice (i.e., inserting Austria-specific advertising content in lieu of German advertising blocks) emphasize that this is the only way to operate economically attractive private television in Austria, that it is also an investment in the future to be able to create additional programming windows, and that the Austrian advertising industry also profits from this practice. On the other hand, critics continue to maintain that vast quantities of Austrian advertising funds are flowing to Germany and causing severe damage to Austrian media companies.

These advertising volumes also increased in 2006: With EUR 146.0 million, the foreign channels were able to increase their advertising revenues by 7.8% compared to the previous year. In this context, RTL took the lead for the first time, gaining 10.6% with advertising revenues of EUR 31.4 million. SAT.1 and ProSieben were not far behind with EUR 30.1 million and EUR 27.8 million, respectively. While the foreign channels which take in the highest advertising revenues were still in close competition with Austria's only nationwide private television station (ATV), the latter was able to pull farther ahead than ever before in 2006: ATV's advertising revenues came to EUR 47.9 million in 2006, which represents an increase of 49.7% compared to 2005.

Figure 9: Development of television advertising expenditure



Source: FOCUS Media Research *Buch der Werbung 2006*

60% of advertising revenues go to the print sector.

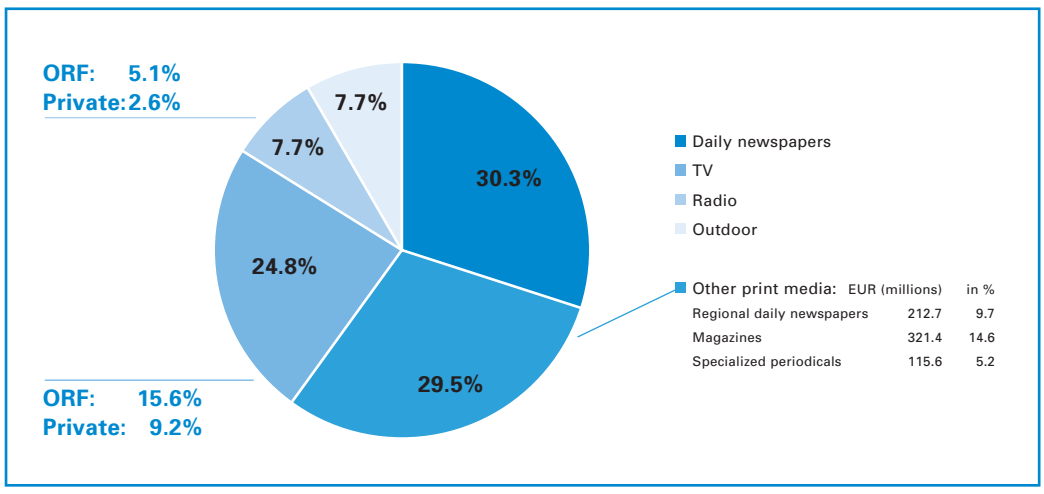
Only minor changes were recorded in each medium's relative share of advertising. As in the previous years, the largest share of overall advertising expenditure (59.8%) went to print media, with daily newspapers taking approximately half of that share (30.3% of overall revenues). This represents only a slight change of +0.3 percentage points. Advertising revenues in the print media segment excluding daily newspapers declined slightly, with regional weekly newspapers accounting for 9.7% (-0.1), illustrated periodicals and magazines 14.6% (-0.6), and other specialized periodicals 5.2% (+0.2).

24.8% of overall advertising expenditure in 2006 can be attributed to the television sector, which recorded an increase of 0.8 percentage points compared to 2004. The shares of ORF and the private broadcasters shifted from 19.5% and 5.1% in 2002 to 18.3% and 6.3% in 2003, 17.9% and 7.0% in 2004, 16.1% and 8.2% in 2005, and 15.6% and 9.2% in 2006 (respectively), which clearly highlights the trend mentioned above.

7.7% of overall advertising expenditure went to the radio sector (down 0.3 percentage points in 2006 after a decrease of 1 percentage point in 2005), with shares of revenues again shifting slightly from ORF toward the private radio broadcasters in 2006 (5.1% and 2.6%, respectively).

7.7% of overall advertising expenditure went to outdoor advertising (billboards, illuminated signs, advertising on public transportation).

Figure 10: Share of advertising in 2006

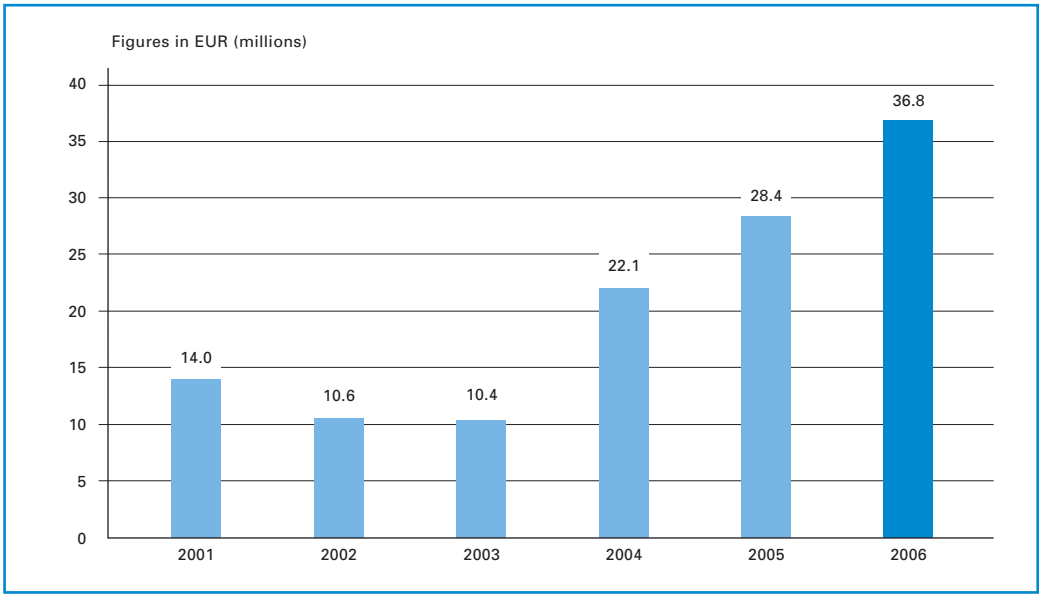


Source: FOCUS Media Research 2006

Online advertising showing rapid growth in Austria

Online advertising expenditure, which is not included in the figures for conventional advertising, has shown extremely dynamic development since 2004. This category of expenditure had already risen by 28.5% to EUR 28.4 million in 2005, and in 2006 its growth rate increased even further to 30%, resulting in a total volume of EUR 36.8 million. For comparison purposes, this impressive value equals almost precisely two thirds of the advertising revenues in private radio broadcasting in 2006. This reveals the rapid expansion of this new medium's competitive position in terms of gross revenues (which are slightly higher than the net amounts). In radio advertising, the difference between gross and net revenues is substantially lower.

Figure 11: Online advertising expenditure in Austria

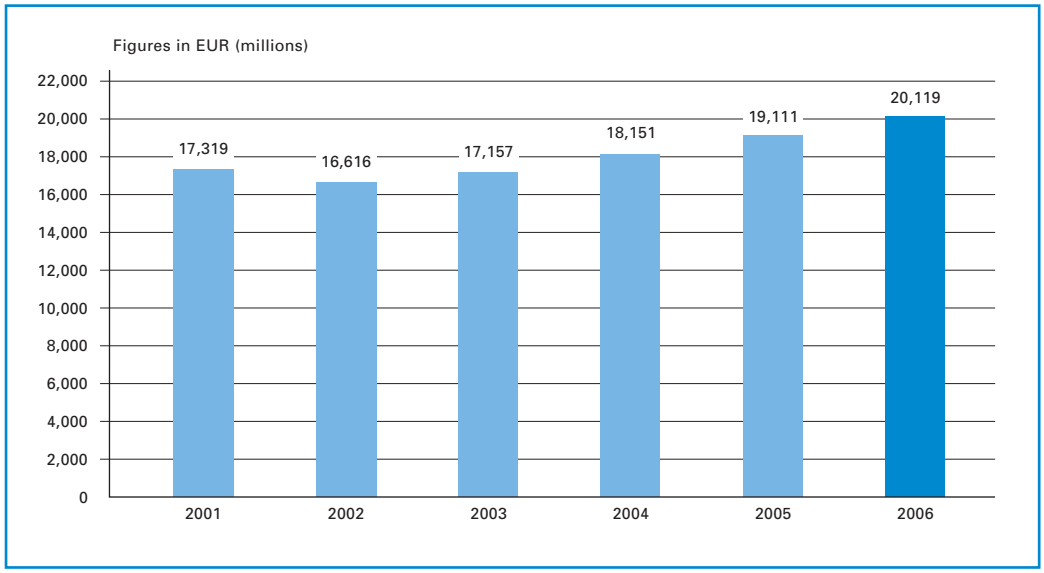


Source: FOCUS Media Research; NB: Survey system changed in 2004.

Advertising expenditure also reached a record level in Germany.

The media in Germany, a country which exerts considerable influence on Austria due to its geographical proximity, the common language and its strength as Europe's largest media market, also saw a highly successful year in 2006. With EUR 20.119 billion in advertising expenditure, the German market reached a new record high; the increase of 5.3% in 2006 was the same as in the previous year.

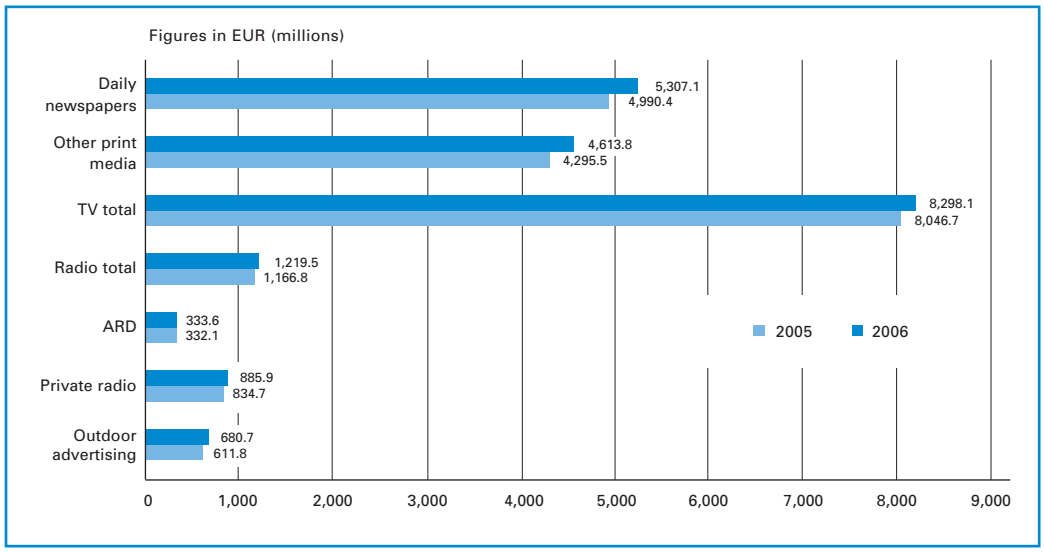
Figure 12: Development of overall advertising expenditure in Germany



Source: S+P Deutschland

As in 2005, Germany's daily newspapers (+9.4%) and television broadcasters (+3.1%) were the main segments to profit from this upswing in 2006, while advertising expenditure in all of the other media categories saw lower growth, as was also the case in the previous years.

Figure 13: Advertising expenditure in Germany: 2005 vs. 2006



Source: S+P Deutschland

5.1.3 Television

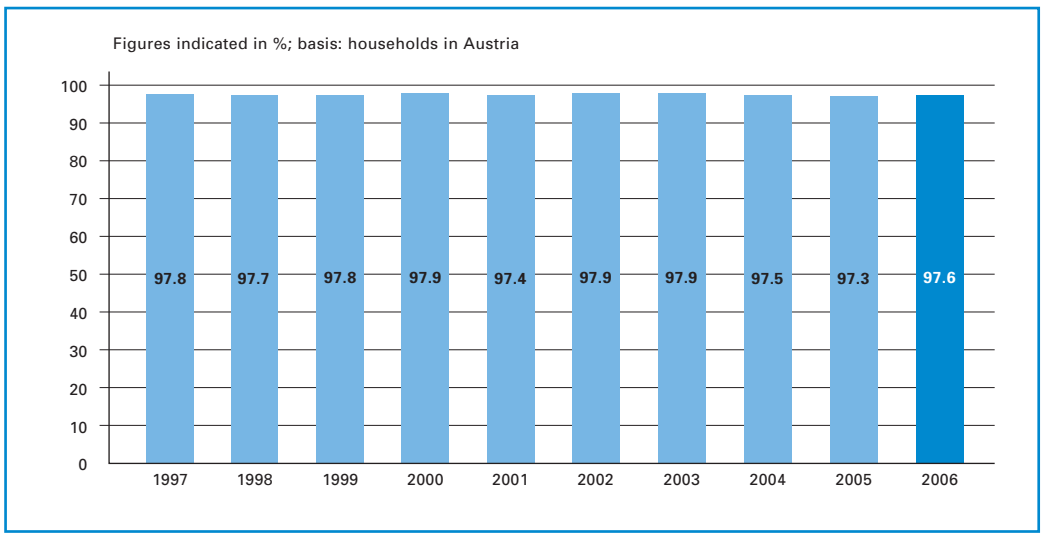
Digitization brings about innovation

The most significant future changes on the Austrian media market can be expected in the field of television, mainly as a result of technical advances and innovations. In 2006, the changeover from analog to digital transmission also began in terrestrial broadcasting; this will provide broadcasters with enhanced picture quality as well as new marketing opportunities. Digitization in satellite and cable broadcasting already started several years ago.

The vastly dominant position of ORF and its significant socio-political role were already clearly visible in ORF's share of overall advertising revenues; this dominance is undisputable on the television market. However, the figures for 2006 also reveal that the public broadcaster's lead is steadily declining. This can be seen in the figures regarding ORF's reach as well as the fact that the audience is no longer bound exclusively to ORF as a source of news and opinions due to various programming innovations developed by the private broadcasters. Nevertheless, ORF's two television channels were still the most powerful force on the Austrian television market in 2006.

In this context, the market can be considered nearly identical to the overall population: According to the Austrian Media Analysis *(Media-Analyse)*, 97.6% of all households in Austria had at least one television set in 2006.

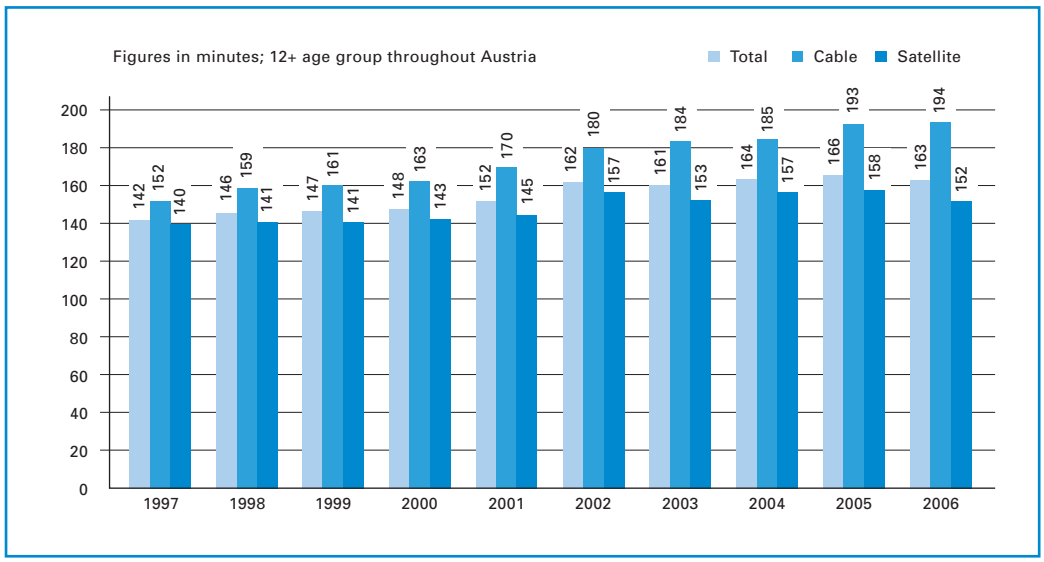
Figure 14: Percentage of Austrian households with television sets, 1997 to 2006



Source: Austrian Media Analysis

The viewing time among Austrian television viewers over 12 years of age has increased steadily in recent years. At 166 minutes per day, this figure even reached a record high in 2005; in 2006, however, viewing time declined slightly to 163 minutes per day. The reason for this was the decrease in the number of satellite television households, while viewing time in cable households actually recorded a slight increase.

Figure 15: Development of viewing time

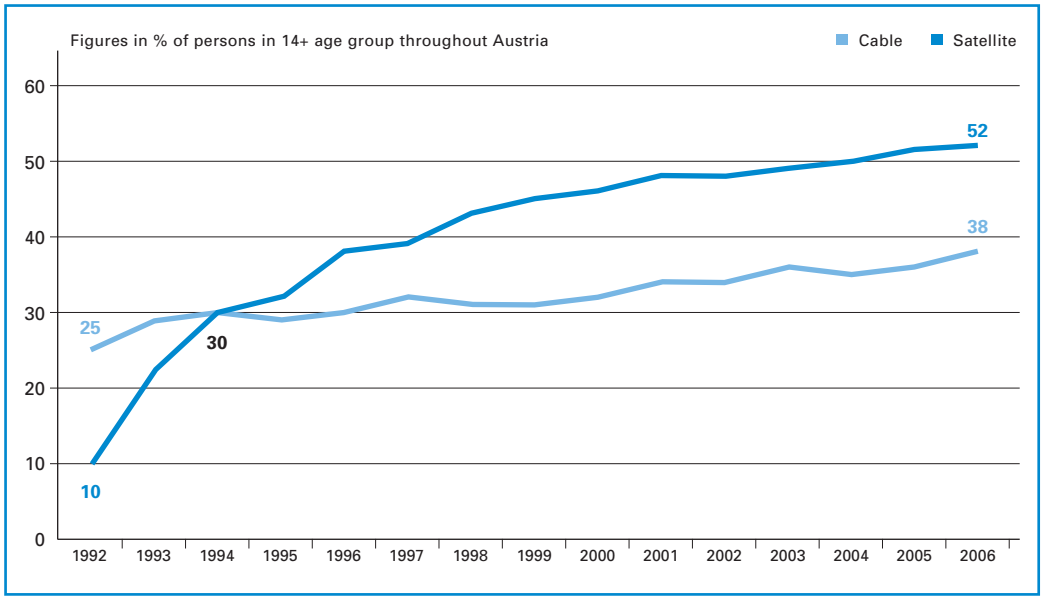


Source: Teletest

Satellite reception continues to grow.

The three reception modes (terrestrial, cable and satellite) not only differ in terms of viewing habits, but also in terms of reach. It was not until 1994 that the percentage of Austrians who receive television channels via satellite caught up to the number supplied by cable networks (30% each). Since then, the share of the population supplied via satellite has increased to 52% (2006), while the percentage supplied by cable has risen to 38%. This means that one in two viewers in Austria already receives television channels via satellite.

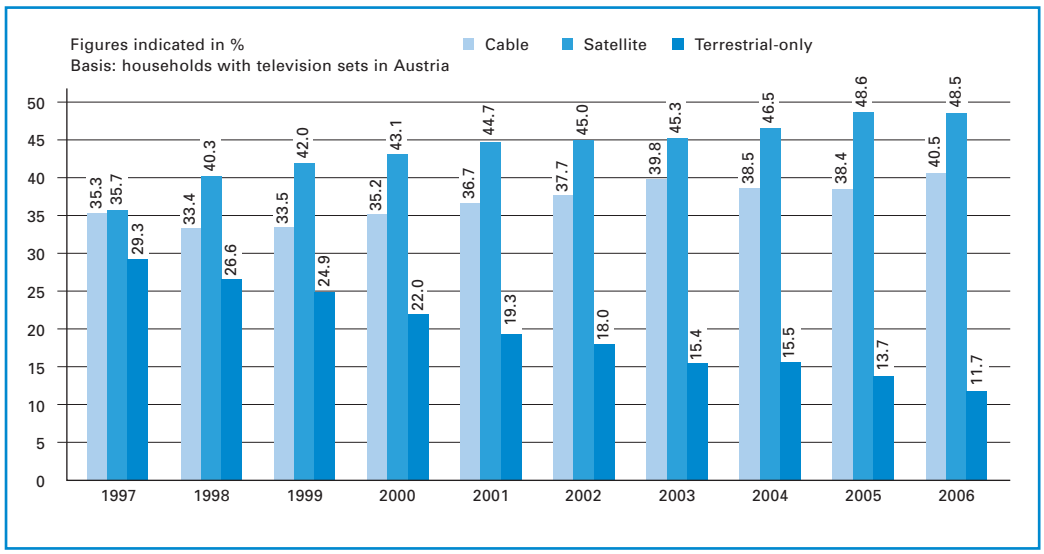
Figure 16: Development of cable vs. satellite television systems



Source: Austrian Media Analysis

In contrast, the number of households which use terrestrial reception only has been decreasing for some time, dropping by more than half over the last eight years. Whereas 29.3% of households still received television channels via terrestrial antenna only in 1997, this figure was down to a mere 11.7% in 2006. Naturally, this does not include the (much larger) number of households which receive foreign channels using an analog satellite system and the Austrian channels (such as ORF1, ORF2 and ATV) using a terrestrial antenna.

Figure 17: Development of reception modes

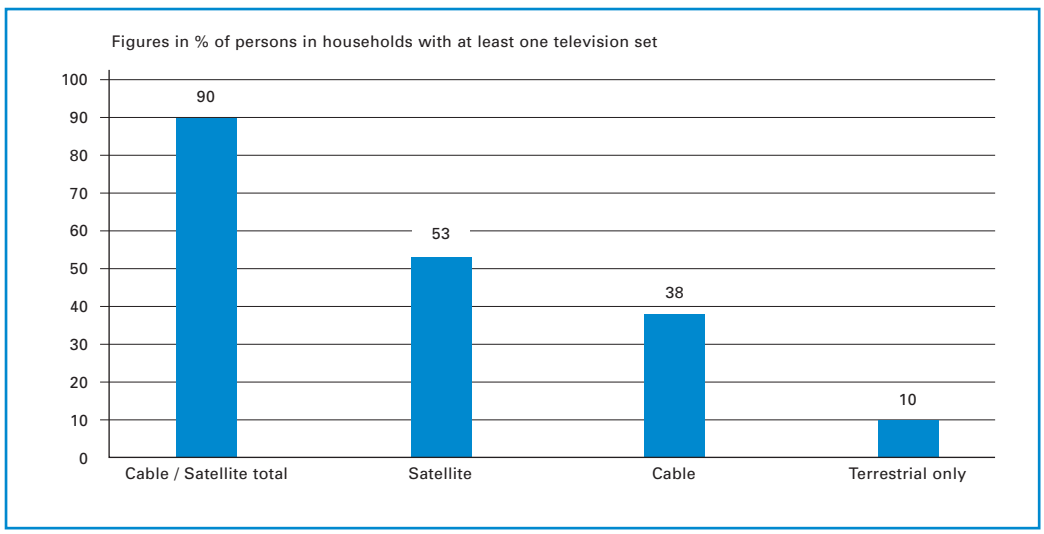


Number of terrestrial-only television households declining steadily

Source: Austrian Media Analysis

Measured against the 97.6% of households with television sets, only 10% were supplied exclusively by terrestrial signals in 2006.

Figure 18: Reception modes in 2006

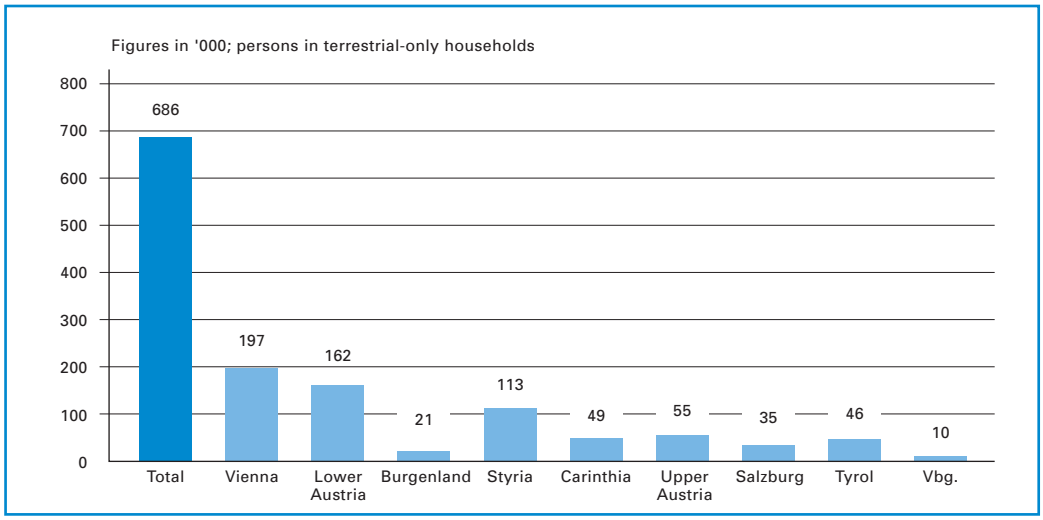


Source: Austrian Media Analysis 2006

Most terrestrial households in Vienna

In terms of the number of people with at least one television set in their households, only 686,000 still received terrestrial-only television in 2006. The largest share of these viewers was in Vienna (197,000), followed by Lower Austria (162,000). Although these figures indicate how uncommon terrestrial-only reception has become in Austria, they also provide evidence of how many people did not have a German-language alternative to ORF's television stations until the launch of ATV in 2003.

Figure 19: Terrestrial-only reception in 2006



Source: Austrian Media Analysis 2006

The transition from analog to digital satellite reception is advancing quickly, meaning that we can expect analog reception in this segment to disappear completely sometime shortly after 2010. The providers of Austrian content and advertising "windows" on private German television channels are conducting targeted marketing campaigns to promote this trend and are attracting viewers with new Austrian programs which can only be received by digital means. In recent years, the reach of these channels has risen quite substantially, and if the rapid trend of technological development continues apace, the private television market will continue to catch up swiftly.

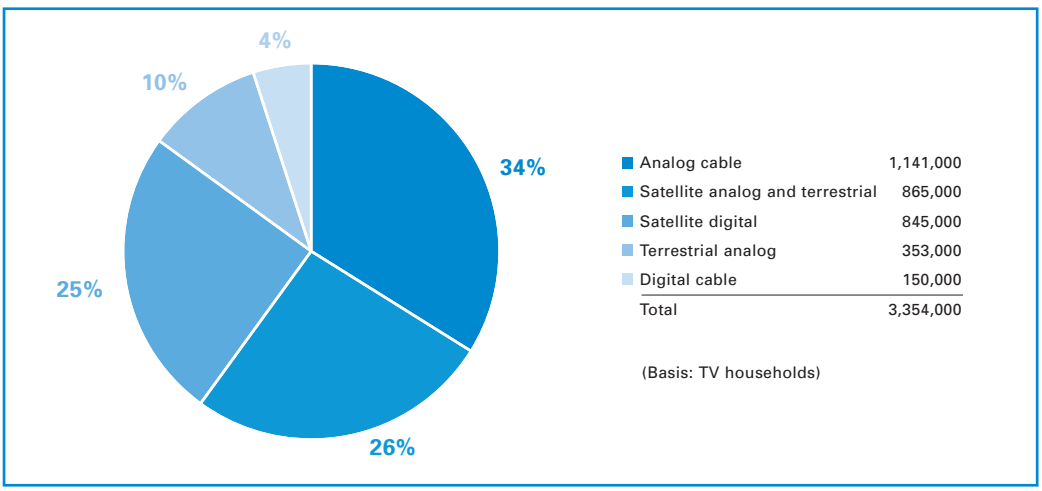
Status of broadcasting digitization in Austria

In general, more than one third (approximately 35%) of Austrian television households were able to receive digital television as of the reporting date (end of 2006). This large share can be attributed to digital satellite reception, which has continued to exhibit highly dynamic growth. However, cable television has also begun to show substantially higher growth rates in the number of digital connections compared to previous years.

More than one third of Austrian television households can already receive digital television.

The results from the first few weeks of regular DVB-T operation have not yet been included in the data available for the overall market. However, the information available indicates that more than 120,000 DVB-T receivers had been sold by the end of February 2007. Of those devices, approximately 60,000 are capable of receiving the new multimedia services implemented by ORF and ATV (MHP MultiText). Moreover, we can expect the changeover in terrestrial television to trigger more activity in the digitization of the cable and satellite platforms due to the population's heightened awareness of digital television.

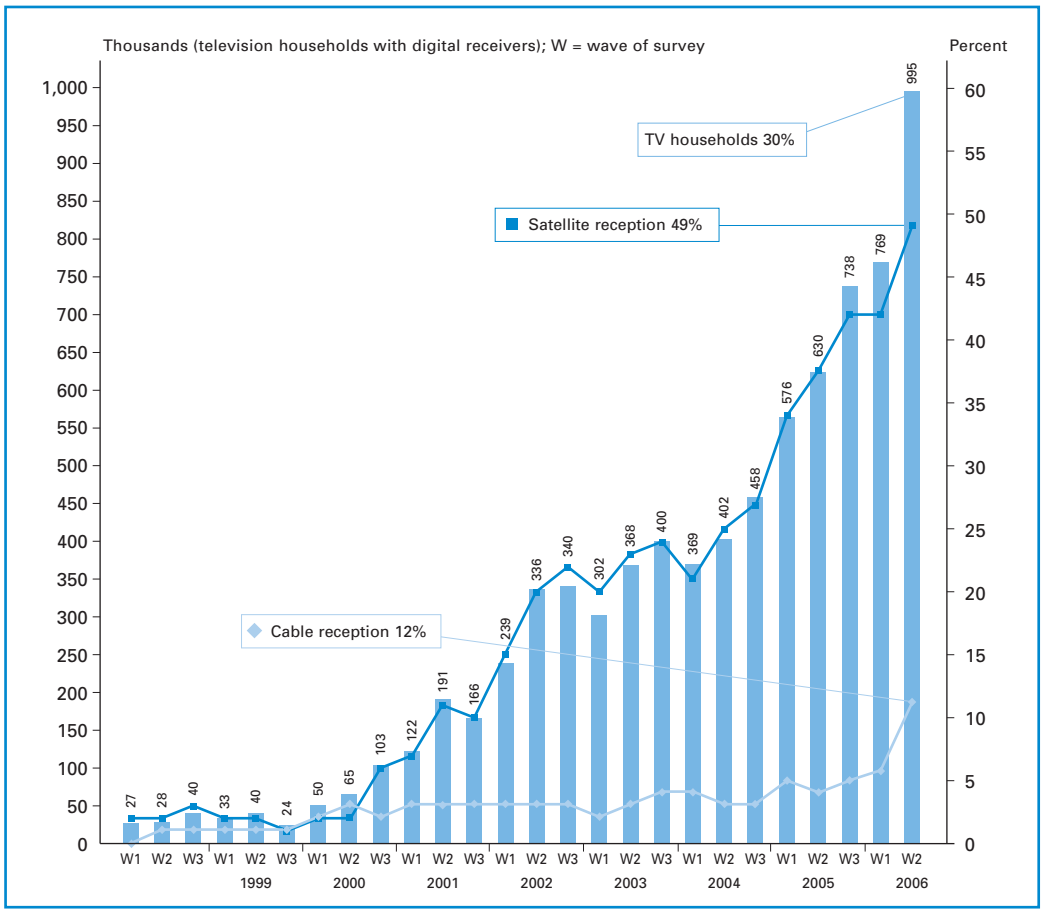
Figure 20: Television reception modes in Austria prior to the DVB-T launch (as of September 2006)



Source: FESSEL-GfK Fernsehforschung / Monitoring June – September 2006

Approximately 3,000 households currently using IPTV

Figure 21: Digital penetration in Austria (as of September 2006)



Source: FESSEL-GfK Fernsehforschung / Monitoring 1998 – September 2006 (20% of all television households have digital television, i.e., 49% of all satellite households and 12% of all cable households; these figures do not include households with digital terrestrial television)

Digitization of satellite television (DVB-S)

Milestone: Half of all satellite households have gone digital.

2006 marked a milestone in the development of digital satellite reception: More than half of all satellite households – or approximately 28% of all television households – in Austria have switched to digital reception, and the dynamic growth in the digitization of satellite reception is expected to increase even more rapidly in the coming months. One reason for this development is the changeover from analog to digital terrestrial television reception in Austria. The owners of analog satellite systems receive the Austrian channels broadcast by ORF and ATV (as well as other Austrian television broadcasters) via terrestrial antenna. In order to continue receiving the Austrian channels after the initial shutdowns of analog terrestrial television, those households will have to choose between a DVB-T box and another type of receiver (e.g., digital satellite) which can decrypt the ORF and ATV channels and thus support reception directly via satellite.

Digitization of cable television (DVB-C)

At least in terms of basic technical equipment, the digitization of Austrian cable networks has made significant progress. As regards acceptance among cable customers, digital cable television (DVB-C) is still in its early stages, although the rate of digitization did show an increase in the second half of 2006.

According to a recent study carried out by the FESSEL-GfK market research institute, some 12% of cable households receive digital television; this accounts for approximately 4% of all television households in Austria. A total of 38% of all television households in Austria use cable reception.

Subsidies for switching to digital cable television in 2007

The year 2007 promises to bring about dynamic growth in the digitization of Austrian cable networks: A total of EUR 4 million from the Austrian Digitization Fund at RTR will be made available in the form of subsidies to early adopters, that is, households which make an early transition to digital cable television. According to the current plans of the 25 cable network operators participating in the campaign, the first 66,666 DVB-C set-top boxes which support MHP will be subsidized at EUR 60.00 each. This campaign will trigger sustainable acceleration on the market for digital cable television.

Digital television via broadband Internet (IPTV)

Another form of digital cable television (i.e., cable-based broadcasting transmission) is Internet Protocol television, or IPTV. In IPTV, television signals are not transmitted via a conventional cable television network, but via broadband Internet lines (e.g., ADSL). In this context, the channels are fed into the main distribution frame locations in the fixed-link network, from where they are transmitted to the subscriber on individual copper-wire lines. This form of transmission must be differentiated from Internet television, which is disseminated via the public Internet and does not fall into the category of broadcasting.

In order to receive IPTV, the subscriber needs a broadband Internet connection to a network operator which offers the service, as well as an IPTV set-top box which can process the signals for the television set.

With regard to interactivity (e.g., video on demand) in particular, the field of IPTV – as well as reception via cable networks in general – is said to have great potential. According to Telekom Austria, the provider of IPTV, approximately 3,000 households in Austria currently use this service.

Digitization of terrestrial television (DVB-T)

The digitization of terrestrial television in Austria will last from 2006 to 2010: Since October 26, 2006, 70% of Austria's population has been able to receive digital terrestrial television. The gradual shutdown of analog transmission in areas covered by digital terrestrial broadcasting will begin in the province of Vorarlberg on March 5, 2007, and will be completed by the fall of 2007, at which time 70% of Austria's television households will only be able to receive digital terrestrial signals. In the first stage, the three nationwide channels ORF1, ORF2 and ATV will be broadcast, and in the fall of 2007 up to four additional national television channels will be added with the second multiplex coverage.

By the end of February 2007, some 120,000 DVB-T set-top boxes had been sold. Approximately half of those receivers are capable of receiving the new MultiText content developed by ORF and ATV; this type of content represents a core element of the innovations achieved by digital terrestrial television.

New Teletest starting in 2007

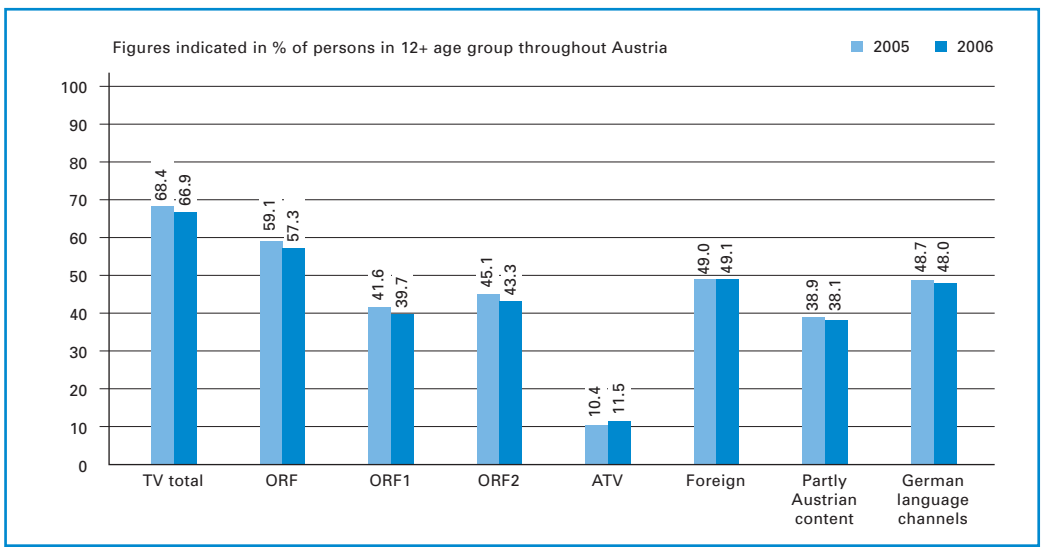
New general framework for the Teletest

The viewing habits of Austrian television viewers are surveyed in what is known as the "Teletest." The data for 2006 was published under this name for the last time, as the contract between ORF and the market research institute responsible for the survey expired at the end of 2005. Starting in 2007, the survey will be based on a slightly modified method which is expected to meet with greater acceptance on the market. For this purpose, the "Teletest Association," which includes ORF as well as all relevant private TV marketers in Austria, was established.

Daily reach, which is a measure indicating the number of people over the age of 12 who watch one of the channels on the market for at least one minute per day on an annual average, came to 66.9% in 2006. This represents a decline of 1.5 percentage points compared to 2005. This decrease affected ORF just as much as its largest competitor, the German "window" channels which offer partly Austria-specific content (taken as a whole): While ORF saw a marked decline from 59.1% to 57.3% (-1.8 percentage points), the "window" channels' reach (RTL, RTL II, Super RTL, ProSieben, SAT.1, Kabel 1 and VOX) only dropped from 38.9% to 38.1% (-0.8 percentage points).

At the same time, these figures clearly reveal that the difference between the German private stations which offer Austria-specific content as a whole and ORF1, for example, has now been reduced to 1.6 percentage points.

Figure 22: Development of daily reach (short term)

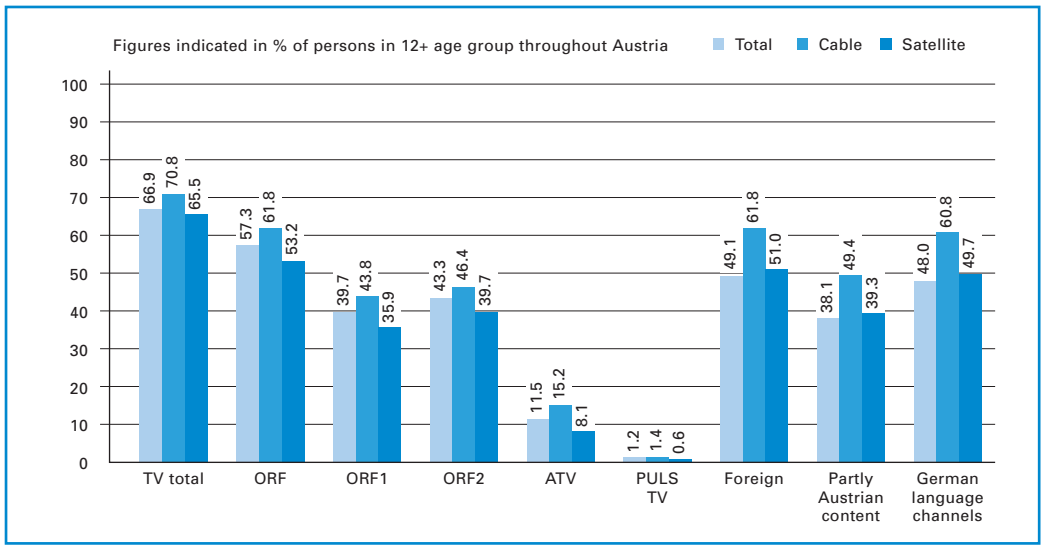


Source: Teletest

In cable households, the foreign channels which offer partly Austria-specific content have long since overtaken the two ORF channels. In 2006, their reach was already 49.4%, while ORF1 and ORF2 recorded figures of 43.8% and 46.4%, respectively. Among satellite households, the channels which offer partly Austria-specific content (39.3%) are ahead of ORF1 (35.9%); ORF2's lead over the foreign channels has now been reduced to 0.4 percentage points (ORF2: 39.7%).

Reach of foreign channels which offer partly Austria-specific content is highest in cable households.

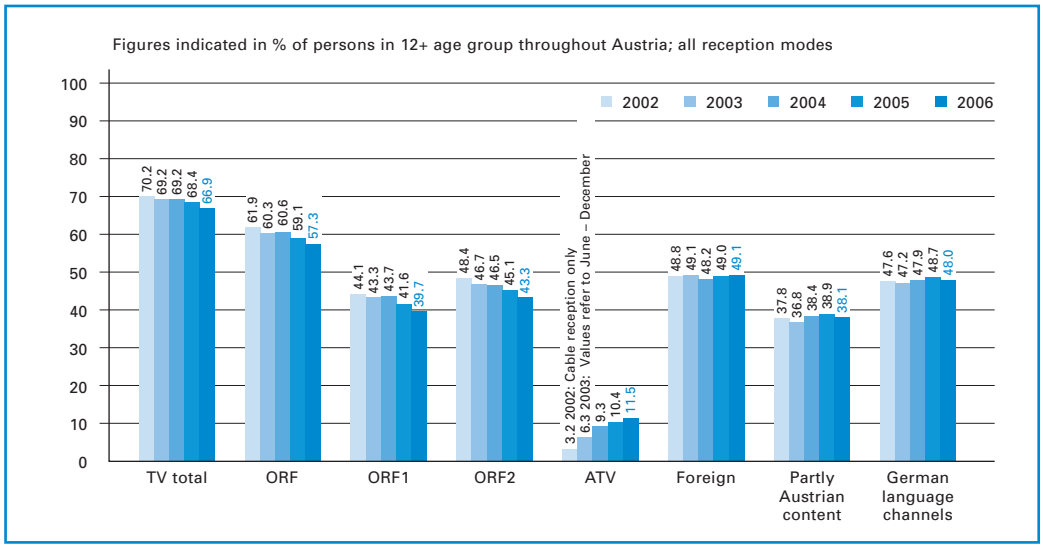
Figure 23: Daily reach of television channels in 2006



Source: Teletest 2006

If we consider the long-term development of daily reach figures in Austria, it quickly becomes clear that the reach of the foreign channels which offer partly Austria-specific content has remained fairly constant around 38% since 2002, while ORF2's reach has been declining gradually from a higher level. It is also striking that ORF1, which is designed for similar target groups as the foreign channels which offer partly Austria-specific content, was able to maintain its reach at around 44% until 2004 but has been losing steadily since 2005.

Figure 24: Long-term development of daily reach figures

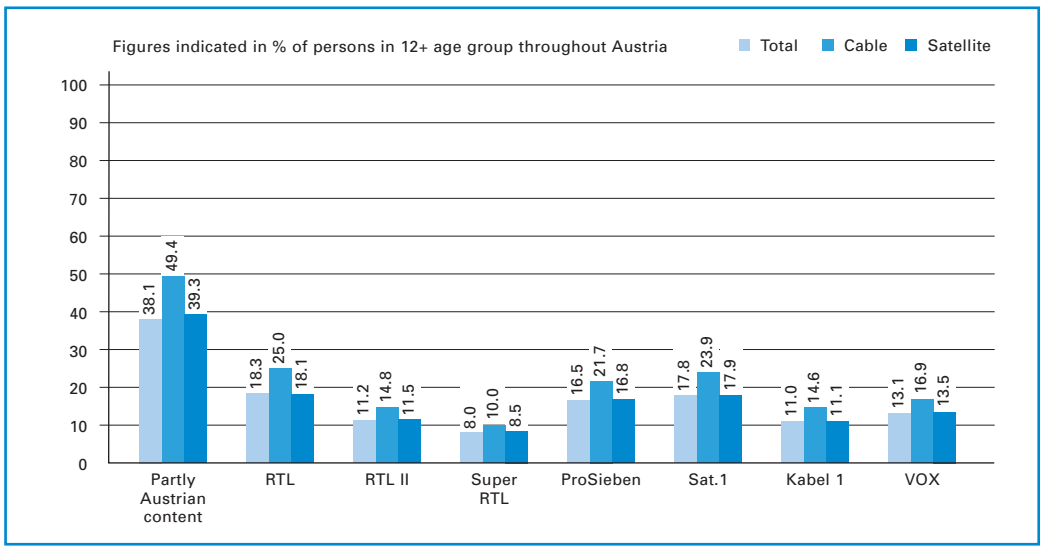


Source: Teletest

RTL enjoys the highest reach among the "window" channels.

Among the "window" channels themselves, RTL once again saw the highest daily reach in 2006 at 18.3% (-1.3), followed by SAT.1 with 17.8% (-1.1) and ProSieben with 16.5% (-1.0).

Figure 25: Daily reach of foreign channels with partly Austria-specific content in 2006



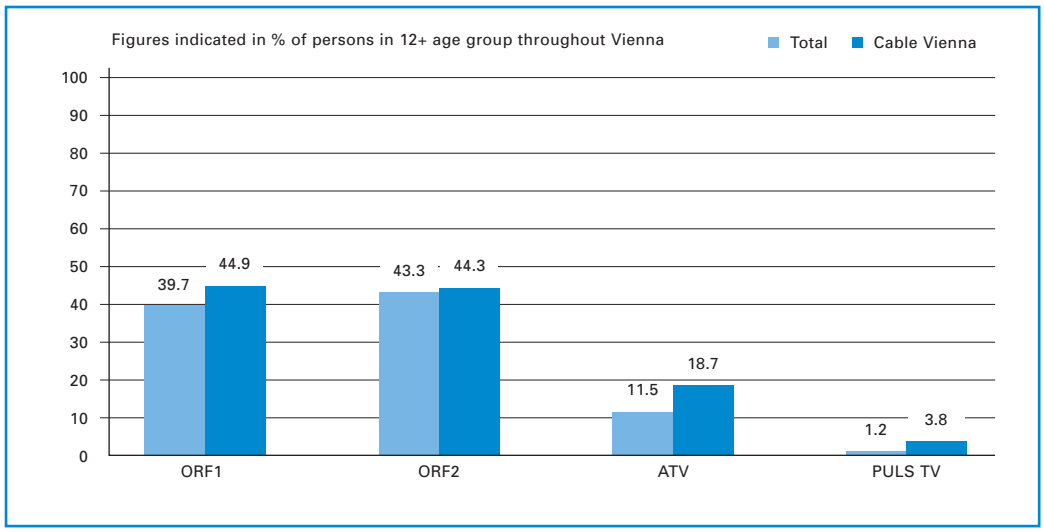
Source: Teletest 2006

ATV steadily increasing its reach

Once again, the Austrian private station ATV was able to expand its reach from 10.4% in 2005 to 11.5% in 2006, which constitutes an increase of approximately 11%. This means that ATV, now in its third year as a nationwide television station, was not only able to overtake the "window" channel Super RTL in 2005 but also surpassed RTL II and Kabel 1 for the first time in 2006. ATV therefore occupies fifth place – behind RTL, SAT.1, ProSieben and VOX – among the private television stations in Austria.

PULS TV, the largest private regional channel in Austria, was launched in 2004 as a television station for the Vienna area. The 1.2% daily reach figure shown for PULS TV in Figure 26 is based on all of Austria. Unfortunately, a specific daily reach figure for the actual region in which the channel can be received is not available, but the channel's reach in Vienna's cable households can be used as a point of reference. In 2006, this value came to 3.8%. The actual reach of PULS TV among the viewing population of Vienna and its surroundings can be estimated at 4 to 5%, as PULS TV is also broadcast by terrestrial means.

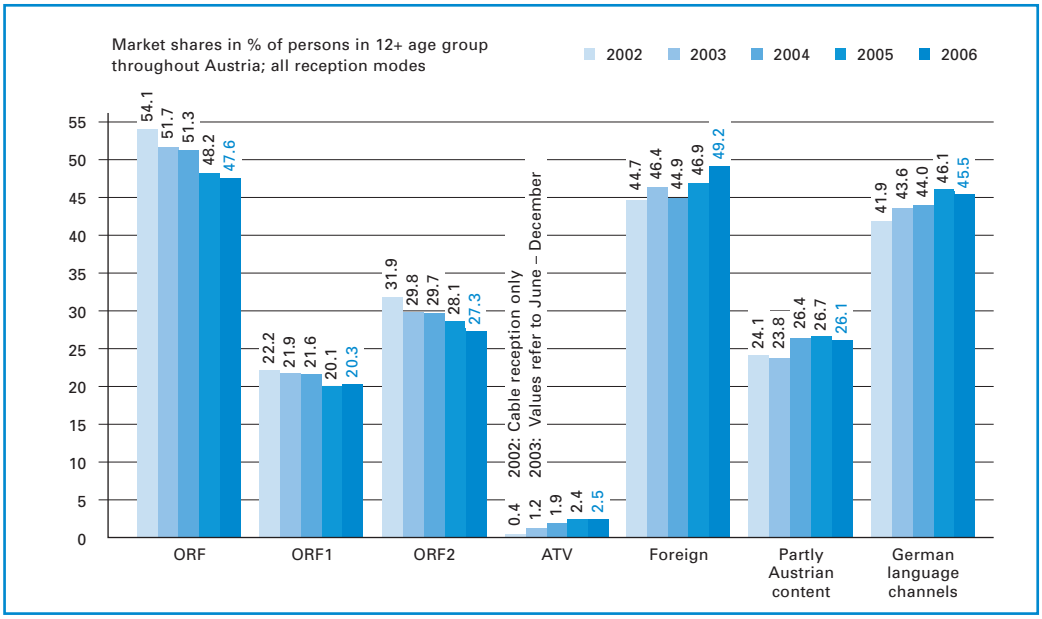
Figure 26: Daily reach of television stations in Vienna's cable households (2006)



Source: Teletest 2006

Market share is the second indicator examined by the Teletest survey, which measures the relative market shares of each channel. Based on the overall Austrian population over the age of 12, ORF's market share came to 47.6% in 2006, which represents a decline of 0.6 percentage points compared to the previous year. However, this loss was significantly smaller than the decline in 2004 (3.1 percentage points). The reason for this was the decrease of 0.8 percentage points in ORF2's daily reach, coupled with an increase of 0.2 percentage points for ORF1. However, it is still remarkable that the development which could soon arise in terms of daily reach already became a reality in terms of market share in 2006: For the first time, the total market share of private television stations (49.2%, up 2.3 percentage points on 2005) exceeded that of ORF by a margin of 1.6 percentage points.

Figure 27: Long-term development of market shares

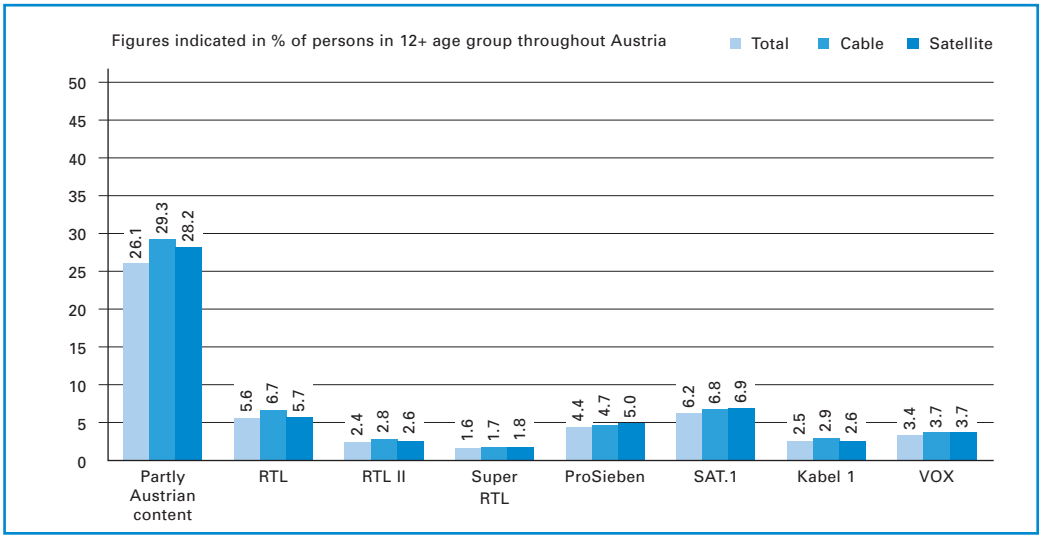


Source: Teletest

ATV increased its market share to 2.5%

ATV recorded a market share of 2.5% in 2006, thus surpassing Super RTL (as was already the case in 2005) and catching up to Kabel 1, RTL II and VOX. As regards competition for market share among the foreign channels, SAT.1 is clearly in the lead: RTL lost 1.0 percentage point, while SAT.1 gained 1.1 percentage points and was the clear leader among the "window" programs in 2006 with a 6.9% market share, followed by RTL with 5.7%.

Figure 28: Market shares of channels with partly Austria-specific content in 2006



Source: Teletest 2006

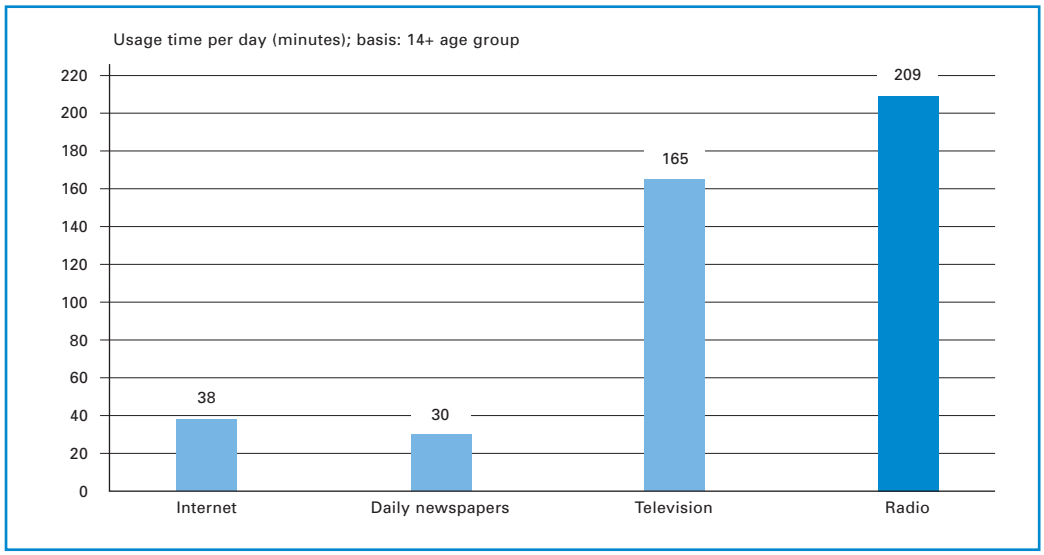
5.1.4 Radio

Radio is Austria's most intensively used medium by far.

The radio broadcasting market was characterized by a fairly unspectacular trend of market consolidation in 2006. The market continued to develop in such a way that Ö3, the market leader, saw slight losses in reach, while the approximately 50 private radio stations (without counting individual regional licenses for chains such as Radio Arabella or Welle 1 redundantly) were able to record slight gains despite the clear dominance of ORF's radio stations.

According to the "Radiotest," a market research instrument based on telephone surveys commissioned jointly by ORF and the private radio stations, radio listening in 2006 averaged 209 minutes per day among Austrians over 14 years of age. This represents a slight decrease in average listening time compared to 2005 (-5 minutes). However, radio has once again proven to be Austria's most intensively used medium by far, followed by television with 165 minutes in 2006. The use of daily newspapers has remained constant at 30 minutes per day in recent years. At the same time, Internet use has increased sharply, rising from 29 minutes per day in 2004 to an average of 38 minutes per day in 2006.

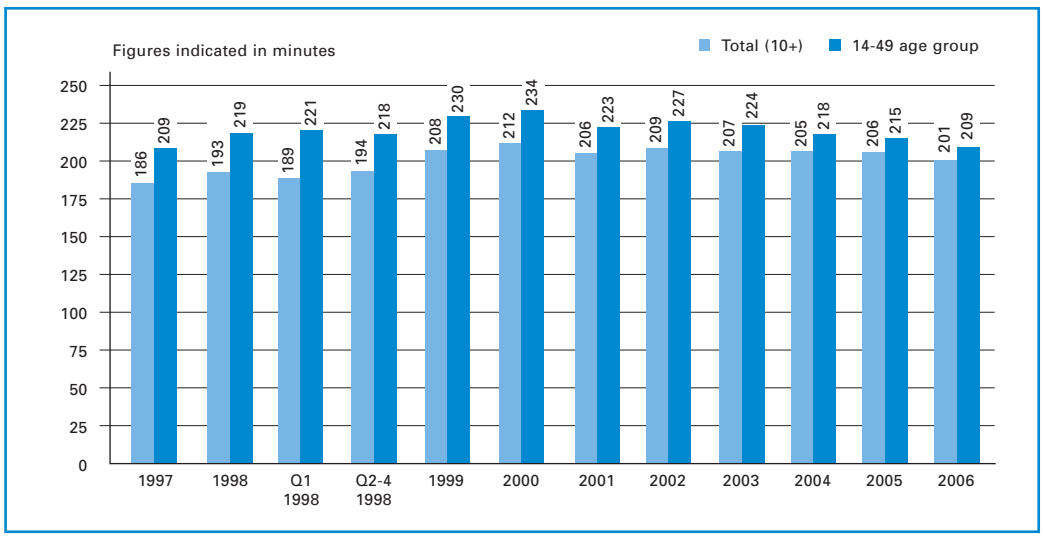
Figure 29: Media usage time per day



Source: Radiotest 2006, Teletest 2006, E&I 1997, AIM - Austrian Internet Monitor Q1 2006

The downward trend in listening time also continued in 2006, ultimately falling to 201 minutes per day (in the 10+ target group). In the 14 to 49 age group (i.e., the main target group for private radio broadcasters), this decrease is significant insofar as the difference compared to the 10+ target group is gradually declining. This means that radio listening time is converging more and more among all age groups.

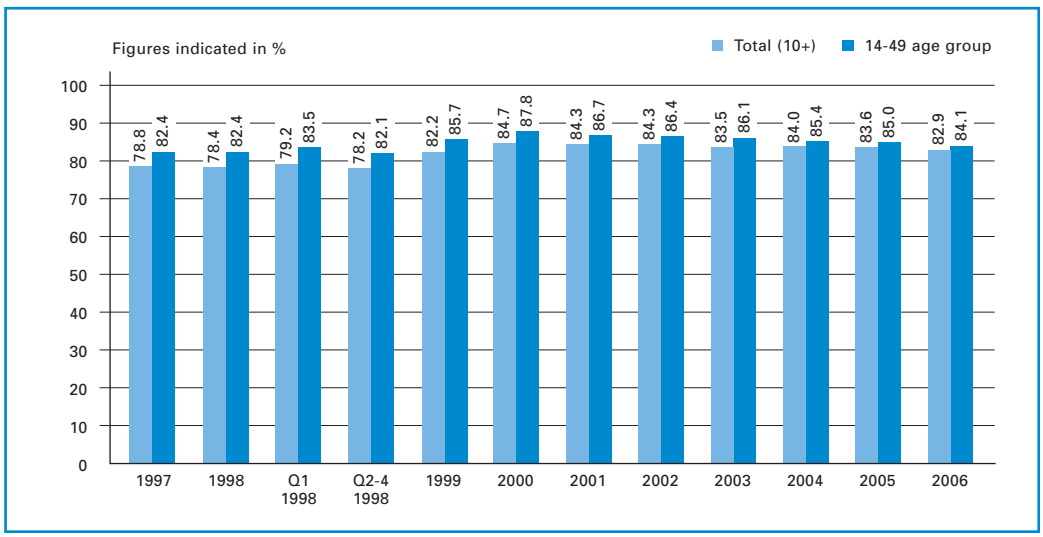
Figure 30: Development of listening time



Source: Radiotest

Radio not only reaches its listeners for a very long time, it also reaches the largest number of people. In 2005, 82.9% of people in the 10+ age group listened to at least one radio station on the market for at least 15 minutes per day (down 0.7 percentage points from 2005). In the 14 to 49 age group, this figure came to 84.1% (down 0.9 percentage points compared to 2005).

Figure 31: Development of radio's daily reach

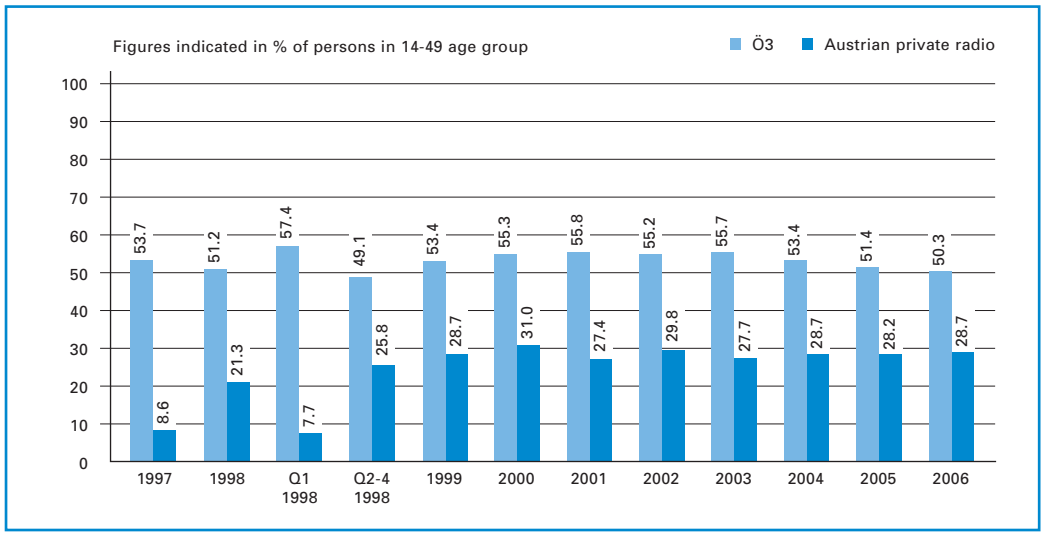


Source: Radiotest

Ö3 remains undisputed market leader.

The history of private radio broadcasting in Austria is one of competition between ORF's highly successful station Ö3 and the private radio broadcasters as a group. In 2001, Ö3 reached a peak (despite competition from private radio stations) with a daily reach of 55.8% among listeners in the 14 to 49 age group. Since that time, Ö3's reach has slowly but steadily declined, while the daily reach of private radio stations has fluctuated around the 29% mark. In 2006, Ö3's daily reach came to 50.3%, while that of the private radio stations was 28.7%. Despite these changes, it is impossible to overlook the fact that Ö3's reach is nearly double that of the private stations as a whole in the 14 to 49 age group, which is crucial to marketing for radio stations.

Figure 32: Development of daily reach, Ö3 vs. private radio stations



Source: Radiotest

ORF's provincial channels (known as "Ö2" within the ORF organization) reached a total of 35.6% of the 10+ age group in 2006; this represents a decrease of 1.3 percentage points compared to 2005.

Kronehit as Austria's only nationwide private radio station

In addition to the numerous local and regional radio broadcasters, Austria also has a nationwide private radio station, "Kronehit," which was granted a nationwide radio broadcasting license in late 2004. In 2005, Kronehit's first full year of broadcasting, the nationwide radio station's reach came to 4.5% in the 10+ age group, and the station managed to increase this figure to 5.0% in 2006.

Table 8: Daily reach of radio stations in Austria

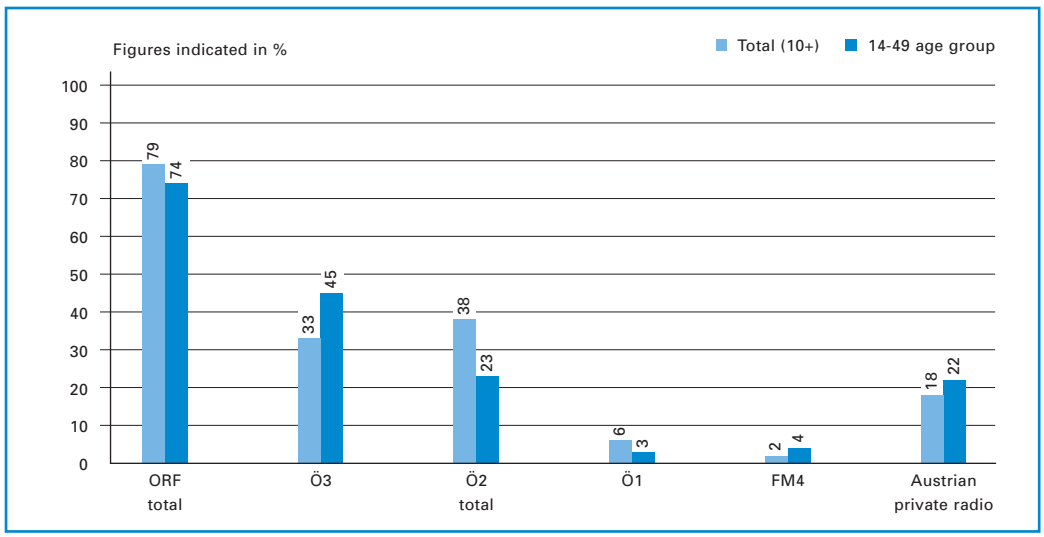
	Total	Vienna	Lower Austria	Burgenland	Styria	Carinthia	Upper Austria	Salzburg	Tyrol	Vorarlberg
Total as number of cases (unweighted)	**26,396**	**3,396**	**3,732**	**2,505**	**3,476**	**2,387**	**3,119**	**2,451**	**2,908**	**2,422**
Total daily reach										
Radio total	82.9	77.2	84.5	85.2	84.8	84.8	83.8	83.6	84.7	82.0
ORF total	72.3	63.2	75.6	79.8	75.1	77.1	72.3	73.7	73.4	73.4
Austrian private stations total	22.4	26.1	21.5	16.2	22.3	17.8	23.8	20.7	24.1	15.1
Other stations total	25.6	28.7	23.3	17.4	24.5	20.1	28.2	25.8	29.6	23.8
Minor stations total	4.0	3.3	2.3	1.6	2.3	2.8	5.5	6.7	6.5	9.8
Other minor stations	2.9	3.3	2.3	1.6	2.3	2.8	2.8	3.9	3.9	4.2
ORF's daily reach										
Ö1	8.7	12.5	8.5	5.7	8.3	7.3	8.1	7.4	7.1	6.0
Ö3	37.7	30.4	40.7	39.2	38.7	38.8	40.0	37.5	39.7	39.9
FM4	3.9	5.7	3.0	2.9	2.9	3.1	4.5	4.2	3.5	3.7
ORF regional stations total	35.6	26.0	38.5	49.5	38.6	44.0	32.3	38.0	37.7	38.0
Vienna	5.3	17.3	9.0	4.2	-	-	-	-	-	-
Lower Austria	7.6	8.2	28.8	2.8	0.4	-	1.5	-	-	-
Burgenland	2.6	2.7	2.0	43.9	0.8	-	-	-	-	-
Styria	5.9	-	0.6	2.8	37.6	1.3	0.1	0.3	-	-
Carinthia	3.1	-	-	-	0.6	43.3	-	0.1	0.5	-
Upper Austria	5.4	-	1.4	-	0.3	-	29.7	0.9	-	-
Salzburg	2.9	-	-	-	0.1	0.2	2.8	37.2	0.2	-
Tyrol	3.2	-	-	-	-	0.2	-	0.6	37.3	0.3
Vorarlberg	1.7	-	-	-	-	-	-	-	0.2	37.9
Private stations' daily reach										
RMS Top	21.9	24.3	21.2	16.0	22.3	17.4	23.7	20.7	24.1	15.1
Kronehit	5.0	5.2	8.0	7.2	3.4	1.6	6.3	2.7	3.3	0.5
Radio Arabella (V/LA/B/UA)	3.1	9.5	4.7	2.0	-	-	1.5	-	-	-
HiT FM Sender total	0.9	0.2	3.8	2.7	0.2	-	0.0	-	-	-
88.6 Wir spielen was wir wollen	1.8	5.6	3.4	1.2	-	-	-	-	-	-
Antenne Wien 102.5	0.5	1.8	0.8	0.2	-	-	-	-	-	-
Radio Arabella (V/LA/B)	2.8	9.5	4.7	2.0	-	-	-	-	-	-
Radio Energy 104.2	1.4	5.8	1.1	0.3	-	-	-	-	-	-
106.7 Party FM	0.4	0.1	1.4	1.9	-	-	-	-	-	-
Antenne Steiermark	2.4	-	0.1	3.4	15.2	0.1	0.1	0.3	-	-
A1 Radio	0.1	-	-	-	0.6	-	-	-	-	-
89.6 Das Musikradio	0.1	-	-	-	0.9	-	-	-	-	-
Soundportal	0.3	-	-	-	2.3	-	-	-	-	-
Radio Grün-Weiß	0.1	-	-	-	0.9	-	-	-	-	-
Radio West	0.0	-	-	-	0.2	-	-	-	-	-
Antenne Kärnten	0.8	-	-	-	0.2	11.3	-	0.0	0.1	-
Radio Harmonie	0.3	-	-	-	0.0	4.7	-	-	-	-
Life Radio (UA)	2.7	-	0.8	-	0.1	0.0	14.9	0.3	-	-
Antenne Wels	0.1	-	-	-	-	-	0.6	-	-	-
Radio Arabella (UA)	0.3	-	-	-	-	-	1.5	-	-	-
Antenne Salzburg	1.2	-	-	-	0.1	0.1	1.2	15.1	-	-
Welle 1 total (Sbg./UA)	0.5	-	0.0	-	-	-	1.5	4.0	-	-
Life Radio (Tyrol)	0.7	-	-	-	-	-	-	-	8.0	0.1
Antenne Tirol	0.4	-	-	-	-	-	-	-	4.6	-
Radio Osttirol	0.2	-	-	-	-	0.5	-	-	1.7	-
Radio Unterland/U1	0.6	-	-	-	-	-	-	-	6.9	-
Welle (Tyrol)	0.2	-	-	-	-	-	-	-	2.5	-
Antenne Vorarlberg	0.6	-	-	-	-	-	-	-	0.1	13.0
Radio Arabella (Vbg.)	0.1	-	-	-	-	-	-	-	-	1.9

Source: Radiotest 2006; vertical percentages; 10+ age group; figures in %

Private radio stations have a total market share of 22%.

In addition to calculating daily reach figures, the Radiotest also measures the market share of each station. These figures indicate the percentage of total radio listening time which can be attributed to an individual radio station. In the 14 to 49 age group, Ö3 attained a market share of 45% in 2006 (2005: 44%), while Austria's private radio stations achieved a total of 22% (2005: 22%). Measured across all age groups, the respective shares of ORF's radio stations and the private stations are 79% and 18%.

Figure 33: Radio market shares in 2006



Source: Radiotest 2006

5.1.5 Print media

"Österreich" increases dynamics in daily newspaper sector

While very few notable changes took place in electronic broadcasting in 2006, the print media sector saw a number of significant developments. The most important change in this sector was triggered by the launch of the new daily newspaper *Österreich* (Austria). The new paper was founded by Wolfgang Fellner, former owner of the News publishing group, and appeared in newsstands for the first time on September 1, 2006. Fellner publishes the newspaper together with his wife, Uschi Fellner, and his long-time business partner Werner Schima. According to Fellner, the *Österreich* daily newspaper's defined target group consists of newspaper readers between the ages of 14 and 49, or the "Ö3 generation." Media experts waited with great anticipation to see the effects of this new daily on the distribution of market shares, which is dominated by the Mediaprint Group and its *Kronen Zeitung* daily newspaper. No other newspaper in the world reaches such a large share of its country's overall population as the *Kronen Zeitung*. Among all Austrians over the age of 14, this newspaper's daily reach came to an incomparable 43.8% in 2006.

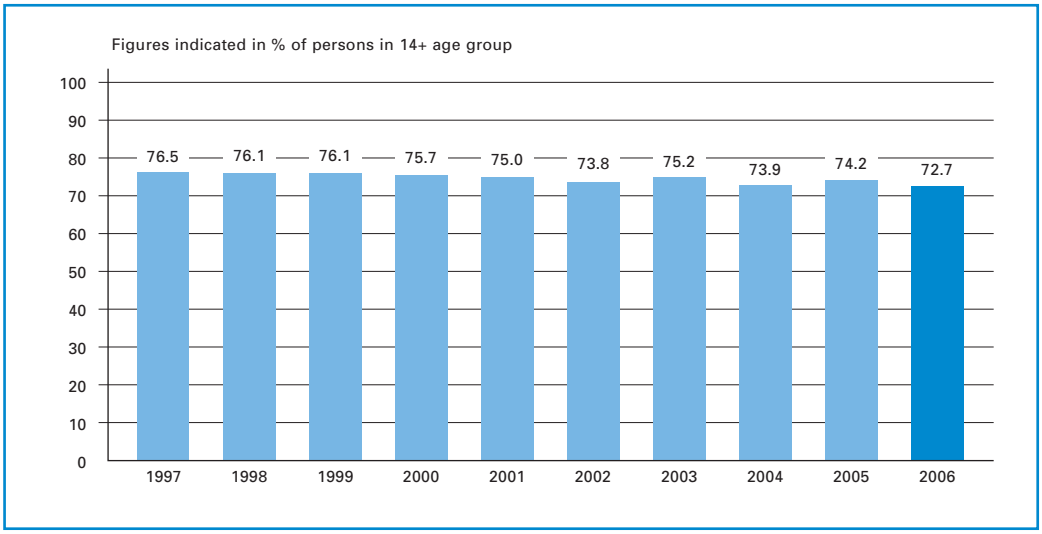
However, it can not be overlooked that this figure saw a decline for the first time after many years of increasing steadily: In 2005, the paper's daily reach came to 44.9%, meaning that this figure dropped 1.1 percentage points in 2006. However, this level was still sufficient to exceed 3 million readers, a milestone surpassed for the first time in 2005.

Austrian Media Analysis shows a significant decline in overall reach of daily newspapers

These figures refer to the results of the Austrian Media Analysis, which does not include data for the *Österreich* daily newspaper in 2006. The Austrian Media Analysis also introduced new weighting criteria in 2006 which make for somewhat limited comparability with the values from previous years. As a result, it is not yet possible to answer the question of whether the decline in the *Kronen Zeitung*'s daily reach can explained by this change or by the launch of the *Österreich* daily newspaper. The data necessary for this purpose will not be available until the 2007 Media Analysis is published in March 2008.

In any case, it is striking that the general development of daily newspapers' reach showed a marked decline in 2006. While this figure had settled around the 74% mark in previous years, it fell to 72.7% in 2006. This prompted numerous observers to comment that readers are not pleased with the ongoing marketing battle among Austria's print periodicals.

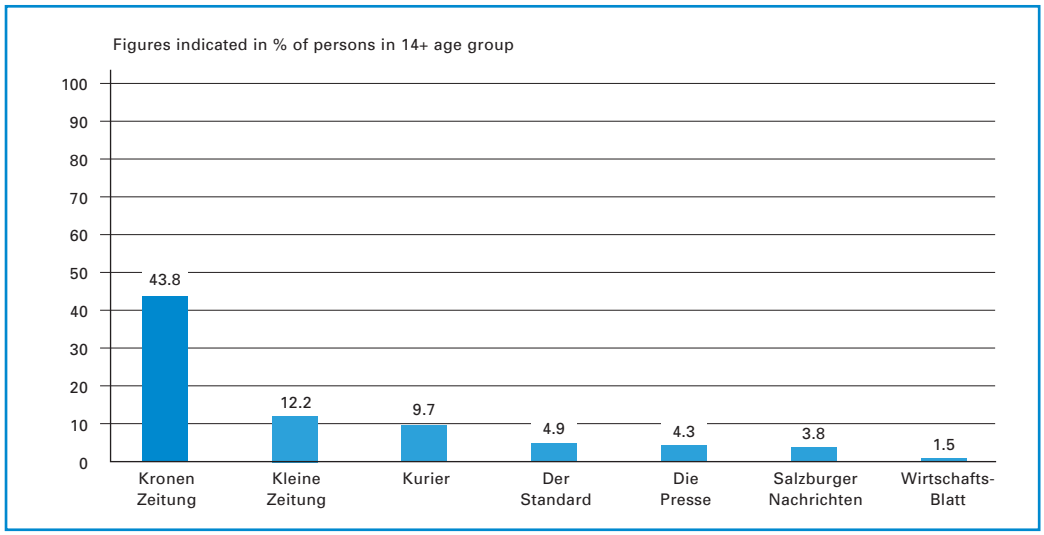
Figure 34: Development of Austrian daily newspapers' daily reach



Source: Austrian Media Analysis

In the areas of marketing, administration, printing and distribution, the *Kronen Zeitung* is linked via Mediaprint to the *Kurier* (the German WAZ Group holds stakes in the *Kronen Zeitung* (50%) as well as the *Kurier* daily newspaper (49.44%) and thus also an indirect stake in the Mediaprint distribution company). Among daily newspapers in Austria, *Kurier* is in third place with 9.7% (-1.6% compared to the 2005 Media Analysis) in terms of daily reach. The *Kleine Zeitung* published by Styria Medien AG came in second, with its daily reach remaining unchanged at 12.2%.

Figure 35: Daily reach of national daily newspapers in 2006

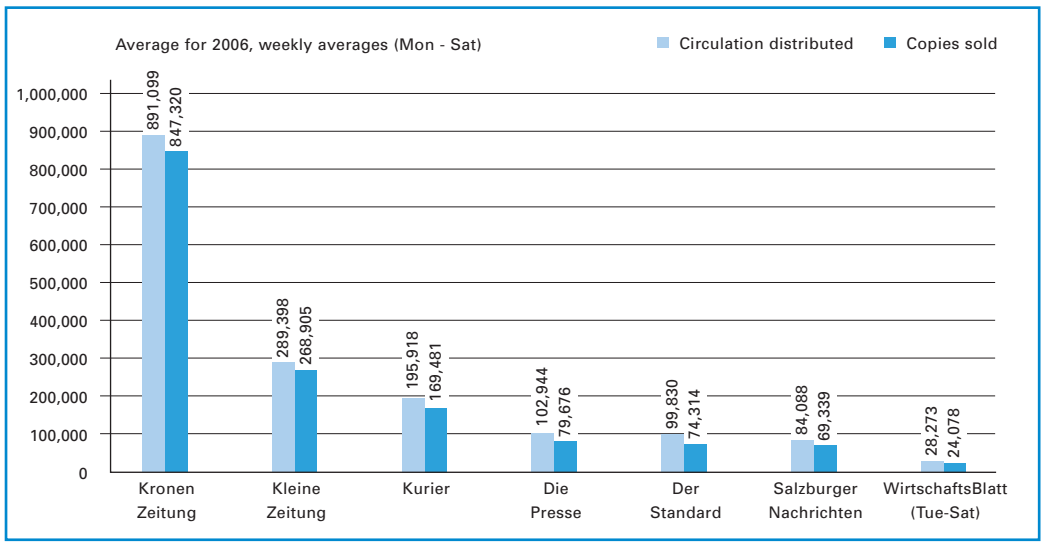


Source: Austrian Media Analysis 2006

ÖAK provides initial market data on "Österreich" daily newspaper.

The figures from the Austrian Circulation Survey (*Österreichische Auflagenkontrolle*, or ÖAK) were awaited with great interest, as these figures provided an initial impression of the *Österreich* daily newspaper's performance on the market. However, this only applied to the 4th quarter of 2006, as *Österreich* was not included in the ÖAK's results for the overall year. The circulation survey provides detailed information on the structure of media circulation. In the results for 2006, the *Kronen Zeitung* saw a slight decline of 0.5% to 847,320 copies on average over the week (Monday to Saturday). In contrast, the *Kleine Zeitung*, *Presse* and *Der Standard* daily newspapers saw an increase of approximately 4,000 copies each, which can be regarded as a major success, especially in the case of the high-quality newspapers.

Figure 36: Circulation of national daily newspapers in 2006

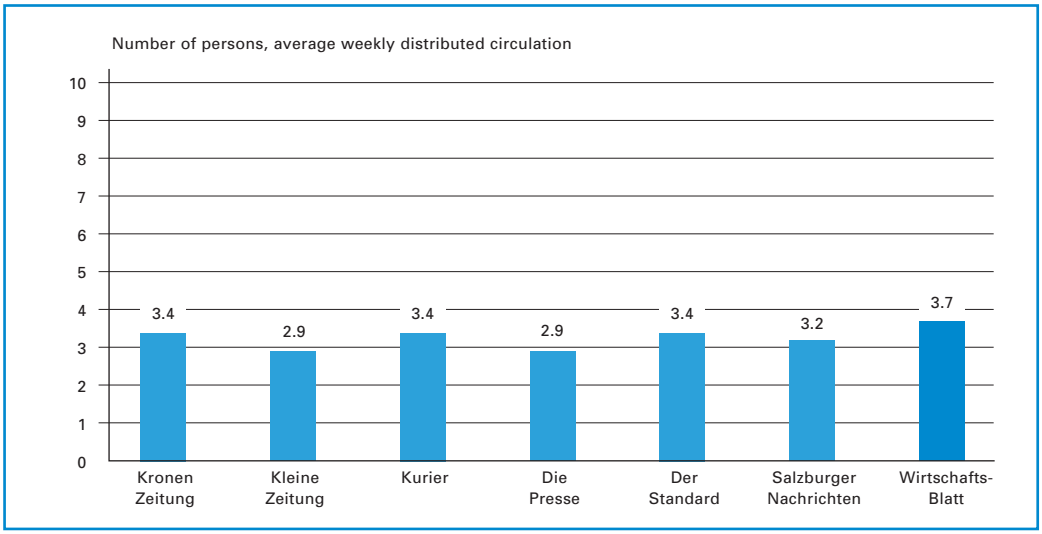


Source: ÖAK

Wirtschaftsblatt has the most readers per copy sold.

The statistics on "Readers per copy" compiled in the Austrian Media Analysis reveal how many people over 14 years of age read each copy of a newspaper sold. In this respect, the leader in 2006 was the *Wirtschaftsblatt* with 3.7, followed by *Der Standard*, *Kurier* and *Kronen Zeitung* with 3.4 readers per copy each.

Figure 37: Daily newspapers: Readers per copy



Source: ÖAK, Austrian Media Analysis 2006

As mentioned above, the results of the Austrian Circulation Survey (ÖAK) for the fourth quarter of 2006 included figures for *Österreich*, Austria's new daily newspaper. With regard to the number of copies sold (i.e., excluding complimentary copies) *Österreich* (with 162,300 copies sold) is in fourth place behind *Kronen Zeitung*, *Kleine Zeitung* and *Kurier* (167,465). As regards copies distributed, *Österreich* (317,043 copies) is in second place behind *Kronen Zeitung* (883,580 copies).

While the Mediaprint Group dominates the segment of daily newspapers, the News publishing group holds a similar position in the magazine sector. The group's titles *News* and *TV-Media* ranked second and third among weekly magazines in Austria with 13.7% and 13.5% (respectively) in 2006, surpassed only by *Die Ganze Woche* with 14.3%.

Finally, Table 9 below provides an overview of all media segments covered by the Austrian Media Analysis in 2006.

Table 9: **Overview of Media Analysis 2006**

	Daily reach in 2006
Population ('000)	**6,919**
Number of cases	**16,177**
Daily newspapers	
Daily reach	72.7
Der Standard	4.9
Die Presse	4.3
Kurier	9.7
Kronen Zeitung	43.8
WirtschaftsBlatt	1.5
Kleine Zeitung (Graz)	8.2
Kleine Zeitung (combined)	12.2
Kleine Zeitung (Klagenfurt)	4.0
KTZ-Neue Kärntner Tageszeitung	1.1
Neues Volksblatt	0.6
OÖN – Oberösterreichische Nachrichten	5.6
SN – Salzburger Nachrichten	3.8
Die Neue – Zeitung für Tirol	1.0
TT – Tiroler Tageszeitung	4.7
Neue Vorarlberger Tageszeitung	0.7
VN – Vorarlberger Nachrichten	3.0
Krone Kärnten/KTZ	4.2
TT/Die Neue	5.1
VN/Neue Vorarlberger Tageszeitung	3.3
Supplements	
Kurier Freizeit	7.6
tele	37.0
TV-Woche	37.3
Wiener Journal	
Weekly regional newspapers	
NÖN – Niederösterreichische Nachrichten	10.3
NÖ Rundschau	1.5
NÖN/NÖ Rundschau	11.0
Neue BVZ	1.4
NÖN/NÖ Rundschau/Neue BVZ	12.3
BF – Die Burgenland Woche	1.1
NÖN/NÖ RS/Neue BVZ/BF	12.9
Linzer Rundschau/korrekt	3.3
Rundschau (o.LRS/korrekt)	7.4
OÖ Rundschau total	9.8
Salzburger Fenster	4.0
Salzburger Woche	4.4
Salzburger Woche/Fenster	5.6
Salzburger Nachrichten/Woche	6.3
Illustrated periodicals / magazines (weekly)	
e-media (biweekly)	4.9
Falter	1.1
Format	3.0
Freizeit Revue	4.5
Ganze Woche	14.3
News	13.7
profil	5.8
Seitenblicke (biweekly)	2.4
Sportwoche	2.5
TV-Media	13.5
Der österr. Lesezirkel	10.4
Illustrated periodicals / magazines (weekly)	
Die Wirtschaft	1.7
Geo	7.7
Gewinn	4.6
Gusto	9.3
New Business	0.5
ORF nachlese	6.0
Report Plus	0.3
Top Gewinn	1.8
trend	4.6
Wiener	2.1

	Daily reach in 2006
Illustrated periodicals / magazines (living, real estate, health)	
Besser Wohnen	2.4
Gartenmagazin	2.4
H.O.M.E.	1.0
Immobilien Magazin	1.1
Schöner Wohnen	4.6
Wohnen	2.3
CD Austria	
Gesünder Leben	3.1
Gesundheit	3.2
Medizin Populär	5.0
Illustrated periodicals / magazines (automotive, sports, leisure, clubs)	
Alles Auto	4.4
Auto Revue	5.8
Auto Touring	27.7
Freie Fahrt	6.0
Kompetenz	
Land der Berge	1.0
Motorrad Magazin	2.5
Reisemagazin	1.8
Solidarität	11.2
Sportmagazin	4.2
Universum	3.2
Unsere Generation	5.2
Visa Magazin	7.4
Illustrated periodicals / magazines (women's)	
Brigitte	2.9
Diva	1.2
Eltern	3.1
Freundin	
Miss – Österreichs ehrliche 22 cm	1.2
Wellness Magazin	1.4
Welt der Frau	2.8
Wienerin	4.4
Woman	8.2
Illustrated periodicals / magazines (combined)	
Best of combined	14.5
Business combined	6.8
Women's combined	19.7
Media combined	16.4
News combined	17.5
Reach combined	23.6
New Business combined	2.0
Universum/Land der Berge combined	4.1
More Living combined	
Leisure combined	7.7
Ladies combined	6.0
Lifestyle combined	5.8
Men/youth combined	6.2
Brigitte+Eltern (female population)	5.8
Schöner Leben combined	7.1
Cinema / poster	
Cinema (last week)	5.9
Poster (7 days/week)	36.4
City Light (last week)	40.2
Infoscreen (last week)	14.4
Internet (previous day)	34.3

	Daily reach in 2006
Television (Teletest)	
Cases	**2,401**
Population	**6,725**
TV total	67.2
ORF total	57.7
Foreign w/Austrian content total	18.9
ORF 1	39.7
ORF 2	44.1
ATV	11.6
RTL (main channel)	18.4
RTL (with Austrian content)	9.2
Sat.1 (main channel)	17.9
Sat.1 (with Austrian content)	9.4
Pro 7 (main channel)	16.4
Pro 7 (with Austrian content)	8.7
RTL II (main channel)	11.2
RTL II (with Austrian content)	5.5
ARD	15.7
ZDF	14.9
Foreign (total)	49.3
Radio (Radiotest)	
Cases	**22,741**
Population	**6,919**
Radio total	83.4
ORF total	73.1
Private domestic (total)	22.3
Other stations (total)	4.1
Ö1	9.1
FM4	4.0
Ö3	37.0
RMS Top	21.8
Kronehit	4.8
Radio Wien	5.5
Radio Niederösterreich	7.8
Radio Burgenland	2.7
Radio Steiermark	6.1
Radio Kärnten	3.2
Radio Oberösterreich	5.6
Radio Salzburg	3.0
Radio Tirol	3.3
Radio Vorarlberg	1.7

Source: Austrian Media Analysis, in %

Moreover, it is especially interesting that complimentary daily and weekly newspapers continue to gain market share. While complimentary weekly newspapers have been distributed to households by conventional mail in all provinces of Austria for several years now, these newspapers are now also being handed out or made available on special racks in public places, especially near public transportation stops.

Data from the RegioPrint survey for 2006 reveals increasing reach figures and readership for established complimentary newspapers throughout Austria:

Table 10: Reach figures and readership of complimentary newspapers in Austria

Vienna		
Bezirksjournal (district journals)	49%	670,000 readers
Wiener Bezirksblatt (district journals)	42%	575,000 readers
VOR Magazin	19%	261,000 readers
Heute (daily newspaper)	18%	245,000 readers
Lower Austria		
Lower Austrian Bezirksblatt (district journals) total	41%	534,000 readers
Lower Austrian Bezirksjournal (district journals)	17%	222,000 readers
Styria		
Der Neue Steirer (monthly) /		
Der Neue Grazer (weekly)	51%	518,000 readers
Steiermark Woche (weekly)	59%	594,000 readers
Burgenland		
Burgenland Bezirksblatt (district journals)	73%	172,000 readers
Upper Austria		
Tips OÖ	68%	786,000 readers
Sonntagsrundschau	63%	728,000 readers
Salzburg		
Salzburg Bezirksblatt (district journals)	63%	275,000 readers
Carinthia		
Kärntner Woche (weekly)	71%	337,000 readers
Tyrol		
Tyrol Bezirksblatt (district journals)	78%	409,000 readers
Vorarlberg		
Wann&Wo (Sun)	74%	218,000 readers
Wann&Wo (Wed)	71%	209,000 readers
Mein Einkauf	55%	160,000 readers
WEEK Vorarlberg	38%	111,000 readers

Source: Regioprint

The growing trend toward complimentary newspapers, which are generally owned by the publishers of large Austrian daily and weekly newspapers, has thus continued; the free newspaper *ok* launched in Graz and Klagenfurt in May and September (respectively) also reaches 172,000 readers. Another new appearance on the market was the complimentary daily newspaper *Oberösterreichs Neue* in Upper Austria with a circulation of 85,000 copies, *Heute* in Styria with a circulation of 60,000 copies, *Heute* in Upper Austria with 80,000, *Heute* in Lower Austria with 100,000 and *NEUE Express* in Tyrol with 112,000 copies.

Similarly, the market for online media is still growing rapidly:

According to data from the Austrian Web Analysis, the most-visited platform in 2006 was once again orf.at with 24.6 million visits, followed by *NEWS* Networld with nearly 7 million visits. As for the online editions of Austrian newspapers, derstandard.at (5.7 million visits) is ahead of Krone.at with 5.6 million and *Kurier* Online with 3.4 million visits. It is especially interesting that diepresse.com (1.1 million visits) is nearly even with *Salzburger Nachrichten*'s salzburg.com (1.2 million) and *Kleine Zeitung* Online (1.6 million).

5.2 Development of the Austrian telecommunications markets

Periodic and comprehensive market evaluations under the legal framework introduced in 2002

The European legal framework for electronic communications markets, which was essentially defined by five EU directives[4] and became legally binding in 2002, has been implemented in national legislation by the Austrian Telecommunications Act 2003 (TKG 2003) and the accompanying ordinances. After the first round of market analysis procedures was completed in early 2005, the review of the Austrian Telecommunications Markets Ordinance 2003 (TKMVO 2003) launched the next round of market analysis procedures at the end of 2005, and in the course of the year 2006 the first decisions regarding telecommunications markets were issued (cf. Section 4.2.2.2).

As regards experience in (inter)national implementation, Austria can be described as one of the "early birds" in the implementation of the legal framework from 2002. In addition, due to very early and extensive preparations the market analysis procedures initiated by the Austrian regulatory authority were completed quickly, efficiently, and without external support from consulting services.

The data sources underlying the descriptions and explanations provided in the sections below are 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.

5.2.1 General market development

In contrast to the rapid overall growth seen after the start of liberalization, the Austrian telecommunications market again saw a slight decline in retail communications revenues in 2006. Specifically, net retail revenues increased by approximately 2.4% (from EUR 4.63 billion to EUR 4.75 billion) between 2004 and 2005, and dropped by about 0.5% (from EUR 4.75 billion to EUR 4.72 billion) in 2006. These net revenues can be attributed to individual business segments as follows:

Table 11: Overall development of retail telecommunications revenues, 2004 to 2006

	2004 EUR (millions)	2005 EUR (millions)	2006 EUR (millions)	Change in %, 2004-2005	Change in %, 2005-2006	Share of total revenues in %, 2004	Share of total revenues in %, 2005	Share of total revenues in %, 2006
Fixed-link network*	1,607	1,523	1,401	-5.2	-8.0	34.7	32.1	29.7
Mobile	2,562	2,680	2,708	4.6	1.0	55.3	56.5	57.4
Broadband	361	440	520	21.9	18.2	7.8	9.3	11.0
Leased lines	102	102	90	0.0	-11.8	2.2	2.1	1.9
Total	**4,632**	**4,745**	**4,719**	**2.4**	**-0.5**			

Source: RTR survey

* Revised values for 2004 and 2005, as non-relevant revenues from service network operation were eliminated from the entire time series.

[4] In addition to the Framework Directive, the Authorisation Directive, Access Directive and Universal Service Directive are immediately relevant to electronic communications markets, as is the Directive on Privacy and Electronic Communications.

Table 12: Development of traffic volumes on retail communications markets, 2004 to 2006

	Unit*	2004	2005	2006	Change in %, 2004-2005	Change in %, 2005-2006
Fixed-link network	Call minutes (excluding dial-in)	10,748,085,350	9,938,222,015	9,073,351,119	-7.5	-8.7
	Lines (absolute number)	3,084,702	3,009,962	2,918,324	-2.4	-3.0
Mobile	Call minutes	10,147,563,581	11,681,671,603	13,728,427,108	15.1	17.5
	Subscriber (post- and prepaid)	7,722,170	8,385,774	8,984,123	8.6	7.1
Broadband	Lines	760,816	1,054,985	1,334,228	38.7	26.5
Leased lines**	Number of 64 kbit/s equivalents	598,249	756,353	994,390	26.4	31.5

Source: RTR survey

* In the case of stock values, the annual average based on quarterly values is used as an aggregate.

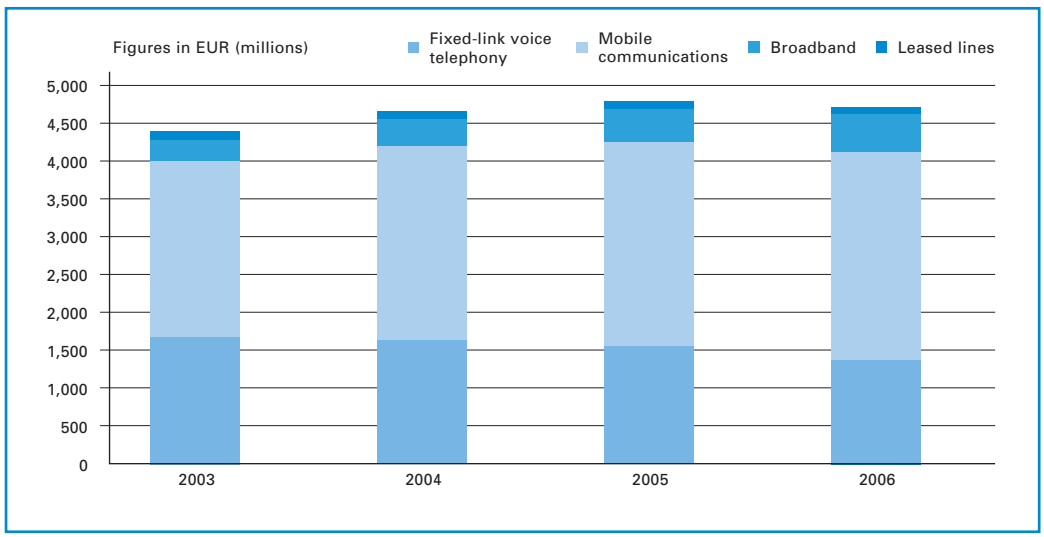
** Due to a lack of available data, values for international leased lines are not included (in contrast to Table 11).

If we compare the development of revenues in individual business segments with the corresponding developments in traffic volumes, it becomes clear that traffic volumes have increased drastically in some areas, with the exception of fixed-link communications (cf. Table 12). While prices have essentially stagnated in fixed-link networks (cf. Section 5.2.2.2), significant price reductions can be identified in the fields of broadband, mobile communications and leased lines; these price reductions can be regarded as the actual reason for the decline in overall revenues. Moreover, the stagnation in mobile revenues must be seen against the backdrop of a very high national penetration rate, with nearly 9 million active subscriber numbers in Austria (over 100%).

Stagnation in retail revenues during later stages of liberalization

Despite declining growth in this segment, more than half of overall telecommunications revenues can be attributed to mobile communications, and this share increased from 56.5% in 2005 to 57.4% in 2006 (cf. also Figure 38). Along with the broadband segment, which showed the strongest development, mobile communications still made a minor contribution to revenues growth (1%) on the retail communications markets in 2006. Due to increasing broadband penetration in Austria, revenues from such services rose from EUR 440 million in 2005 to EUR 520 million in 2006, which represents an increase of approximately 18.2%.

Figure 38: Development and distribution of retail revenues, 2003 to 2006



Source: RTR

In recent years, mobile networks have become the fiercest competitor to the fixed-link network in Austria (cf. especially the development of call minutes in Table 12). This effect has been compounded by increasing migration toward IP-based voice solutions, which are not classified as relevant markets in this context. Specifically, the use of Voice over Internet (VoI) by residential customers and the realization of private networks (PNs) by business customers have led to the corresponding outflows from the traditional fixed-link voice telephony markets. However, the resulting decline in classic fixed-link network revenues was partly offset by increases in broadband revenues.

Table 13 provides a qualitative overview of the major factors influencing market developments. For more detailed information, please refer to the sections indicated below.

Table 13: Trends on retail markets in 2006

Broadband as key growth factor

Service	Revenues	Traffic volumes	Rates	Remarks	Section
Fixed-link voice telephony	Decreasing	Decreasing	Stagnating/ decreasing	Partial substitution with mobile telephony, Vol and PN	5.2.2
Mobile communications	Increasing/ stagnating	Increasing	Decreasing	Increasing share of data services	5.2.3
Broadband	Increasing	Increasing	Decreasing	Declining significance of narrowband Internet access	5.2.4
Leased lines	Decreasing	Increasing	Decreasing	Decreasing significance of low bit-rate leased lines	5.2.5

The sections that follow give an overview of market developments and selected indicators, but in no way should the discussion be considered exhaustive. Instead, it should serve to illustrate the complexity of market relationships and to report on key figures of general interest.

In terms of structure, this overview is based on the relevant markets defined in the review of the TKMVO 2003; in this context, the markets are merged to form various market clusters. The cluster approach generally underlying RTR's market analyses can be explained by practical considerations as well as the existing (horizontal and vertical) linkages between individual markets. These linkages can only be presented adequately in a comprehensive overview. However, this discussion is not exclusively confined to the relevant markets defined under the TKVMO 2003. As mentioned above, we also paid special attention to the potential interests of our readers in defining the focal points of this market overview.

5.2.2 Fixed-link voice telephony

5.2.2.1 Introduction

After a large number of new market entries were recorded in the first stage of liberalization, the market has seen consolidation processes in the last few years, which is generally in line with current discussions regarding market phases. In particular, this refers to mergers and acquisitions among the largest alternative operators: UPC Telekabel took over Inode in early 2006, and as early as 2004 Tele2 (the largest alternative provider in the residential segment) acquired UTA, which was one of the most important unbundling partners apart from Inode. eTel, which mainly operates in the business customer segment, has taken over numerous smaller companies, especially Internet providers (including RSL-Com, MCN, European Telecom, yc net:works, KPNQwest, Tiscali and Nextra), and eTel itself was taken over by Telekom Austria at the end of 2006.

Depending on the type and scope of the network infrastructure used, different business models can be distinguished:

Quasi-monopolist structures on the local access market

- As the former monopolist, Telekom Austria plays an especially important role because it is the only telecommunications enterprise with nationwide infrastructure and because it still holds the largest market share by far in the access market. As Telekom Austria's market power would allow the company to prevent alternative providers from gaining access to customers and thus to restrict or even prevent competition, Telekom Austria has been identified as having significant market power to date and according to the requirements of the framework from the year 2002.[2] 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, for example, are still characterized by a sub-additive cost structure, meaning that one infrastructure provider could actually handle the overall demand for subscriber lines more cost-effectively than two or more providers. At least from the perspective of static efficiency, replicating local infrastructure would be economically inefficient in this case. As long as alternative access technologies still lack the technical sophistication to be marketable and cable TV networks only have substitution potential in areas of high population density, the natural monopoly in access networks will generally continue to prevail. Naturally, the mobile communications sector as a whole can also be regarded as a substitute for the fixed-link network. However, sufficiently large substitution effects did not emerge during the underlying observation period (for empirical evidence and differentiated observations, please refer to Section 5.2.2.2).

Potentially competitive structures in the carrier segment

- 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, they 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 with greater product flexibility compared to carrier network operators alone, communications network operators certainly have incentives to develop new networks and to expand existing ones.

  On the fixed-link market, carrier selection has proven to be a very effective means of promoting competition. This can be attributed to the relative ease of market entry due to lower investment expenses compared to building separate access networks, which has resulted in a large number of license applications. This stimulation of competition due to the emergence of new providers has put pressure on Telekom Austria to lower prices and led to a reduction of rates and charges throughout the entire industry, thus bringing about significant savings in telecommunications costs to the customer (see Section 5.2.2.2.2).

[5] For information on specific decisions, please refer to the decisions in Procedure M 1-6/06 at http://www.rtr.at (in German).

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. As existing infrastructure is used, it is not necessary for these operators to maintain separate originating and terminating access networks which extend all the way to the customer. Instead, the operator's carrier network is usually interconnected with the incumbent operator's telecommunications network and selected by the subscriber using a four-digit carrier selection code. The carrier network operator collects the charges directly from the subscriber and is required to compensate the other operator(s) for the origination, transit and termination services used.

In carrier selection, it is necessary to distinguish between call-by-call (CbC) and carrier pre-selection (CPS) arrangements. Call-by-call means that the caller selects a specific carrier network operator for each call by dialing a specific network operator code. If the subscriber does not do so, the call is handled and billed by Telekom Austria. In carrier pre-selection, all of a subscriber's traffic – with the exception of calls to value-added services and public service numbers – is routed via the selected carrier network using a permanently pre-set carrier network code. This allows the subscriber to use a specific carrier network constantly without having to dial a specific network operator code for each call. In addition to alternative operators with their own network infrastructure or their own access network(s), CPS and CbC-based access is essential, especially for pure resellers which do not have their own infrastructure. Among the resellers, the creation of added value is confined to the retail level. In addition to focusing on different business areas, the forms of reselling which can be observed on the market essentially differ in terms of the different "dial-in" options offered to the customer.

Table 14 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.

VoIP as a technology with high innovative potential

Another major development is Voice over Internet Protocol (VoIP), which is becoming an increasingly powerful factor influencing the entire fixed-link sector. VoIP refers to a technology which allows voice communication via IP-based networks. This technology is expected to revolutionize 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 Tele2UTA, Inode and Silver Server, while VoI is offered by Skype and Sipgate, for example. The current significance of VoIP has to be assessed specifically for each segment (e.g., on the basis of characteristics such as residential and non-residential markets), but in principle it still impacts all of the business models outlined in Table 14. For further distinctions with regard to regulatory, technical and economic issues, please refer to Section 6.2.2.

Table 14: 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) ▪ Pricing ▪ Sales/billing	Medium
Resellers (access network) (regulated, but not required to date)	▪ Resale of access services	▪ Service design ▪ Pricing ▪ Sales/billing	Medium / low
Resellers (carrier network) (provision of CPS/CBC 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

While fixed-link markets used to be regarded as a whole, the various retail and wholesale markets are now described separately (as shown below) in accordance with the delineation of markets in the TKMVO 2003 and the European Commission's recommendation on relevant product and service markets as relevant for 2006. Specifically, the following retail markets are differentiated:

- Access to the public telephone network at a fixed location for residential customers;
- Access to the public telephone network at a fixed location for non-residential customers;
- Publicly available local and/or national telephone services provided at a fixed location for residential customers;
- Publicly available international telephone services provided at a fixed location for residential customers;
- Publicly available local and/or national telephone calls provided at a fixed location for non-residential customers;
- Publicly available international telephone services provided at a fixed location for non-residential customers.

Three relevant markets were defined at the wholesale level:

- Call origination on the public telephone network provided at a fixed location;
- Call termination on individual public telephone networks provided at a fixed location;
- Transit services in the fixed public telephone network.

As mentioned in the introduction, the relevant individual markets are not discussed point by point but on the basis of specific focus areas.

5.2.2.2 Retail market

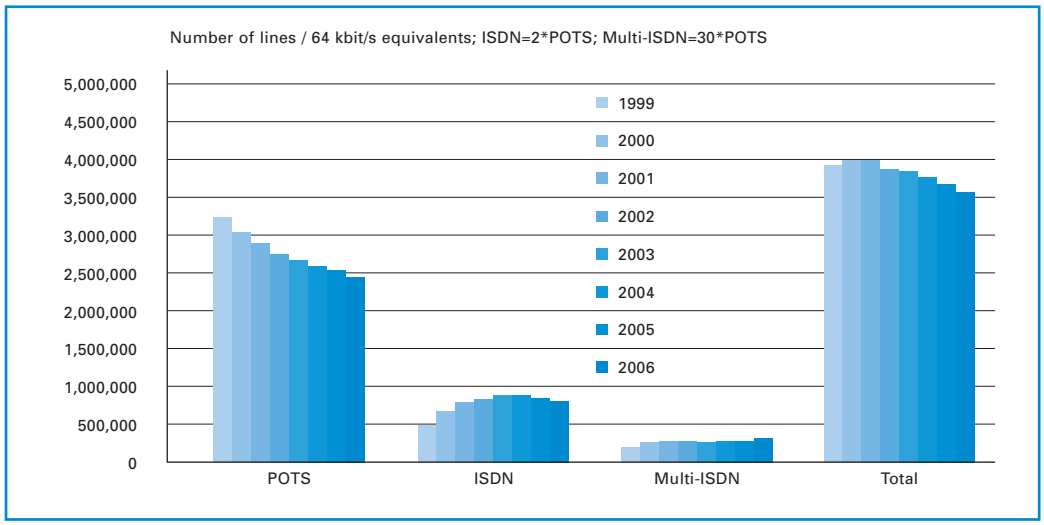
5.2.2.2.1 Structural developments on the market

Balanced decline in revenues and volume in lines

Especially rapid growth in the number of subscribers on the mobile communications market has brought about a moderate but steady decline in total revenues from fixed-link voice telephony (cf. Table 11 and Figure 40). However, in terms of lines measured in 64 kbit/s equivalents, the decline was less pronounced over the reference period (1999 to 2006): Since 2001, this decrease has only come to -0.04%, and was -2.77% in 2006 (cf. Figure 39). Upon closer observation, it becomes clear that the changes differ substantially depending on the line access technology in question. The decline in analog POTS (plain old telephone service) lines was partly offset by the increase in ISDN lines and relatively steady development of multi-ISDN lines, each measured in 64 kbit/s equivalents. At the retail level, therefore, mobile telephony is (as expected) more often used as a substitute for the fixed-link network among residential users with analog lines.

Although revenues on the overall fixed-link retail market still showed an upward trend in 1998 (+3.6%), they dropped steadily over the rest of the observation period (1999 to 2006), losing as much as 8% in 2006 (see Figure 40). This general decrease can be seen (albeit to different degrees) in revenues as well as traffic volumes, in lines as well as calls, and among residential as well as non-residential customers.

Figure 39: Development of line types in 64 kbit/s equivalents (1999 to 2006)



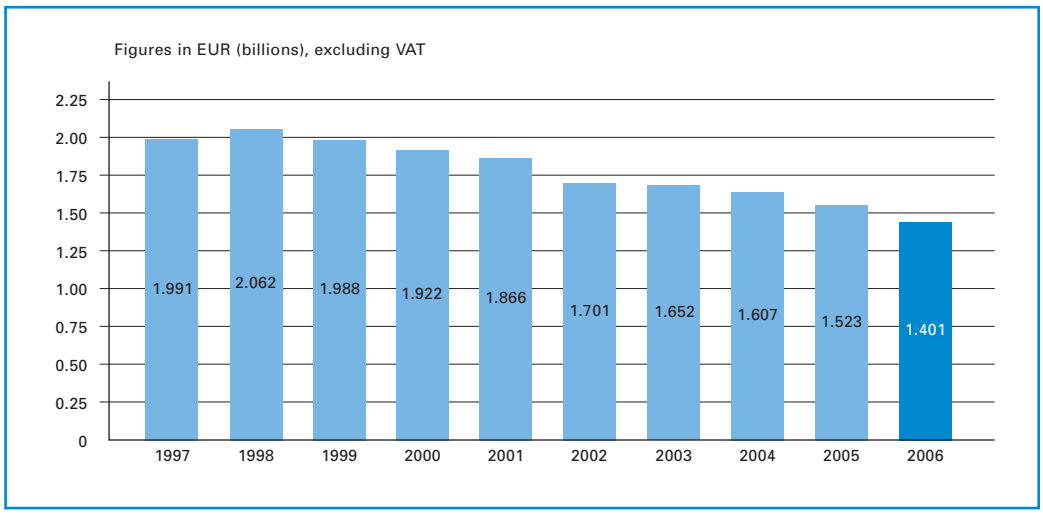
Source: RTR

The calculation of overall revenues on the fixed-link retail market 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 directory assistance services;
- Connection charges for online services;
- Revenues from the sale of cards and minutes to resellers;
- Monthly base fees;
- Charges for special coverage services;
- Connection setup charges.

The revenues of service network operators, which were included in previous market reports, were eliminated over the period from 1997 to 2006 in order to restrict the comparison exclusively to relevant communications revenues in accordance with the legal framework from 2002.

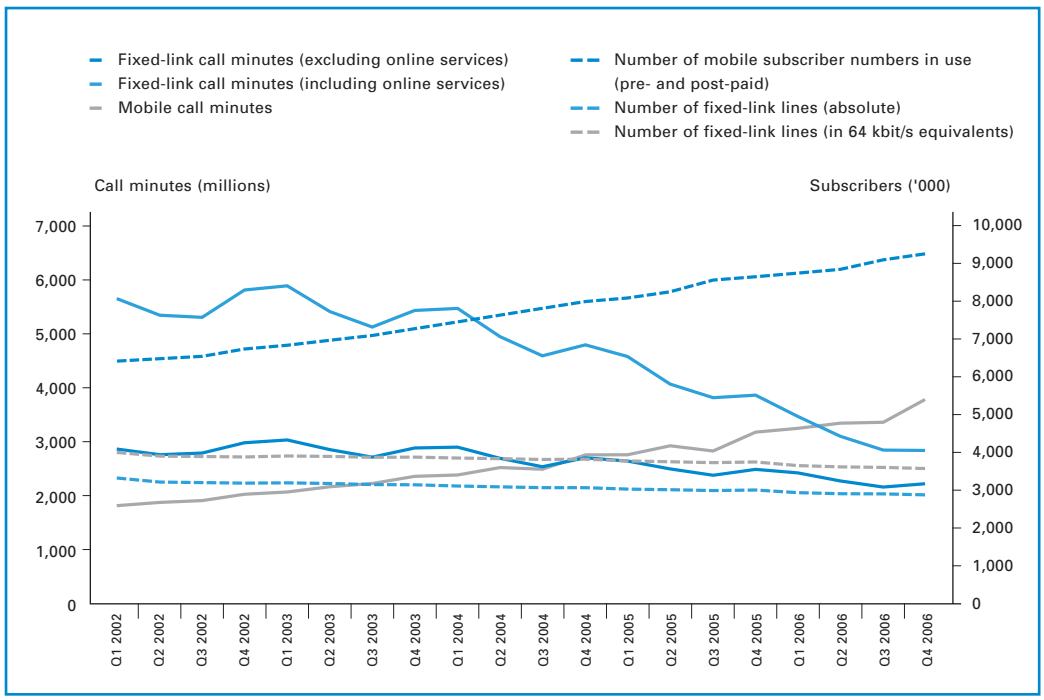
Figure 40: Development of revenues on the retail fixed-link market, 1997 to 2006



Source: RTR

As mentioned earlier, the decreases identified in call and line charges can mainly be attributed to intermodal competition emanating from the mobile communications sector. This competition is far stronger in calls (especially national calls). Figure 41 clearly illustrates this systematic difference in the corresponding traffic volumes as well. The (absolute) number of subscriber lines in the fixed-link network was only subject to a moderate decline (cf. also Figure 39). In the mobile sector, on the other hand, both areas showed consistently rapid growth throughout the observation period. In fixed-link communications, it is also necessary to point out the distinction between classic voice telephony minutes and Internet dial-up minutes, as the development in overall minutes on national call markets is largely explained by the massive decline in narrowband Internet usage and by increasing broadband penetration. On the other hand, the rapid decline in Internet dial-up minutes can also be attributed to the unlimited flat-rate product offered by Telekom Austria, "Aon Complete," which generated a very large number of dial-up traffic minutes. However, the potential usage of "Aon Complete" was subsequently restricted.

Figure 41: Fixed-link/mobile developments by market segment



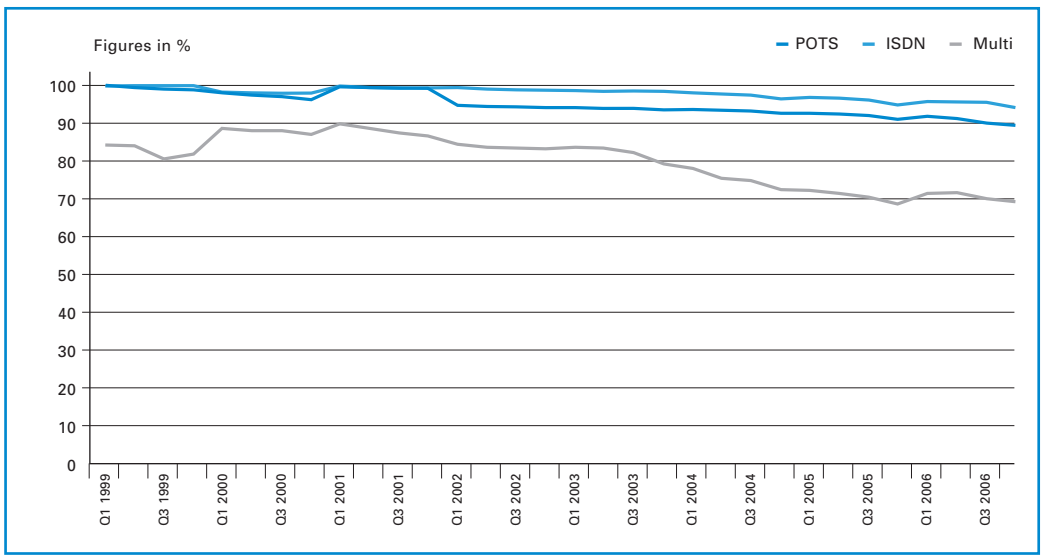
Source: RTR

Major differences in fixed-link/mobile developments

The market share levels of Telekom Austria also provide an indirect indication of the success of alternative network operators (carrier and subscriber network operators) in the individual fixed-link telephony segments in the years 1999 to 2006. As regards the absolute number of subscriber lines, Telekom Austria still exhibits a relatively high and stable market share (cf. Figure 42). The high concentration in terms of connected subscribers is not surprising, as the vast majority of subscriber lines are handled by Telekom Austria and only few alternative network operators (ANOs) have their own access network to connect subscribers directly. This shows that the Austrian market is still in effect characterized by a monopolistic market structure in terms of access. However, Figure 42 also reveals far more competitive developments in the business customer segment, especially in multi-ISDN lines, as alternative providers were able to garner a 30% market share in this segment by the end of 2006. At the same time, these competitive stimuli only had a slight impact on the overall access segment due to the relatively low diffusion of multi-ISDN lines (cf. Figure 39).

Quasi-monopoly in POTS and ISDN; alternative operators made gains in multi-ISDN segment

Figure 42: Telekom Austria's market share in access services



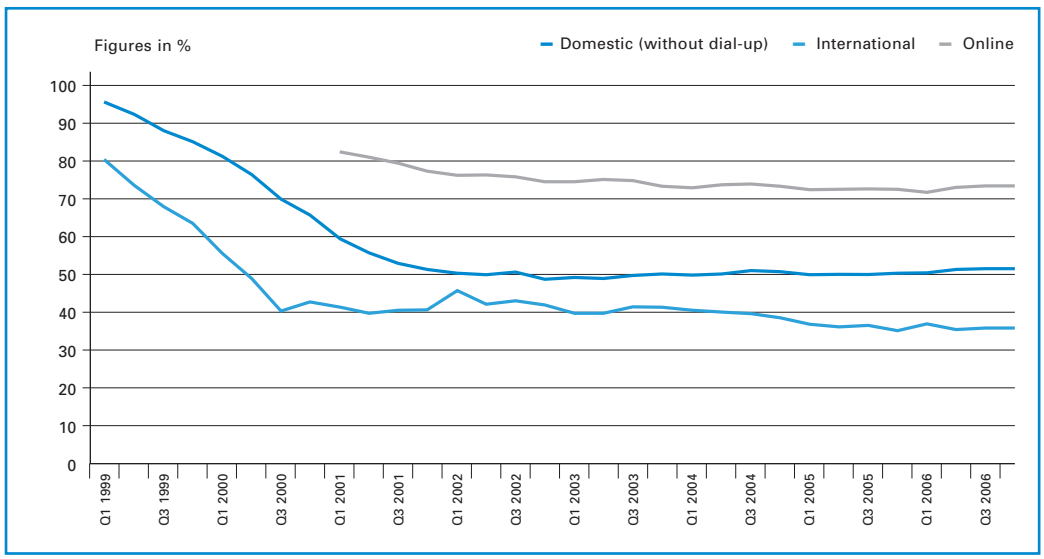
Source: RTR

Stabilization of market structures for connection services

In contrast, the alternative network operators were able to take substantially larger market shares in the national and international voice telephony segments of the market for access services. Here it becomes clear that the gains in the field of international telephony were significantly higher at the end of the observation period (over 10%; cf. Figure 43). In line with the results of the corresponding market analyses, the most competitive market structure can be found in the market for international telephone services for residential customers (not reported separately).[6] In contrast, Telekom Austria's market share of Internet dial-in minutes is approximately 20% higher than its market share for national calls (approximately 50% market share), which highlights Telekom Austria's strongest market share in Internet dial-up minutes. In this context, it is important to note that market shares measured in terms of revenues are even higher than those measured in terms of minutes (regulatory experience has shown that this difference comes to approximately 10% in classic connection services [not including dial-up access]).

[6] Cf. in particular the decisions issued in Procedures M 5/03 and M 5/06 at http://www.rtr.at (in German).

Figure 43: Telekom Austria's market share in connection services (minutes)



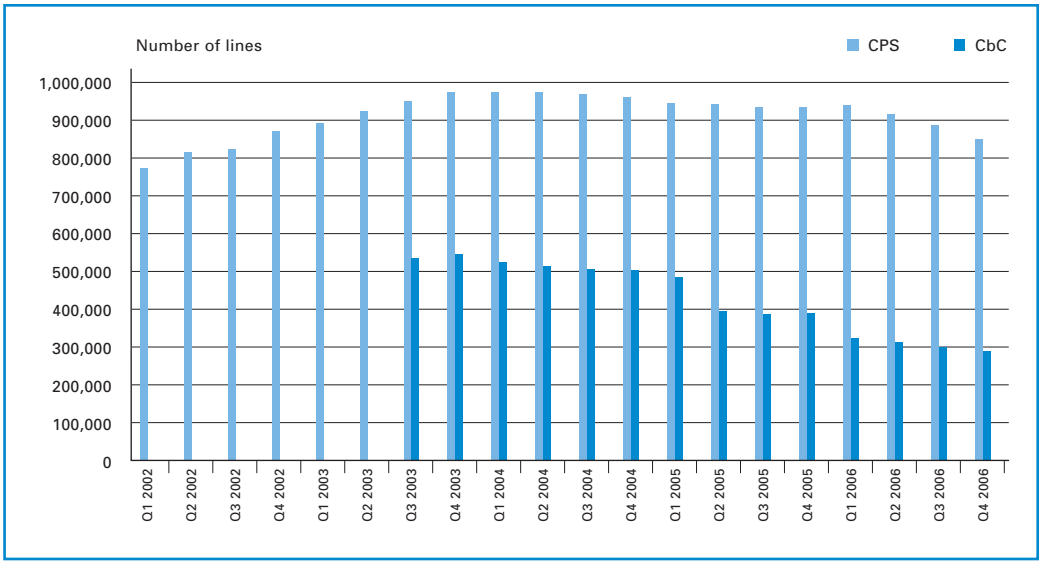
Source: RTR

Carrier (pre-)selection is still an essential factor despite declining trend.

The stagnation among alternative network operators in terms of connection services, which is shown in Figures 42 and 43, is closely linked to the development of the market for call-by-call (CbC) and carrier pre-selection (CPS) services. As shown in Figure 44, CPS in particular was very well received in the course of liberalization, although this segment has shown a slow but steady decline in the last two years. By the end of the reporting period, more than 850,000 subscribers in Austria had decided to have all of their calls handled by an alternative network operator. Data on CbC services is more difficult to collect and is therefore not reported in a sufficiently consistent form until July 2003 (i.e., the start of the observation period for the Operators Survey 2006). At present, we can estimate a basic level of just over 300,000 CbC customers. With regard to CbC in particular, the Communications Survey Ordinance's data basis shows excessively low values, as it is not possible to conduct a full survey of CbC reselling activities. This partly explains the spike in values seen in Q1/2006. In general, however, a clearly declining tendency can be observed in CbC, while CPS levels have shown a less pronounced decrease. The latter can also be explained by the increasing transition from carrier pre-selection to subscriber network operation among alternative network operators. It is therefore not possible to calculate a simple total, as CPS and CbC are not mutually exclusive but can be used as complements to one another. Moreover, the CPS and CbC levels shown reflect the respective aggregate values for residential as well as non-residential customers. Based on the available data, however, the ratio of residential to non-residential customers can be estimated at approximately 85:15.

In any case, the figures show 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 (or 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 services throughout Austria within a short time without requiring them to go through the difficult process of building their own (nationwide) networks.

Figure 44: Development of CPS and CbC customers (Q1/2002 to Q4/2006)



Source: RTR

5.2.2.2.2 Rates

Price competition as a result of competitive conditions

Since the start of market liberalization in 1997-1998, the fixed-link markets for telephone services observed here have seen substantial declines in prices. However, the fierce price competition observed in recent years has led to convergence in rates among the providers. For example, Telekom Austria – which is still the largest provider by far – has been forced to reduce its rates repeatedly. On the other hand, the absolute amount of these price reductions has declined in the last few years, although a certain degree of pricing latitude can still be observed in international telephone services. Competition also appears to have driven an increasing number of alternative network operators to their lower pricing limits, as their margins depend largely on prevailing wholesale costs. The analyses of explicit and implicit price developments below provide the corresponding empirical evidence.

Analysis of explicit price developments

The discussion of prices below mainly refers to the residential user segments. As the precise assignment of pricing models used on the market is possible only at the "edges" of the rate structures offered, the comparisons in this section are based on the respective standard rate packages used by a majority of telephony customers. Whereas it is both feasible and useful to depict price developments in the "transparent" residential user segment, this is only possible to a limited extent in the business customer segment, where pricing is rather opaque. In the business customer markets, however, we can assume that customers have frequently obtained substantial discounts due to high traffic volumes.

First of all, a representative sample of the connection charges[7] to retail customers for the most important national fixed-link calls is presented and discussed. In this context, calls within the national fixed-link network are broken down into local fixed-link network calls and long-distance fixed-link network calls over 50 km, and each of these categories is further subdivided into peak and off-peak times. Geographical and temporal distinctions in pricing are, of course, not applied uniformly by individual providers.

Figures 45 and 46 show the connection charges for the call distances mentioned above on the basis of the underlying "minimum rate" and (since the minimum rate was abolished in Procedure G07/03) for Telekom Austria's subsequent rate plan "TikTak Privat." The approach to investigating these rate options can be explained on the basis of two considerations regarding plausibility: First, it would be rational for customers of the carrier network operator competing with the incumbent to choose the rate plan with the lowest monthly base fee. Second, these rate options target the mass segment of typical residential users. In this context, Telekom Austria's rates are compared with those of the largest alternative network operators on this market, Tele2 and UTA, and with UPC/Priority Telecom instead of UTA for the years 2005 and 2006. In addition, the company Amiga represents a typical reseller which has been able to establish itself on the markets for national as well as international calls.

Increasing importance of bundled offers

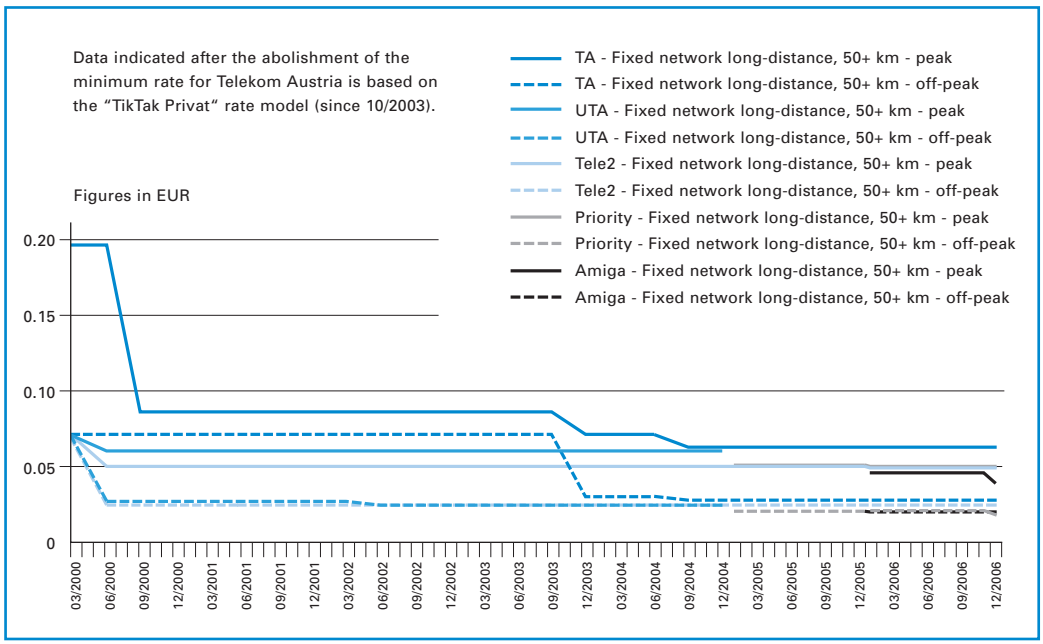
Aside from the substantial price reductions generally observed in the year 2000, the most dramatic reductions already took effect in the initial years of liberalization (1997 to 2000). As shown in Figures 45 and 46, between 2001 and 2003 there were almost no further price changes in the "minimum rate" in the respective comparisons of calls to national fixed-link networks (up to September 2003). In general, this also applies to charges for calls to national mobile networks (not included here). Likewise, the charts also show the direct and indirect price reductions in connection charges due to the abolishment of the minimum rate and the definition of "TikTak Privat" as the subsequent rate plan underlying all of the illustrations provided for the latter part of the period under review (10/2003 to 12/2006). Additional price reductions were only introduced in mid-2004, this time initiated by Telekom Austria. In general,

[7] All charges shown are gross charges (including VAT).

Telekom Austria's redesign of rate structures and its launch of optional rates led to (further) decreases in connection charges. The year 2006 again shows price reductions initiated by the alternative network operators. On the other hand, consumers were still able to enjoy price advantages with regard to the bundled products offered more and more frequently on the market, as shown in Figures 45 and 46. In addition to the optional rate plans mentioned above, which essentially combine monthly base fees and connection charges in various ways, this also refers to bundles which go beyond the confines of the (classic) voice telephony segment, including mobile and broadband services.

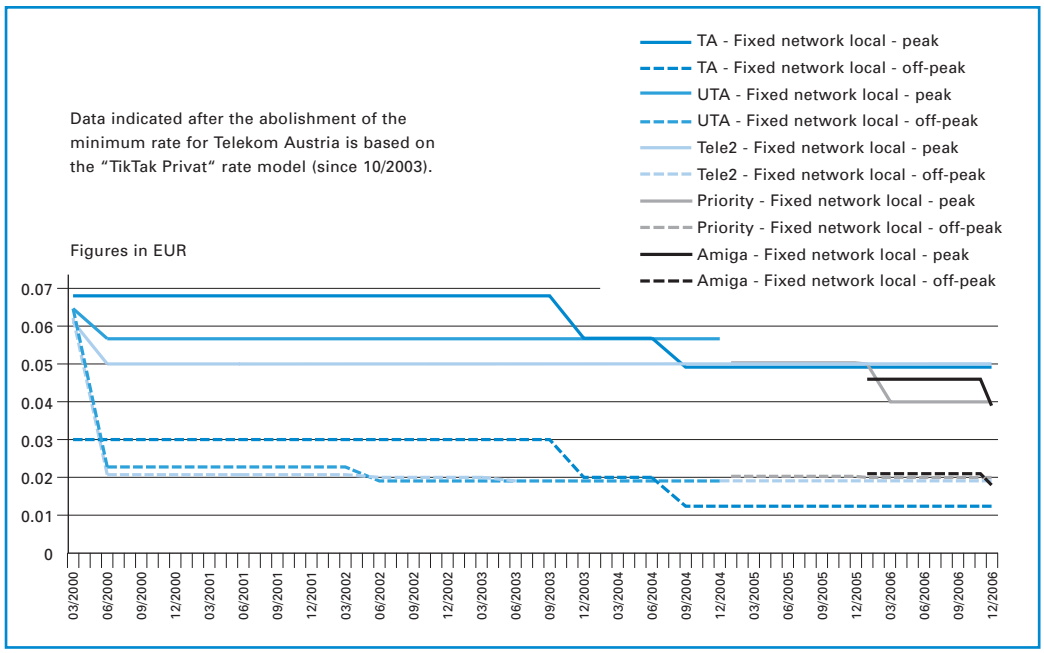
Increasing consolidation of prices in national fixed-link calls

Figure 45: Connection charges for national long-distance calls



Source: RTR

Figure 46: Connection charges for local fixed-link network calls



Source: RTR

On the markets for international fixed-link calls, Telekom Austria's rate structure is first compared to the connection fees charged by the most significant alternative providers, in each case during peak and off-peak times.

In order to depict the prices of international calls, a static presentation was used in order to account for the variety of international destinations and zones. Rates were selected according to traffic minutes terminated abroad for comparison purposes. Although this does not immediately reflect the relevant weighting on the retail markets, it still provides a sound approximation because the international destinations identified and ranked by volume in Table 15 also correspond to the most important rate groups used in various comparisons provided on the Internet as well as the relevant international studies (OECD, EU Implementation Report, etc.). The selection of operators is based on their relative importance to the overall market. Specifically, Telekom Austria is compared to the largest alternative operators representing each business model shown in Table 14. For example, Tele2UTA is the largest alternative carrier and subscriber network operator, Amiga and Finarea (with their "Telediscount" brand) in particular are good examples of successful resellers on the markets for international (residential) calls, and finally UPC/Priority Telecom is included as the largest alternative infrastructure operator in urban areas.

Based on comparisons with "TikTak Privat," Table 15 again refers to the residential user segment. In addition to the product name, the billing mode (pulse rate) used in each rate model is indicated in bold print.

Table 15: Connection fees for most important international call destinations

	Telekom Austria ("TikTak Privat") **60/1**	**Tele2UTA** ("Classic") **60/1**	**Finarea** ("Telediscount") **(depends on subscriber network operator)**	**Amiga** ("Amiga.premium") **1/1**	**UPC/Priority Telecom** ("Standard") **60/30** (Minimum charge: EUR 0.02)
	Connection charges in EUR (peak/off-peak)				
Germany	0.1896/0.099	0.099/0.099	0.044/0.044	0.05/0.05	0.17/0.17
Switzerland	0.1896/0.099	0.099/0.099	0.044/0.044	0.05/0.05	0.17/0.17
Italy	0.1896/0.099	0.099/0.099	0.044/0.044	0.05/0.05	0.17/0.17
Turkey	0.36/0.324	0.349/0.349	0.022/0.022	0.10/0.10	0.31/0.31
Hungary	0.1896/0.099	0.099/0.099	0.044/0.044	0.05/0.05	0.19/0.19
USA	0.1896/0.099	0.099/0.099	0.022/0.022	0.05/0.05	0.17/0.17
Poland	0.3096/0.229	0.254/0.254	0.022/0.022	0.05/0.05	0.31/0.31
UK	0.1896/0.099	0.099/0.099	0.022/0.022	0.05/0.05	0.17/0.17

Source: RTR

Price differences for international calls between communications network operators and resellers

Table 15 shows that Telekom Austria now only charges higher rates in some areas compared to the largest alternative communications network operators in the residential user segment. Compared to the group of communications service providers classified as "switchless" resellers or resellers with only very few infrastructure components, however, a massive price difference can be observed. At the same time, it is important to note that these price differences are accompanied by sometimes significant differences in quality. However, in recent years it has been increasingly possible to serve specific customer segments with these discount offers; this has above all intensified the (price) competition on the corresponding market for international services and brought about the corresponding shifts in market shares.

Analysis of implicit price developments

In all of the (explicit) descriptions above, it was necessary to omit entire product categories (i.e. calls to mobile networks) as well as certain details regarding rates from the discussion. In particular, the different billing modes (increments) for each rate plan, various discounts on individual rate options (e.g., free minutes and flat-rate Internet dial-up minutes) and other specific rate characteristics had to be omitted entirely from rate comparisons or could only be included in part.

In principle, such problems can be avoided by constructing a "price measure" by dividing revenues (where relevant in each case, i.e., on national or international call markets) by the corresponding number of voice minutes and thus calculating an "implicit" price basket.

Figure 47 shows the average price developments for international as well as national calls from a fixed location since the start of liberalization in Austria. For this purpose, an estimated value for Q1/1997 was derived in each case on the basis of rate information from the former

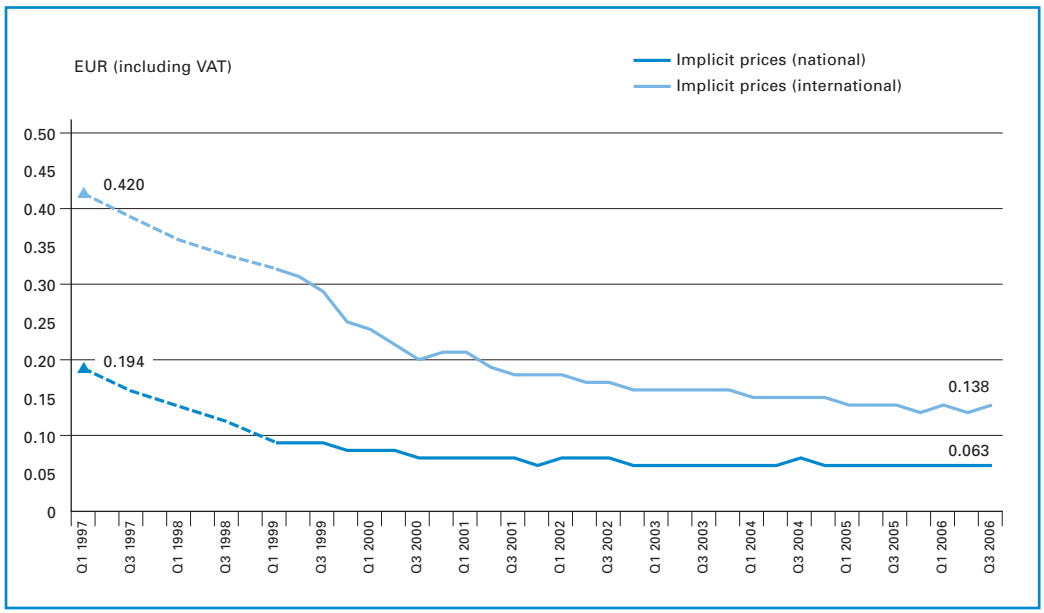
fixed-link monopolist Telekom Austria (enlarged) in order to depict the initial rate level. The ensuing data values up to and including Q4/1998 (broken lines) were then interpolated in order to illustrate the relevant development.

Significant price reductions in fixed-link calls in the course of liberalization

The prices calculated in this way reflect each "product" for national and international calls (calls to the fixed-link network and to mobile networks) in aggregate form for residential and non-residential customers. As in the analysis of explicit prices, it also becomes clear in this context that the most significant price reductions took place rapidly in the first stage of liberalization (with the corresponding initial values characterized by a monopoly structure). From 2003 onward, Figure 47 (like Figures 45 and 46) reveals a great degree of price stabilization, with relatively high potential for price reductions still existing in international calls among alternative operators. As shown in Figures 45 to 47, however, the constant trend in recent years also shows a similar pattern among residential and non-residential customers.

Regardless of the individual developments, Figure 47 also shows that at the end of 2006 consumers only had to pay an average of approximately one third the price for national and international fixed-link calls compared to the initial price in 1997.

Figure 47: Average price development since start of liberalization in Austria



Source: RTR

International comparison of rates

In this section, international rates are used as a benchmark against which the results on the Austrian market for fixed-link voice telephony can be measured. Significant indicators in this context include rates and rate developments.

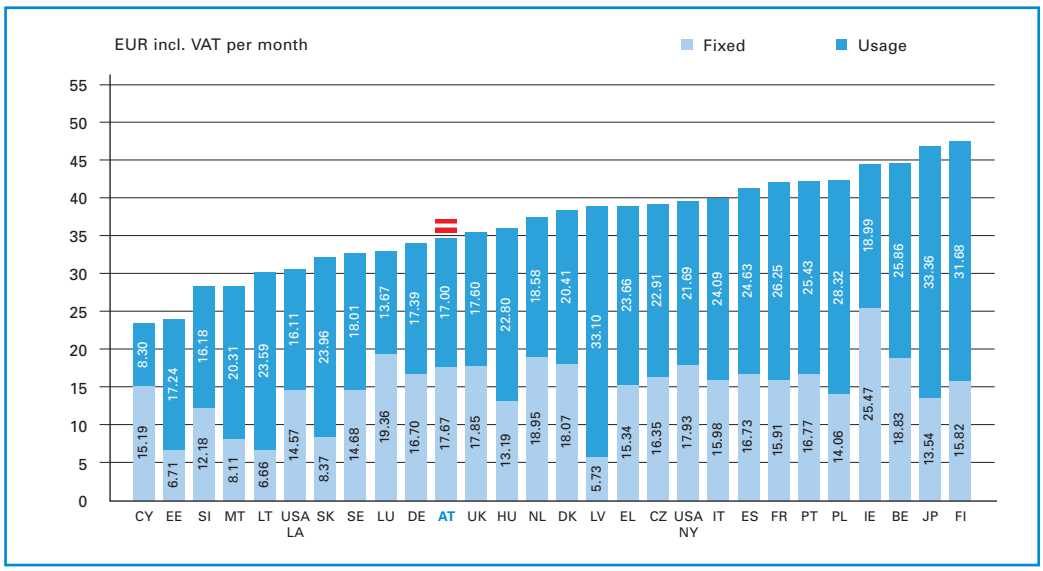
One problem inherent to international comparisons is the heterogeneous nature of rate models, accounting structures, market structures, etc. Therefore, the figures indicated here must be interpreted with some degree of caution. Due to the numerous problems and inaccuracies which inevitably arise in such international comparisons, it is not advisable to place excessive emphasis on exact positions.

The data set used for this comparison was the 12th Implementation Report published by the European Commission (Annex II).

In general, this comparison only uses the standard rates of each incumbent operator. As this selection completely disregards the rates offered by alternative operators, it creates distortions which become even greater as the incumbent's market share becomes smaller and that of its competitors (which, as shown above, 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.

International comparison of rates – Residential customers

Figure 48: Residential customers: Average monthly expenditure (including VAT, as of September 2006)



Source: 12th Implementation Report of the European Commission

With regard to the monthly base fee, the Telekom Austria rate package used in the comparison ("TikTak Privat") is just above the EU average. However, this relatively high monthly base fee is offset by low connection rates, which is why Telekom Austria is placed in the lower middle range among operators based on a basket of services (see Figure 48). This basket includes the monthly base fee, the connection setup charge, national calls over various distances, international calls as well as calls to mobile networks. Demand behavior and weighting factors are designed to reflect a "standard European residential user."

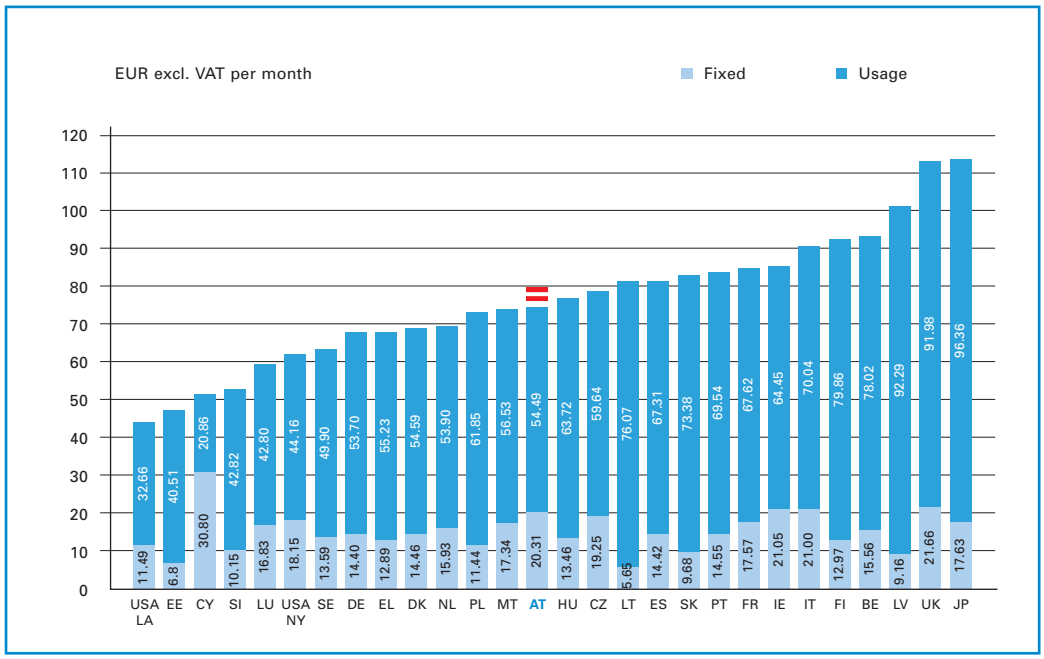
Austrian residential rates in the lower middle range by European comparison

International comparison of rates – Business customers

Figure 49 likewise shows the incumbents' monthly base fees and connection charges for business customers as of September 2006. As in the case of residential customers, Telekom Austria is again in the lower middle range among European operators (measured on the basis of a price basket). In order to reflect a representative "European business user," the basket not only includes the base fee and the setup charge but also national calls over various distances, international calls, and calls to mobile networks.

Austrian business rates and charges also in the middle range by European comparison

Figure 49: Business customers: Average monthly expenditure (excluding VAT, as of September 2006)



Source: 12th Implementation Report of the European Commission

5.2.2.3 Wholesale markets

In order to offer products on the retail markets, operators rely on wholesale services provided by other operators. Although these markets are not (or only hardly) perceived by the consumer, they represent an important element in functional competition. The advantage of wholesale products being available on the market lies in the fact that network operators do not have to construct all of the infrastructure in parallel, but can instead purchase services from other operators. This substantially reduces the barriers to market entry. Naturally, there is a close link between the wholesale and retail markets, as the services purchased on the wholesale market are ultimately included in retail products. As a result, the size and development of the wholesale markets are closely linked to those of the retail markets.

Since RTR published the TKMVO 2003 on March 17, 2003, three wholesale markets have been considered relevant in the fixed-link networks:

- The market for call origination on the public telephone network provided at a fixed location (origination);
- The market for call termination on individual public telephone networks provided at a fixed location (termination);
- The market for transit services in 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 generally refers to the exchange where at least one network operator is interconnected with the source network and at which traffic can be handed over close to the source.

Depending on its infrastructure, the operator will deliver calls to the exchange using its own infrastructure or purchase the necessary services on the wholesale markets.

Origination services largely provided internally

If an operator has customers connected directly to its network using its own (or leased) infrastructure, the operator provides the origination service itself and does not generate revenues at the wholesale level. This is the case in a vast majority of calls.

Origination services of Telekom Austria essential for carrier network operators

If an operator does not have infrastructure extending all the way to the customer (and thus operates as a carrier network operator), then the operator will have to pay for the service of origination. At present, Telekom Austria (TA) is the only network operator to offer this service, as TA is obligated to offer origination services due to its position of significant market power on the access markets for fixed-link voice telephony.

In addition to these origination services, the service of origination to target network-priced service numbers is also provided on the origination market. The latter origination service is provided in cases where retail customers make calls to toll-free numbers, numbers with regulated maximum prices, and value-added service numbers. In the case of calls to toll-free

numbers, the access network operator does not collect any fees from the retail customer. For the other types of numbers, the access network operator passes on the retail fee (collected from the subscriber) to the target network operator but is also compensated with a fee for its origination services.

Table 16: Distribution of origination services

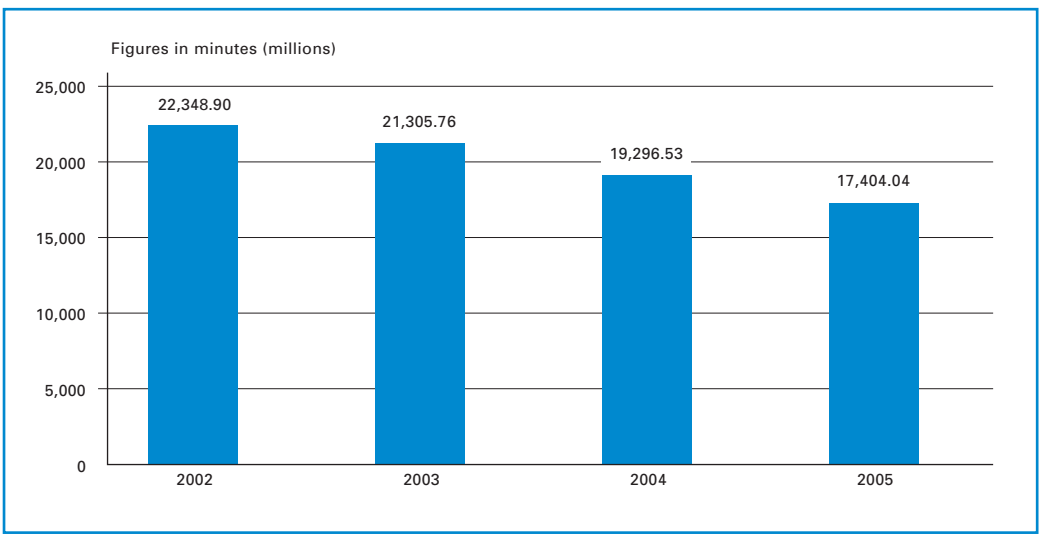
	2002	2003	2004	2005
Carrier network operator	33.04%	33.25%	32.41%	29.24%
Service number	1.52%	2.39%	3.37%	3.87%
Self-provided service	65.44%	64.35%	64.22%	66.89%

Source: RTR; no data collected for 2006

Volumes of origination minutes to target network-priced service numbers are low but rising rapidly.

Table 16 shows the distribution of origination minutes across the three categories of origination services. Two out of three origination minutes can be attributed to self-provided services, whereas nearly one third refer to origination services for carrier network operators, and origination for service numbers comes to approximately 4%. In this context, it is worth noting the steady increase in origination services for service numbers (from 1.52% in 2002 to 3.87% in 2005), which play an increasingly important role in fixed-link voice telephony.

Figure 50: Development of origination minutes

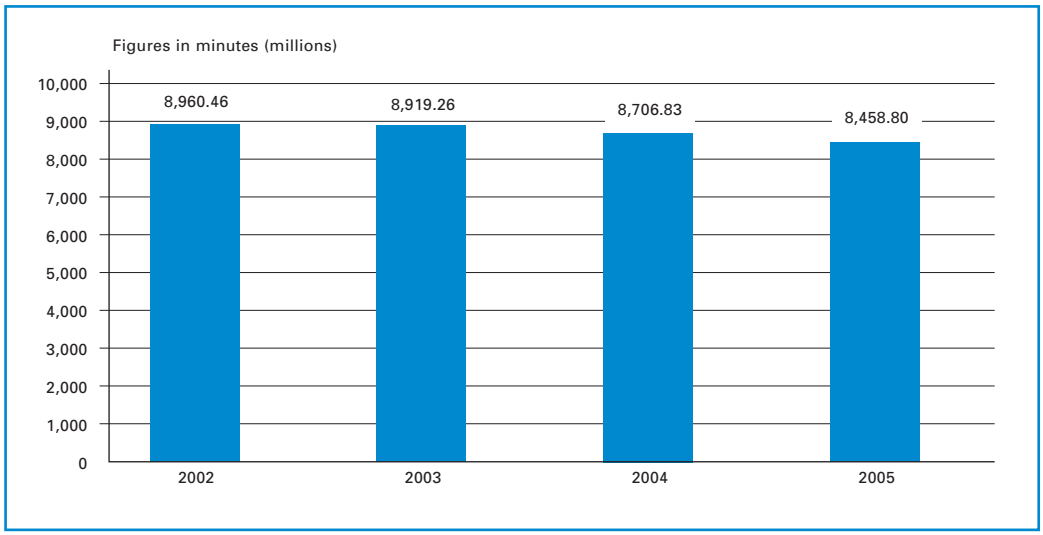


Source: RTR; no data collected for 2006

Decline in origination minutes by more than 20% over four years

In line with the development on the retail markets, the overall number of origination minutes has declined. Over four years, this number of traffic minutes (voice and dial-up online minutes) declined by more than 20% (see Figure 50), and no signs of a trend reversal can be detected at present.

Figure 51: Development of the HHI on the origination market

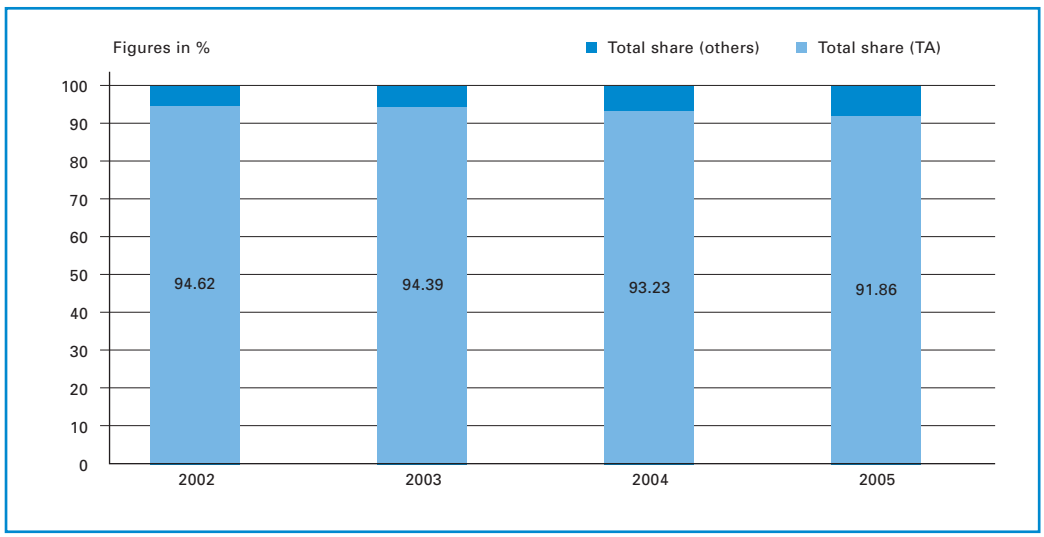


Source: RTR; no data collected for 2006

HHI indicates lack of competition on the origination market

The Hirschman-Herfindahl Index (HHI), which is calculated as the sum of squares of market shares, is one of many indicators used to evaluate competition. HHI values range from 1 to 10,000, with lower HHI values pointing to less concentrated (and thus competitive) markets. The HHI for the origination market amounts to approximately 8,500 (see Figure 51), meaning that in principle we can assume that competition on this market is not sufficiently developed. The regulatory authority has identified Telekom Austria as the dominant (SMP) company on this market.

Figure 52: Telekom Austria's share of the origination market (in terms of minutes)



With a market share of 92%, Telekom Austria dominates this market.

Source: RTR; no data collected for 2006

Telekom Austria has a market share of 92%, and this proportion has only decreased slightly since the start of liberalization in Austria (see Figure 52). From the current perspective, this company's market share can not be expected to decrease in the coming years, as it develops in parallel to the availability of wired subscriber lines.

5.2.2.3.2 Termination

Termination is a wholesale service provided by every subscriber network operator in which incoming traffic is transported to the subscriber's network termination point from the last interconnectable exchange before that network termination point.

The unique feature in the definition of termination markets is that they are specific to each network operator, and therefore each operator of a subscriber network has its own termination market as defined under Art. 1 No. 8 TKMVO 2003. Termination services can only be rendered by the provider network to which the subscriber is connected.

Termination minutes stagnating overall

In Austria's fixed-link networks, a total of approximately 6 billion minutes were terminated for other operators, thus generating revenues of approximately EUR 67 million. Self-provided termination services came to approximately 5 billion minutes. Traffic minutes as well as revenues have declined in recent years.

Telekom Austria's termination service most important

Termination in Telekom Austria's network still remains the most important termination service on the fixed-link network, as Telekom Austria has the largest number of directly connected customers and terminates several times more call minutes than the other fixed-link operators. This wholesale service is required by almost all network operators.

UPC and Tele2UTA recording significant termination volumes

Due to its number of connected subscribers, Telekabel (UPC), which operates in certain regions of Austria, has the largest number of termination minutes among the alternative operators, followed by Tele2UTA. The other fixed-link network operators handle substantially fewer termination minutes.

Different obligations for Telekom Austria vs. alternative operators

Due to its large number of connected subscribers, its size and its power on other markets, Telekom Austria would bring about different competition problems than smaller network operators in the absence of regulation. 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.

The other network operators which provide termination services and collect a fee in return are only required to comply with regulated maximum limits for termination charges in order to address the competition problem identified in their case (i.e., excessively high pricing).

5.2.2.3.3 Transit

Transit services refer to carrying traffic between two exchanges which are interconnectable with different networks or between two zones around interconnectable exchanges. These services are therefore provided by communications network operators in order to cover certain line sections and can not be regarded as origination or termination as described above.

Operators which transport traffic out of their own networks provide transit services

All network operators which transport traffic from one exchange to another provide services on the transit market. This service can be provided within as well as beyond the boundaries of the operator's own network. The operators which offer services on this market are thus 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. In addition, these transit network operators offer international termination services for other operators. Carrier network operators as well as all other companies which are directly interconnected offer transit services as part of direct interconnection via joining links. When traffic flows via a joining link, a transit service is provided from one network to another, which replaces a previously external transit service. As traffic via joining links can be used as a substitute for transit services, it can be assigned to this market. Naturally, a company can offer more than one type of transit service at the same time.

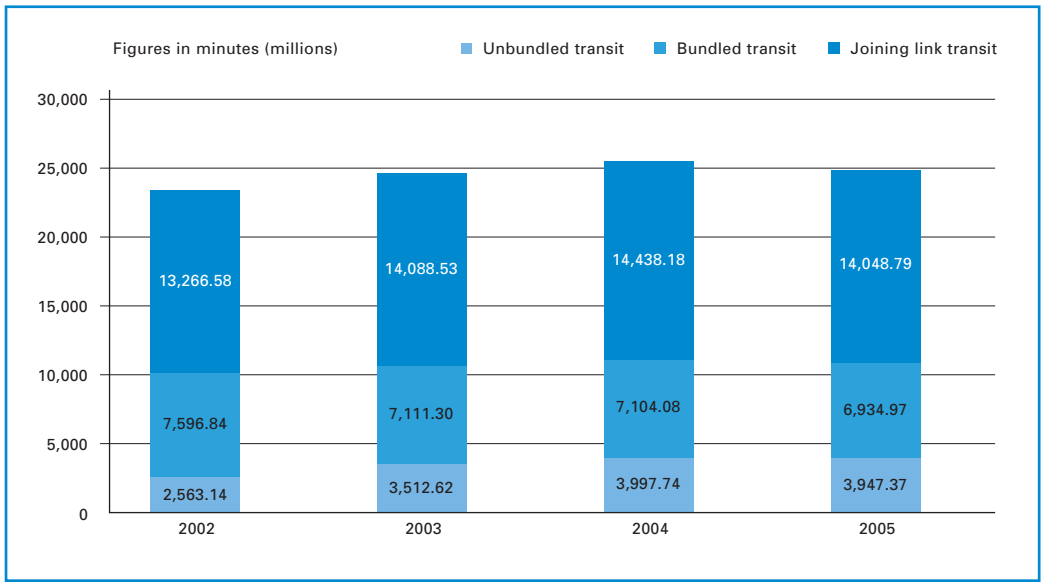
EU vetoed market analysis in 2004.

The European Commission did not agree with the market definition which includes joining links, as the Commission does not regard traffic via joining links as a substitute for transit services and therefore does not classify this service as part of the transit market. As a result, the Commission vetoed the draft decision notified by the TKK based on the results of its analysis of the transit market.

As the European Commission took a different view and this market has not yet been analyzed further, the regulatory measures imposed under the former legal framework were still applied. As a result, the fees charged by Telekom Austria for unbundled transit and for its bundled products were subjected to regulation.

Against this backdrop, the regulatory authority examined the market once again and came to the following results:

Figure 53: Total traffic minutes on the transit market

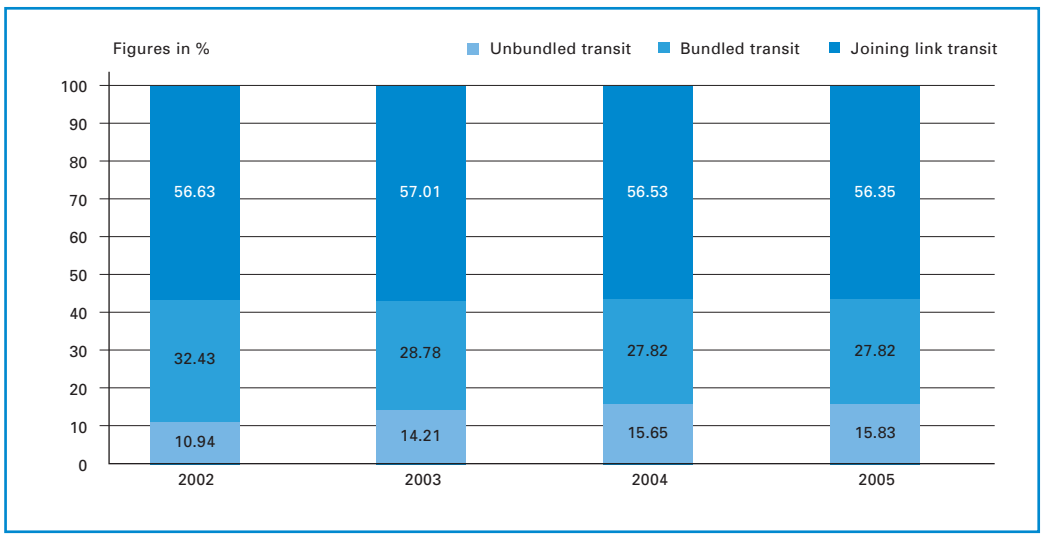


Source: RTR; no data collected for 2006

Many alternative operators provide transit themselves

Traffic minutes on the transit market have remained constant in recent years. Many alternative operators have already completed the substitution of externally provided transit minutes with joining link transit, meaning that major shifts in transit can not be expected in the coming years. The trend of recent years is developing in such a way that alternative network operators offer other (smaller) operators transit services and therefore compete directly with Telekom Austria. The alternative network operators could not offer these services until they had met the necessary prerequisites for this purpose: On the one hand, they have realized a large number of interconnections with other network operators, especially Telekom Austria, and on the other hand they can also rely on the use of leased lines. As a result, they are also able to offer transit services for third parties.

Figure 54: Types of transit services

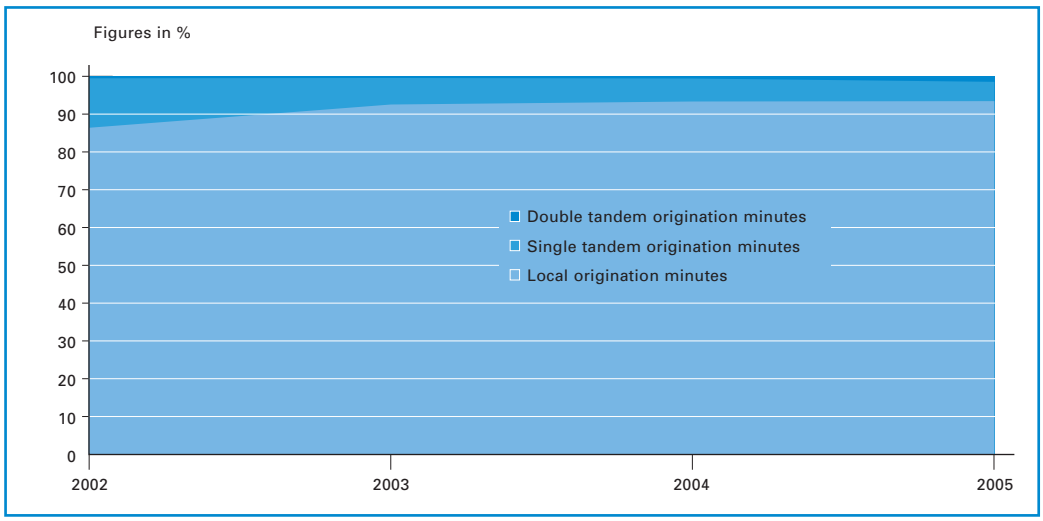


Source: RTR; no data collected for 2006

Several operators also offer transit services for third parties, thus increasing the volume of unbundled transit.

Due to this trend, the share of unbundled transit services (i.e., transit services provided for third parties) has increased steadily. Bundled transit, which is mainly provided by Telekom Austria, has declined in terms of share because demand for the bundled products of transit and termination or transit and origination is lower due to the availability of alternatives. Transit via joining links has remained relatively constant.

Figure 55: Shares of local origination and origination with bundled transit (Telekom Austria traffic only)



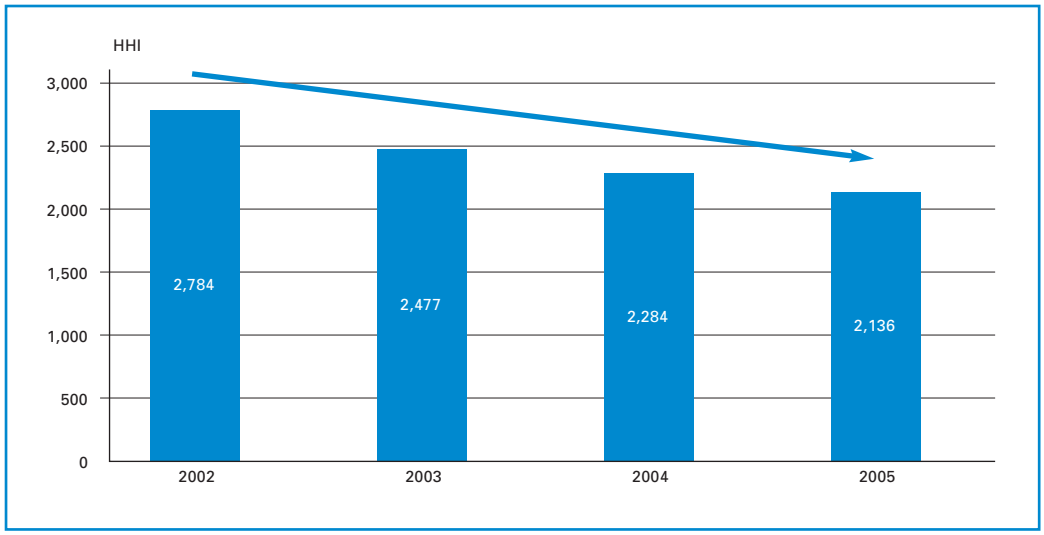
Source: RTR; no data collected for 2006

Figure 55 clearly shows that local traffic which originates in Telekom Austria's network and is passed on to alternative network operators without transit services has already reached 90% (in terms of minutes), while only the remaining 10% of minutes is provided in the form of bundled transit services.

Share of bundled transit declining

In terms of absolute revenues, unbundled transit also increased substantially between 2002 and 2005, which can be seen as an indication of functional competition on this market.

Figure 56: HHI for the transit market

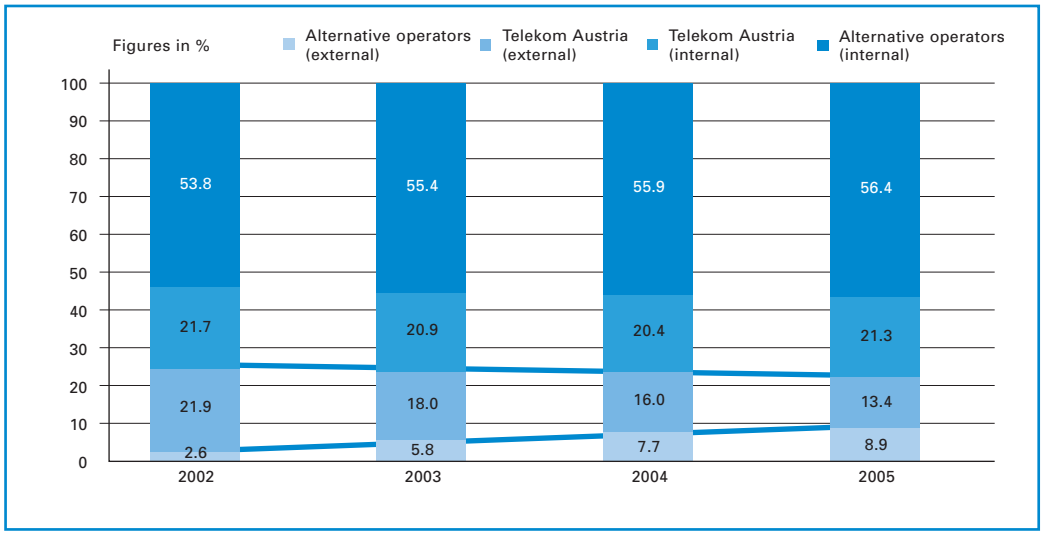


Source: RTR; no data collected for 2006

The HHI for this market has also continued to decline over the last four years, falling to a mere 2,136 in 2005. This low value indicates declining concentration and increasing competition on this market (NB: Telekom Austria's acquisition of eTel is not yet reflected in the data).

HHI points to effective competition on the market

Figure 57: Comparison of external and internal transit for Telekom Austria and alternative network operators



Source: RTR; no data collected for 2006

Figure 57 illustrates once again that the transit services of alternative network operators were expanded significantly and also readily accepted on the market between 2002 and 2005. While Telekom Austria's services continue to decline, the alternative network operators were able to attain a share of 8.9% in 2005.

No objection to decision raised by European Commission

Based on the arguments provided above as well as other evidence, the TKK came to the conclusion that effective competition prevails on the transit market, meaning that the existing regulatory measures applied to Telekom Austria no longer needed to be maintained. In a letter dated March 6, 2007, the European Commission did not raise any objections to the draft decision, therefore the regulatory measures were removed after a transition period.

5.2.3 Mobile communications market

5.2.3.1 Provider structure

Mobile network operators

Due to the short supply of frequencies in Austria, the mobile communications market has far fewer participants than the fixed-link market. New companies can only enter the market if they can obtain frequency usage rights through allocations or transfers.

Four independent mobile network operators, one exclusively UMTS-based

At present, there are four economically independent mobile network operators on the Austrian market. In the fall of 2005, T-Mobile took over tele.ring, and the acquisition was cleared by the European Commission in April 2006. Since that time, tele.ring has no longer been regarded as an independent company despite its separate market presence, which is mainly due to competition considerations. Table 17 provides an overview of the mobile network operators operating on the

market as well as their frequency utilization and transmission technologies. All four providers offer UMTS services, with Hutchison 3G operating as an exclusively UMTS-based network operator.

UMTS was launched on the Austrian market in 2003, and all of Austria's mobile network operators have been offering mobile broadband products using the faster HSDPA technology since 2006.

Table 17: Active mobile networks and years in which each technology was launched

	GSM		EDGE	UMTS	HSDPA
	900	1800			
Mobilkom Austria	1994	1999	2005	2003	2006
T-Mobile Austria	1996	1999	2006	2003	2006
One	2004	1998	X	2003	2006
Hutchison 3G	X	X	X	2003	2006

Source: RTR

Service providers in mobile communications

In addition to vertically integrated mobile network operators, the following business models of service providers without their own radio communications networks are currently relevant in mobile communications:

- **Airtime resellers**
  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 technical production processes underlying these services. From a value creation perspective, these providers mainly perform activities at the retail level (customer service, billing and acquisition). Resellers do not operate their own telecommunications infrastructure (e.g. switches), nor do they administer SIM cards, have access to network intelligence, or interconnect with communications network operators. Instead, they purchase the required wholesale services (airtime) from a mobile network operator.

- **Mobile virtual network operators**
  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 (HLR, MSC, etc.), possess the corresponding addressing elements (e.g., a mobile network code), and administer SIM cards themselves. As they do not have their own radio communications networks, these operators are forced to rely on the corresponding wholesale services of mobile network operators. This wholesale service is referred to below as MVNO access, which is actually a form of roaming agreement. In Austria, Tele2UTA uses this type of business model.

Service providers also offer mobile communications services on the retail market

In addition to the four mobile network operators, there are also service providers without their own radio communications networks operating in Austria. These providers are listed in Table 18. In 2006, an additional reseller named eety, in which One holds a participating interest, entered the market. This reseller focuses on the market for inexpensive international calls. Another service provider, Yesss!, is wholly owned by One. As a result, the significance of these providers in terms of competition must be evaluated in conjunction with One. The market share of all service providers in 2006 only came to 2% of retail revenues and 2.5% of retail minutes.

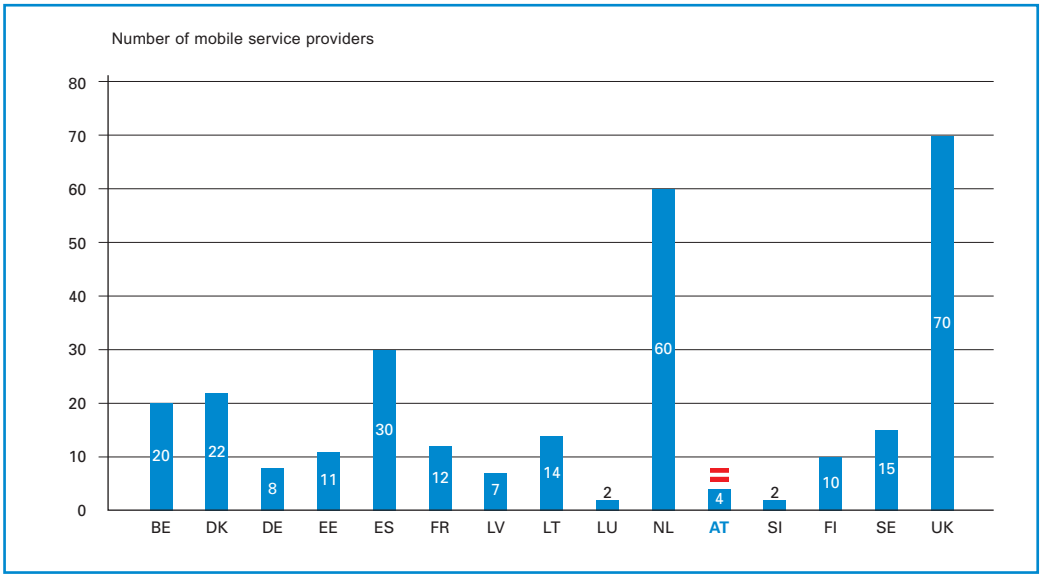
Table 18: Active service providers in mobile communications

Company	Type	Market entry
Tele2UTA	MVNO	2003
eTel	Airtime reseller	2004
Yesss!	Airtime reseller	2005
eety	Airtime reseller	2006

Source: RTR

The EU comparison from July 2006 shown in Figure 58 shows that the number of service providers varies widely between countries. Over time, the number of providers has changed dramatically. In some countries, there is a substantially larger number of service providers than in Austria, while other countries have no service providers operating on the market (not shown below).

Figure 58: Number of mobile service providers in EU countries (July 2006)



Source: 12th Implementation Report of the European Commission. Note: In Estonia, Spain, Netherlands and Lithuania, not all of the service providers shown were still operating on the market.

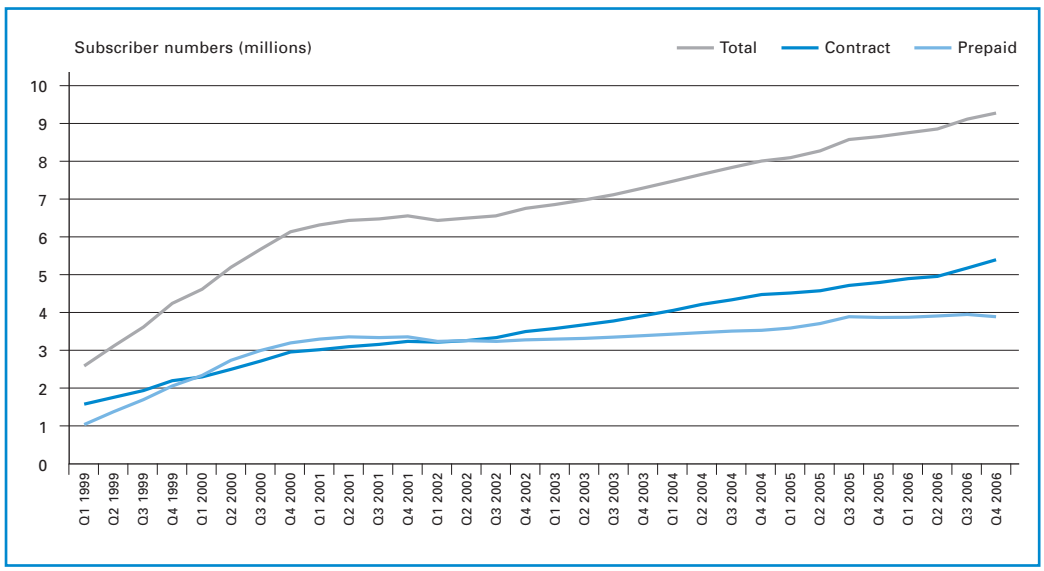
5.2.3.2 Market development

Development of number of subscribers and penetration rates

Although Austria's mobile penetration rate already reached 100% in 2005, the number of activated subscriber numbers has still continued to rise. This increase has mainly been driven by the rising number of contract customers. In 2006, the average penetration rate throughout Europe exceeded the 100% mark and reached 103.2% in EU countries (Source: 12th Implementation Report). At the same time, Austria's penetration rate came to 108%.

The penetration rate is measured in terms of activated subscriber numbers compared to the country's population, therefore it only permits limited conclusions regarding the share of the population which actually uses mobile communications services. Surveys show that approximately 17% of the Austrian population does not have a cell phone (Source: Integral's Austrian Internet Monitor, Q4/2006).

Figure 59: Development of activated subscriber numbers



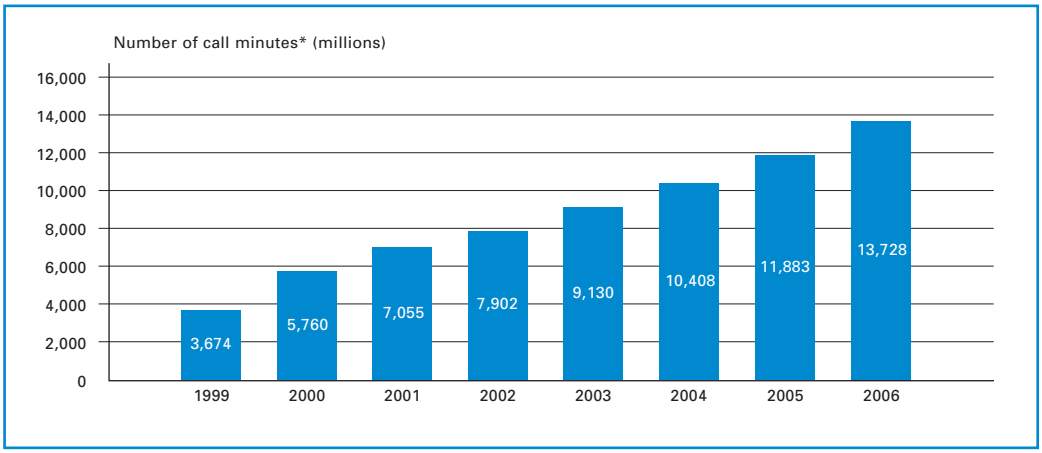
Source: RTR
NB: Data interpolated between Q4 2003 and Q3 2004

Development of traffic volumes

As regards traffic volumes, the steady increase in call minutes and text messages has remained unchanged. Call minutes have shown continuous growth rates. Between 2003 and 2006, the change compared to each previous year was between +14% and +15.5%. After reaching a plateau in 2004 and 2005, the number of text messages again increased drastically (+24%) in 2006.

Continued growth in demand for call minutes and text messages

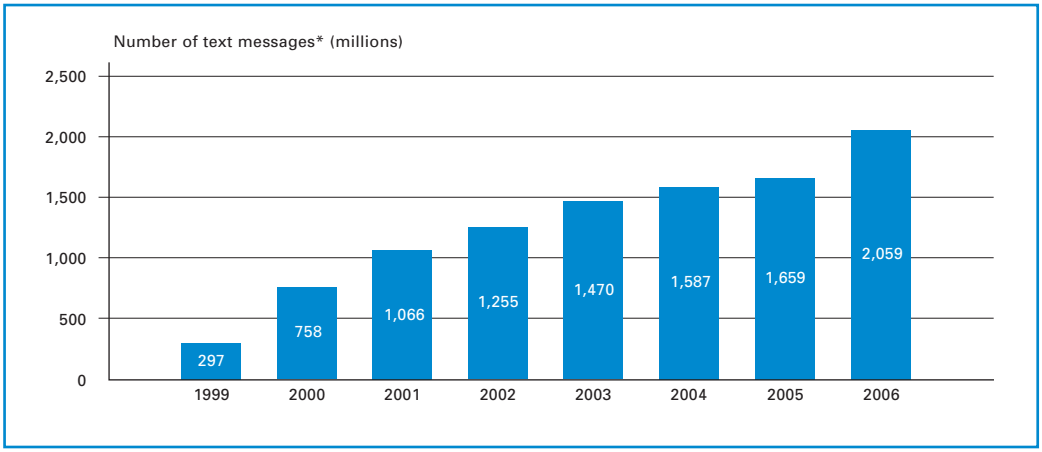
Figure 60: Call minutes on the retail market (technical measurement)



Source: RTR

* These minutes refer to the actual time retail customers spent talking on their mobile phones. In contrast, billed call minutes refer to the number of call minutes charged to retail customers.

Figure 61: Number of text messages on the retail market (technical measurement)



Source: RTR

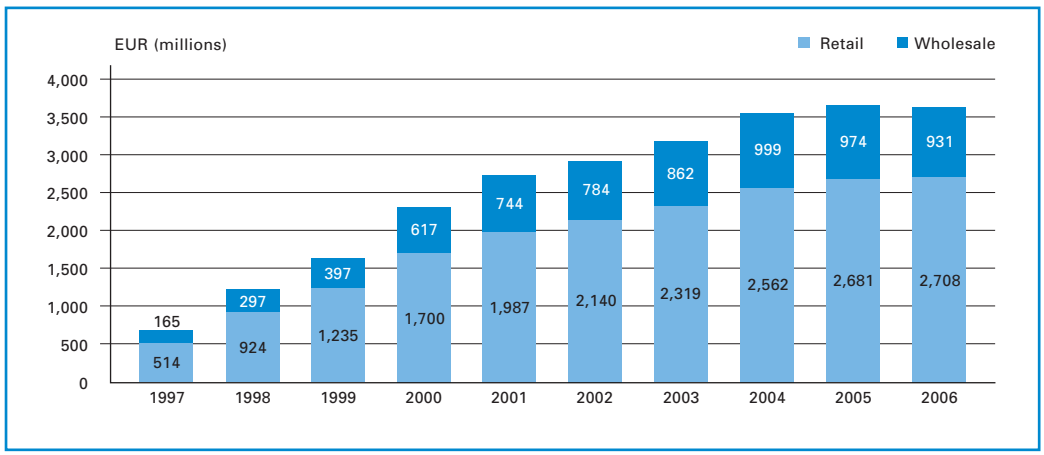
* This figure refers to the actual number of text messages sent by retail customers. In contrast, billed text messages refer to the number of text messages charged to retail customers.

Development of revenues

Slight decrease in overall revenues for the first time

Despite the growing number of subscribers and recent growth in call minutes and text messages, a slight decrease in overall revenues was recorded for the first time in 2006, although this decline only came to -0.4% compared to the previous year. Overall revenues are calculated on the basis of retail revenues as well as wholesale revenues from termination and visitor roaming. Retail revenues showed a slight increase (+1%), meaning that the overall decline in revenues can be attributed to decreasing wholesale revenues. Above all, revenues from termination declined despite an increase in the number of termination minutes; this can be attributed to a regulatory order to reduce termination charges.

Figure 62: Development of revenues in mobile communications



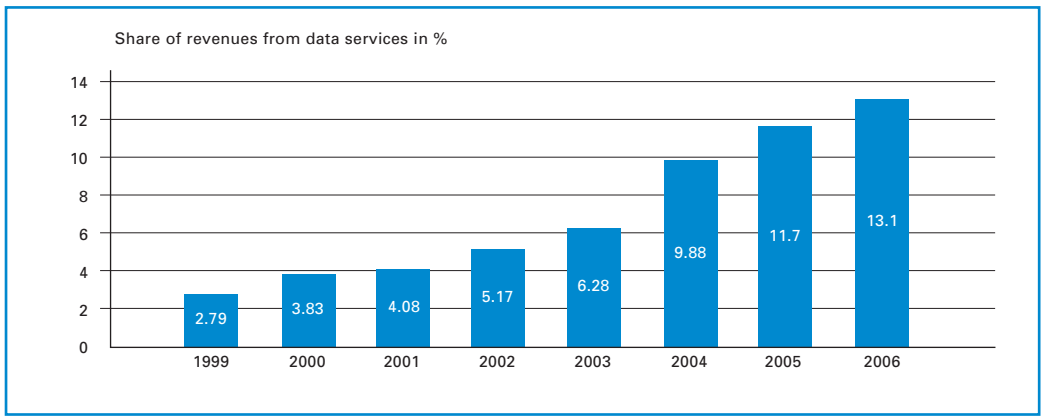
Source: RTR

Figure 62 shows the overall development of revenues since 1997. After heady growth in the years 1997 to 2004, revenues appear to be undergoing a process of consolidation.

Significance of data services continues to rise

However, data services have shown further growth in terms of revenues. This includes text messages (SMS), MMS, video telephony and other data transmission services. Compared to the previous year, revenues from data services increased by approximately 12% in 2006. As a result, the share of retail revenues attributed to data services has also increased markedly (cf. Figure 63), thus continuing the trend from the previous years.

Figure 63: Share of data services (including SMS and MMS) in retail revenues



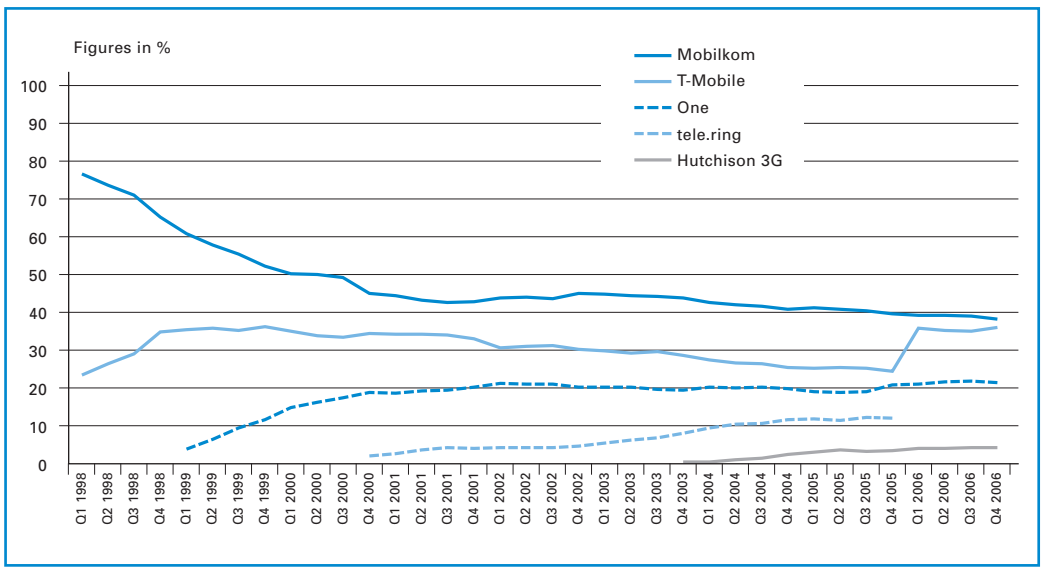
Source: RTR

Market shares and concentration

Figure 64 below shows the market shares of mobile network operators in terms of subscribers (not including service providers) over the last eight years.

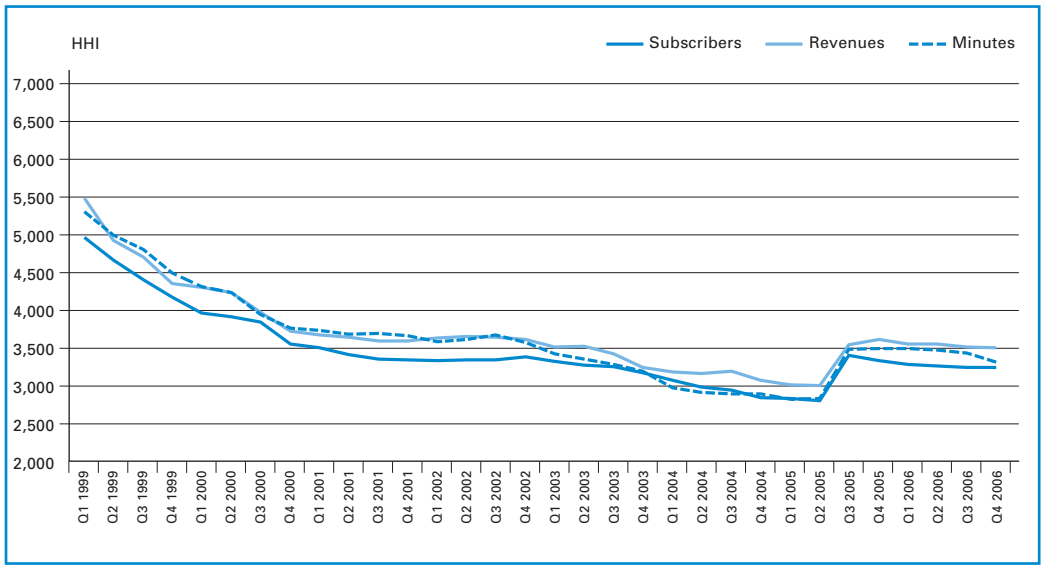
The development over the last two years mainly shows a trend toward convergence between the two largest operators due to T-Mobile Austria's acquisition of tele.ring, the fourth largest operator at the time. Mobilkom, the market leader, dropped below 40% (albeit only slightly) for the first time in 2006. Thanks to its acquisition of tele.ring, T-Mobile Austria's market share is now 35%. T-Mobile Austria is followed by One, whose market share is significantly smaller (about 20%) but shows a noticeable upward trend compared to the previous year. Hutchison 3G's market share is just over 4%.

Figure 64: Development of market shares (basis: number of subscribers)



Source: Mobile Communications

Figure 65: HHI for the retail mobile communications market



Source: RTR / Mobile Communications

Until 2001, the HHI declined continuously due to the market entry of tele.ring and One. This value was given even more downward impetus in 2003 due to the entry of Austria's fifth mobile network operator, Hutchison 3G. It is not surprising that the HHI for this market shows a pronounced increase upon T-Mobile Austria's acquisition of tele.ring. Since that time, the HHI has been declining slowly, and this is most pronounced in the HHI in terms of subscribers. At the end of 2006, the HHI showed values between 3,200 and 3,500, depending on which characteristic is used as the basis for calculation. The index is highest in the case of revenues, which indicates that the larger companies also have the customers which generate the highest revenues.

5.2.3.3 Comparison of rates with other EU countries

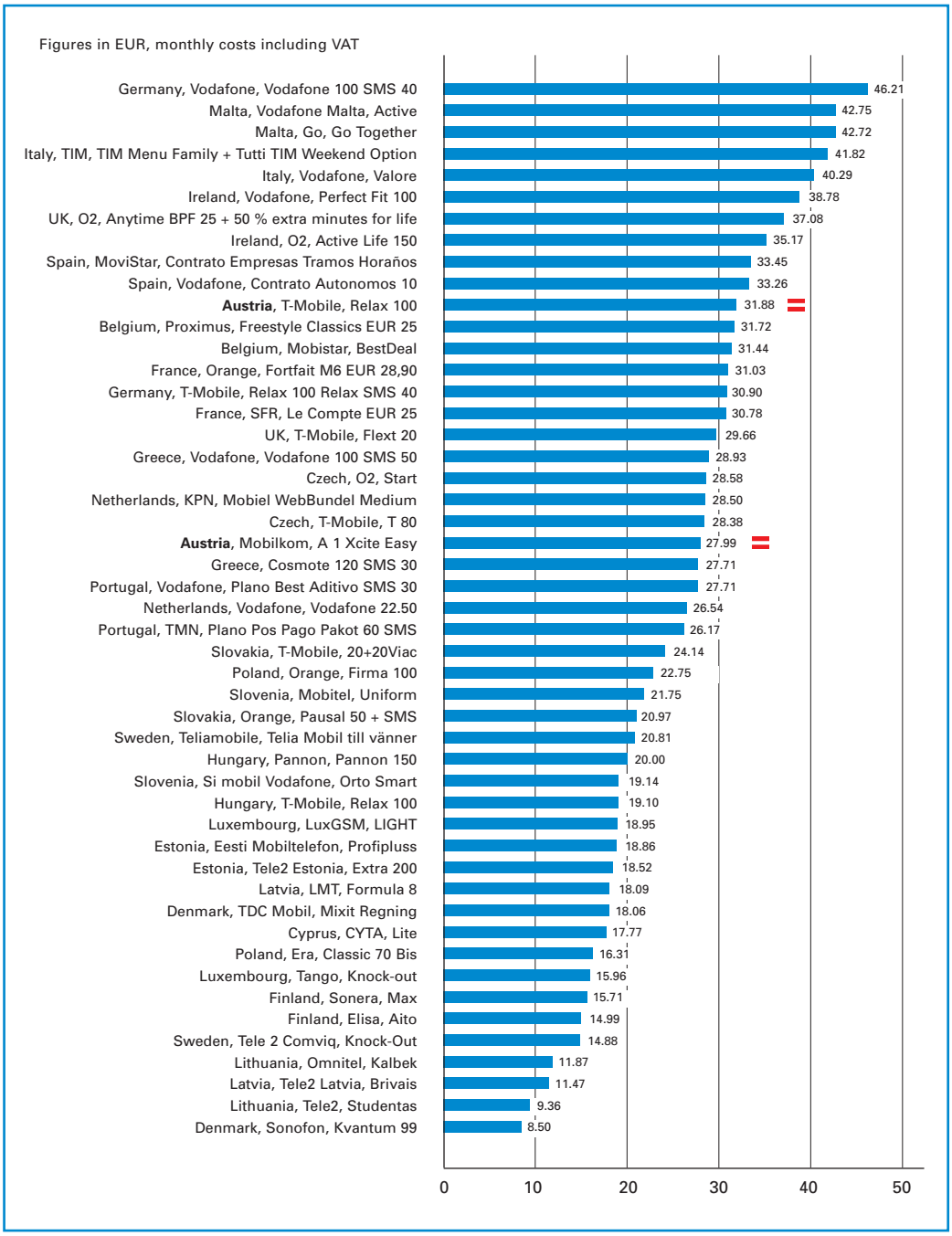
The Implementation Report regularly publishes EU-wide comparisons of rates based on baskets of services; however, these were redesigned in 2006, thus making comparisons rather difficult. There are three OECD baskets which are intended to reflect usage profiles of differing intensity. The calculation of baskets for each country is based on the lowest contract rate offered by one of the two largest mobile network operators (based on the number of subscribers).

As an example, the results for the medium-intensity basket are shown here (cf. Figure 66).

Austria in lower middle range in EU-wide comparison

At 28th or 39th place (out of 49), Austria can be classified in the lower middle range in terms of mobile rates. The situation is similar for the large basket (32nd or 38th place). With regard to the small basket, Austria places best compared to the other two usage profiles (24th and 35th place; not shown).

Figure 66: EU-wide comparison of rates for the OECD's medium basket in 2006



Source: 12th Implementation Report of the European Commission

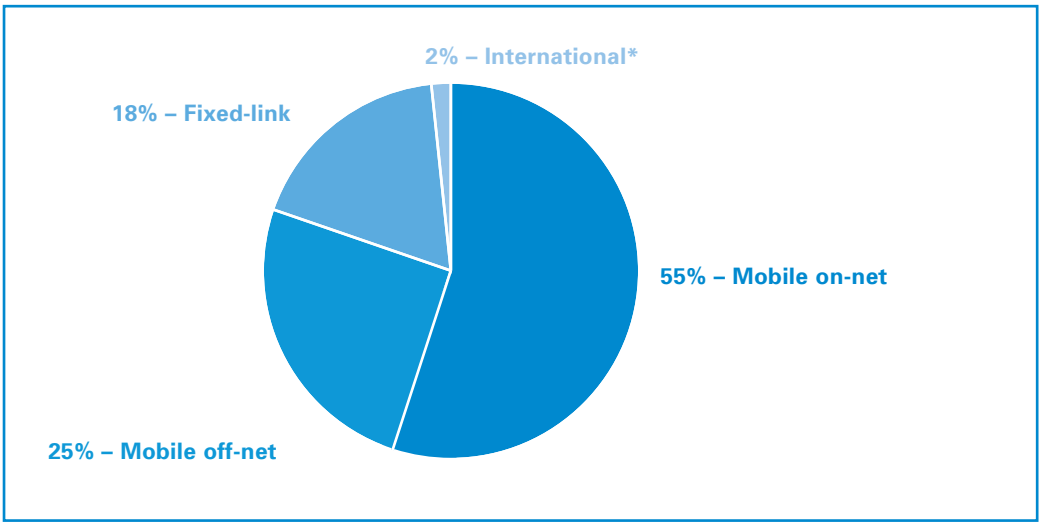
5.2.3.4 Wholesale termination market

Termination in mobile communications networks is an interconnection service and serves to ensure that subscribers can reach one another across various networks. As a result, termination is a prerequisite for functional communication. When one subscriber calls another subscriber in a different mobile network, this kind of (off-net) call is either routed directly (direct interconnection) or indirectly via a transit network operator (indirect interconnection) using a predefined interconnection point to the network of the subscriber receiving the call, and from there the call is routed to the relevant subscriber. For this service, the mobile communications network operator charges a termination fee.

The delivery of the call to a certain subscriber (i.e., the service of termination) can only be handled by the operator which runs the network to which the called subscriber is connected. As a result, each operator has its own termination market, which is therefore a monopoly market (cf. fixed-link termination, Section 4.2.2.2.3). In total, there are currently five providers – and thus five markets – for mobile termination services in Austria. In addition to the four competitively independent mobile network operators, the MVNO Tele2UTA also provides termination services for its mobile customers.

Users of mobile termination services include domestic and foreign fixed-link operators and mobile network operators, as well as the mobile network operator itself for calls within its network. Nowadays, less than one fifth of calls to mobile telephone networks come from the national fixed-link network. More than half of incoming calls are from the same network (on-net). If we consider mobile-to-mobile calls only, 69% of these calls are made within the same mobile network (on-net).

Figure 67: Sources of calls to Austrian mobile networks (as of 2005)



Source: RTR
* Clearly attributable to international calls

On-net/off-net price differentiation

Telecommunications networks are characterized by clear network externalities. The more subscribers a network has, the more attractive it is to the user. By means of interconnection, these network effects are (in part) neutralized, which means that regardless of which operator a user chooses, the user can still reach any subscriber and thus benefit from greater network externalities.

Network externalities are (in part) reactivated by discrimination between on-net and off-net calls. On-net rates which are lower than off-net rates give rise to price-induced network externalities which make the network of a smaller operator less attractive because it costs the consumers less to use a large network. In addition, this can also increase the costs of switching operators. Price discrimination between on-net and off-net calls is therefore primarily an instrument of competition. The sometimes very large price differences can not generally be explained by cost differences or Ramsey prices.

Up to now, substantial differences have been identified between the charges for on-net and off-net calls. In the meantime, we have been able to observe a departure from the on-net/off-net price differentiation policy, as confirmed by several rate plans launched in the recent past (examples of such rates are provided in Table 19). This can largely be attributed to the regulatory reduction of termination fees, and thus also the decreased costs of off-net calls as well as reduced subsidization potential for on-net rates.

Table 19: Rates without the less expensive on-net rate

Operator	Rate
Tele2UTA (Champion)	8 cents to all networks
Yesss!!!	6.9 cents to all networks
Mobilkom (Bob)	7 cents to all networks
tele.ring (Alles 5)	5 cents to all networks
One (Light)	8 cents to all networks
T-Mobile Austria (Klax Total)	9 cents to all networks

Source: RTR survey
Figures in EUR cents (including VAT)

In contrast to the retail market, the wholesale markets for termination are deemed relevant markets under the TKMVO (cf. Section 4.2.2). Therefore, these markets were again subjected to evaluation in the course of the second round of market analysis procedures in 2006. In this process, the regulatory authority determined that self-sustaining competition does not prevail on these mobile termination markets (cf. Section 4.2.2.2.8). The arguments supporting this result are the monopoly position in termination as well as the lack of demand-side countervailing power in order to put pressure on termination charges.

Termination and interconnection function in a similar way in the case of text messages, but there is a substantial difference in the structure of demand. Text message services are mostly provided for mobile network operators and only to a limited extent for fixed-link operators. Text message termination is currently unregulated. However, the European Commission is also considering including this market in its recommendations regarding relevant markets, as is already the case with the termination of voice services.

5.2.4 Broadband

5.2.4.1 Introduction

An alternative network operator or Internet service provider (ISP) might offer broadband access for retail customers using self-operated access technologies such as fiber optics (fiber to the home, or FTTH), power lines (PLC), radio networks (WLAN) or cable television networks (CATV), or by using Telekom Austria's unbundled copper-wire access network (i.e., purchasing bitstreaming as a wholesale service).

Bitstreaming is generally associated with xDSL (ADSL, SDSL, etc.). The provision of technical systems for xDSL access and generally the routing of traffic to a network interconnection point (at which the bitstream is transferred to the alternative operator) are handled by the wholesale provider. One example is Telekom Austria's wholesale xDSL offer (the "ISPA offer"). The term "open access" is used for a comparable product in cable television networks.

In unbundling, the respective subscriber's local loop is (physically) connected to the unbundling partner's network in a separate room (i.e., a collocation room) at the MDF.[8] For this purpose, the unbundling partner needs to make considerable investments in the adaptation of the collocation room, backhaul[9] as well as separate switching equipment. These investments can only pay off if a sufficiently large number (critical mass) of subscribers wish to be unbundled by the unbundling partner at the location of the respective MDF (i.e., in the local loop area).

[8] The MDF is located either at a remote concentrator or switching exchange of Telekom Austria.

[9] This can also be implemented using leased lines.

It is thus also possible to use the alternative wholesale product of bitstreaming (broadband xDSL access) at the next level of the value creation chain. In the case of bitstreaming, the investments to be made by the alternative operator or ISP are basically confined to constructing its own network infrastructure[10] in order to connect to at least one of nine access points (PoPs) at which data traffic is transferred from Telekom Austria to the respective wholesale bitstreaming customer. Depending on the connection realized, national or regional charges of varying amounts will be incurred.

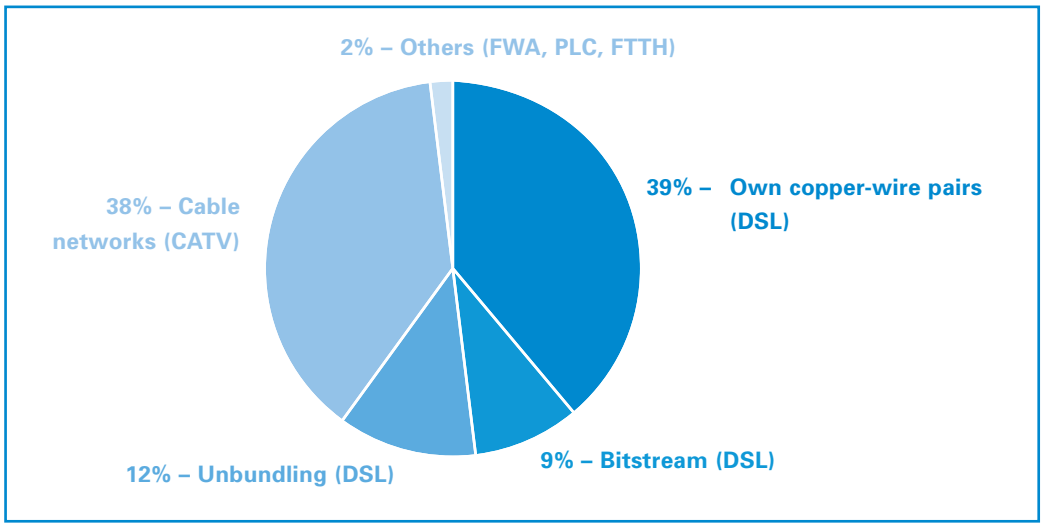
5.2.4.2 Retail market for broadband Internet

At the end of 2006, fixed-link broadband Internet connections[11] were available for almost all households in Austria (nearly 96%), and more than 40% of households had taken advantage of such offers. This comparison makes it clear that the services are offered by the network operators, but the customers' use of the services is nowhere near their full potential.

The figure below shows the distribution of technologies used on the retail consumer market.

Figure 68: Types of broadband access

More than half of all broadband Internet access is provided using DSL.



Source: RTR

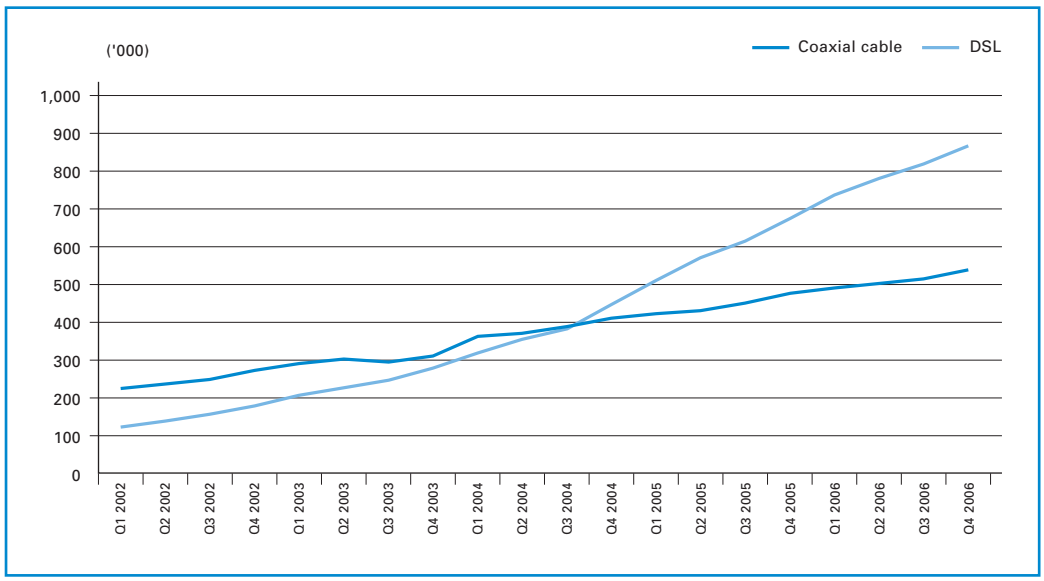
This depiction makes it clear that approximately 60% of broadband connections are provided using DSL access technology.

[10] This can also be implemented using leased lines.

[11] For more information on the relevant broadband technologies, please refer to the Communications Report 2005.

The figure below shows the development of the most important access technologies – namely DSL and cable networks (CATV, coaxial cable, HFC) – over time. In Q3/2004, DSL connections surpassed coaxial cable-based broadband connections and have shown more rapid growth ever since.

Figure 69: Development of DSL vs. coaxial cable



Source: RTR – KEV

5.2.4.3 Wholesale market for bitstreaming

In November 1999, Telekom Austria launched an ADSL-based Internet service for its own retail customers. After intervention by the regulatory authority and negotiations between the ISPA (Association of Austrian Internet Service Providers) and Telekom Austria, an agreement regarding a standard wholesale offer (the "ISPA offer") was reached in March 2000.

Telekom Austria records increasing market share

In addition to Telekom Austria's standard wholesale offer, ISPs also offer 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.

As a wholesale xDSL-based product, bitstreaming is largely provided by Telekom Austria (more than 90%). To some extent, unbundling partners also offer bitstreaming services for other ISPs via unbundled local loops.

After a comprehensive analysis of the wholesale broadband market, the TKK issued Decision M 1/05, which identified Telekom Austria as having significant market power on this market. This decision was mainly justified by Telekom Austria's rising market share (which has climbed to more than 50%), the high barriers to market entry as well as the fact that Telekom Austria is the only operator to own access infrastructure in large parts of Austria (i.e., approximately one third of Austrian households).

Because Telekom Austria was identified as having significant market power, the decision mentioned above subjected the company to an obligation to offer (or continue offering) bitstreaming and to set the corresponding prices in a non-discriminatory manner according to the "retail minus" principle (i.e., retail price less avoidable administrative and additional costs). Therefore, no ISP – especially Telekom Austria's own provider – can be given preferential treatment.

Telekom Austria's market share of the wholesale broadband market has now stabilized at approximately 50%.

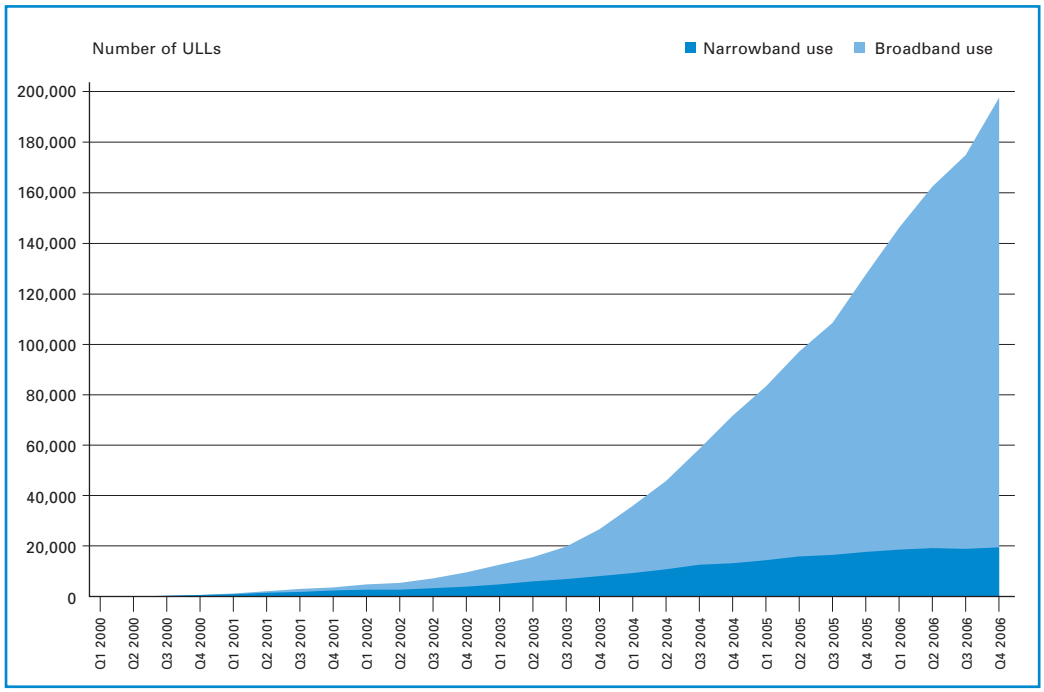
5.2.4.4 Wholesale unbundling market

Unbundling has been available in Austria since mid-1999. Since that time, its potential uses have been expanded repeatedly and the relevant provisions have been refined in TKK decisions. For example, since 2000 unbundling has not only been available for alternative providers of fixed-link voice telephony services, but also for ISPs and leased-line operators on the same terms and conditions. In the market analysis decision M 12/06, Telekom Austria – which practically has a market share of 100% on the unbundling market – was ordered to offer unbundled subscriber lines on non-discriminating terms and at cost-oriented prices.

Unbundling generated decisive incentives to offer low-priced and innovative broadband services, especially in the Internet segment. Inode, Tele2UTA as well as numerous regional providers have taken advantage of these incentives (in some cases quite intensively).

The figure below shows the increase in the number of unbundled local loops over time.

Figure 70: Development of ULLs (unbundled local loops) in Austria



Source: RTR

90% of unbundled lines are used for broadband access

In 2006, the annual growth rate in the number of ULLs (unbundled local loops) came to approximately 55%, and by the end of 2006 more than 7.4% of all Telekom Austria lines had actually been unbundled. As shown in Figure 70, the proportion of ULLs used for broadband is increasing steadily and had reached approximately 90% by the end of 2006.

60% of households are potential unbundling candidates.

The coverage situation can generally be deduced from the number of collocations in operation as well as the areas which these collocations could cover with ULLs. If at least one unbundling partner has a collocation at a Telekom Austria MDF, then the households in that MDF's local loop area are considered to be unbundling candidates. RTR carried out statistical calculations to determine the potential ULL coverage level with due attention to the coverage areas of all Telekom Austria main distribution frames (MDFs) as well as the population density in each area. However, the actual maximum number of households which can be unbundled by an unbundling partner in an MDF's local loop area depends on various underlying conditions, such as the collocation resources available at the MDF and the capacity of the unbundling partner's infrastructure (e.g., backbone capacity).

Especially in the capitals of Austrian provinces, multiple unbundling partners have a simultaneous presence, meaning that retail customers can choose one of various unbundling partners (up to seven) as their primary broadband access provider in addition to Telekom Austria and a local cable network operator.

The local loop areas covered by unbundling partners represent approximately 60% of Austrian households which could already be unbundled. These figures make it clear that this market has enormous potential, although only about 200,000 of the 2 million potential households have been unbundled.

5.2.5 Leased lines

5.2.5.1 Introduction

Leased lines are exclusive lines for data transmission

Leased lines support voice, audio, video and data transmissions. Due to their specific characteristics, leased lines differ from other services such as the Internet or fixed-link voice telephony, which can also be used to transfer voice, audio, video and data, as leased lines are made available to the customer as a point-to-point connection exclusively and constantly (24 hours / 365 days), and with a guaranteed minimum bandwidth. Leased lines provide transparent transmission capacity between the two points, and on-demand switching is not permitted (i.e., the user does not have individual control capabilities; the data is always exchanged between the same two predefined termination points). Depending on how they are used, leased lines might be required with various bandwidths ranging from just a few kbit/s to 2 Mbit/s and even 155 Mbit/s or more.

Definition of leased lines

- Transparent transmission capacity between network termination points: In this context, "transparent" means that payload data bits are transmitted through the line in unchanged form;
- Symmetrical, bidirectional point-to-point connection which supports data and voice traffic;
- No on-demand switching: This means that the user does not have the ability to control the connection. On-demand switching functions are omitted as a result of the fact that no line control information from the bitstream is evaluated at the user interface.

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 connections, copper-wire pairs, coaxial and fiber cables.

What is decisive in this context is the function for the user, not the technical implementation between the two customer interfaces or the product's name on the market. Therefore, a leased line is also a transmission line realized using ATM technology with a customer-side SDH or PDH interface, a wavelength service with customer-side SDH interfaces, or a product with Ethernet interfaces which fulfills the generic requirements.

Products which offer on-demand switching are not considered leased lines.

In line with the definition given above, products with user-side Ethernet interfaces which make on-demand switching functions available to the user are not classified as leased lines. Moreover, products with user-side X.25, frame relay, ATM and IP interfaces at the network termination points which make it possible to control the connection's destination are also not considered leased lines (for an overview of alternatives to leased lines, please refer to the Communications Report 2005).

Regardless of the access technology used (e.g., xDSL, cable, WLAN), Internet connections generally make on-demand switching possible, and thus they are not classified as leased lines.

Finally, products with more than two network termination points which deliver data sent from a customer interface to several or all of the other customer interfaces (multi-point to multi-point, not point-to-point) do not constitute leased lines.

As explained in Section 4.2.2.2.2 (Markets for leased lines), in addressing the issue of significant market power, the following relevant leased-line markets are differentiated in line with the system of market delineation in the TKMVO 2003 and in the European Commission's recommendation on the relevant product and service markets:

- Trunk segments of leased lines (wholesale market);[12]
- Terminating segments of leased lines (wholesale market);
- The minimum set of leased lines, which comprises specified types of leased lines up to and including 2 Mbit/s (retail market).

Retail leased lines with bandwidths over 2 Mbit/s and international leased lines were not considered relevant in the delineation of markets, thus they were not subjected to sector-specific regulation.

5.2.5.2 Potential uses of leased lines

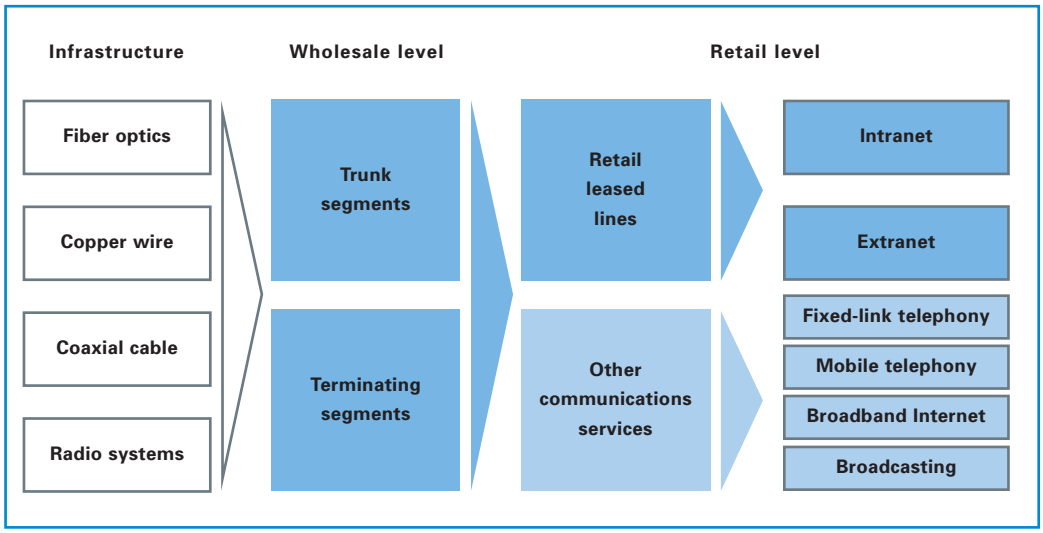
Users include communications service providers and network operators as well as businesses.

Without leased lines, many communications services and activities in other business areas would not be possible: Communications service providers and network operators which do not have (sufficient) infrastructure of their own rely on leased lines to build or supplement their networks. For example, leased lines are used to connect mobile radio transmitter antennas to a higher network level or to connect subscribers to one's own network, thus allowing operators to attain higher coverage and to offer higher transmission capacities in their communications services. Because these providers and operators in turn offer retail communications services (e.g., mobile communications, Internet connections) using leased lines, they are referred to as wholesale customers for leased lines in this context. On the retail side, companies generally use leased lines to network two or more business locations, for example connections between a branch and headquarters (intranet), or for the purpose of connecting business partners, suppliers or customers (extranet).

[12] Depending on the location of the wholesale leased line, these lines are classified as trunk segments or terminating segments.

The figure below illustrates the relationship between wholesale leased lines and retail leased lines as well as other communications services.[13]

Figure 71: Levels of value creation in leased lines



Source: RTR

In the sections that follow, the development of the leased line sector in Austria (and by international comparison) is discussed in greater detail.

[13] For the sake of clarity, only the previously mentioned technologies for the provision of infrastructure or retail usage are included. The self-provision of communications services using one's own infrastructure or reseller chains at the wholesale level is likewise omitted.

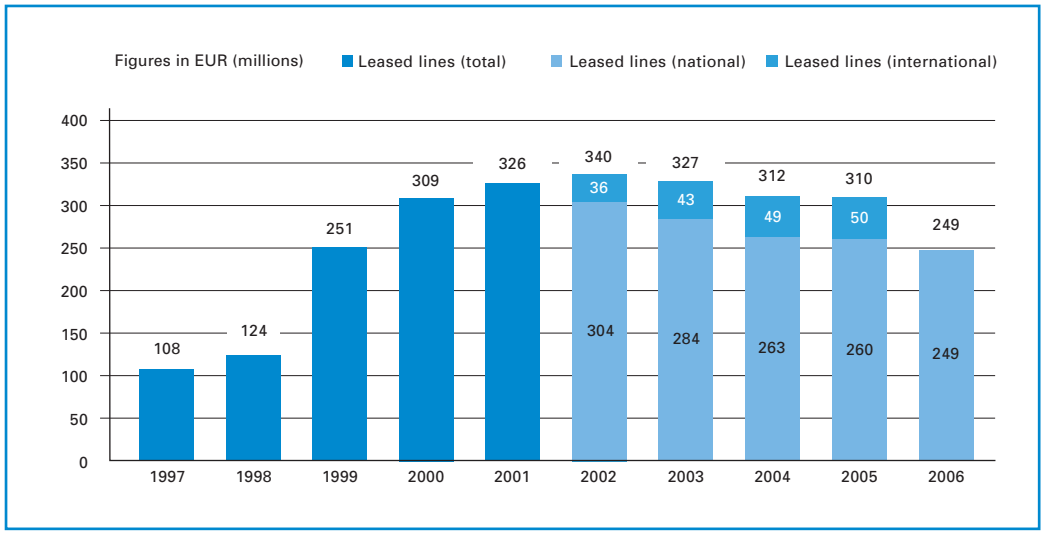
5.2.5.3 Market data

5.2.5.3.1 Development of revenues

Decline in revenues continued in 2006.

In 2006, national leased lines generated revenues of approximately EUR 250 million. The declining trend in revenues which has persisted for years also continued in 2006. Unfortunately, no current data on international leased lines is available. The chart below shows the changes in revenues from leased lines since 1997; any deviations in annual values compared to the Communications Report 2005 can be attributed to ex post changes in the data reported to RTR.

Figure 72: Development of revenues from leased lines, 1997 to 2006

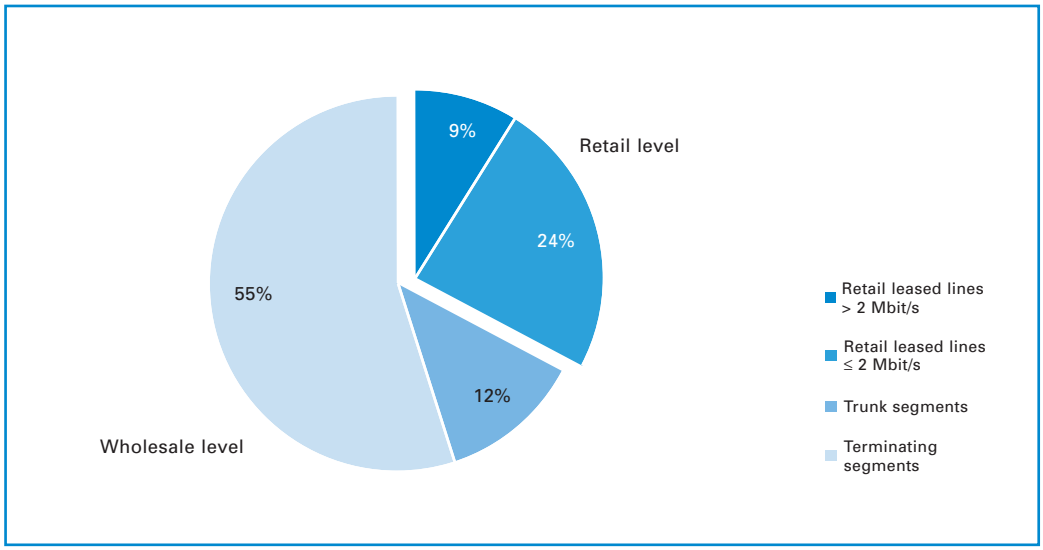


Source: RTR

As shown in the figure below, the greatest demand is for terminating segments of leased lines, followed by retail leased lines with bandwidths up to and including 2 Mbit/s. Here it becomes clear that the bulk of revenues is generated at the wholesale level. The development of communications infrastructure is a major determinant of demand for leased lines, especially at the local level.

Figure 73: Distribution of revenues by area in 2006

Highest demand at wholesale level



Source: RTR estimates

As explained in Section 4.2.2.2.2, Telekom Austria possesses significant market power on the markets for terminating segments and for retail leased lines up to and including 2 Mbit/s; as a result, this company has been subjected to the appropriate regulatory remedies.

5.2.5.3.2 Development of rates

Austria's prices for leased lines are in the lower range by European comparison. The Implementation Report published regularly by the European Commission compares the annual expenditure (excluding setup charges and taxes) of a retail customer for national leased lines with bandwidths of 64 kbit/s, 2 Mbit/s, 34 Mbit/s and 140/155 Mbit/s for the distances of 2 km and 200 km from the respective incumbent operator. As rate plans, billing structures, market structures, etc. are not always homogeneous, the figures presented here should be interpreted with caution. Moreover, data from all EU-25 countries is not available for all of the categories reported (this is especially the case with higher bandwidths, for which some operators no longer publish price lists), which may create distortion in the calculation of averages.

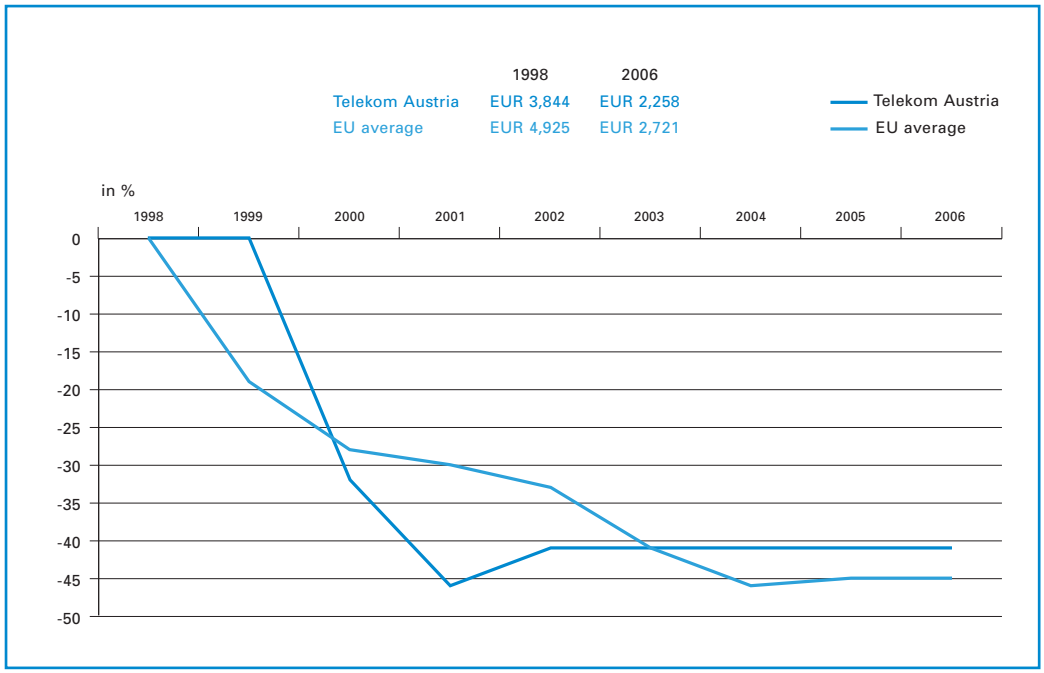
The comparison in the 12th Implementation Report (Volume 2) clearly shows that Austria's rates (using Telekom Austria as a basis) are below the EU average in six out of eight categories, and in the case of shorter 2 Mbit/s lines Austria's prices are among the lowest alongside Portugal and Denmark.

Drastic decline in prices for 2 Mbit/s lines since 1998

One of the most significant price reductions in the EU average since 1998 has been observed in 200 km 2 Mbit/s lines; the largest decline was recorded in long 34 Mbit/s leased lines, which only play a secondary role on the Austrian market. Throughout the EU, a decline of 45% has been recorded since 1998, and this decrease came to 41% (starting from a lower base value) in Austria.

The figure below provides a graphic depiction of the price reductions compared to 1998 prices. For the sake of better orientation, the monthly fees for 1998 and 2006 were also indicated as the starting and ending points of the calculation.

Figure 74: Percentage change in prices since 1998 for 2 Mbit/s, 200 km leased lines, Austria and EU average



Source: 12th Implementation Report of the European Commission (Volume 2), data provided by the European Commission

Although the price decrease in Austria was not as pronounced as the decline in the EU average, the price of a leased line from Telekom Austria was substantially lower than the EU average in 2006.

5.2.6 The markets for electronic signatures

Among the services offered in the field of electronic signatures, those of the certification service providers are discussed first in this section. Ten providers of certification services were active on the Austrian market in 2006:

- Arge Daten - Österreichische Gesellschaft für Datenschutz;
- A-Trust Gesellschaft für Sicherheitssysteme im elektronischen Datenverkehr GmbH;
- Generali IT-Solutions GmbH;
- Main Association of Austrian Social Security Institutions;
- Institute for Applied Information Processing and Communications Technology (IAIK);
- City Administration of Vienna;
- mobilkom austria AG & Co KG (or mobilkom austria AG, its successor from July 27, 2006 onward);
- Telekom Austria AG (from October 9, 2006);
- Trosoft Entwicklungs u. Vertriebs GmbH (or xyzmo Software GmbH after the company's name was changed on July 18, 2006);
- XiCrypt Internetsicherheitslösungen GmbH.

In addition, in December 2006 the Federal Ministry of Health and Women's Affairs (now the Federal Ministry of Health, Family and Youth Affairs) as well as the Federal Office of Metrology and Surveying also reported their intention to offer certification and timestamp services from January 2, 2007 onward.

The certification service providers mentioned above offered a total of 34 certification and timestamp services covering the entire spectrum of certificates in 2006. In general, the services offered can be categorized as follows:

- **Qualified certificates for secure electronic signatures:** These certificates are issued only after an identity check by means of an official photo ID, and only for keys stored on secure signature creation devices. As secure electronic signatures are to a large extent legally equivalent to handwritten signatures, these certificates are used in particular for legal transactions. Certificates for secure electronic signatures have been offered in Austria since early 2002. In 2006, A-Trust was the only company to provide such certificates.

- **Certificates for administrative signatures** using citizens' cards will be considered equivalent to qualified certificates for secure electronic signatures until the end of 2007, but they do not have to fulfill all of the requirements of qualified certificates for secure electronic signatures. Such certificates were offered by mobilkom austria and the Main Association of Austrian Social Security Institutions in 2006.

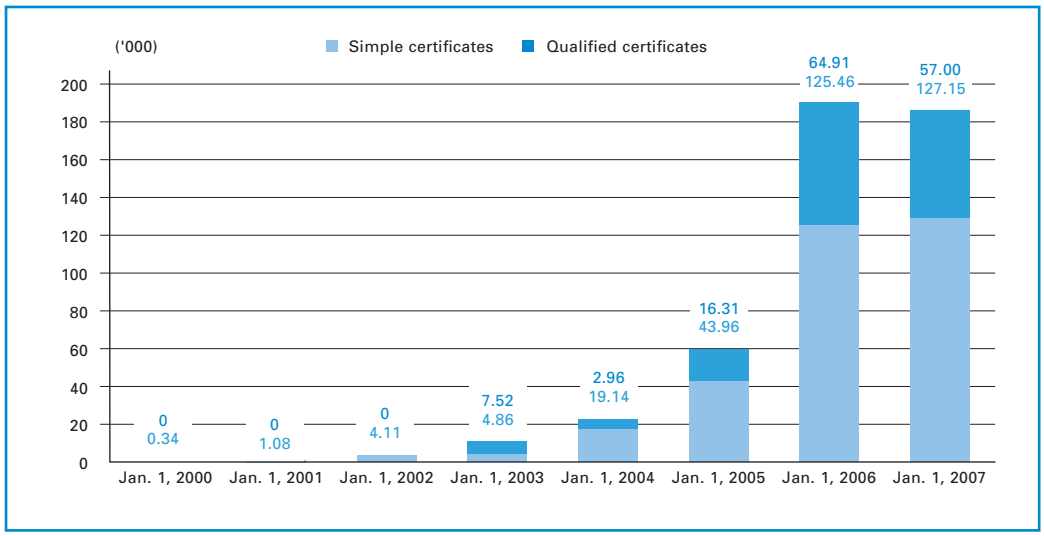
- **Certificates for electronic signatures as defined in Art. 2 No 3 lit. a to d SigG ("advanced" electronic signatures)** are not necessarily qualified certificates and do not require secure signature creation devices. However, the electronic signatures must allow the identification of the signatory (among other things) and be created using devices over which the signatory can maintain exclusive control. These signatures are suitable for electronic invoicing, for example. Certification services of this type were provided by Arge Daten, A-Trust, E-Control, the City Administration of Vienna, Telekom Austria and xyzmo in 2006. Secure electronic signatures

and administrative signatures also implicitly fulfill the legal requirements for "advanced" electronic signatures, but it may not be possible to use them as flexibly under certain circumstances.

- **Certificates for simple electronic signatures**: These certificates only have to fulfill the minimum legal requirements (e.g., reporting of a certification practice statement, maintenance of a revocation service and documentation by the certification service provider). An identity check is not necessary, nor is the signatory's exclusive control over the devices used for signature creation. These certification services are offered by almost all providers.

- **Timestamps** serve as certifications that specific data existed at a certain point in time. These services were provided by E-Control, XiCrypt and xyzmo in 2006.

Figure 75: Number of certificates issued by Austrian providers



Source: RTR

Since the Austrian Signatures Act went into effect in 2000, the number of certificates issued tripled each year until 2005, but the market stagnated in 2006. As of January 1, 2007, approximately 57,000 qualified certificates and 127,000 non-qualified certificates existed in Austria,[14] thus making for a total of some 184,000 certificates. The slight decline compared to the previous year can in part be attributed to the fact that the validity of numerous certificates on older smart cards expired at the end of 2006.

[14] This figure also includes those non-qualified certificates which are issued together with a qualified certificate on a smart card.

In addition to the certification service providers supervised by the TKK, there are also companies which offer products to support secure electronic signatures: smart cards, smart card readers and secure viewers.

The Austrian confirmation authority A-SIT had issued certifications for a total of 15 smart card types by the end of 2006. Their practical applications mainly involved Philips and Infineon smart card processors using Giesecke & Devrient's STARCOS operating system (e-Card, among others), Siemens' CardOS, or Austria Card's ACOS (Maestro and MasterCard, among others).

Starting in 2005, it was no longer necessary to have smart card readers and secure viewers certified by a confirmation authority; instead, these devices only have to be indicated as "signature products used, provided and recommended" in the certification practice statements published by providers of qualified certificates. A-Trust recommends certain smart card readers made by Cherry, Kobil, Omnikey, Reiner, SCM Microsystems and Siemens.

Thus far, predominantly Austrian-developed secure viewers (i.e., programs which ensure the security of the signature creation process and in particular display the document to be signed in an inalterable form on screen) have been used in Austria, especially as several of these products support the functions of the Austrian citizen's card: MBS-Sign and hot:Sign (BDC EDV Consulting GmbH) as well as trustview (IT Solution GmbH). The SecSigner product developed by SecCommerce Informationssysteme GmbH of Hamburg, Germany, is mainly used in online banking.

6. RTR's activities as a competence center

6.1 Broadcasting Division

6.1.1 Research Institute for Electronic Mass Media Law (REM)

Founded in early 2005, the Research Institute for Electronic Mass Media Law (*Forschungsinstitut für das Recht der elektronischen Massenmedien*, or REM) is dedicated to academic research on electronic mass media law at the Austrian and international levels.

REM established within RTR

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 (University of Graz), 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).

Each year, the association organizes the Austrian Broadcasting Forum in order to support the exchange of ideas between academics, researchers and practitioners. In the fall of 2006, the Austrian Broadcasting Forum was entitled "Community law and broadcasting – Revolution or adaptation?" and dealt with the legal framework and the latest developments at the European level.

REM publication series

In addition, the REM also produces publications which generally address the topics discussed at each year's Broadcasting Forum. Based on the previous year's forum, the first volume of conference proceedings on "Media freedom versus content regulation" was published in 2006. Another volume covering the subjects discussed during the second Austrian Broadcasting Forum is currently being compiled.

Additional information on the REM can be found at http://www.rem.ac.at (in German).

6.1.2 DICE – Digital Innovation through Cooperation in Europe

RTR was an active partner in the international project "Digital Innovation through Cooperation in Europe" (DICE), which was concluded in late 2006. The goal of DICE was to intensify content-related cooperation and knowledge transfer between member states of the EU with regard to the digitization of terrestrial television. Due to the successful pilot tests for interactive TV carried out in and around Graz in the summer of 2004, RTR was invited to take part in the project, half of which was financed by the EU's INTERREG IIIC funding program. In addition to Austria, the participants also included Germany (Berlin/Brandenburg), Great Britain, Hungary, Lithuania, Poland and Sweden.

In the course of the DICE project, RTR invited participants to Vienna for a high-level specialist event to discuss the topic of "Promoting the terrestrial switchover" on June 7, 2006. During the conference, numerous prominent experts from Austria and abroad discussed key aspects of terrestrial digitization.

6.1.3 Involvement in training and education measures for broadcasters

Continuing education for Austria's private television stations

privatsenderpraxis, an association focusing on practical aspects in private broadcasting, was first presented to the broadcasting community in October 2005. This association organizes training and education programs for the employees of private radio and television broadcasters with the overarching goal of increasing the quality – and thus also the competitiveness – of private broadcasting in general. Wolfgang Struber, Managing Director of Radio Arabella in Vienna, is the association's chairman. RTR supports these educational measures in line with its legal mandate defined in Art. 9 Par. 2 No. 3 KOG.

Each year, the association holds approximately ten workshops covering all relevant areas of broadcasting. These workshops are also open to licensed commercial broadcasters and their marketing organizations which do not belong to the association. An overview of planned workshops can be found at http://www.privatsenderpraxis.at (in German).

***Verband Freier Radios Österreichs* (Austrian association of free radio broadcasters)**

In the fall of 2005, RTR concluded its first grant agreement with the *Verband Freier Radios Österreichs* (VFRÖ) to provide training and continuing education for employees at Austria's free radio broadcasters in the year 2006.

Since October 2005, the VFRÖ has been organizing training and education events which focus on the needs of non-commercial broadcasters. By the end of 2006, the association will have held a total of 26 continuing education events throughout Austria. The organization's program for December 2006 focused on basic courses in technology and journalism as well as moderation/elocution training and media law.

6.1.4 RTR study on mobile TV

"Mobile TV – International pilot projects, user acceptance, business models and the legal framework" is the title of a study commissioned by RTR and conducted by the evolaris private foundation in Graz. On June 7, 2006, the study was presented as part of RTR's publication series at an expert panel discussion held by the Digital Platform Austria working group.

The investigation carried out by evolaris' experts represents the first detailed overview of the numerous pilot tests for mobile TV being carried out around the world. The market situation in South Korea, which is the worldwide leader in mobile TV, was also analyzed in detail. On this basis, the study then discusses expected levels of user acceptance as well as potential business models for mobile television services.

The study's comprehensive research and analyses have made a substantial contribution to preparatory work for the market launch of television broadcasting for handheld devices.

The evolaris study can be downloaded from the RTR web site (http://www.rtr.at) under the category "Portfolio" (in German).

6.2 Telecommunications Division

6.2.1 ICT – Information and communications technologies

In the context of RTR's activities as a competence center, the regulatory authority carried out additional activities in 2006 with a view to promoting the development of the ICT strategy in Austria.

6.2.1.1 Benchmarking study

Learning from the best

In order to examine the concrete results of the ICT Master Plan published in November 2005, additional detailed analyses of leading ICT countries were performed in order to provide additional input for the realization of a sustainable ICT strategy and thus to strengthen Austria's position as a business location. The ICT strategies of those leading countries – specifically Denmark, Sweden, Finland and South Korea – were analyzed in greater detail by means of a benchmarking study. For this purpose, stakeholders in the ICT field were interviewed on site about the success factors in their ICT strategies. At the same time, key framework conditions for the successful development of such a strategy were elucidated. In addition to interviews and discussions with the institutions responsible for ICT strategies, extensive information on each country's ICT strategy was collected and analyzed. In addition, it was possible to obtain experience reports from Estonia and Switzerland, which have been able to improve their worldwide rankings in ICT usage drastically by defining specific focus areas.

Regardless of the differing approaches used in these countries, the study revealed that the successful implementation of each ICT strategy requires comprehensive, long-term strategies as well as regular adaptation; those countries have now consistently addressed the topic of ICT for ten years or more. As a result, public awareness of ICT is very high in those countries, which means that these technologies are also used heavily in day-to-day life. This requires a high level of commitment to strengthening ICT among all stakeholders as well as close cooperation in implementation processes. This not only includes government bodies, the business world and academia, but also each individual citizen. As it turns out, the driving force is the identification and promotion of growth factors as well as national efforts to attain top spots in the field of technology.

Specifically, the first Internet-related initiatives in Korea were launched as early as 1993, and in Sweden the first IT commission was founded to develop ICT strategies in 1994. One year later, Finland followed with its first ICT master plan, which focused on increasing productivity and effectiveness. Due to their early launch of ICT initiatives and the concentration of relevant national efforts on ICT, these countries have been able to take a large number of measures and now enjoy top international ICT rankings. The economic structure of Denmark, with its many small and medium-sized companies, is most comparable to that of Austria. Through the targeted promotion of medium-sized ICT startups and innovative business areas, coupled with

the appropriate educational focuses and measures in order to ensure the availability of qualified personnel, Denmark was able to provide essential stimuli to enhance the country as a business location in the long term.

Conclusions for the Austrian situation

The benchmarking study compares the approaches taken in the various countries, then generates conclusions and insights relevant to Austria's ICT strategy.

In contrast to Denmark, Finland, Korea and Sweden, Austria is still in the process of raising awareness and sensitizing people to the importance of ICT. The other four countries have long since passed through these stages. Those countries base their implementation structures on industrial, organizational and cultural strengths, with informal structures – depending on the culture – also playing a decisive role. The best practices applied in those countries and the recommendations which can be derived for the sustainable promotion of ICT in Austria serve to confirm the ICT Master Plan presented to the public in November 2005.

6.2.1.2 Publication series on best practices in ICT

Compact, first-hand experience reports

In order to give an authentic presentation of the perspectives of those responsible for ICT strategies in each country, RTR dedicated a volume of its publication series to "Best practices in ICT" in the countries of Denmark, Estonia, Finland, South Korea, Sweden and Switzerland. In their various contributions, the authors provide an extensive and detailed description of their ICT strategies and the relevant general conditions as a complement to the benchmarking study. One area of special interest was the motives behind these strategies, which essentially included potential savings in public administration, the requirements of the private sector as well as the improvement of the country's competitive position and quality as a business location. The ICT strategies and their focuses differ from country to country. In most of the articles, however, the public sector plays a key role in the development of a knowledge-based society. This role can take various forms, including e-government services, measures aimed at preventing a "digital divide," and comprehensive ICT strategies. The individual measures as well as their effects on the economy, society and politics are discussed in each article. Finally, the authors provide an outlook in which they describe their visions and focus areas for the upcoming years.

This volume can be downloaded from the RTR web site at http://www.rtr.at.

6.2.2 VoIP – Voice over Internet Protocol

6.2.2.1 VoIP continues to grow

VoIP guidelines in 2005

In recent years, VoIP (i.e., voice communication via IP-based networks) has made considerable advances in terms of technology as well as its number of users. This is true of both the retail and the wholesale sector. RTR has accounted for this development and concerned itself with these issues intensively at the national as well as the international level for several years now. For example, RTR's regulatory perspective on VoIP already underwent a public consultation process in April 2005 and was further specified in RTR's guidelines for VoIP service providers published in October 2005.

6.2.2.2 Guidelines for VoIP services

RTR's guidelines for VoIP service providers primarily target communications service providers and network operators. In conjunction with the "Frequently Asked Questions (FAQs) on VoIP Services" published at the same time, the guidelines clearly define RTR's position – based on the provisions of the TKG 2003 and the accompanying ordinances – with regard to a number of substantial VoIP-related issues which are still relevant in this form.

Classification

One point worth mentioning in this context is RTR's classification of publicly provided VoIP services into two main groups: VoIP services which enable access to the classic telephone network (Class A; regulated as telephone services) and "Internet-only" VoIP services (Class B; unregulated).

Telephone numbers

RTR's guidelines for VoIP service providers also focus on the telephone numbers available for these services. In this area, RTR still sees no immediate need for changes in the numbering regime introduced in May 2004 under the Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V) with regard to the regulation of telephone numbers for VoIP services. Under this ordinance, the number ranges (0)720 and (0)780 were adapted/created specifically for innovative services such as VoIP. For the sake of technological neutrality as required by Austrian legislation, geographical numbers are also available to the providers of VoIP services on the condition that the specific terms and conditions of use are fulfilled (i.e., addressing a concrete fixed-location network termination point).

A separate chapter is devoted to VoIP access to emergency services; here RTR clearly states that this service component is mandatory for all providers of public telephone services (VoIP Class A).

Analysis of effects on market definition

Another issue to be discussed separately was the question of how VoIP services are to be assessed with regard to the relevant telephone markets. While the guidelines for VoIP service providers mentioned above focus on the classification of services under the TKG 2003 and the resulting rights and obligations of providers, the market analysis procedures deal with issues of competition and competition regulation. In the course of the review of the TKMVO 2003, this topic was addressed in such a way that services were classified into two groups (currently only services in Class A are taken into account).

- VoI: In VoI (Voice over Internet), the VoIP provider offers services using the (public) Internet, but these services are generally not bundled with (broadband) Internet access to the retail consumer. Access to the retail consumer is realized via an existing (broadband) Internet connection, that is, the VoIP provider uses an existing Internet connection as an "access network." The customer's Internet connection (i.e., the physical connection including Internet connectivity) is generally provided by an independent third party. VoI is offered in various forms: Some enable full connectivity with the conventional telephone network, while others only support outgoing calls to the conventional telephone network or are restricted to calls between Internet users.

- VoB: Voice over Broadband (VoB) is offered in the form of Voice over DSL (VoDSL) using copper-wire pairs, or as "Voice over CATV" in cable television networks. VoB is characterized by the fact that the VoIP provider offers services in combination with the provision of (broadband) Internet access and uses VoIP technology to transport voice data in the access network. VoB services enable full connectivity with the conventional telephone network and are largely equivalent to conventional telephone services in terms of product characteristics. This is mainly due to the fact that the provider controls the quality parameters in the access network by offering a VoIP service combined with (broadband) Internet access. Moreover, VoB operators can generally fulfill the requirements for the use of geographical telephone numbers.

The ensuing market analysis came to the conclusion that VoB must be included in access as well as carrier markets, while VoI is not to be included in either of those relevant markets.

Publication series

Another of RTR's activities in this area was the publication of Volume 1/2006 of the RTR publication series, which was entitled "Voice over IP – Fundamentals, regulation and initial experience", in January 2006. This publication was prepared in cooperation with market participants and covers a cross-section of technical, regulatory and market-relevant topics in connection with VoIP.

Detailed information on RTR's activities in this area can be found at http://www.rtr.at/voip (in German).

6.3 Review 2006

Revision of the EU legal framework

On June 29, 2006, the European Commission published a "Communication on the Review of the EU Regulatory Framework for electronic communications networks and services."[15] In this document, the European Commission evaluates the functioning of the five directives of the regulatory framework for electronic communications networks and services (the Framework Directive, Authorisation Directive, Access Directive, Universal Service Directive and the Directive on Privacy and Electronic Communications) and in this way arrives at a number of proposed changes which essentially focus on two broad areas. First, the Commission believes that there is extensive room for improvement in spectrum management,[16] especially in order to enable the coexistence of various types of allocation and authorization models and to promote the economically and technically efficient use of this valuable resource. The Commission's second focus in the Review 2006 is the streamlining of procedures associated with the review of markets susceptible to ex ante regulation. In connection with the procedures under Article 7 of the Framework Directive (i.e., coordination procedures), the Commission stresses the positive contribution of these procedures toward creating an internal market;[17] however, the Commission also believes that the current level of detail is no longer necessary in certain market analyses and notifications.

Along with this communication, the European Commission simultaneously launched a public consultation on the future of the regulatory framework for electronic communications, in which all interested parties were invited to submit comments until October 27, 2006.

The sometimes far-reaching changes proposed by the European Commission required a convergent approach for the purpose of submitting a joint Austrian comment in the consultation procedure.

RTR contributed actively to Austria's comment.

In its comment of October 25, 2006,[18] the Republic of Austria (represented by the BKA, BMVIT, BMSG, KommAustria, RTR and the TKK as regulatory authorities for electronic communications) first praised the European Commission's communication as well as the two working documents complementing the communication, which make many useful suggestions for the adaptation of the legal framework. In Austria's view, the proposals could help toward the goal of simplifying procedures, reducing administrative effort and thus increasing the efficiency of national regulatory authorities, especially if changing technologies and market conditions are accounted for properly.

[15] COM (2006) 334 of 29 June 2006. This communication also refers to two Working Documents of the European Commission on "Proposed Changes" and "Impact Assessment," both published on June 28, 2006. These documents can be downloaded at http://ec.europa.eu/information_society/policy/ecomm/tomorrow/index_en.htm

[16] COM(2005) 411 of September 6, 2005

[17] COM(2006) 334, p. 9

[18] These comments will be published at http://europa.eu.int/information_society/policy/ecomm/tomorrow/roadmap/index_en.htm

Expansion of veto rights clearly rejected

However, the European Commission's communication also contains proposals which clearly must be rejected from the Austrian standpoint, as they neither serve to simplify administration nor are they compatible with the principle of subsidiarity. In particular, these proposals include the proposed expansion of the European Commission's "veto rights" as well as efforts to establish a European regulatory authority.

Continuity means success

Moreover, the Austrian comment emphasizes the fact that the principle of "continuity in economic policy" is considered an essential component of the legal framework: Changes in the applicable legal framework should therefore be made only in cases where they serve to enhance the framework in light of current regulatory objectives. The regulatory objectives pursued to date should be included in the new legal framework and integrated into the framework seamlessly. Another important point from the Austrian perspective is that the regulatory objectives offer businesses the certainty necessary for long-term investments and that the high level of consumer protection is upheld.

Finally, the comment states that fundamental reservations about a general revision of the legal framework still prevail at the present time. In light of the fact that several regulatory authorities in other member states have not yet gained sufficient experience with the current legal framework, the Austrian comment expressed concern about the framework's effectiveness, which depends heavily on harmonized and effective implementation in all member states of the European Union.

The European Commission is expected to publish specific proposals for changes in this package of directives in early summer 2007.

6.4 Convergence

The convergence of broadcasting and telecommunications is based largely on the digital representation of audiovisual information ("digital convergence"), which creates enormous advantages in the processing, storage and transport of content. This convergence can also be attributed to rapid progress in microelectronics and the ever-increasing number of technical platforms available for the transport and presentation of audiovisual content, in some cases even in real time.

In fact, not only broadcasting but the entire media industry is affected by the revolutionary developments arising from digital convergence; this includes, for example, the film industry as well as the print media industry, hence the general term "media convergence." Therefore, in the regulation of content it will be necessary to account for an increasing number of aspects across multiple sectors.

Convergence clearly visible on the market

Apart from the advancement of conventional telecommunications operators' fixed-link and mobile networks, the Internet is a major driver of convergence, as its special technical and commercial attributes easily enable innovation with immediate global impact. The Internet supports both individual electronic communication (i.e., the conventional field of telecommunications) as well as mass electronic communication, that is, the provision of information in electronic form for the general public (i.e., the conventional field of broadcasting).

At the transport level, the diversity of audiovisual platforms – given fair "convergent" general conditions – will provide more and more inexpensive means of transmission for content services. In this context, platform independence gives rise to new ways of providing the content promoted by media policy.

The plurality of audiovisual platforms and the convergence of the overall media field also encourage a re-evaluation of the mechanisms which can be employed to promote content effectively with a view to attaining media policy goals such as freedom of speech, the diversity of opinions, and the preservation of cultural identity.

Consistently regulating the transport and content levels in such a way that accounts for the development of electronic networks and services as well as electronic content requires a "horizontal" regulation model which separates content-level regulation from transport-level regulation.[19] Based on the current national situation, this gives rise to legal issues as well as issues related to the structure of government authorities. There may very well be dependencies between certain aspects of the content and transport levels in the horizontal regulation model. This is especially true of issues related to network and service access. One example is the enforcement of regulations at the content level in the context of global infrastructures where content providers are incorporated outside the country or the EU. In such cases, approaches other than those based on access via the national access networks may appear less effective.

Avoiding the "digital divide" in the field of ICT and media is an essential social objective. The increasing speed of consumers' bidirectional wireless and wired connections to the infrastructures of the future information and knowledge society can be used increasingly for individual communication as well as the consumption of all types of audiovisual content and program-oriented content in some cases. For the foreseeable future, the coexistence of different transmission platforms and audiovisual content formats appears to be a probable scenario, but the focuses of use could shift considerably in the long term.

Analysis of effects on regulation

The advertising industry, which plays a decisive role in many business models for electronic audiovisual services, follows the time constraints of consumers. The increasing diversification of audiovisual consumption types, which in some cases also enable more personalized advertising forms, can therefore have substantial effects on classic market structures.

In light of these developments, the Convergence Task Force project was launched in 2006 with the objective of identifying needs for action or adaptation arising from the trend toward convergence.

[19] This is one of the considerations motivating the single European framework for all communications networks and services.

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 meet the stakeholders' information requirements and to ensure compliance with the principle of transparency, the regulatory authority carried out various public relations activities in the reporting period.

Web presence

Web site: 8,500 pages of information

The key medium in RTR's external communication activities is the regulatory authority's web site, http://www.rtr.at. Continuous in-house monitoring of the web site ensure that the information offered to the public is always up to date. On more than 8,500 web pages, RTR describes its regulatory work as well as the development of markets in the fields of broadcasting, telecommunications, electronic signatures, grant funds and collecting societies. In addition, all of the regulatory authority's information products are available as downloads. In the fall of 2006, the regulatory authority's web presence was expanded to include the site http://www.digitaler-rundfunk.at, which provides extensive information and assistance with regard to the introduction of digital television in Austria.

Publications

RTR's frequent publications are also a major component of the authority's public relations work. The Communications Report, which appears in the second quarter of each year, contains an activities report in compliance with legal reporting requirements, documents the authority's regulatory work and provides insights into developments on the communications markets.

RTR's conciliation body also publishes an activities report. In 2006, this report was released in April and provides an overview of the essential problems and developments in retail consumer dispute settlement, as well as discussing both typical and atypical examples of conciliation cases. Other reports include the Digitization Report and the Austrian Television Fund Report, which describe the grant activities of the funds established within RTR. As a complement to the site http://www.digitaler-rundfunk.at, the brochure "Digitaler-Rundfunk.at" (on digital broadcasting) was released in the fall of 2006. This brochure explains a number of issues relevant to DVB-T for the retail consumer.

In addition, three volumes of RTR's publication series were produced in the reporting period, including one volume on topics related to broadcasting and two volumes related to telecommunications. The authors of these publications include both in-house and external experts.

Table 20: Titles in RTR's publication series in 2006

Volume 1 / 2006	Voice over IP - Fundamentals, regulation and initial experience
Volume 2 / 2006	Mobile TV - International pilot projects, user acceptance, business models and the legal framework
Volume 3 / 2006	ICT best practices in Denmark, Estonia, Finland, the Republic of Korea, Sweden and Switzerland

Source: RTR

RTR's broadcasting and telecommunications newsletters *(RTR Aktuell)* provide timely information on regulatory and international topics of interest at regular intervals. In 2006, ten issues of the broadcasting newsletter and eleven issues of the telecommunications newsletter were published.

The RTR *Telekom Monitor* (Telecoms Monitor) launched in November 2006 will be published on a quarterly basis. Based on information supplied by operators, this publication contains market data on the fixed-link, mobile, leased-line and broadband market clusters.

Events

RTR's communication of relevant specialist topics to a broader audience also includes lectures held by the organization's managing directors and selected employees. At numerous events, the intentions and results of the authority's regulatory work are discussed. In addition, RTR organized a large number of specialist conferences to encourage the advancement of expert knowledge and the proactive discussion of future developments. In this context, highlights included the annual plenary assembly of the Digital Platform Austria working group and the 7th Telecommunications Forum.

Management of inquiries

RTR receives a large number of inquiries by telephone and in writing every day. As an unbureaucratic service institution, RTR makes extensive efforts to handle these inquiries quickly and efficiently. In 2006, RTR replied to nearly 3,900 written inquiries submitted to the e-mail address rtr@rtr.at. Compared to 2005, this represents an increase of approximately 9%.

Table 21: Inquiries received and answered at the address rtr@rtr.at, 2004 to 2006

Year	2004	2005	2006
Number of inquiries	2,808	3,585	3,890

Source: RTR

The range of issues addressed in these inquiries spans the regulatory authorities' entire field of activity, but the bulk of written inquiries refer to telephone number administration and matters involving retail consumers. In addition to handling written inquiries, RTR's experts also frequently provide advice by telephone on a daily basis.

Call center: Decline in number of calls

As a complement to those activities, RTR's call center (reachable at 0810 511 711 and 0810 511 811, calls subject to charges) also provides information by telephone. The call center mainly provides initial advice for retail consumers, usually on the topic of telephone bill disputes, conciliation procedures and the introduction of DVB-T. The table below shows the number of inquiries handled by the call center during the reporting period. The sharp decrease in telephone inquiries between 2005 and 2006 correlates with the decline in the number of complaints received in connection with dispute settlement.

Table 22: Number of inquiries handled at the RTR call center, 2004 to 2006

Year	2004	2005	2006
Calls	8,589	10,138	7,160

Source: RTR

Media relations

34 press releases

The regulatory authorities' media relations work serves to provide factual information on complex regulatory issues and decisions. In the reporting period, a total of 34 press releases were prepared, six press conferences were organized for media representatives, numerous press inquiries were answered, and various individual interviews were conducted.

7. The company

7.1 Staff structure and development

As of December 31, 2006, RTR's staff comprised 94.4 full-time equivalents (FTEs), which was 0.9 FTEs more than in the previous year. Over the year 2006, the number of FTEs fluctuated slightly due to leaves of absence and employee turnover.

Head count remains constant

On average, the number of employees in classic regulatory areas remained constant over the year 2006, and the situation was largely similar in the units responsible for the funds and for electronic signatures.

Despite expanding duties (i.e., the establishment of the supervisory authority for collecting societies on RTR's premises) and additional requirements in the service departments, we were once again able to maintain a fairly constant average head count by leveraging productivity potential.

In order to ensure the efficient use of human resources, RTR's employees perform tasks in various areas of the company. In order to provide an accurate picture of the time spent working on various activities, a project-based work tracking system was implemented in 2006 as a complement to our existing timesheet software. Trial operation began on July 1, 2006 and delivered satisfactory results from the outset. In the first half of 2007, the system will be fine-tuned on the basis of practical experience gained in 2006. Overall, this will ensure that working hours can be assigned to activities more accurately, thus providing the basis for an even more precise delineation of work activities in cost accounting.

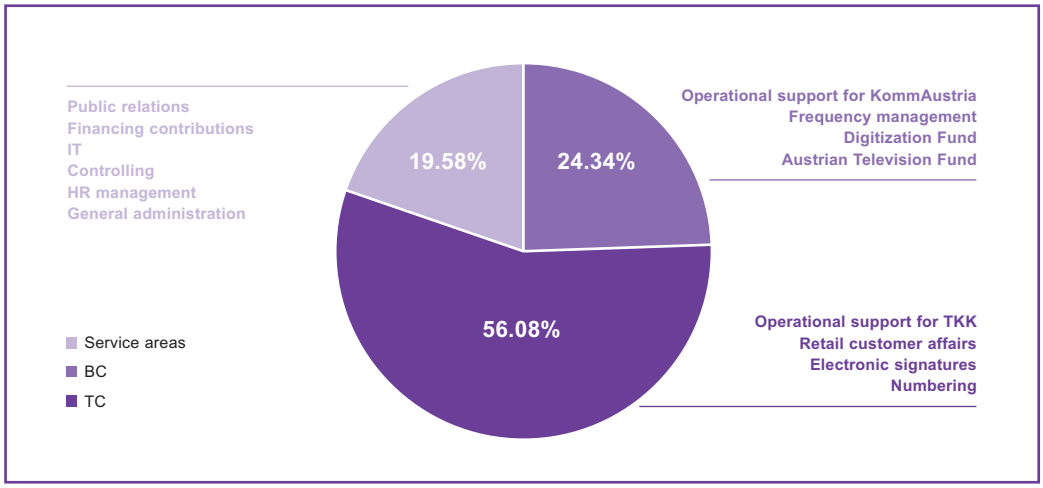
Human resources in the service departments which can not be allocated directly to specific units are assigned as overhead to RTR's cost units according to their share of RTR's head count.

Allocation according to the "causer pays" principle

Services are also exchanged between RTR's divisions (example: the Broadcasting Division purchases the support services of economists from the Telecommunications Division); these services are charged using RTR's current hourly rates in internal accounting.

These measures serve to ensure the efficient use of human resources as well as accurate allocations to the specific areas where costs are incurred.

Figure 76: Development of RTR's head count in 2006



Source: RTR; as of December 31, 2006

7.2 RTR's financial statements for 2006

These financial statements were prepared in accordance with the Austrian Commercial Code (UGB) in its current version.

The external auditors at Deloitte have issued an unqualified audit certificate for RTR's financial statements for the 2006 business year (January 1, 2006 to December 31, 2006).

RTR's income statement and balance sheet from the 2006 financial statements are presented below.

The company's revenues consist of financing contributions from broadcasters located in Austria (Art. 10a Par. 2 KOG) and from the 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), income from fees collected (Art. 13 Par. 4 SigG), and payments from the federal government for activities as the supervisory authority for collecting societies (Art. 28 VerwGesRÄG). The latter revenues are raised by means of financing contributions which the supervisory authority receives from collecting societies (Art. 7 Par. 5 VerwGesG 2006).

The company closed the business year (January 1, 2006 to December 31, 2006) with a loss of approximately EUR 3,000.00 resulting from duties assigned to the company under the Austrian Signatures Act (SigG). The operating result from the fulfillment of duties under the TKG 2003 and KOG is balanced. After the partial reversal of appropriated capital reserves in the amount of EUR 2,780.90, the balance sheet result comes to EUR 0.00.

Table 23: Income statement for the business year from January 1, 2006 to December 31, 2006

		2006		2005	
		EUR		EUR '000	
1.	Net revenues		9,964,312.86		10,057
2.	Other operating income				
	a) Income from the disposal of fixed assets	304.14		10	
	b) Income from the reversal of accruals	40,302.61		18	
	c) Other	81,423.54	122,030.29	128	155
3.	Personnel expenses				
	a) Salaries	-5,146,310.65		-5,093	
	b) Severance payment expenses	-99,120.46		-91	
	c) Cost of statutory social insurance contributions as well as remuneration-dependent charges and mandatory contributions	-1,277,175.61		-1,251	
	d) Pension insurance expenses	-163,237.72		-59	
	e) Voluntary benefit expenses	-101,072.17	-6,786,916.61	-100	-6,595
4.	Depreciation of intangible fixed assets and tangible assets		-243,460.06		-364
5.	Other operating expenses				
	Other		-3,219,554.26		-3,400
6.	**Subtotal of Lines 1 to 5**		**-163,587.78**		**-147**
7.	Income from other securities held as investment assets		82,771.15		87
8.	Miscellaneous interest and similar income		89,315.91		35
9.	Expenses from financial assets (depreciation)		-11,280.00		0
10.	Interest and similar expenses		-0.18		-17
11.	**Sub-total of items 7 to 10**		**160,806.88**		**105**
12.	**Result from ordinary activities = Net annual loss**		**-2,780.90**		**-42**
13.	Reversal of capital reserve		2,780.90		
14.	Amounts gained from capital decrease		0.00		2,108
15.	Allocation to capital reserve		0.00		-143
16.	Loss carried forward		0.00		-1,923
17.	**Accumulated loss**		**0.00**		**0**

Table 24a: Balance sheet as of December 31, 2006, Assets

Assets

		Dec. 31, 2006		Dec. 31, 2005	
		EUR		EUR '000	
A.	**Fixed assets**				
I.	Intangible assets				
	Industrial property rights and similar rights		102,462.55		86
II.	Property, plant and equipment				
	1. Fixtures in rented buildings	52,684.10		91	
	2. Other fixed assets, furniture, fixtures and fittings	132,287.93	184,972.03	121	212
III.	Financial assets				
	1. Securities held as investment assets		2,829,997.68		2,836
			3,117,432.26		**3,134**
B.	**Current assets**				
I.	Accounts receivable and other assets				
	1. Trade accounts receivable	1,215,268.43		1,438	
	2. Other receivables and assets	25,303.07	1,240,571.50	325	1,763
II.	Cash on hand and at bank		3,299,591.35		2,875
			4,540,162.85		**4,638**
C.	**Accruals and deferrals**		**43,477.37**		**46**
D.	**Trustee accounts / funds**		11,533,708.73		10,289
			19,234,781.21		**18,107**

Table 24b: Balance sheet as of December 31, 2006, Liabilities

Liabilities

		Dec. 31, 2006		Dec. 31, 2005	
		EUR		EUR '000	
A.	**Equity capital**				
I.	Capital stock	3,633,641.71		3,634	
II.	Appropriated capital reserve	140,392.34		143	
III.	Net loss for the year	0.00	**3,774,034.05**	0	**3,777**
	(loss carried forward: EUR 0.00; 2005: EUR 1,923,000)				
B.	**Provisions**				
	1. Provisions for severance payments	515,800.00		426	
	2. Other provisions	1,063,050.00	**1,578,850.00**	1,193	**1,619**
C.	**Liabilities**				
	1. Trade accounts payable	364,189.75		458	
	2. Other accounts payable	1,882,718.38	**2,246,908.13**	1,708	**2,166**
	(including taxes: EUR 306,849.34; 2005: EUR 172,000 Social security: EUR 114,799.21; 2005: 111,000)				
D.	**Accruals and deferrals**		**9,097.38**		**0**
E.	**Trustee obligations / funds**		**11,625,891.65**		**10,545**
			19,234,781.21		**18,107**

Sector-specific expenses in the Broadcasting and Telecommunications Divisions

RTR's financial statements do not contain a breakdown of resource allocations by sector. For this reason, Table 25 below gives a breakdown of the main items in RTR's income statement for the Telecommunications (TC) and Broadcasting (BC) Divisions in order to ensure the transparency of sector-specific expenses. In the business year 2006, income and expenses were distributed as follows:

Table 25: RTR income statement by division

Amounts indicated in EUR '000	BC	TC	Total
Net revenues	3,430	6,534	9,964
Other operating revenues	44	78	122
Personnel expenses	-2,039	-4,748	-6,787
Depreciation	-89	-154	-243
Other operating expenses	-1,404	-1,816	-3,220
Operating result	**-58**	**-106**	**-164**
Financial result	58	103	161
Result from ordinary activities	**0**	**-3**	**-3**
Reversal of capital reserve	0	3	3
Accumulated profit (loss)	**0**	**0**	**0**

Source: RTR

7.3 Notes on the structure of RTR financing

As of January 1, 2005, the amendment to the KommAustria Act (KOG) introduced new regulations governing the financing of both divisions of the regulatory authority.

The Broadcasting Division is allocated funds from the federal budget in the amount of EUR 750,000 per year (to be adjusted from 2007 onward), and the parties subject to the financing contribution requirement under the KommAustria Act (KOG) contribute a maximum of EUR 2.25 million (to be adjusted from 2007 onward).

The Telecommunications Division is allocated federal funds amounting to EUR 2 million per year (to be adjusted from 2007 onward), and the parties subject to the financing contribution requirement under the KommAustria Act (KOG) pay a maximum of EUR 6 million (to be adjusted from 2007 onward).

In an amendment to the KommAustria Act (KOG), the Austrian Digitization Fund and the Austrian Television Film Fund were set up at the beginning of 2004; both are to be administered by the managing director of the Broadcasting Division. The Digitization Fund is endowed with EUR 6.75 million and the Television Fund with EUR 7.5 million annually using state revenues from fees collected under Art. 3 Par. 1 of the Broadcasting Fees Act (RGG). These amounts are transferred in two equal installments as of January 30 and June 30 each year.

The legal basis for the funds is established in Articles 9a to 9g of the KommAustria Act (KOG). These legal provisions describe the purposes of grants and the means by which the funds are raised, as well as specific uses for the funds and guidelines for grant awards.

The expenses incurred in the administration of these funds are delineated by means of cost accounting and covered by the respective fund. By March 30th of each year, RTR is required to submit an annual report on the use of the funds to the Federal Chancellor, who must then present the report to the Austrian National Council.

The resources in the funds established within RTR developed as follows in the year 2006:

Table 26: Austrian Television Fund: Excerpt from 2006 financial statements

	EUR	EUR
Balance in trustee account as of December 31, 2005		3,494,530.82
Income		
Increase from credits in 2006	7,500,000.00	
Interest	135,745.97	7,635,745.97
Payments		
Excess administrative expenses from 2005	-50,736.18	
Administrative expenses in 2006	-609,000.00	
Grant payments from 2004	-343,718.00	
Grant payments from 2005	-2,633,112.66	
Grant payments from 2006	-5,305,882.00	-8,942,448.84
Balance of initial funds, debits and credits in 2006 **= Balance in trustee account as of December 31, 2006**		**2,187,827.95**
Unpaid administrative expenses from 2006 to be paid out in 2007		104,367.10
Balance of trustee obligations as of December 31, 2006		**2,292,195.05**
Grants approved but not yet paid out		-2,217,781.67
Funds available in 2007		74,413.38

Source: RTR

Table 27: Austrian Digitization Fund: Excerpt from 2006 financial statements

	EUR	EUR
Balance in trustee account as of December 31, 2005		6,794,002.27
Income		
Increase from credits in 2006	6,750,000.00	
Interest	275,243.08	7,025,243.08
Payments		
Administrative expenses from 2005	-307,289.28	
Administrative expenses and RTR's participation in projects in 2006	-951,800.00	
Grant payments from 2005	-953,875.66	
Grant payments from 2006	-450,479.46	
Payment of subsidies for terminal devices	-2,424,498.73	-4,473,364.57
Balance of initial funds, debits and credits in 2006 **= Balance in trustee account as of December 31, 2006**		**9,345,880.78**
Unpaid administrative expenses from 2006 to be paid out in 2007 and RTR's participation in projects in 2006		-12,184.18
Balance of trustee obligations as of December 31, 2006		**9,333,696.60**
Grants approved but not yet paid out		-5,179,009.45
Funds available in 2007		4,154,687.15

Source: RTR

When the Signatures Act (SigG, Federal Law Gazette I No. 190/1999) went into effect, the TKK was designated as the supervisory authority for electronic signatures (Art. 13 Par. 1 SigG). Under Art. 13 Par. 7 and Art. 15 Par. 5 SigG, the activities of the supervisory authority and RTR under the Signatures Act are to be separated from RTR's activities under other federal acts (TKG 2003, KOG, etc.) in all organizational and financial aspects.

For its activities pursuant to the Signatures Act and for the use of RTR's services, Art. 13 Par. 4 SigG stipulates that the supervisory authority must charge fees which are based on the costs of its activities and defined in an ordinance. Until 2004, the certification service providers were required to pay an annual fee of EUR 2.00 per qualified certificate to cover the ongoing fixed costs of the supervisory authority and RTR (Art. 1 Par. 2 SigV in the version of Federal Law Gazette II No. 30/2000). As this fee was no longer included in the version of the SigV amended by Federal Law Gazette II No. 527/2004, which went into effect on January 1, 2005, the ongoing fixed costs are now covered by a yearly allocation from the federal budget.

As the funds raised through the capital increase under Art. 13 Par. 4 SigG for the first years of the supervisory authority's operations were exhausted in August 2005, the RTR Supervisory Board decided in its session on October 19, 2005 to reduce the company's capital stock to its original level. The difference was added to appropriated capital reserves.

In the period from January 1 to December 31, 2006, RTR incurred costs totaling EUR 227,831.66 in fulfilling its duties under the Signatures Act. On the other side, revenues amounted to EUR 225,050.76. The excess expenses were covered by partially reversing appropriated capital reserves in the amount of EUR 2,780.90.

When the amended Collecting Societies Act 2006 (VerwGesRÄG) went into effect on July 1, 2006, KommAustria was assigned the function of supervisory authority for collecting societies under Art. 28 Par. 1. Pursuant to Art. 28 Par. 2 VerwGesRÄG, the Broadcasting Division at RTR 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).

As a result, the company's equity as of December 31, 2006 was as follows:

Table 28: Equity as of December 31, 2006

	EUR	EUR
Capital stock as of December 31, 2006 (after capital decrease)		3,633,641.71
Loss incurred in the fulfillment of duties under the SigG, January 1 – December 31, 2006	-2,780.90	
Result from ordinary activities		-2,780.90
Offset of loss in 2006 against partial reversal of capital reserve		2,780.90
Capital reserve as of December 31, 2006		140,392.34
Equity as of December 31, 2006		**3,774.034,05**

Source: RTR

7.4 RTR Supervisory Board

In December 2006, the RTR Supervisory Board consisted of the following members (in alphabetical order):

Josef Halbmayr (Wiener Privatbank Immobilieninvest AG), Chairman of the Supervisory Board

Franz Semmernegg (Member of the Management Board, Kapsch AG),
Deputy Chairman of the Supervisory Board

Matthias Traimer (Head of Department V/4, Constitutional Service at the Federal Chancellery), Member of the Supervisory Board

Johannes Strohmayer (Managing Director, European Capital Partners), Member of the Supervisory Board

Brigitte Hohenecker (Member of the Works Council, RTR)

Martin Ulbing (Member of the Works Council, RTR)

Stefan Weiss (Telecommunications Advisor in the Cabinet of the Austrian Federal Minister of Transport, Innovation and Technology) stepped down from the RTR Supervisory Board in December 2006 and was replaced by Johannes Strohmayer. At the same time, Ms. Marion Kopp (Member of the Works Council, RTR) relinquished her seat on the board to Martin Ulbing.

8. Appendix

8.1 Tables and figures

Tables

Figures

8.2 Abbreviations

A	
ADR	Alternative Dispute Resolution
ADSL	Asymmetric Digital Subscriber Line
ANO	Alternative network operator
ATM	Asynchronous Transfer Mode
AVG	General Administrative Procedures Act *(Allgemeines Verwaltungsverfahrensgesetz)*
B	
BKA	Federal Chancellery *(Bundeskanzleramt)*
BKS	Federal Communications Senate *(Bundeskommunikationssenat)*
BMVIT	Federal Ministry of Transport, Innovation and Technology *(Bundesministerium für Verkehr, Innovation und Technologie)*
B-VG	Federal Constitutional Act *(Bundes-Verfassungsgesetz)*
C	
CATV	Cable TV
CbC	Call-by-Call
CEPT	European Conference of Postal and Telecommunications Administrations *(Conférence Européenne des Administrations des Postes et des Télécommunications)*
CoCom	Communications Committee
CPS	Carrier pre-selection
D	
DICE	Digital Innovation through Cooperation in Europe
DSL	Digital Subscriber Line
DVB-C	Digital Video Broadcasting – Cable
DVB-H	Digital Video Broadcasting – Handheld
DVB-T	Digital Video Broadcasting – Terrestrial
E	
ECC	Electronic Communications Committee
ECG	E-Commerce Act *(E-Commerce-Gesetz)*
ECP	European Common Proposal
EDGE	Enhanced Data Rates for GSM Evolution
EEN-V	Itemized Billing Ordinance *(Einzelentgeltnachweis-Verordnung)*
E-GovG	E-Government Act *(E-Government-Gesetz)*
EC	European Commission
EHRC	European Human Rights Convention
ENUM	Electronic Number Mapping
EPG	Electronic Program Guide
ERG	European Regulators Group
ETSI	European Telecommunications Standards Institute

F

FBZV	Frequency Range Allocation Ordinance *(Frequenzbereichszuweisungsverordnung)*
FESA	Forum of European Supervisory Authorities for Electronic Signatures
FL-LRAIC	Forward-Looking Long-Run Average Incremental Costs
FTTH	Fiber to the Home
FWA	Fixed Wireless Access

G

GHz	Gigahertz
GSM	Global System for Mobile Communication

H

HFC	Hybrid Fiber Coax
HHI	Hirschman-Herfindahl Index
HLR	Home Location Register
HSDPA	High Speed Downlink Packet Access

I

IC	Interconnection
IETF	Internet Engineering Task Force
ICT	Information and Communications Technologies
IMT	International Mobile Telecommunications
IP	Internet Protocol
IRG	Independent Regulators Group
ISDN	Integrated Services Digital Network
ISP	Internet service provider
ISPA	Internet Service Providers Austria
ITU	International Telecommunication Union

K

KartG 2005	Cartels Act 2005 *(Kartellgesetz 2005)*
Kbit/s	Kilobits per second
KEM-V	Communications Parameters, Fees and Value-Added Services Ordinance *(Kommunikationsparameter-, Entgelt- und Mehrwertdiensteverordnung)*
KEV	Communications Survey Ordinance *(Kommunikations-Erhebungs-Verordnung)*
KOA	KommAustria
KOG	KommAustria Act *(KommAustria-Gesetz)*
KommAustria	Austrian Communications Authority
KSchG	Consumer Protection Act *(Konsumentenschutzgesetz)*

L

LRAIC	Long-Run Average Incremental Cost

M

Mbit/s	Megabits per second
MDF	Main Distribution Frame
MHP	Multimedia Home Platform
MHz	Megahertz
MMS	Multimedia Messaging Service
MSC	Mobile Switching Center
MT	Mobile Terminated
MUX	Multiplexer

N

NGN	Next Generation Network
NÜV	Number Porting Ordinance *(Nummernübertragungsverordnung)*

O

OECD	Organization for Economic Cooperation and Development
OGH	Austrian Supreme Court *(Oberster Gerichtshof)*
ONP	Open Network Provision
ORF	Austrian Broadcasting Corporation *(Österreichischer Rundfunk)*
ORF-G	ORF Act *(ORF-Gesetz)*

P

Par.	Paragraph
PBX	Private branch exchange
PDH	Plesio-synchronous digital hierarchy
PIB	Principles of Implementation and Best Practice
PKI	Public key infrastructure
PoI	Point of Interconnection
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
PubFG	Journalism Subsidies Act 1984 *(Publizistikförderungsgesetz 1984)*

R

REM	Research Institute for Electronic Mass Media Law *(Forschungsinstitut für das Recht der elektronischen Massenmedien)*
RFMVO 2004	Broadcasting Market Definition Ordinance 2004 *(Rundfunkmarktdefinitionsverordnung 2004)*
RGG	Broadcasting Fees Act *(Rundfunkgebührengesetz)*
RR	Radio Regulations
RRC	Regional Radio Conference
RSC	Radio Spectrum Committee
RSPG	Radio Spectrum Policy Group
RTR	Austrian Regulatory Authority for Broadcasting and Telecommunications *(Rundfunk und Telekom Regulierungs-GmbH)*
R-VO	Reference Rate Ordinance *(Richtsatzverordnung)*

S

SigG	Signatures Act *(Signaturgesetz)*
SigV	Signatures Ordinance *(Signaturverordnung)*
SKP-V	Special Communications Parameters Ordinance *(Spezielle Kommunikationsparameter-Verordnung)*
SMP	Significant market power
SMS	Short Message Service
SVO-RF 2006	Broadcasting Threshold Value Ordinance 2006 *(Schwellenwert-Verordnung Rundfunk 2006)*
SVO-TK 2006	Telecommunications Threshold Value Ordinance 2006 *(Schwellenwert-Verordnung Telekommunikation 2006)*

T

T-DAB	Terrestrial Digital Audio Broadcasting
TKG (1997)	Telecommunications Act 1997 *(Telekommunikationsgesetz 1997)*
TKG 2003	Telecommunications Act 2003 *(Telekommunikationsgesetz 2003)*
TKGV	Telecommunications Fees Ordinance *(Telekommunikationsgebührenverordnung)*
TKMVO 2003	Telecommunications Markets Ordinance 2003 *(Telekommunikationsmärkte-Verordnung 2003)*
TKK	Telekom-Control Commission

U

UDV	Universal Service Ordinance *(Universaldienstverordnung)*
UGB	Austrian Commercial Code *(Unternehmensgesetzbuch)*
UMTS	Universal Mobile Telecommunication System
UVS	Independent Administrative Board *(Unabhängiger Verwaltungssenat)*

V

VerwGesG 2006	Collecting Societies Act 2006 *(Verwertungsgesellschaftengesetz 2006)*
VerwGesRÄG	Act amending the Collecting Societies Act *(Verwertungsgesellschaftenrechtsänderungsgesetz)*
VfGH	Austrian Constitutional Court *(Verfassungsgerichtshof)*
VHF	Very High Frequency
VoB	Voice over Broadband
VoDSL	Voice over DSL
VoI	Voice over Internet
VoIP	Voice over Internet Protocol
VwGH	Austrian Administrative Court *(Verwaltungsgerichtshof)*

W

WAG	Securities Supervision Act *(Wertpapieraufsichtsgesetz)*
WARC	World Administrative Radio Conference

Z

ZIV	Access Control Systems and Interoperability Ordinance *(Zugangsberechtigungssysteme- und Interoperabilitätsverordnung)*
ZuKG	Access Control Act *(Zugangskontrollgesetz)*
ZVO	Interconnection Ordinance *(Zusammenschaltungsverordnung)*

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).
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).
Directive on Privacy and Electronic Communications	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, 31 July 2002, p. 37).
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).
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).
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).
Television Directive	Council Directive 89/552/EEC 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, as last amended by Directive 97/36/EC, OJ L 202 of 30 July 1997, p. 60).
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 Federal acts

Access Control Act (ZuKG)	*(Zugangskontrollgesetz)* Federal Act on the Protection of Services Subject to Access Control, Federal Law Gazette 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 last amended by Federal Law Gazette I No. 117/2002
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. 9/2006
Cartels Act 2005 (KartG 2005)	*(Kartellgesetz 2005)* Federal Act on Cartels and Other Restrictions on Competition, Federal Law Gazette I No. 61/2005
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	*(Wettbewerbsgesetz)* Federal Act on the Establishment of a Federal Competition Authority, Federal Law Gazette No. 753/1996 as last amended by Federal Law Gazette I No. 62/2005 and Federal Law Gazette I No. 106/2006
Consumer Protection Act (KSchG)	*(Konsumentenschutzgesetz)* Federal Act of March 8, 1979, Enacting Provisions for the Protection of Consumers, Federal Law Gazette 1979/140 as last amended by Federal Law Gazette I No. 92/2006
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

European Human Rights Convention (EHRC)	Convention on the Protection of Human Rights and Basic Freedoms, Federal Law Gazette No. 210/1958 as last amended by Federal Law Gazette III No. 179/2002 (DFB)
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. 121/2005
Federal Constitutional Broadcasting Act	*(BVG-Rundfunk)* Federal Act Ensuring the Independence of Broadcasting, Federal Law Gazette No. 396/1974
General Administrative Procedures Act (AVG)	*(Allgemeines Verwaltungsverfahrensgesetz)* General Administrative Procedures Act, Federal Law Gazette No. 51/1991 as last amended by Federal Law Gazette I No. 10/2004
Journalism Subsidies Act 1984 (PubFG)	*(Publizistikförderungsgesetz)* 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. 113/2003
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. 159/2005
Press Subsidies Act 2004 (PresseFG 2004)	*(Presseförderungsgesetz 2004)* Federal Act on Press Subsidies, Federal Law Gazette I No. 136/2003
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. 1169/2004
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. 66/2006
Securities Supervision Act (WAG)	*(Wertpapieraufsichtsgesetz)* Federal Act on the Supervision of Securities-Related Services, Federal Law Gazette No. 78/2005 as last amended by Federal Law Gazette I No. 141/2006
Signatures Act (SigG)	*(Signaturgesetz)* Federal Act on Electronic Signatures, Federal Law Gazette No. 190/1999 as last amended by Federal Law Gazette I No. 164/2005
Telecommunications Act 2003 (TKG 2003)	*(Telekommunikationsgesetz 2003)* Federal Act Enacting a Federal 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. 133/2005

8.3.2.2 Ordinances

Access Control Systems and Interoperability Ordinance (ZIV)	*(Zugangsberechtigungssysteme- und Interoperabilitätsverordnung)* 6th Ordinance of the Austrian Communications Authority (KommAustria) on conditions for access control systems and requirements for the interoperability of television devices and services
Broadcasting Market Definition Ordinance 2004 (RFMVO 2004)	*(Rundfunkmarktdefinitionsverordnung 2004)* 2nd 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. 70/2003)
Broadcasting Threshold Value Ordinance 2006 (SVO-RF 2006)	*(Schwellenwert-Verordnung Rundfunk 2004)* 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 the calculation of overall sector-specific revenues
Communications Parameters, Fees and Value-Added Service Ordinance (KEM-V)	*(Kommunikationsparameter-, Entgelt- und Mehrwertdiensteverordnung)* 6th RTR Ordinance defining regulations regarding communications parameters, fees and value-added services, as last amended by Federal Law Gazette II No. 389/2006
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
Framework Guidelines Ordinance	*(Rahmenrichtlinienverordnung)* Ordinance of the Austrian Federal Minister of Transport, Innovation and Technology defining framework guidelines for the issuance of general terms and conditions for the sharing of infrastructure and for the provision of reserved telecommunications services, Federal Law Gazette No. 756/1994
Frequency Allocation Ordinance	*(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 2005 (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. 524/2006

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. 525/2006
Interconnection Ordinance (ZVO)	*(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
KommAustria Reference Rate Ordinance (R-VO)	*(Richtsatzverordnung der KommAustria)* 3rd 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
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
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
RTR Reference Rate Ordinance (R-VO)	*(Richtsatzverordnung (R-VO) der RTR-GmbH)* 5th 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
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
Special Communications Parameters Ordinance (SKP-V)	*(Spezielle Kommunikationsparameter-Verordnung)* 2nd RTR Ordinance defining a partial plan for communications parameters

Telecommunications Fees Ordinance (TKGV)	*(Telekommunikationsgebührenverordnung)* Ordinance of the Austrian Federal Minister of Science and Transport on fees in the field of telecommunications, Federal Law Gazette II No. 29/1998 as last amended by Federal Law Gazette II No. 438/2006
Telecommunications Markets Ordinance 2003 (TKMVO 2003)	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. 117/2005
Telecommunications Threshold Value Ordinance 2006 (SVO-TK 2006)	*(Schwellenwert-Verordnung Telekommunikation 2006)* Ordinance of the Telekom-Control Commission (TKK) defining a threshold value below which the revenues of a party subject to the financing contribution are not included in the calculation of overall sector-specific revenues
Telecoms Pricing Ordinance	*(Telekom-Tarifgestaltungsverordnung)* Ordinance of the Austrian Federal Minister of Science, Transport and Arts defining a pricing system for specific telecommunications services, Federal Law Gazette No. 650/1996
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 and association names

Abbreviation	Full name of company
Antenne Oberösterreich	Antenne Oberösterreich GmbH
Antenne Salzburg	Antenne Salzburg GmbH
Antenne Steiermark	Antenne Steiermark Regionalradio GmbH & Co KG
Arge Daten	Arge Daten - Österreichische Gesellschaft für Datenschutz (Austrian association for data protection)
A-SIT	Secure Information Technology Center – Austria
A-Trust	A-Trust Gesellschaft für Sicherheitssysteme im elektronischen Datenverkehr GmbH
ATV	ATV Privat-TV Services AG (formerly ATV Privatfernseh-GmbH)
Datakom	Datakom Austria GmbH
DFFG	Digitales Fernsehen Förder GmbH
eety	eety-Telecommunications GmbH
enum.at	enum.at Dienstleistungs GmbH für konvergente Kommunikationsdienste
eTel	eTel Austria AG
Finarea	Finarea SA
Hutchison 3G	Hutchison 3G Austria GmbH
Inode	Inode Telekommunikationsdienstleistungs GmbH (now UPC Austria GmbH)
ISPA	Internet Service Providers Austria
KRONEHIT	KRONEHIT Radio Betriebsgmbh
Mobilkom	mobilkom austria AG (formerly mobilkom austria AG & Co KG)
One	One GmbH
ORF	Austrian Broadcasting Corporation *(Österreichischer Rundfunk)*
ORS	Österreichische Rundfunksender GmbH & Co KG
Puls TV	Puls City TV GmbH
Radio Arabella	Radio Arabella GmbH
REM	Research Institute for Electronic Mass Media Law *(Forschungsinstitut für das Recht der elektronischen Massenmedien)*
RTR	Austrian Regulatory Authority for Broadcasting and Telecommunications *(Rundfunk und Telekom Regulierungs-GmbH)*
SAT.1 (Österreich)	Sat.1 Privatrundfunk und Programmgesellschaft mbH
Siemens	Siemens AG Österreich
tele.ring	tele.ring Telekom Service GmbH (now T-Mobile Austria GmbH)
Tele2UTA	Tele2UTA Telecommunication Services GmbH
Telekom Austria	Telekom Austria AG
T-Mobile Austria	T-Mobile Austria GmbH
TRA 3G	TRA 3G Mobilfunk GmbH
UPC Telekabel	UPC Telekabel Wien GmbH
VFRÖ	Verband Freier Radios Österreichs (Austrian association of free radio broadcasters)
VKI	Verein für Konsumenteninformation (Association for consumer information)
VÖZ	Verband Österreichischer Zeitungen (Association of Austrian newspapers)
Yesss!	YESSS! Telekommunikation GmbH

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, 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 James Anderson, Lerchenfelder Strasse 100/9, A-1080 Vienna, e-mail: chris.anderson@wu-wien.ac.at

RUNDFUNK & TELEKOM REGULIERUNGS-GMBH

A-1060 Wien, Mariahilfer Str. 77–79
Tel: +43 (0)1 58058-0
Fax: +43 (0)1 58058-9191
http://www.rtr.at E-Mail: rtr@rtr.at
FN: 208312t HG Wien
DVR-Nr.: 0956732 Austria