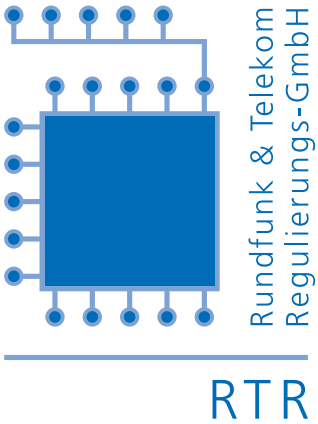
Communications Report 2005



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Preface

The increasing importance of the communications markets (i.e., broadcasting and telecommunications) for the information society of the 21st century is clearly reflected in the European Commission's i2010 initiative. This initiative aims to build an information and media society as well as a uniform information space in Europe, and to promote innovation and investment in research on information and communications technologies (ICTs) with the cooperation of the Member States. In this context, the main priority is to create a coordinated legal framework for a market-oriented, flexible and future-proof digital economy in Europe in order to ensure growth and employment in the information society and the media industry.

The activities of the convergent regulatory institutions KommAustria, RTR and the Telekom Control Commission are also to be seen against the backdrop of this overall European plan. In the interest of promoting Austria as an attractive location, stable and reliable regulatory framework conditions are especially important for the market. Specifically, this involves the rapid and forward-looking fulfillment of duties set forth in the relevant laws, ensuring continuity in regulation by considering the overall picture, and taking on an active role as regulator in major issue areas.

The regulatory authority acts in accordance with clear principles set forth in Austrian law and makes its decisions independently of individual lobbies and interests. In addition, the regulatory authority assumes the role of a competence center as required by Austrian legislation. For the sake of transparency, all essential decisions and current market information are published on the RTR web site, where we also carry out consultations on topics relevant to regulation. With an efficient structural and process organization as well as targeted deployment of the available resources, we were able to handle our growing responsibilities in 2005 with the same number of employees and without increasing overall expenditure.

As in the past, the Communications Report documents the authority's activities in the year 2005 in the fields of broadcasting, film promotion, press and journalism subsidies, electronic signatures and telecommunications. In addition, the report describes the regulatory authority's activities as a competence center. Finally, we provide a brief description of RTR as an organization managed according to the principles of economy, thrift and expedience as is prevalent in the private sector.

With this document, we wish once again to provide the reader with in-depth insight into our extensive activities and to highlight the growing importance of the communications markets.

Vienna, June 2006 *Alfred Grinschgl* *Georg Serentschy*

1. Management summary

1.1 Introductory remarks

Objective of the report: Fulfillment of legal reporting obligations

The 2005 Communications Report serves to meet various legal reporting requirements under the Austrian Communications Act (KommAustria Act, or KOG) and 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, 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 extensive and realistic insight into the problems and challenges associated with RTR's legally based efforts to enable more competition and 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 2005 Communications Report are as follows:

1. **Management summary:** In addition to providing the reader with brief overview of RTR's reporting obligations and of the additional information contained in the report, this section summarizes the report's essential statements and describes the outlook for the year 2006.

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 laws (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 levels of authority are described briefly and proceedings before the Administrative Court and Constitutional Court are discussed in detail.

4. **RTR's activities in 2005:** This part provides information on RTR's regulatory work in both the Broadcasting and Telecommunications Divisions, with due attention to the attainment 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 volumes.

6. **RTR as a competence center:** This section describes the activities undertaken by the regulatory authority in its capacity as a competence center in 2005.

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 Supervisory Board.

With this part of the 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 provision of official services and the authority's activities as a competence center.

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

According to Art. 2 Par. 2 of the KommAustria Act (KOG), the objectives to be pursued in the activities of KommAustria are as follows:

- to promote market access for new providers;
- to ensure a diversity of opinions and promote quality in broadcasting programs, including the technical requirements for their dissemination;
- to develop technical and economic schemes for a dual broadcasting market in Austria;
- to ensure that content providers adhere to minimum European standards, especially in the interest of child, youth and consumer protection;
- to optimize the use of Austria's frequency spectrum for broadcasting;

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

- to create and maintain modern, high-quality communications infrastructure in order to promote Austria's location quality at a high level.

Below we give a general description of the main activities undertaken by RTR in the reporting period in its efforts to attain the objectives laid down in the KOG.

One core area in the work of KommAustria (and RTR as its operational arm) involves procedures for the licensing and allocation of transmission capacities in radio broadcasting; these procedures serve to promote the market entry of new providers on an ongoing basis.

The selection procedure in the licensing process ensures that decisions always take into account the need to secure a diversity of opinions in the media. The authority promotes the quality of broadcasting programs by means of various education and training measures for broadcasters. In its capacity as a competence center, RTR has been actively involved since autumn 2005 in 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 introduction of digital broadcasting ultimately contribute to improving technical dissemination capabilities.

Since the amendment of the Austrian Private Radio Act (PrR-G) which went into effect on August 1, 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 "collect" these frequencies and (wherever possible) put them out to tender in combination with additional transmission capacities. This actively supports the development of technical and economic schemes for the dual broadcasting market.

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

All of our 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 is part of RTR's self-perception as an independent and transparent service organization for all stakeholders, such as market participants, consumers and policymakers. This expert knowledge is disseminated in our publications, which include monthly newsletters, individual studies on specific topics, annual reports and the ongoing provision of replies to subject-specific 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.

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 2005, RTR was able to make substantial contributions to the attainment of these objectives. In brief, all of RTR's activities in this area essentially pursue the following general objectives:

- to ensure the clarity of 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 functional competition.

A few examples of specific contributions in 2005 are described briefly in this section.

In the core area of competition regulation – i.e., market analyses – the organization made substantial progress in 2005. With the exception of the wholesale market for international roaming (which has only been notified by one EU Member State), all of the 17 relevant telecommunications markets were notified to the European Commission, and most of these procedures have been completed in their entirety. In terms of implementation speed, Austria is among the top three countries in the European Union. This has made it possible to ensure a smooth transition from the old legal framework to the new one and to ensure the clarity of general conditions for the market and consumers thanks to consistent and rapid implementation.

In order to account for current as well as expected market developments, the regulatory authority has already initiated preparations for future market analyses. For this purpose, a public consultation was launched on the revision of the Telecommunications Markets Ordinance (TKMVO). For this first time, this consultation also included empirical data related to demand. In addition, a detailed report was published on the comprehensive demand-side study carried out in this context.

In the course of several major dispute settlement procedures, the regulatory authority was able to ensure the enforcement of legal obligations (e.g., obligations arising from the results of market analyses). At the wholesale level, the major issues in 2005 were mobile termination, unbundling and wholesale access to broadband services. For example, the gradual reduction of mobile termination rates decided on by the regulatory authority will help obviate disruptive intervention and at the same time create the conditions necessary for a medium-term reduction of retail rates for calls to mobile subscribers in other networks.

The new decisions in the field of mobile number porting made it possible to standardize porting processes between operators in terms of technology as well as processes, to specify quality parameters more precisely and to resolve unanswered questions about porting fees between operators. Moreover, the general conditions for the porting of large-scale customers (subscribers with more than 25 SIM cards) have also been standardized.

In late 2005 – immediately after the Austrian Federal Ministry of Transport, Innovation and Technology delivered the relevant terms of use – an invitation to tender was launched for the allocation of frequencies in the 450 MHz range. Due to their 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. Once the frequency allocation procedure is completed, the market will have yet another means of broadband access to retail consumers at its disposal in 2006.

With the publication of its guidelines for VoIP service providers in 2005, RTR demonstrated once again that it recognizes the increasing importance of Voice over IP (VoIP) services and also met the market participants' need for a classification of these services under the existing legal framework.

With regard to communications parameters, one particular focus area was a review of the provisions of the Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V). In this context, usage monitoring focused more on the field of value-added services (especially SMS-based value-added services) as well as telephone numbers for private networks. In the administration of the Austrian numbering space, it was possible to tap further potential for efficiency and to continue the trend toward increasingly shorter processing times for requests.

The KEM-V's new opt-in principle for dialer services brought about a substantial improvement in consumer protection in this area. Compared to 2004, dialer-related complaints declined by 76%. This is also reflected in the number of retail consumer conciliation cases, which fortunately declined by 20% from 2004 to 2005. In light of the increasing number of problems with SMS/MMS-based value-added services, RTR took the initiative and was able to find a solution (i.e., giving consumers the ability to bar such services) in cooperation with market participants.

In the field of electronic signatures, an amendment to the Signatures Ordinance brought about substantial simplifications. In addition, the relevant requirements were further specified in the publication of a recommendation on the algorithms suitable for signatures.

In its capacity as an independent competence center, RTR drew up Austria's ICT Master Plan as instructed by the Federal Ministry of Transport, Innovation and Technology. On the basis of

an analysis of strengths and weaknesses, expert interviews and research on international examples of best practice, RTR developed an integrated four-level plan which starts with a general vision and proceeds to specify the mission, strategic objectives and 44 concrete measures. The plan will serve as the point of departure for a broad-based public discussion and for the planning and execution of implementation measures by the responsible bodies.

The regulatory authority also continued to play an active role in promoting innovation in 2005. For example, after the successful launch of commercial ENUM (Electronic Number Mapping, a service which allows telephone numbers to be mapped to Internet addresses) in 2004, Austria reached a further milestone with its first allocations of telephone numbers in the range designated for convergent services, thus reinforcing its role as a forerunner in this field.

Regulation and international benchmarking

Through targeted cooperation in international working groups, RTR was able to make use of best practices from other countries in its day-to-day regulatory work and to collect benchmarks on the status of Austrian liberalization and regulation. In addition, the regulatory authority also helped advance EU-wide harmonization efforts by contributing its specific experience in meetings and working documents.

When evaluating the attainment of objectives in regulation, it is especially important to consider how the market perceives the progress made. For example, the ECTA carried out a study (the "ECTA Regulatory Scorecard 2005") which evaluated the implementation of the new legal framework by means of interviews with market participants in 16 EU countries. The survey's parameters included issues such as the independence of the national regulatory authority, the speed of processes, and key access products available on the market. In 2005, Austria ranked fourth in this study, behind the United Kingdom, Denmark and France. This means that the activities related to liberalization and regulation in Austria are perceived in a highly positive light by international comparison.

1.4 Outlook

1.4.1 Focuses of the Broadcasting Division in 2006

Ongoing regulatory activities

A large number of licensing and allocation procedures in radio broadcasting are again expected in 2006. One licensing procedure which has attracted great public attention is the award of the 98.3 MHz frequency in Vienna, for which there are 25 applicants.

Broadcasting digitization

2006 will be a decisive year for the digitization of terrestrial television in particular (i.e., television signals which can be received via building antennas or indoor antennas): Early in the year, the invitation to tender launched in May 2005 for the license to operate Austria's first digital terrestrial television (DVB-T) multiplexer will be completed. In the fall of 2006, regular operation of DVB-T will commence. At the same time, the regulatory authority will arrange for extensive communication measures and promote the upcoming transition by providing grants from the Austrian Digitization Fund for the consumers affected.

Austrian Television Fund

In the first two years since its inception, the Austrian Television Fund has successfully established itself as a magnet for highly popular television productions in the genres of documentaries, series and films. In 2006, these activities will also focus on allocating the available EUR 7.5 million to the domestic – and thus also the international – production industry as expediently as possible.

1.4.2 Focuses of the Telecommunications Division in 2006

A number of the issues dealt with in 2005 will also shape the year 2006, for example:

- With regard to creating clarity in general conditions, the completion of RTR's market analyses as well as any necessary subsequent procedures (e.g., with regard to broadband) are forthcoming.

- With the completion of RTR's review of the TKMVO 2003, the second round of market analyses under the new legal framework will begin in 2006.

- As regards frequencies, the auction for packets in the 450 MHz range will be carried out in the first quarter of 2006.

- With regard to universal service, one can expect to see negotiations on the relevant financial compensation.

- The expansion of digital infrastructure and the development of the Austrian ICT market will also be focus areas for further activities, publications and events.

- At the European level, the authority's work will also focus on the revision of the legal framework in the course of the Review 2006. RTR intends to contribute its know-how in the appropriate international work groups.

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

2.1 Regulatory objectives

The objectives and duties of the regulatory authorities are set forth in Austrian law.

The objectives of regulation – which serve as a benchmark for the activities of the Austrian Communications Authority (KommAustria), the Telekom-Control Commission (TKK) as well as the Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR) – are set forth in the Austrian Telecommunications Act 2003 (Art. 1 TKG 2003) and in the KommAustria Act (Art. 2 KOG). These objectives are based on the premise of technological neutrality.

They include creating modern electronic communications infrastructure to promote the attractiveness of Austria as a location, ensuring equitable and functional competition in the operation/provision of communications networks and services, promoting and protecting the interests of the population, and encouraging the market entry of new providers. Additional objectives include ensuring a diversity of opinions and promoting the quality of broadcasting programs (including the technical requirements for their dissemination), developing technical and economic schemes for the dual broadcasting market in Austria, ensuring that minimum European standards are observed by content providers (especially in the interest of child, youth and consumer protection), optimizing the use of the broadcasting frequency spectrum, as well as providing expert knowledge on the convergence of audiovisual media and telecommunications.

2.2 The regulatory authorities

2.2.1 Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR)

RTR was established under the Austrian Communications Act (KommAustria Act, or KOG), which went into effect on April 1, 2004. The authority is organized as a convergent regulator for broadcasting and telecommunications. Its legally defined range of duties can be broken down into the following general categories:

- Operational support for the Austrian Communications Authority and the TKK;
- Fulfillment of duties assigned to RTR under the Telecommunications Act 2003 (TKG 2003) and the KommAustria Act (KOG);
- Fulfillment of duties pursuant to the Signatures Act (SigG), E-Commerce Act (ECG), the Cartels Act and the Communications Survey Ordinance (KEV);
- Establishment and management of a competence center specifically for issues related to the convergence of media and telecommunications (Art. 5 KOG).

Duties under the KOG

RTR's duties under the KOG specifically include issuing broadcasting licenses, issuing permits for the operation of technical equipment required for broadcasting, legal supervision of private broadcasting organizations, administering the resources in the Austrian Digitization Fund and the Austrian Television Fund, and monitoring adherence to advertising regulations by private broadcasters and the Austrian Broadcasting Corporation (ORF).

Duties under the TKG 2003

Under the TKG 2003, RTR is responsible for fulfilling all duties which are not assigned to the TKK and KommAustria. These include, among other things, issuing ordinances, receiving and processing reports from operators/providers of public communications networks and services (general approvals), assigning and monitoring the use of communication parameters, deciding on conciliation and dispute settlement procedures as well as alternative dispute resolution (ADR), delineating markets and setting reference compensation rates for the right to use land for telecommunication lines.

Duties under the SigG

As the operational arm of the Telekom-Control Commission, RTR is in charge of supervising the providers of certification services under the Austrian Signatures Act (SigG).

Duties under the ECG

Under Art. 7 ECG, RTR is required to maintain a list of persons and companies who do not wish to receive commercial communication via electronic mail. These parties can have their names placed on this list free of charge. All of RTR's activities in 2005 contributed to achieving the regulatory authorities' objectives as defined in the relevant Austrian laws.

Duties under the KEV

The Communications Survey Ordinance (KEV) went into effect on October 1, 2004. The provisions of Art. 4 Par. 2 KEV require RTR to carry out statistical surveys in the field of communications on a quarterly basis and to compile the resulting statistical reports, which are then published on RTR's web site.

Organizational aspects

Organizational aspects: Two divisions, two managing directors

RTR is managed by its two 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 2005, the managing directors at RTR were:

- Broadcasting Division: Alfred Grinschgl
- Telecommunications Division: Georg Serentschy.

100% of the company's shares are held by the Austrian federal government.

2.2.2 Telekom-Control Commission (TKK)

TKK: A panel authority with the powers of a court

The TKK, which was established in 1997 as a panel authority with the powers of a court, makes major decisions in connection with telecommunications regulation. The Commission's duties are laid down in Art. 117 TKG 2003. Moreover, the Commission also acts as the supervisory authority for electronic signatures under the Signatures Act (SigG). As a rule, the TKK bases its decisions on expertise provided by RTR.

In 2005, 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)

The members of the Commission are independent and not bound by any instructions in the performance of their duties.

2.2.3 Austrian Communications Authority (KommAustria)

KommAustria is an authority which reports directly to the Austrian Federal Chancellor and was established in 2005 by its current head, Michael Ogris. KommAustria's deputy head is Franz Prull. In its external business activities, KommAustria is an independent body and relies on RTR for operational support in the performance of its functions.

Within the scope of its official activities, the authority makes first-instance decisions and performs its duties pursuant to the following laws:

- Communications Act (KommAustria Act, or KOG);
- Private Radio Act (PrR-G);
- Private Television Act (PrTV-G);
- Telecommunications Act 2003 (TKG 2003);
- Press Subsidies Act 2004 (PresseFG 2004);
- Journalism Subsidies Act 1984 (PubFG);
- Access Control Act (ZuKG).

Since the new Press Subsidies Act 2004 (PresseFG 2004) and the amendment to the Journalism Subsidies Act 1984 (PubFG) went into effect on January 1, 2004, KommAustria has been responsible for managing and awarding press and journalism subsidies.

2.3 National regulatory environment

RTR cooperates with numerous Austrian authorities relevant to regulation.

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)

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 cooperates 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. On the basis of its experience in day-to-day implementation, RTR advises the Ministry on the further development of these 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 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 working group's activities are managed by the regulatory authority (KommAustria) and its operational arm (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 2005, 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).

Under Art. 12 Par. 1 KOG, the five members of the BKS (three of whom have to be appointed judges in Austria) are independent in the performance of their duties and not bound by any instructions. They are appointed by the Federal President upon nomination by the federal government. The members of the Senate are:

- Ekkehard Schalich, Austrian Supreme Court (Chairman);
- Wolfgang Pöschl, Vienna Superior Court (Deputy Chairman);
- Rainer Geissler, Vienna Commercial Court;
- Michael Holoubek, Vienna University of Economics and Business Administration;
- Georg Karasek (Attorney at Law).

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

Cross-border cooperation and international exchange of experience

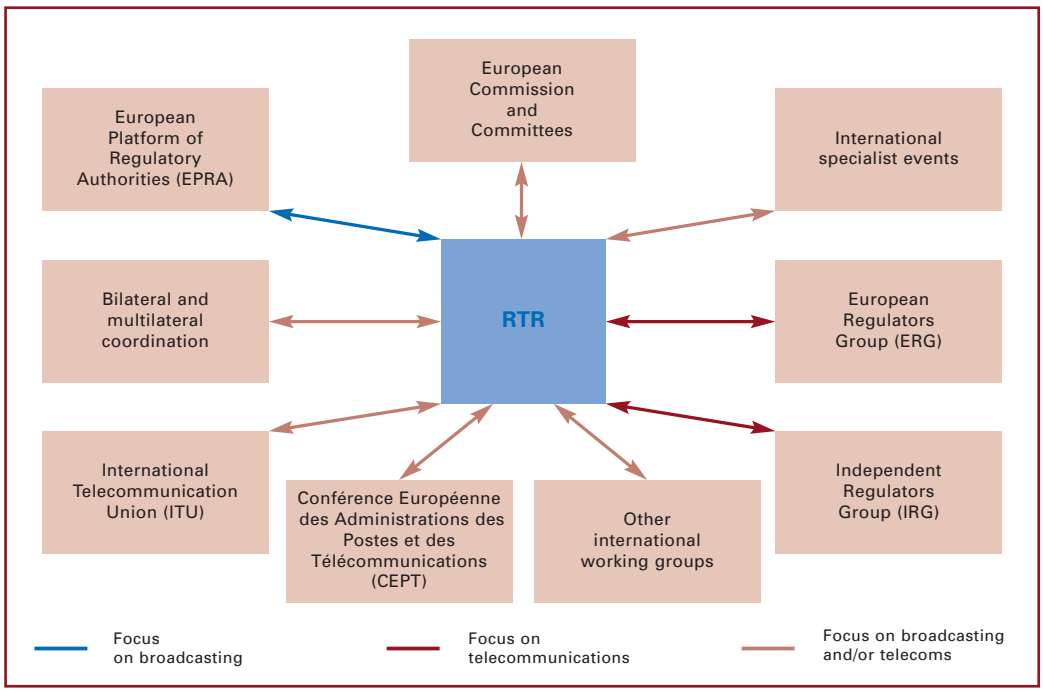
Against the backdrop of the Single European Market, RTR's involvement at the international level is an essential component of its regulatory activities, as well as being one of the authority's duties under Austrian law. Both divisions of RTR cooperate closely with comparable institutions and authorities in other countries.

The internationalization of communications markets also requires close cross-border coordination and cooperation activities among individual regulatory institutions. Regulatory aspects and their potential effects on the market must always be considered with attention to the international market environment. This is especially true of the areas where regulatory decisions have direct or indirect effects on the quality of Austria as a business location. Moreover, the international exchange of experience and benchmarking with regulatory authorities also contributes know-how to RTR's activities in Austria.

RTR also belongs to the European Regulators Group (ERG), which was set up as an advisory body for the European Commission. In many cases, international activities are also required as immediate measures to protect the interests of Austria in the further development of communications technologies and markets.

The diagram below provides an overview of the regulatory authority's international working environment.

Figure 1: RTR and the international regulatory environment



Source: RTR

For further information on the international activities of RTR's two divisions, please refer to Sections 4.1.7.8 and 4.2.6.1.

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

3.1 Lines of command and levels of appeal

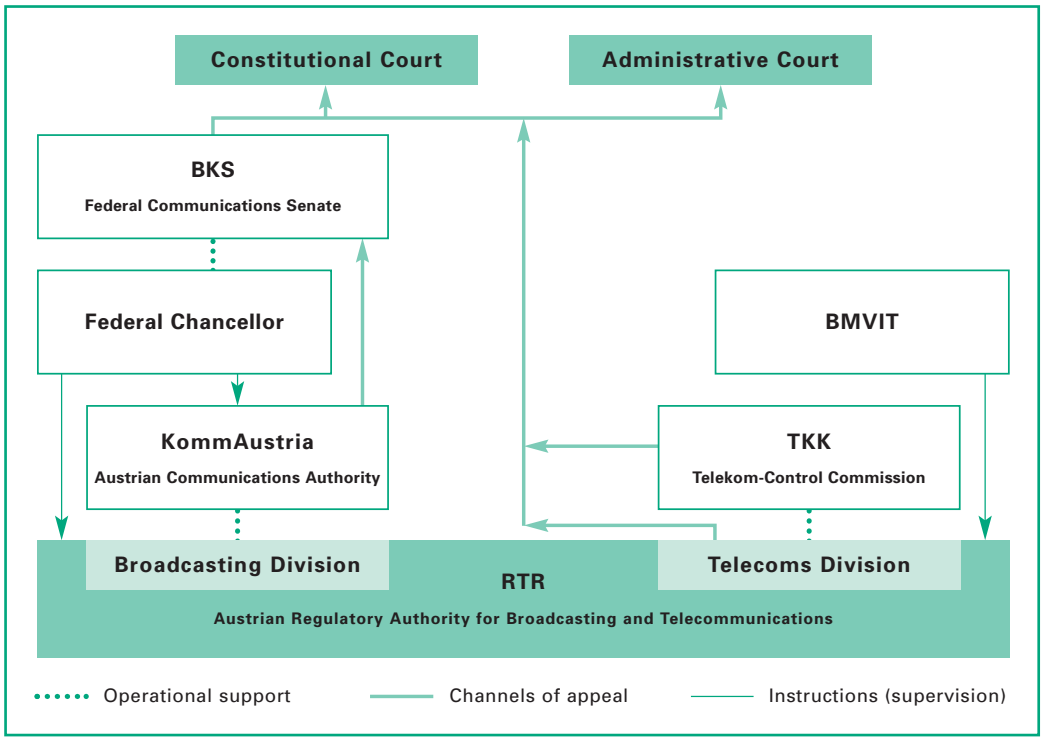
Various means of appeal against the regulatory authorities' decisions

The Austrian Federal Chancellor has the power to issue instructions to KommAustria as well as the Managing Director of RTR's Broadcasting Division, to whom instructions must be submitted in writing.

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. Finally, the chairperson of the TKK (or the member designated in the rules of procedure) and the head of KommAustria are empowered to issue instructions to the staff of RTR in technical matters.

Appeals against Telekom-Control Commission decisions can be filed with the Constitutional Court and Administrative Court in the form of complaints, while appeals against KommAustria decisions can be submitted to the Federal Communications Senate (BKS) as the second instance. Further appeals against BKS decisions can be submitted to Austria's high courts. Appeals against RTR's official decisions in its area of competence can be submitted to the Austrian Administrative Court and/or the Austrian Constitutional Court.

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 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, this competence in administrative penal cases is assigned to the Independent Administrative Board *(Unabhängiger Verwaltungssenat)* in Vienna.

KommAustria decisions: Generally confirmed in the second instance

In the reporting period, the BKS issued 49 decisions in response to appeals. Eighteen decisions were related to radio licenses or frequency allocations (with six of those decisions made after being overturned by the Administrative Court). In one case, KommAustria's decision was changed, while in another case the matter was sent back for renegotiation and a new decision. In the other 16 cases, KommAustria's decisions were confirmed, including the license awards for Innsbruck 92.9 MHz to Welle 1 Innsbruck and Linz 96.7 MHz to Radio Arabella.

In addition, the BKS issued rulings on KommAustria's official decisions in connection with advertising monitoring in 13 cases where violations were identified on the part of private broadcasters. In one case, the BKS ruled that no violation existed, while in the other cases the Senate confirmed or slightly amended KommAustria's decisions.

As an after-effect of the overturning and redefinition of RTR financing arrangements (see also Section 6.3), the BKS had to issue 15 replacement decisions on ORF's financing contribution obligation, in which the financing contributions were recalculated on the basis of the amended legal situation.

Two BKS decisions dealt with appeals against KommAustria decisions on press subsidies. One magazine publisher as well as one radio broadcaster had requested an official ruling from KommAustria (for the purpose of further legal proceedings before the Constitutional Court) on their non-eligibility for press subsidies under legal regulations. In these decisions, the BKS confirmed KommAustria's view that no official decisions can be issued in these cases, as press subsidies are allocated within the federal government's private-sector administration activities and not in the course of an administrative procedure.

Finally, an additional BKS decision confirmed KommAustria's official procedural decision dismissing requests related to procedural matters.

At the end of the reporting period, seven 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, 20 official decisions of this kind were issued. In all cases, the reports submitted by KommAustria were at least partly confirmed.

During the reporting period, the Independent Administrative Board (UVS) in Vienna had to rule on an administrative penal decision in connection with advertising monitoring. The decision was confirmed, but the fine was reduced.

3.2.2 Proceedings before the Administrative Court (VwGH)

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

One BKS appeal decision confirmed

In the Administrative Court's only ruling on a procedure conducted by KommAustria, the court confirmed the BKS' decision on an appeal regarding a legal violation. In this case, the radio broadcaster had outsourced responsibility for radio broadcasting operations to an excessive extent (in the opinion of KommAustria) without ensuring an appropriate level of control. Under Art. 3 Par. 4 PrR-G, radio licenses are non-transferable except in the case of universal legal succession under company law. The contracts concluded in this case were interpreted as a circumvention of this restriction on transferability. The licensee was requested to restore the situation to a legally compliant state.

3.2.3 Proceedings before the Constitutional Court (VfGH)

Complaints against BKS appeal decisions can also be filed with the Austrian Constitutional Court. In the reporting period, no decisions were issued on such cases except for the discontinuation of a procedure and the formal completion of four pending procedures on RTR financing.

Two inadmissible individual requests

In two cases, the Constitutional Court had to rule on individual requests in its capacity as a legal review body; these requests maintained that laws related to KommAustria's enforcement activities were unconstitutional. Both requests were rejected as inadmissible: In the case concerning the exclusion of complimentary issues from press subsidies, the Constitutional Court determined that as a purely self-binding law in private-sector administration the Press Subsidies Act (PresseFG) 2004 has no legal effect on those subject to the law. It was not necessary in the individual request to address the dispute against the public accessibility of verbal negotiations before KommAustria in matters related to license revocation, as this objection can be raised in the course of a complaint with regard to the conclusive decision.

3.3 Telecommunications Division

3.3.1 Proceedings before the Administrative Court (VwGH)

17 complaints regarding TKK decisions were filed with the Austrian Administrative Court.

Seventeen complaints regarding TKK decisions were filed with the Administrative Court during the reporting period. These complaints pertained to eight interconnection procedures, five procedures in which a company was identified as possessing significant market power (SMP) and thus subjected to obligations under Articles 38 to 47 TKG 2003, and four procedures related to the subscriber directory and directory assistance service under Art. 18 TKG 2003. In this context, the regulatory authority's activities involved preparing refutation documents.

The Administrative Court issued a total of 50 decisions in the reporting period. The majority of these decisions were related to interconnection procedures from the years 2000 to 2004. In eight cases, the Administrative Court confirmed the official decision issued by the TKK. Official decisions were overruled due to violations of procedural rules in 17 cases, and due to content-related legal violations in 19 cases. Four procedures were dismissed, and two were declared invalid. Thirteen procedures are currently still pending with the Administrative Court.

3.3.2 Proceedings before the Constitutional Court (VfGH)

Three complaints regarding RTR and TKK decisions were filed with the Austrian Constitutional Court.

In the reporting period, three complaints regarding TKK and RTR decisions were filed with the Constitutional Court. These complaints concerned two interconnection procedures where the requests were withdrawn by the applicant and one supervisory procedure under Art. 91 TKG 2003 in which an operator was ordered to reduce its fees for mobile number porting. Another complaint which is still pending before the Constitutional Court is related to the parties' rights to submit comments under Art. 35ff TKG 2003. In this context, the regulatory authority's activities involved preparing refutation documents. In the reporting period, the Constitutional Court discontinued the procedure in three cases because the relevant official decisions had already been overturned by the Administrative Court. With regard to the supervisory procedure mentioned above, the complaint was rejected, and one complaint from the year 2004 regarding the approval of general terms and conditions of business was rejected due to insufficient grounds.

4. RTR's activities in 2005

4.1 Broadcasting Division

In 2005, RTR's regulatory work in the Broadcasting Division was largely characterized by preparations for the invitation to tender for the construction and operation of Austria's terrestrial multiplex platform. Moreover, two regional coverage areas (the Austrian provinces of Styria and Salzburg) were put out to tender again once the ten-year licensing period for these areas expired. This was the first case where private broadcasting licenses have expired in Austria.

4.1.1 Regulatory activities in radio broadcasting

4.1.1.1 Licensing procedures

In the business year 2005, eleven licensing procedures for radio broadcasting pursuant to the Private Radio Act (PrR-G) were carried out at the request of the relevant party or due to official invitations to tender.

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, as well as information on technical range/coverage deficiencies.

Allocation priorities require review.

If the new transmission capacity leads to the creation of a new coverage area or the expansion of an existing coverage area, then it must be put out to public tender (*Wiener Zeitung*, daily newspapers, RTR web site), unless it is 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 specified by KommAustria. If different applications are then submitted (i.e., including improvements, expansions or the creation of a new coverage area), they are reviewed according to the sequence specified in Articles 10 and 12 PrR-G.

Art. 10 PrR-G defines the objectives to be pursued in allocating transmission capacities in the interest of a dual broadcasting system, as well as defining a 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 priority is the allocation of transmission capacities for the purpose of improving the coverage provided by already licensed radio broadcasters. However, this does not include expanding such coverage areas.

Technical range now relevant in new license procedures

- Finally, transmission capacities are allocated for the purpose of expanding nationwide licenses. Since the PrR-G was amended on August 1, 2004, an application for the creation of a new coverage area is to be rejected under Art. 12 PrR-G in cases where the technical range comprises less than 50,000 people and the applicant does not provide evidence that an independent radio station in the coverage area would serve special local needs and that the radio station can be financed in the long term despite its low range. Applications are also to be rejected in cases where the technical range is between 50,000 and 100,000 people – 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.

- In the next step, KommAustria has to review whether the transmission capacity applied for 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.

4.1.1.2 Allocation of transmission capacities for the creation of new coverage areas

Re-allocation of expired licenses in 2005

Licenses for two new coverage areas

In 2005, four radio broadcasting licenses were issued. On the one hand, two new coverage areas were created ("Innsbruck" and "Lienz"), with the frequency "INNSBRUCK 92.2 MHz" allocated to Lokalradio Innsbruck GmbH and "LIENZ 106.4 MHz" allocated to Antenne Salzburg GmbH.

Two re-allocations of expired licenses

On the other hand, two existing licenses expired on August 31, 2005, specifically those granted to Antenne Salzburg GmbH (previously Radio Melody) for the "Salzburg" coverage area and the license granted to Antenne Steiermark for the "Styria" coverage area. These were the first cases in which radio licenses have expired in Austria. As a result, it was necessary to put those coverage areas out to tender once again (the invitation to tender was published on January 11, 2005).

In the Salzburg procedure, it was not necessary to carry out a selection process because the other applicants withdrew their applications in the course of the procedure. Antenne Salzburg GmbH was once again granted a radio broadcasting license for the "Salzburg" coverage area. Likewise, Antenne Steiermark Regionalradio GmbH & Co KG was able to renew its license for the "Styria" coverage area. In the course of the selection process which had to be carried out in this case, it was necessary in particular to consider Antenne Steiermark Regionalradio GmbH & Co KG's exercise of the license up to that point (Art. 6 Par. 1 and 2 PrR-G).

4.1.1.3 Allocation of transmission capacities for the expansion or improvement of 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 less than 50,000 people can be restricted to existing radio broadcasters for the purpose of expanding existing coverage areas (Art. 13 Par. 3 PrR-G).

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

- HINTERTUX 89.2 MHz, to expand the coverage area of the Tyrolean lowlands and Zillertal valley (Unterländer Lokalradio GmbH);

- LIND DRAUTAL 102.3 MHz to expand the coverage area of Spittal an der Drau (Radio Starlet Programm- und Werbegesellschaft mbH).

Three existing coverage areas expanded

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

- SCHEFFAU 88.9 MHz, KITZBUEHEL 3 106.0 MHz and S JOHANN TIR 87.7 MHz, to expand the coverage area of the Tyrolean lowlands and Zillertal valley (Unterländer Lokalradio GmbH).

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

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

If another radio broadcaster submits an application and is able to provide evidence that allocating the transmission capacity to the broadcaster's coverage area would bring about a greater improvement of deficiencies in its coverage area, 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.

Three allocations for coverage improvement

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

- SCHWAZ 103.1 MHz, to improve the "Lower Inntal Valley including the town of Hall" coverage area (Radio Service und Beteiligung GmbH);

- 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);

- SECKAU 106.1 MHz, to improve the "Aichfeld – Upper Murtal Valley" coverage area (Privat-Radio Betriebs GmbH).

In one procedure, the application which triggered the procedure was withdrawn due to technical infeasibility.

Several procedures not yet completed

A total of 13 additional allocation procedures were started in 2005 but not completed during the reporting period:

- BADEN 93.4 MHz
- SALZBURG 102.5 MHz
- GLEISDORF 95.9 MHz
- BAD GLEICHENBERG 100.4 MHz
- INNSBRUCK 6, 95.5 MHz
- INNSBRUCK 6, 97.0 MHz
- INNSBRUCK 6, 92.9 MHz
- VIENNA 4, 98.3 MHz
- ZELL AM SEE 107.1 MHz
- SAALFELDEN 104.3 MHz
- MISTELBACH 101.0 MHz
- EBENSEE 106.0 MHz
- TRAISEN 3, 107.7 MHz.

4.1.1.4 Nationwide broadcasting license

On December 6, 2004, KommAustria issued Kronehit Radio BetriebsgmbH the first license for nationwide private terrestrial radio broadcasting in Austria. This nationwide license was created by transferring the individual licenses of the ten radio stations in the Kronehit group to Kronehit Radio BetriebsgmbH. A total of 28 transmission capacities were included in this nationwide license. As a result, KRONEHIT Radio BetriebsgmbH's adult contemporary radio station broadcast under the name "Kronehit" reached approximately 64% of the Austrian population when the company went on the air on December 17, 2004.

Following the transfer of Grazer Stadtradio GmbH's licenses to broadcast a private terrestrial radio program in the coverage area of "Graz und Weiz" to KRONEHIT Radio BetriebsgmbH, the transmission capacities underlying this coverage area were also assigned to the latter company on June 28, 2005. In addition, the following transmission capacities were allocated to KRONEHIT Radio BetriebsgmbH in the year 2005; in the process, the respective license was amended accordingly:

- Radio broadcasting station: SPITTAL DRAU 5, location: Hühnersberg, frequency: 99.3 MHz;

Expansion of the nationwide license

- Radio broadcasting station: ZELTWEG, location: Ferngas AG mast, frequency: 107.1 MHz;
- Radio broadcasting station: NEUMARKT, location: Kulmer Alpe, frequency: 101.8 MHz;
- Radio broadcasting station: LEOBEN 3, location: Windischberg, frequency: 107.5 MHz;
- Radio broadcasting station: ST VEIT, location: Goggerwenig Scheune, frequency: 107.6 MHz.

KRONEHIT: 35 frequencies

This means that by the end of 2005 the licensee had been allocated a total of 35 transmission capacities, with which the licensee can reach more than 70% of Austria's population with the KRONEHIT channel in almost all provinces of Austria. However, in the reporting period the province of Vorarlberg, the region of eastern Tyrol, the Tyrolean highlands and large parts of the province of Carinthia were not covered.

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 2005, the following event radio licenses were granted:

One radio program broadcast by Freier Rundfunk Oberösterreich GmbH in connection with the "*Geordnete Verhältnisse*" festival of regions from May to July; one program in connection with the Raimund Festival in Gutenstein in July and August; one program focusing on live coverage of the "Air Challenge 2005" which took place at Lake Wofgangsee on August 7 and 8; one program related to a project in the "*steirischer herbst*" festival in Graz from October to November; and one pilot operation license for ORS in the Austria Center Vienna in order to identify a radio frequency which can be utilized there.

At the end of the year, three event radio applications were still pending (European Congress of Radiology/ECR GmbH, Campusradio Klagenfurt, and Wert-Impulse Beratungsgesellschaft für ganzheitliches Management GmbH).

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 2005:

One educational radio station at a secondary school in Freistadt for "Radius 106.6 MHz"; one educational radio station for an independent campus radio station at the specialized college (FH) in St. Pölten, which had already been licensed in 2003 and 2004; and one educational radio license for the Basic Vocal association, which focuses on providing training to improve elocution in radio, theater and professional activities.

4.1.1.6 Changes in approved radio programming

Programming changes were approved for two radio broadcasters

In the licensing process for radio broadcasting, the intended nature of programming is defined and also approved. During the ten-year validity period of the license, it is possible to make certain changes in the approved program, but fundamental changes in the nature of programming will lead to a revocation procedure, which may end with an order to take remedial action and – if repeated – can also lead to revocation of the license. The reasoning behind this regulation is that the intended nature of programming is an essential criterion in the authority's selection decisions, which have to be made with due attention to existing programs on offer. If the information provided by a licensee justifies expectations that the licensee's programming will be preferable to that of other applicants, then the licensee is required to adhere to the programming plan indicated.

In order to enhance legal certainty and flexibility, the amendment to the Private Radio Act 2004 (PrR-G) introduced two new types of procedures. First, it is possible to inform the regulatory authority about programming changes in advance and to receive an assessment decision indicating whether the change is within admissible limits or would constitute a fundamentally impermissible change in the nature of programming. Second, should a change exceed those limits, then it may be possible to receive approval for the change by way of an official decision under certain conditions and after hearing the comments of the other broadcasters in the coverage area.

In the reporting period, three radio broadcasters made use of these new options. The programming of Sendeanlagen GmbH (Radiofabrik Salzburg) had originally been applied for and approved as an alliance between commercial and non-commercial radio broadcasters. After the commercial partner exited the arrangement, the conversion of programming to an all-day non-commercial format ("free radio") was approved.

In another case, a "nostalgia radio" station in Graz planned to include more pop music in its programming. KommAustria determined that this would be a fundamental change in the nature of programming, but the radio broadcaster did not subsequently apply for approval as its license expired.

In the programming offered by the association "Mehrsprachiges Offenes Radio – MORA" & Partner GmbH (now HIT FM Burgenland), a multilingual radio station, the official license decision contains a condition requiring that the languages of the ethnic groups living in Burgenland be accounted for appropriately. In an earlier procedure, KommAustria had already determined that in the originally approved programming plan the share of content presented in the languages of Burgenland's ethnic minorities should be assumed to be approximately one third. The radio station planned to reduce this share to 20 hours per week, but not to broadcast this content during the night (as was previously the case, in part), thus ensuring the economic viability of the minority-focused radio station overall. KommAustria deemed this to be a fundamental change in the nature of programming and subsequently approved the change.

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 under 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) pursuant to 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 which it is necessary to obtain the consent of the neighboring countries which may be affected.

In the case of 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 2005, KommAustria approved 14 applications for changes in radio systems for private radio broadcasters. One application had to be dismissed due to incomplete content. At the end of the year, another three 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

Four applications submitted by ORF for the modification of a license to construct and operate rebroadcast receiver and transmitter stations for terrestrial analog radio (VHF) were approved by official decision; in all cases, ORF planned to increase the station's maximum radiated power. In addition, the installation and operation of two VHF tunnel radio systems by ORF were 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 30, 2005 to March 25, 2006. In the field of digital radio broadcasting, the permits granted to ORF for the construction

and operation of several transmitter stations for further technical testing of the T-DAB single-frequency network were extended until June 30, 2006 for Vienna, and until April 1, 2006 for Innsbruck.

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

For the first time, an analog short-wave broadcasting permit issued to ORF was extended to cover experimental digital short-wave broadcasts in the "Digital Radio Mondiale" system as well. These experimental broadcasts were approved for the period from January 1, 2006 to December 31, 2006.

4.1.1.8 Consent of KommAustria to frequency allocations

KommAustria's consent required for certain frequency allocations

Under Art. 54 Par. 4 TKG 2003, KommAustria's consent is required for the allocation of those 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 changes in such allocations.

In 2005, KommAustria granted its consent to the responsible telecommunications authorities in six cases of this kind. These cases involved projects for small areas and limited time periods, such as drive-in movie theater broadcasts, children's radio stations and the Ars Electronica festival; in such cases, the telecommunications authorities are responsible for issuing permits.

4.1.2 Regulatory activities in television broadcasting

4.1.2.1 Award procedure for Austria's multiplex operator license

Multiplex licensing procedure launched in 2005

For 2005, KommAustria's Digitization Plan called for Austria's first invitation to tender for a terrestrial multiplex platform, which was a major milestone in the introduction of digital terrestrial television in Austria.

In compliance with this requirement, the regulatory authority began developing and preparing the necessary instruments at the beginning of 2005. In particular, these included the following documents:

Invitation to tender document

This text defines the content of the invitation to tender and the deadline for submissions. The accompanying information sheet provides a non-binding overview of the general conditions of the invitation to tender as well as additional information required by applicants.

Multiplex Operator Selection Principles Ordinance 2005 (MUX-AG-V 2005) and explanatory notes

In the case of multiple applicants in the invitation to tender for a multiplex platform, the PrTV-G provides for a comparative selection procedure according to defined criteria (i.e., a "beauty contest"). Along with the invitation to tender, KommAustria is required to issue an ordinance specifying these legally defined criteria based on the Digitization Plan. In order to create as broad a basis as possible for this ordinance, it is first necessary to provide the Digital Platform Austria with an opportunity to submit comments and opinions.

Digitization Plan Supplement

As an addition to the Digitization Plan, this supplement states the regulatory authority's view (based on a study commissioned by RTR) that DVB-T should be launched on the strong channels which have been used for analog broadcasting up to now, not primarily on the available replacement channels. However, this procedure will also require television broadcasters to move analog broadcasting to the replacement channels during the simulcast period.

Frequency pool for digital terrestrial television

In line with the requirements of the PrTV-G, this pool comprises those coordinated transmission capacities which are not allocated for analog broadcasting and therefore will theoretically be available for DVB-T from the time of the launch. This listing is only intended to serve as a rough orientation aid; in particular, it does not constitute the object of the invitation to tender. Specific transmission capacities will be allocated to a multiplex operator on the basis of joint planning after the license is issued.

Guidelines for project grants from the Austrian Digitization Fund for the purpose of attaining a reasonable level of digital broadcasting coverage in rural regions.

The Austrian Digitization Fund set up at RTR can also be used to promote the development of broadcasting infrastructure. In this context, the funds are primarily intended to support the (economically inefficient) coverage of thinly populated areas. These guidelines define the conditions under which the multiplex operator can be entrusted with constructing and converting such infrastructure as a service to the economy in general, and how the corresponding compensation payments are to be made.

In line with the relevant legal requirements, the draft versions of the MUX-AG-V 2005 and the Digitization Plan Supplement were conveyed to the members of the Digital Platform Austria working group for comments and opinions in March 2005. Once the comments had been received, the draft documents were revised to accommodate the issues raised.

On May 13, 2005, the invitation to tender was published along with the accompanying documents mentioned above. The submission deadline for multiplex license applications was set for September 1, 2005.

ORS was the only applicant.

At the end of the tender submission period, Österreichische Rundfunksender GmbH & Co KG (ORS), an ORF subsidiary which took over ORF's broadcasting technology arm at the beginning of 2005, was the only organization which had submitted an application.

As ORS waived grants from the Digitization Fund for the construction of transmitter infrastructure, the relevant RTR guidelines were suspended.

After reviewing various formal aspects of ORS' application and requesting several supplements, RTR prepared a technical expert report, and official experts drew up an economic assessment of the application. In addition, ORS was presented with a first draft of the extensive catalog of requirements under which the license would be issued. In order to deal with unanswered questions, ORS was invited for verbal negotiations before KommAustria on December 19, 2005.

KommAustria is expected to issue a decision in this licensing procedure in early 2006.

DVB-T pilot operation continues in Graz

In addition to the activities related to the introduction of regular DVB-T operation, KommAustria also issued several official decisions to extend the telecommunications permits for DVB-T pilot operation in Graz. Although the interactive testing phase ("!TV4GRAZ") ended in 2004, the digital television signal will still be broadcast in various transmitter configurations until regular operation commences.

4.1.2.2 Procedures involving 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 of 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 described in Section 4.1.1.

In the field of analog television broadcasting, ORF submitted three applications for changes in permits for rebroadcast receiver and transmitter stations. All three applications concerned increases in maximum radiated power and were approved for regular operation.

Changes in existing permits

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 this procedure.

Channel switch in Tyrol due to MUX planning

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.

In 2005, KommAustria granted four new satellite broadcasting licenses:

Four new satellite licenses: Two radio stations and two television stations

- Sat.1 Privatrundfunk und Programmgesellschaft mbH (SAT.1 Austria): This is a "window" program comprising six hours per day and broadcast under the name SAT.1 Austria (connected with the Sat.1 Germany channel belonging to SAT.1 Satellitenfernsehen GmbH). From Monday to Friday, a morning show (*Frühstücksfernsehen*, or "breakfast television") is broadcast for three hours each day. Another 60 minutes per day are devoted to predominantly Austrian content focusing on information, entertainment and talk-show elements.

- ATV Privatfernseh-GmbH (ATVplus): ATVplus' satellite broadcasting license was renewed in an official decision issued by KommAustria on March 16, 2005. ATVplus is a full 24-hour channel with family-oriented content and reports focusing on Austria in the genres of news, journals, live events, talk shows, discussion and controversy shows as well as entertainment shows, films, series, cartoons and documentaries.

- Radio Starlet Programm- und Werbegesellschaft mbH (Truck Radio): In June 2005, the specialized radio station "Truck Radio" was approved. Its programming can be classified as country, western and rock music, and is intended for a core target group between 25 and 65 years of age, in particular addressing truck drivers. With the exception of original sound feeds from press agencies during news broadcasts, the channel is produced 100% in-house.

- YU Planet-Dragutinovic KEG (Radio Planet): This is a full 24-hour radio program broadcast in Serbo-Croatian language. Reports deal with news from the areas of leisure, music and sports. This channel also produces 100% of its content in-house.

Changes and extensions of satellite licenses are also subject to approval under Art. 6 PrTV-G. The following extension was approved by KommAustria in 2005:

Changes and extensions of satellite licenses

- Franz Ressel Handels GmbH (EUROTIC-TV): Upon application by Franz Ressel Handels GmbH, a licensee for satellite television broadcasting, the change in its satellite channel was approved as follows: As of October 1, 2005, the existing channel was to be expanded to include another channel (EUROTIC-TV 2), with broadcast content to include talk shows on the topics of dating and personal contacts, contact shows with telephone services, advertising for value-added telephone services, short films, reports as well as advertising for the channels EUROTIC-TV, INXTC TV and X-PLUS.

4.1.4 Public communications networks and services

Communications networks must be reported to the regulatory authority under Art. 15 TKG 2003.

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

In practice, this reporting obligation is especially important to the broadcasting activities of cable network operators. In the reporting period, KommAustria issued 18 general approvals under Art. 15 Par. 3 TKG 2003 to cable network operators. One general approval for the provision of a communications service for terrestrial broadcasting was granted to the newly founded Österreichische Rundfunksender GmbH & Co KG (ORS), which took over ORF's transmission technology operations at the beginning of 2005 and has since operated as a service provider for ORF and private broadcasters.

The ZIV ensures easy reception of television channels.

With the new legal framework for electronic communications and the Broadcasting Act amendments in 2004, KommAustria also gained the power to issue ordinances with regard to matters formerly governed by the Television Signal Act (FS-G). In exercising this power and executing the relevant principles under European law, therefore, KommAustria issued the Access Control Systems and Interoperability Ordinance (ZIV) in March 2005. This ordinance defines a number of conditions intended in particular to enable the unobstructed dissemination of digital television and as broad a selection of channels as possible for the viewers.

Specifically, the following areas are governed:

For providers of access control systems – i.e., service providers which can scramble broadcast programs or allow their reception individually by some other means in order to charge a fee for the channel (as in the case of pay TV), to restrict the reception (of satellite channels) geographically, or to provide child protection mechanisms – certain conditions are provided in order to ensure that consumers have as wide a variety of channels and services as possible at their disposal. If access control systems are licensed for installation in reception devices (e.g., set-top boxes or television sets), then this must be done on non-discriminating terms and conditions.

Television sets with a certain minimum screen size must be equipped with interfaces (e.g., SCART connections) which enable additional devices – especially decoding devices and digital receivers – to be connected easily. In this way, it is possible to ensure that these sets are future-proof and in particular can still be used in the case of digital-only broadcasting. In addition, all devices for decrypting television signals should support the uniform European encryption algorithm as well as unencrypted broadcasts.

Television transmission networks must be suited for broadcasting programs in 16:9 format. Such programs must not be converted into other screen formats.

4.1.5 Advertising monitoring

Sample-based monthly evaluation of all broadcasting channels

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

For decisions on possible violations of the law, the KOG maintains the "dual system" of organization in broadcasting regulation: KommAustria is responsible for decisions with regard to the programs of private broadcasters in the enforcement of advertising regulations set forth in the PrR-G and PrTV-G, while – as the legal supervisory authority for ORF (and its channels) – the BKS is responsible for identifying violations of advertising regulations under the ORF Act (ORF-G).

In 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 shows from various areas (culture, sports, reports, news, entertainment shows, feature films, etc.).

4.1.5.1 Channels monitored

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

ORF as well as private broadcasters' channels are analyzed.

As for ORF channels, in 2005 the station Ö3 was reviewed twice, and one review each was conducted for FM4 and ORF's regional radio stations in Salzburg, Styria and – with legal violations identified – in Carinthia, Tyrol, Vorarlberg and Vienna, as well as the Ö1 radio station. The television channels ORF1 and ORF2 were reviewed a total of ten times, with (usually multiple) violations identified in four of the samples. In a vast majority of these cases, the BKS found violations where there was justified suspicion on KommAustria's part. In all cases where reports were filed, a violation was also found. Three cases from the reporting period are still pending before the BKS.

Among the private radio broadcasters, the following channels were evaluated in addition to the nationwide radio broadcaster KRONEHIT: Carinthia: Radio Harmonie (Wörthersee) and Radio Real; Lower Austria: Hit FM Waldviertel, PartyFM and Radio Arabella Tulln 99.4; Upper Austria: Welle 1 Steyr, Antenne Wels 98.3 and Radio Salzkammergut; Salzburg: Welle 1 Salzburg; Styria: A 1, Soundportal Graz, MM89,6 – Das Musikradio, Radio Harmonie (Ennstal)

and Radio Helsinki; Tyrol: Antenne Tirol (Innsbruck), Welle 1 Innsbruck and U1 Radio Unterland; Vorarlberg: Radio Arabella Bregenz and "Proton – das freie Radio"; Vienna: Freies Radio Wien and Antenne Wien 102.5. Violations of advertising regulations (or of the obligation to provide recordings) were identified by KommAustria in only four of these cases. The appeals filed against two of these decisions were unsuccessful (in one case only partially). Two further procedures in which violations are suspected have not been completed.

As for the private television broadcasters, broadcasts by WKK Lokal-TV, ProSieben Austria, gotv, Premiere Austria, LÄNDLE TV, Fashion-TV, TV6, ATVplus, Steiermark 1, RTV and Munde-TV were selected. In six cases, a violation of advertising law (or of the obligation to provide recordings) was identified; three of those decisions have not yet taken legal effect. Violations are suspected in two additional samples, for which procedures are still pending before KommAustria.

4.1.5.2 Decisions of the Federal Communications Senate (BKS)

In the reporting period, the BKS completed a large number of legal supervisory procedures regarding ORF which had been initiated by a KommAustria report for the first time, as well as procedures regarding those private broadcasters who appealed against KommAustria's identification of advertising law violations. These cases also refer to broadcasts from the year 2004.

BKS makes decisions on violations of advertising law.

The BKS has now prepared fundamental guidelines for the interpretation of advertising regulations in Austrian broadcasting law and developed a differentiated understanding of the various imperatives. Once again, the BKS (as a legal supervisor or appeals authority) agreed with KommAustria's legal views regarding violations of advertising law in a vast majority of cases.

A large number of procedures were dominated by two main issues:

First of all, the broadcasters' understanding of the central imperatives that advertising should be made clearly recognizable as such and be unmistakably separated from other programming content by acoustic – or visual, in the case of television – means (Art 13 Par. 3 ORF-G, Art. 38 PrTV-G and Art. 19 Par. 3 PrR-G) was called into question. In this context, it is necessary to emphasize that the practice of considering a visual or acoustic cue which separates advertising from programming content to be optional when advertising can clearly be recognized as such on the basis of its content – or (only) on the basis of an explicit visual "advertisement" label during the commercial – has clearly been rejected. It is likewise insufficient to separate only the start of a commercial from the previous program and not the end of a commercial from the following program with a visual or acoustic cue.

Second, it was necessary to resolve the question of how to announce program sponsorship in a permissible manner. In this regard, the BKS stated that it is not inadmissible to broadcast advertising in the course of sponsorship announcements, but that the specific advertising regulations still have to be observed in such cases. If, for example, the sponsorship indication crosses the line between advertising and programming, which the BKS had to review in numerous cases, then it is necessary to separate this indication from other programming – and thus also from the sponsored show itself – by means of visual or acoustic cues.

4.1.6 Broadcasting market analysis

In accordance with Art. 36 and Art. 120 Par. 1 No. 4 TKG 2003, KommAustria issued an ordinance on January 14, 2004 defining the relevant national markets for "Broadcasting transmission services to deliver broadcast content to end users" susceptible to sector-specific regulation. In this context, KommAustria made use of the option under Art. 36 Par. 3 TKG 2003 to diverge from the Commission Recommendation of 11 February 2003 on relevant product and service markets in the electronic communications sector (2003/311/EC, OJ L 114 of May 8, 2003, pp. 45 ff) and to define other relevant markets or to subdivide the recommended market (No. 18) even further. In line with the provisions of Articles 128 and 129 TKG 2003, therefore, the draft Broadcasting Market Definition Ordinance (RFMVO) was published on August 25, 2003 for national consultation as well as coordination with the European Commission and the national regulatory authorities of other EU member states.

The Broadcasting Market Definition Ordinance 2004 (RFMVO 2004) issued by KommAustria on the basis of Art. 36 and Art. 120 Par. 1 No. 4 TKG 2003 states the following:

Art. 1: The following markets are defined as relevant:

1. Market for terrestrial television broadcasting;
2. Market for terrestrial VHF radio broadcasting.

Geographically, these markets comprise the territory of the Federal Republic of Austria.

Art. 2: This ordinance shall enter into force on January 16, 2004.

Due to the outsourcing of ORF's broadcasting infrastructure to its subsidiary ORS as of January 1, 2005, official experts at RTR were instructed to prepare a new opinion on market analysis and regulatory instruments for both relevant markets. These opinions were completed and passed on to ORS for comments in February 2005. In March 2005, ORS submitted its comments on these opinions. At the end of April 2005, KommAustria was informed that all of ORF's site-sharing agreements had been transferred to ORS and at the same time the communications service of broadcasting transmission had been terminated by ORF pursuant to Art. 15 TKG 2003.

As regards the regulatory instruments planned by KommAustria, a national consultation procedure as well as coordination at the EU level (as provided for in Art. 128 and 129 TKG 2003) will be carried out for the two relevant markets in the first quarter of 2006.

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.

The field of broadcasting frequency management currently covers the following broadcasting services:

- Analog terrestrial television broadcasting;
- Digital terrestrial television broadcasting (DVB-T);
- VHF analog radio;
- Digital terrestrial audio broadcasting (T-DAB);
- MW (medium wave);
- SW (short wave);
- DRM (Digital Radio Mondiale).

Frequency management ensures the efficient use of the available frequency spectrum.

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.

The fundamental rules for international coordination activities are laid down in the ITU Radio Regulations. In principle, the International Telecommunication Convention stipulates that radio stations can not be put into operation unless they have been coordinated with all of the telecommunications administrations concerned.

Specifically, the following international broadcasting treaties govern coordination activities:

- Stockholm 61 (ITU conference);
- Chester 97 (CEPT conference);
- Geneva 84 (ITU conference);
- The special agreement of Wiesbaden 95, revised in Maastricht 2002, Band III (CEPT conference);
- The special agreement of Maastricht 2002, L-Band (CEPT conference);
- Geneva 75 (ITU conference).

4.1.7.2 Frequency coordination procedures

New transmission capacities require international coordination procedures.

New terrestrial transmission capacities to be used by broadcasting operators can only be rendered usable by way of coordination procedures, which generally last three to six months.

The table below provides an overview of the coordination procedures carried out in the year 2005.

Table 1: Number of coordination procedures

Country	Analog radio	Digital radio	Analog television	Digital television
Austria	74	0	2	3
Germany	11	31	1	24
France	29	0	0	0
Croatia	43	0	0	0
Poland	22	0	1	2
San Marino	2	0	0	0
Switzerland	80	96	0	154
Serbia and Montenegro	0	0	1	0
Slovakia	11	0	50	3
Slovenia	15	0	32	1
Czech Republic	33	1	1	1
Ukraine	0	0	1	0
Hungary	15	0	9	0
Total	**335**	**128**	**98**	**188**

Source: RTR

In addition, coordination procedures were held with the Czech Republic and Slovakia for 150 television transmitters in order to adjust ST61 plan data and to update the frequency plan with regard to existing television transposer systems in these countries. The extensive data was reviewed and entered in the coordination database according to the results in order to account for this information properly in future planning.

4.1.7.3 Participation in licensing and allocation procedures

Expert opinions on technical issues related to frequencies are among the decisive factors in licensing procedures.

One essential task in broadcasting frequency management is the preparation of technical expert opinions for KommAustria under the PrR-G and the PrTV-G. Depending on the instruction issued or on the procedure itself, these expert opinions cover various topics in connection with the technical implementation of transmission capacities, such as the feasibility of the transmission capacity, active/passive interference, IF interference, coverage capabilities, coordination probability, double and multiple coverage, expansion or improvement of existing licenses, number of residents covered, and compatibility with aviation radio systems. Practical experience has shown that these expert opinions provide an important basis for decision-making in the procedures carried out by KommAustria.

In 2005, expert opinions focused on the new licenses for the coverage areas of Salzburg and Styria as well as the applications for the expansion of Austria's nationwide private radio station. In addition, extensive expert opinions and statements were drawn up for KommAustria in the process of handling numerous private radio applications in 2005 (i.e., new licenses as well as modifications of technical parameters in existing transmission capacities).

It was also necessary to cooperate in the approval of ORF's experimental broadcasts for digital short-wave broadcasting (DRM) as well as T-DAB and DVB-T pilot broadcasts in the reporting year.

4.1.7.4 Frequency register

RTR's broadcasting transmitter map allows targeted information queries.

Another duty of the regulatory authority under the PrR-G and PrTV-G is to maintain the Austrian frequency register, which also lists those transmission capacities reserved for future digital terrestrial television broadcasting. The frequency register also gives a comprehensive and up-to-date overview of all licensed transmitter stations belonging to ORF and private broadcasters. This data is also available to the public on the RTR web site (http://www.rtr.at).

4.1.7.5 Measurement activities

In the year 2005, numerous jobs were carried out with the RTR measurement vehicle in the course of licensing procedures and complex coordination inquiries. One major focus was the measurement of Italian VHF transmitters which are operated near the Austrian border without proper international coordination and which encumber Austria's frequency spectrum. These measurements provided the basis for the international interference reports submitted in this context.

In addition, intensive measurements were taken in the provincial capitals Graz, Salzburg, Klagenfurt, Innsbruck and Vienna. Numerous test broadcast measurements in order to verify the feasibility of frequency plans as well as interference measurements were also among the approximately 50 measurement projects carried out in 2005. Another particular focus is on taking measurements of foreign television transmitters, which has become necessary in preparation for RRC06.

4.1.7.6 Invitation to tender for the multiplex platform

Digital transmission technology (DVB-T) expands current frequency planning to include new possibilities which enable more efficient use of the available spectrum. Single-frequency networks can be set up, and multiple channels, services and applications can be broadcast simultaneously over a single transport stream.

The relevant technical requirements were defined in the Multiplex Operator Selection Principles Ordinance in preparation for the invitation to tender for the license to construct and operate a terrestrial multiplex platform. With specific regard to technical issues related to frequencies, the work was completed on May 10, 2005, when the invitation to tender was published.

Once the tender submission period ended (September 1, 2005), KommAustria instructed RTR's Broadcasting Frequency Management Department to prepare a technical expert report in which the implementation of the plan, the planned technical range, the efficient use of the available frequency spectrum as well as the observance of technical standards, procedures and parameters were reviewed and assessed.

4.1.7.7 Compilation of Austria's requirements for RRC06

National frequency needs for digital broadcasting services will form the basis for frequency planning at RRC06.

Like the other nations participating in RRC06, Austria also submitted its national requirements to the ITU as of the cutoff date (October 31, 2005). These requirements describe Austria's national frequency needs; specifically, these include the following: 180 DVB-T allotments, 123 DVB-T assignments, 25 T-DAB allotments and 64 geographical contours. Each DVB-T allotment and assignment carries one channel, while each T-DAB allotment carries one frequency block. These requirements were developed in the course of extensive bilateral and multilateral negotiations held with neighboring countries' administrations with a view to assigning channels and frequency blocks in such a way as to enable transmitter networks which are free of interference.

In the reporting year, Austria participated in the following four multilateral frequency negotiation groups: the ADSL Group, Central European Group (chaired by Austria), the East European Group and the Adriatic Sea Group. Austria's goal in RRC06 negotiations is to plan six or seven nationwide DVB-T coverages in Band IV/V as well as one nationwide DVB-T coverage and two or three nationwide T-DAB coverages in Band III, which – together with Austria's L-Band coverages under the Maastricht Special Arrangement (MA02) – will make for a total of five full T-DAB coverages.

As of February 28, 2005, it was necessary to submit current preliminary requirements in an interim report to the ITU, on the basis of which numerous test calculations were carried out. Together with the administrative declarations, these requirements will be included in the synthesis process. The result of this synthesis and further changes in requirements during the RRC06 negotiations will bring about the new frequency plan for digital broadcasting, which should account for the national requirements of all participating countries with due attention to a balanced distribution of available frequencies.

4.1.7.8 Cooperation in international organizations

Prerequisite for the successful digitization of broadcasting: Cooperation of RTR in international working groups

International activities related to broadcasting frequency management were also characterized by preparations for the RRC06 conference.

Working Group RRC06

The objective of this working group is to define the strategy of European countries for RRC06. For this purpose, the working group has set up two project teams, PT1 and PT2, which aim to draw up European Common Proposals (ECPs). A total of 12 ECPs and 13 briefs are currently being prepared.

Project teams (PT1/PT2)

In addition to representatives of European telecommunications administrations, both teams also comprise leading experts from the European Broadcasting Union (EBU), broadcasting institutions, IRT (*Institut für Rundfunktechnik*) as well as other organizations concerned with digital terrestrial broadcasting. PT2 deals with frequency-related technical issues in connection with preparations for the conference, while PT1 addresses procedural topics and their implications. During the reporting period, a total of nine meetings of PT1 and PT2 took place.

Intersessional Planning Group (IPG)

The IPG working group convened twice in the reporting year. The first meeting was held from July 4 to 8, 2005, the second from September 28 to 29, 2005. In the first meeting, the ITU's Planning Exercise Team (PXT) working group presented the results of initial planning calculations based on the requirements submitted by the telecommunications administrations. On the basis of these results, recommendations were developed for the administrations participating in RRC06 in order to be able to draw up a realistic frequency plan. In the summer, the telecommunications administrations submitted further administrative declarations to the ITU, which were included in further analyses and the results of which were presented at the second meeting of the IPG working group in September 2005. As it turned out, several administrations have defined excessively high demands and show certain deficits in expert knowledge on technical issues related to frequency planning, thus endangering the success of the RRC06 conference.

Regulatory and Procedural Group (RPG)

The RPG meeting was held in Geneva from December 6 to 9, 2005, and was attended by a total of 128 participants from telecommunications administrations in the planning region and from international organizations. Two subgroups prepared the meeting by providing the relevant documents. The participants discussed documents on the individual articles of the RRC06 agreement and on the two short conferences for the adaptation of the ST61 and GE89 Agreements. The most difficult part of preparations for the conference turned out to be the creation of the Article 4 procedure for plan modifications and the Article 5 procedure for registration in the international frequency list. Due to the need for parallel procedures for digital and analog television in the transition period as well as the new possibility of allotment planning,

the complexity of regulations far exceeds that of all comparable treaties in the past. These two articles of the agreement also harbor the greatest source of tensions between industrialized nations and developing countries. The conference itself will show whether a viable compromise can be found.

MHP Implementation Group

In connection with the activities of COCOM, the MHP Implementation Group also held three sessions in which EU Member States were again given the opportunity to exchange ideas and experience. As no major breakthroughs were made in this technology in 2005, the decision was made to devote further meetings of the group to the topic of interoperability.

4.1.8 Austrian Digitization Fund

Digitization Fund endowed with EUR 6.75 million

The Austrian Digitization Fund was set up for the purpose of promoting digital transmission technologies and digital applications based on European standards in connection with broadcasting programs. The objectives and bases of the Austrian Digitization Fund are derived from the intentions of the eEurope 2005 Action Plan, which aims to accelerate the transition to digital television. The Digitization Fund is endowed with EUR 6.75 million annually; 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). These guidelines form the 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.

Grants are awarded according to technology-neutral criteria with due attention to all transmission means and platforms for digital broadcasting. In addition, under Art. 9b No. 9 of the KommAustria Act the expenses incurred by KommAustria and RTR for the preparation and implementation of KommAustria's Digitization Plan are to be covered by the Austrian Digitization Fund.

One focus of promotion activities in 2005 was the DVB-C pilot operation in Linz (ITV4CABLE), which began in the summer of 2005 and will continue into the first half of 2006. The project partners are LIWEST Kabelmedien GmbH (the cable network operator in Linz), the Upper Austrian provincial government, RTR and ORF. Another broadcaster participating in the project is ATV Privatfernseh GmbH (ATVplus). The trial is being carried out in 500 households which subscribe to LIWEST's cable services. The core objective of the trial is to test video on demand in a cable network. In addition, the project includes interactive MHP portals which provide background and additional information on various shows aired by ORF and ATVplus.

Another major focus in the reporting period was the preparation of an overall promotion scheme for the Digitization Fund, which was published in December 2005. This scheme describes the planned focuses of the Digitization Fund's grant activities for the years 2006 to 2010 as well as the criteria for grant awards.

In the year 2005, the following projects were supported or financed by RTR: the continuation of the !TV4GRAZ trial to test DVB-T broadcasting from a large transmitter; a communications study at the University of Salzburg, the results of which were published under the title "On the Implementation of DVB-T in Austria" in RTR's publications series; and cooperation in preparation activities for a DVB-H trial scheduled for 2006 and 2007.

In 2005, Digitization Fund grants were approved in the amount of approximately EUR 1.7 million. In 2005, some 20% of the resources in the Digitization Fund were used for the relevant administrative activities at RTR as well as the reimbursement of costs arising from the implementation of the Digitization Plan, and for opinions and studies commissioned in connection with broadcasting digitization.

Grants approved in 2005: EUR 1.7 million

The economical, efficient and effective use of funds meant that some EUR 5.4 million from the years 2004 (approx. EUR 1.7 million) and 2005 (approx. EUR 3.7 million) could be carried forward to the business year 2006.

4.1.9 Austrian Television Fund

Endowment: EUR 7.5 million less administration costs

The Austrian Television Fund was established within RTR by an amendment to the KommAustria Act (KOG) as of January 1, 2004. RTR administers the fund, which is endowed with EUR 7.5 million from the fees collected in accordance with Art. 3 Par. 1 of the Austrian Broadcasting Fees Act (RGG), i.e., the same source as the Digitization Fund. These funds were previously allocated to the federal budget. This sum (minus the personnel and material expenses incurred by RTR in administering the fund) serves 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. In addition, the fund is also intended 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 Austrian Communications Act (KOG). These provisions describe the objectives of grants and how the funds are raised. RTR is required to submit an annual report to the Austrian Federal Chancellor on the Television Fund's grant activities. Art. 9h KOG stipulates the estab-

lishment 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 2005, the Television Fund's review board consisted of the following members:

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

New identity: Austrian Television Fund

As of October 1, 2005, the name of the fund was changed from "Television Film Fund" (*Fernsehfilmförderungsfonds*) to "Austrian Television Fund" (*Fernsehfonds Austria*). This simplification also created a more direct reference to Austria. A fund logo designed especially for on-screen use was also created in order to convey a strong, independent visual identity:

Figure 3: Austrian Television Fund logo

FERNSEHFONDS AUSTRIA

Source: RTR

4.1.9.1 Guidelines on grants from the fund

New guidelines approved by European Commission until June 2007

The amended guidelines, which were notified to the European Commission in the fall of 2004, were approved in the decision of July 13, 2005 K(2005)2571, State Aid No. N 77/2005 for the period ending June 30, 2007. The new version of the guidelines went into effect retroactively as of January 1, 2005. One major need for change was in Section 3.6 of the guidelines, which addresses the issue of agreements with television broadcasters. This provision now calls for the reversion of rights – without exceptions – after seven years in the case of films and documentaries, and after ten years in the case of series. At the same time, the new guidelines make it easier for television broadcasters which co-finance production costs to maintain exclusivity in their license areas.

In connection with the new version of the guidelines, Prof. Oliver Castendyk and Prof. Klaus Keil of the Erich Pommer Institute (EPI) in Germany drew up an expert opinion on the appropriateness of terms between television broadcasters and producers in Austria in November 2005. This expert opinion was published on April 27, 2005, in RTR's publications series (Volume 1/2005).

4.1.9.2 Projects supported

In 2005, the applicants for two projects which had been approved in 2004 failed to fulfill the relevant conditions within the period specified by RTR or waived the grant amount allocated. In total, therefore, an additional amount of some EUR 460,000 was available in the year 2005.

39 projects supported in 2005

A total of 60 projects were submitted as of the four application dates in 2005. Approvals were granted for 39 of those projects, with total grants amounting to approximately EUR 7.5 million (16 television films, 2 television series and 21 television documentaries). Various producers submitted applications for projects of varying length and content.

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

2005: 154 applications for subsidies

For the second time, KommAustria was responsible for awarding federal press subsidies in 2005 under the new Press Subsidies Act 2004 (PresseFG 2004). One especially remarkable aspect of grant activities in 2005 was the large number of applications submitted and approved: While just over 80 applications per year were submitted prior to the reform of press subsidies, the number of applications received in the reporting year came to a total of 154. Compared to 2004, the first year in which KommAustria awarded the subsidies, this represents an increase by 15 applications. The bulk of the additional applications pertained to subsidies for the costs of in-house journalist training under Art.10 Par. 1 PresseFG 2004. Far fewer applications were submitted for grants to support research projects under Art. 11 Par. 3 PresseFG 2004 (2004: 13; 2005: 7). Of the 154 applications, 134 were approved.

The Press Subsidies Commission prepares evaluations of grant applications

The Press Subsidies Commission provided support for KommAustria in the decision-making process. In 2005, 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 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.

Although the new Press Subsidies Act, which went into effect on January 1, 2004, represented a comprehensive reform of the regulations on federal press subsidies from 1975 and created new types of subsidies, the group of potential subsidy recipients was basically still confined to the publishers of daily and weekly newspapers. Exceptions included grants for journalist education institutions (which have been awarded for many years) as well as grants for press clubs and the new grants for research projects and reading promotion associations.

In order to trigger a judicial review of this restriction, the holder of a nationwide terrestrial radio license submitted an application for a press subsidy for the first time in 2005. As expected, this application was rejected by KommAustria due to non-fulfillment of the legal requirements for grants. The appeal submitted to the BKS against the KommAustria decision elicited by the applicant (in which the request for an official decision on the application was dismissed) was unsuccessful, as press subsidies are awarded on the basis of a private-law grant agreement and not in an official decision within the framework of the government's administrative jurisdiction.

Likewise unsuccessful was the appeal submitted to the BKS by a weekly newspaper publisher in connection with two rejected applications for the special grant for the preservation of regional diversity under Section III of the PresseFG 2004, which is reserved for daily newspapers.

Already in 2004, a weekly newspaper publisher had submitted applications for a special grant for the preservation of regional diversity under Section III of the PresseFG 2004; as expected, these applications were rejected. A case initiated in this context before the Austrian Supreme Court (OGH) is currently pending, and a ruling can be expected in the second half of the year 2006 at the earliest.

KommAustria adopted new grant guidelines for 2006.

In December 2005, 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.

The guidelines are subject to annual review and adaptation so that experience gained in practice can be used in their further development. For this reason, the guidelines for the year 2006 specifically redefined the calculation of a periodical's verifiable paid circulation under the PresseFG 2004.

Subsidies allocated:
In 2005, subsidies totaling EUR 12,837,950.20 were paid out.

Table 2: Press subsidies allocated in 2005

Type of subsidy	Amount paid out (EUR)	Applications	Applications approved
Distribution subsidies under Section II	**4,525,050.40**	**68**	**59**
▪ Amount awarded to daily newspapers	2,443,527.40	16	15
▪ Amount awarded to weekly newspapers	2,081,523.00	52	44
Special subsidies for daily newspapers under Section III	**6,644,499.80**	**11**	**8**
Promotion of quality and security for the future under Section IV	**1,668,400.00**	**75**	**67**
▪ Internal training and education for next-generation journalists	311,268.26	28	26
▪ Association for Journalist Education	650,676.00	6	6
▪ Foreign correspondents	233,721.24	6	6
▪ Reading promotion	364,442.50	21	19
▪ Research projects	58,240.00	7	3
▪ Press clubs	50,052.00	7	7
Total	**12,837,950.20**	**154**	**134**

Source: RTR

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 2005, KommAustria was responsible for decisions on subsidies for print periodicals and received 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.

In 2005, grants totaling EUR 360,976.00 were paid out to support 102 print periodicals. A total of 12 applications were rejected because they did not fulfill the grant prerequisites defined in Section II of the Journalism Subsidies Act.

102 print periodicals received subsidies totaling approximately EUR 360,000.

4.2 Telecommunications Division

4.2.1 Regulatory framework and central issues

Milestone in the liberalization process: Green Paper of 1987

The process of liberalization in Europe 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). The goal of this ambitious project was to liberalize the telecommunications sector completely in all member states by eliminating the predominant state monopolies on telecommunications markets and to create a common telecommunications market in Europe.

The EU's decision for complete liberalization meant turning away from traditional monopoly supervision authorities (usually based in "postal ministries") in favor of establishing new regulatory authorities for the telecommunications sector which are not subject to any influence on the part of operators and providers. This independence should be ensured vis-à-vis the (former) monopolist and its owners.

The legal framework with which these regulatory authorities were to accelerate and promote the opening of markets first consisted of various EU directives such as the Interconnection Directive, Voice Telephony Directive as well as the Authorisation Directive. In addition, there were a number of recommendations from the European Commission and several important documents from the ONP Committee which explained the contents of the directives in greater detail (without actually being part of the existing legislation). In Austria, this first European regulatory framework was implemented in the 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. For this reason, the EU announced in 2002 a new package of directives consisting of the Framework Directive, the Access Directive, the Authorisation Directive, the Universal Service Directive as well as the Directive on Privacy and Electronic Communications in the Official Journal of the European Union. This package was implemented under national law by the Austrian Telecommunications Act 2003 (TKG 2003), which took effect on August 20, 2003. This new legal framework enables new – and above all refined – regulation methods in many areas, in particular by eliminating licensing and introducing a system of general approvals, by providing for market definition and analysis, and by allowing frequency trading and refarming.

In this section, RTR's work in each area in 2005 is described according to this scheme. Detailed documentation on specific procedures can be found on the RTR web site (in German).

The relevant procedure numbers are indicated in this section in order to facilitate the retrieval of specific decisions.

Under the TKG 1997 (Federal Law Gazette I No. 100/1997), two regulatory authorities were set up: The Telekom-Control Commission (TKK) and Telekom-Control GmbH (TKC). As of April 1, 2001, TKC was transformed into the Telecommunications Division at RTR. Under the new legal framework (TKG 2003, Federal Law Gazette I No. 70/2003), the separation of responsibilities between the Broadcasting and Telecommunications Divisions as well as TKK and

KommAustria is also clearly defined. 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 Telekom-Control Commission.

4.2.1.1 Market delineation in 2005

4.2.1.1.1 Delineation of the wholesale broadband access market

Under Art. 36 Par. 1 TKG 2003, the regulatory authority is required to define by ordinance the relevant markets susceptible to sector-specific regulation according to national circumstances and in line with the principles of general competition law, taking into account the requirements of sector-specific regulation.

Definition of the wholesale market for broadband Internet access

In complying with this legal requirement, RTR put the amendment to the Telecommunications Markets Ordinance 2003 (TKMVO 2003; Federal Law Gazette II No. 117/2005) into effect on May 2, 2005 after carrying out a public consultation procedure. This amendment defines the wholesale market for broadband access to the Internet. This market definition forms the basis for the procedure currently pending before the TKK for the identification of companies with significant market power or (if applicable) effective competition on this market. The market defined in this amendment to the TKMVO 2003 is nationwide and, in terms of substance, comprises Telekom Austria's copper wire pair network as well as all existing bidirectional cable television networks.

4.2.1.1.2 Review of markets in the TKMVO 2003

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

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

In this process, RTR is required to review the relevant national markets susceptible to sector-specific regulation.

Once the draft version of the market review in the TKMVO 2003 had undergone public consultation, RTR completed its review of the markets below defined in the TKMVO 2003 as markets which are subject to ex ante regulation as specified in Art. 36 Par. 1 TKG 2003. No changes to the TKMVO 2003 were necessary for the following 13 markets:

- Access to the public telephone network at a fixed location for residential customers (retail market);
- Access to the public telephone network at a fixed location for non-residential customers (retail market);

- Publicly available local and/or national telephone services provided at a fixed location for residential customers (retail market);
- Publicly available local and/or national telephone services provided at a fixed location for non-residential customers (retail market);
- Publicly available international telephone services provided at a fixed location for residential customers (retail market);
- Publicly available international telephone services provided at a fixed location for non-residential customers (retail market);
- Call origination on the public telephone network provided at a fixed location (wholesale market);
- Call termination on individual public telephone networks provided at a fixed location (wholesale market);
- The minimum set of leased lines, which comprises specified types of leased lines up to and including 2 Mbit/s (retail market);
- Trunk segments of leased lines (wholesale market);
- Terminating segments of leased lines (wholesale market);
- Unbundled access, including shared access, to metallic loops and sub-loops for the purpose of providing broadband and voice services (wholesale market);
- Voice call termination on individual public mobile telephone networks (wholesale market).

4.2.2 Promotion of market entry

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.

RTR's web interface facilitates the general approval process

As early as 2003, the regulatory authority had developed a web interface which made registration easier and far less bureaucratic. Based on previous experience with the use of the web interface, the online entry forms were revised in 2005. Above all, this made the interface simpler and more uniform, thus ensuring a faster and improved process for companies and the regulatory authority.

In addition, the web interface was expanded to enable users to log in using a digital signature card.

In practice, reports 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/provision of a public communications network or service can be found on the RTR web site.

4.2.3 Creation of clear and fair general conditions

4.2.3.1 Market analyses

4.2.3.1.1 General information

Significant market power (SMP)

The legal framework for electronic communications networks and services is essentially based on the idea that certain restrictions and obligations are imposed on companies with significant market power in advance (ex ante), and – in contrast to general competition law – prior abuse of market power is not required in order to impose such restrictions and obligations (ex post).

This approach to competition regulation provides for a three-stage process:

Market delineation

The first stage involves delineating communications markets which may be subject to sector-specific regulation. RTR issued the Telecommunications Markets Ordinance 2003 (TKMVO 2003), which went into effect in October 17, 2003 and defined 16 telecommunications markets in compliance with the European Commission's recommendation of February 11, 2003 on the relevant product and service markets in the electronic communications sector. In the ordinance RTR issued on April 29, 2005, the TKMVO 2003 was supplemented to include the wholesale market for broadband access.

Market analysis

The second stage provides for the analysis of these markets by the TKK with a view to determining whether effective competition prevails or one or more companies have significant market power on the markets.

Imposition of specific obligations

Finally, the third stage involves the definition of specific obligations ("regulatory instruments") which can be use to remedy the current and potential competition problems identified in cases where the Telekom-Control Commission concludes in a market analysis procedure that effective competition does not prevail on a certain market and thus one or more companies possesses significant market power as defined in the TKG 2003. The following possible regulatory instruments are provided for: non-discrimination obligations, transparency obligations, accounting separation obligations, obligations to grant access to network facilities and functions, price regulations and cost accounting for the provision of access, regulatory measures related to retail user services, obligations related to the provision of leased lines, obligations with regard to retail rates as well as carrier selection and carrier pre-selection obligations.

4.2.3.1.2 Market analysis procedure for the wholesale market for broadband access to the Internet

Prompted by a TKK resolution on May 2, 2005, a market analysis procedure under Art. 37 TKG 2003 was initiated with the purpose of investigating 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 amended on May 2, 2005).

In addition, official experts at RTR were instructed to draw up an expert opinion on the question of whether, from an economic perspective, competition prevails on this market and whether self-sustaining competition would be present without regulation on this market.

After making a preliminary decision that Telekom Austria possessed significant market power, the Telekom-Control Commission then commissioned another opinion in which the experts were to establish which specific obligations under Articles 38 to 46 and/or Art. 47 Par. 1 TKG 2003 (i.e., regulatory instruments) would be suitable for potential SMP companies on this market from an economic standpoint in order to address the competition problems identified in the market analysis opinion of August 2005. This regulatory instruments opinion was completed in September 2005.

Telekom Austria has significant market power on the wholesale market for broadband access

On November 14, 2005, the TKK passed a draft measure (consultation draft) under Art. 128 Par. 1 TKG 2003 on the basis of the two expert opinions mentioned above. This draft states that Telekom Austria possesses significant market power on the wholesale market for broadband Internet access as defined under Art. 1 No. 17 TKMVO 2003 (as amended on May 2, 2005).

The TKK made this determination after a thorough investigation of market shares, existing barriers to market entry, control over infrastructure which is not easily duplicated, demand-side countervailing power, product differentiation, vertical integration, pricing behavior and other economically relevant indicators of market power.

In the analysis of the wholesale market for broadband Internet access, the following potential competition problems were identified:

1. The creation of barriers to market entry for (potential) competitors;
2. The transfer of market power to adjacent markets;
3. The use of market power vis-à-vis customers (especially in pricing).

Due to the competition problems identified, the following regulatory instruments were imposed on Telekom Austria in accordance with Art. 37 Par. 2 TKG 2003 in conjunction with Art. 128 Par. 1 TKG 2003:

1. A special access obligation;
2. A non-discrimination obligation, including the obligation to provide a reference offer;
3. Price regulation based on "retail minus" calculations;
4. separate accounting in order to prevent illicit cross-subsidization.

These instruments were imposed on Telekom Austria after the respective consultation and coordination procedures were completed.

This market was analyzed for the first time, thus it was not necessary to remove or alter any previous obligations from the TKG 1997. At the end of the period under review, this procedure had not yet been completed.

4.2.3.1.3 Market analysis procedures for the fixed-link carrier markets

Fixed-link carrier markets: Telekom Austria deemed an SMP operator on three out of four markets

With the resolution issued by the Telekom-Control Commission on October 20, 2003, market analysis procedures under Art. 37 TKG were initiated under the codes M 3/03 (Local/national services for residential customers), M 4/03 (Local/national services for non-residential customers), M 5/03 (International services for residential customers) and M 6/03 (International services for non-residential customers).

RTR's official experts drew up expert opinions on the issue of whether effective competition prevails on these markets from an economic perspective, and – in the case of insufficient competition – which regulatory instruments would be suitable from an economic standpoint to address the competition problems identified.

Publicly available local and/or national telephone services provided at a fixed location for residential and non-residential customers

Local/national carrier markets: Telekom Austria as a significant market power operator

After completing the consultation and coordination procedures in accordance with Articles 128 and 129 TKG 2003, in its session on February 21, 2005 the TKK determined in Procedures M 3/03 and M 4/03 that Telekom Austria possesses significant market power on the retail markets for publicly available local/national services for residential customers and non-residential customers at a fixed location. As a result, specific obligations were imposed under Art. 38 ff TKG 2003.

Telekom Austria was subjected to the following regulatory instruments on these markets:

1. An obligation under Art. 43 Par. 1 in conjunction with Par. 2 and 3 TKG 2003 to submit its general terms and conditions of business (including service descriptions) as well as its retail rates and fees (except for special offers lasting up to three months) to the regulatory authority for advance approval, coupled with the requirement that retail rates meet the standard of cost orientation;

2. An obligation under Art. 40 Par. 1 TKG 2003 to maintain accounting separation and to set up a cost accounting system.

Previous obligations arising from the TKG 1997 were abrogated.

In a decision handed down on November 22, 2005, the Austrian Constitutional Court overruled TKK's official decision regarding Procedure M 4/03. The continued procedure has not yet been completed.

Publicly available international telephone services provided at a fixed location for residential customers

Effective competition on the market for international services for residential customers

After completing the consultation and coordination procedures under Art. 128 and 129 TKG 2003, the TKK decided in its session on February 4, 2005 to discontinue Procedure M 5/03 regarding the retail market for international telephone services for residential customers, as no company on this market was identified as having significant market power, therefore effective competition is considered to prevail on the market as defined in Art. 37 Par. 2 TKG 2003.

The obligations imposed on Telekom Austria for this market were lifted in accordance with Art. 37 Par. 3 TKG 2003 by way of an official TKK decision in Procedure M 5a/03 on February 4, 2005.

1. This result was mainly justified by the fact that the market share of the largest operator on this market (Telekom Austria) is approximately 45% (and falling), including the market shares of Telekom Austria's resellers and the revenue shares arising from the use of calling cards.

2. Compared to the market for local/national telephone services for residential customers, carrier network operators enjoy greater latitude in pricing due to the larger number of possible call destinations on the market for international telephone services provided for residential customers.

3. Due the lower dependence on infrastructure, the broader selection and the higher price sensitivity among customers, the barriers to market entry are lower on the market for international services provided for residential customers than on the market for local/national services provided for residential customers or the market for international services provided for non-residential customers.

4. Moreover, new providers can enter selected segments (i.e., certain international calling destinations) of the market for international services provided for residential customers. This can be done more quickly and easily than covering all international destinations at once.

Publicly available international telephone services provided at a fixed location for non-residential customers

Telekom Austria identified as having significant market power on the market for international services for non-residential customers

After completing the consultation and coordination procedures in accordance with Art. 128 and 129 TKG 2003, in its session on February 4, 2005 the TKK determined in Procedure M 6/03 that Telekom Austria possesses significant market power on the retail market for publicly available international telephone services for non-residential customers at a fixed location. As a result, the TKK imposed specific obligations under Art. 38 ff TKG 2003.

The following regulatory instruments were imposed on Telekom Austria on this market:

1. An obligation under Art. 43 Par. 1 in conjunction with Par. 2 and Par. 3 TKG 2003 to submit its general terms and conditions of business (including service descriptions) as well as its retail rates and charges (except for special offers lasting up to three months) to the regulatory authority for advance approval, coupled with the requirement that retail rates meet the standard of cost orientation;

2. An obligation under Art. 40 Par. 1 TKG 2003 to maintain accounting separation and to set up a cost accounting system.

Previous obligations arising from the TKG 1997 were abrogated.

In a decision handed down on November 22, 2005, the Austrian Constitutional Court overruled TKK's official decision regarding Procedure M 6/03. The continued procedure has not yet been completed.

4.2.3.1.4 Market analysis procedure regarding mobile termination markets of mobile virtual network operators (MVNOs)

Operator-specific markets for termination

In the TKMVO 2003, RTR also defined a market for "Voice call termination on individual public mobile networks." Termination services can only be rendered by the provider network to which the subscriber is connected. As each mobile network operator has its own termination market as defined under Art. 1 No. 15 TKMVO 2003, network operator-specific termination markets exist.

The consequence of this market definition is that the market share of each operator on its own market is 100%, that infinitely high barriers to market entry are present (each new operator establishes its own market but can never enter an existing termination market), that economic incentives exist (in particular) to increase termination fees, and that no demand-side countervailing buyer power (CBP) exists which can discipline this potential market power.

After the operator-specific mobile termination markets of Mobilkom, T-Mobile, One, tele.ring and H3G had been analyzed in 2004 with the conclusion that these operators possess significant market power (thus leading to the imposition of specific obligations), the TKK initiated a procedure to analyze Tele2UTA's mobile termination market (Procedure M 15f/03) in late 2004. Since the fall of 2004, Tele2UTA has been providing mobile voice services as a mobile virtual network operator (MVNO).

Mobile virtual network operators (MVNOs)

In contrast to mobile network operators, an MVNO does not operate a complete mobile radio network because it does not have frequency usage rights. Instead, an MVNO substitutes part of the mobile network infrastructure – the radio network – by purchasing these services wholesale from mobile network operators (under a "national roaming agreement" with a host network operator).

In the course of the procedure, official experts at RTR were instructed to draw up an expert economic opinion on the question of whether, from an economic perspective, competition prevails on the market in question and whether self-sustaining competition would be present without regulation on those markets.

Subsequently, another opinion was commissioned in which the experts were to determine which specific obligations under Articles 38 to 46 and/or Art. 47 Par. 1 TKG 2003 (regulatory instruments) would be suitable from an economic standpoint for the potential SMP company Tele2UTA on its mobile termination market in order to address the competition problems identified in the market analysis opinion.

MVNO as an SMP operator

In the case of the MVNO Tele2UTA, the mobile termination market is also a resistant monopoly market. The TKK came to the conclusion that Tele2UTA has significant market power on its own termination market. In connection with mobile termination services, the following potential competition problems were identified in the case of non-regulation:

1. Allocative market distortions due to excessive termination fees for calls from the fixed-link network to the mobile network;

2. Allocative market distortions due to excessive termination fees for calls between mobile networks as well as price discrimination between on-net and off-net calls;

Competition problems

3. Danger of foreclosure strategies vis-à-vis small mobile network operators (greenfielders, MVNOs) through the denial of interconnection, excessively high termination fees, price discrimination between on-net and off-net calls or other tactics not related to pricing ("raise rival's costs" strategies);

4. Potential foreclosure strategies vis-à-vis fixed-link network operators in the case of overlaps in business areas (e.g., fixed-link/mobile convergence or in virtual private networks) or through increased substitution between fixed-link and mobile networks. This is not least reinforced by the marked discrimination between the implicit termination fees for on-net calls and those charged for off-net calls.

Imposition of specific obligations

In light of the objectives of regulation and the central principle of proportionality, Tele2UTA was subjected to the following specific obligations:

1. A non-discrimination obligation;

2. An obligation to publish a reference offer for termination services;

3. An obligation to allow interconnection;

4. An obligation to charge a fee for the interconnection service of termination in its public mobile telephone network based on the long-run average incremental cost (LRAIC) to an efficient operator in such a way that the fee for termination in Tele2UTA's public mobile telephone network equals the respective current mobile termination fee of its national roaming partner.

4.2.3.1.5 Market analysis procedure for operator-specific mobile termination markets – Imposition of an additional non-discrimination obligation

Novel retail products

In light of new retail products such as T-Mobile's "Replace" and One's *Mobile Nebenstellenanlage* ("Mobile Private Branch Exchange"), in the fall of 2005 the TKK initiated six market analysis procedures because it did not appear to be sufficiently ensured that the specific obligations imposed in the official decisions on Procedures M 15a-f/03 could also prevent all of the competition problems identified on the markets specified under Art. 1 No 15 TKMVO 2003 (termination in individual mobile networks) in a situation where such retail products are offered.

These products are public telephone services which enable the customer to receive calls to a geographical telephone number at a fixed physical network termination point which is connected via the air interface and to which the telephone number is assigned.

Foreclosure vis-à-vis fixed-link network operators

The fourth competition problem identified by the TKK (foreclosure strategies vis-à-vis fixed-link network operators in the case of overlaps in business areas [e.g., fixed-link/mobile convergence or in virtual private networks] or through increased substitution between fixed-link and mobile networks) gains special importance here due to these retail products, as they could be regarded as foreclosure strategies vis-à-vis fixed-link network operators. These products can be used to replace existing fixed-link lines, with the possibility of porting an existing geographical number to a mobile network operator. This subjects fixed-link network operators to substantial competitive disadvantages; they may not be able to offer comparable products as they depend directly on mobile termination and are required to pay the mobile termination fee incurred for this purpose. In contrast, the mobile network operator can offer favorable rates for calls from its fixed-location network termination point (fixed-link network) to one of its mobile handsets due to internal service provision.

Additional non-discrimination obligations

In order to address this competition problem of foreclosure strategies vis-à-vis fixed-link network operators, all mobile network operators were subjected to an additional non-discrimination obligation with regard to the price of mobile termination services. Specifically, this obligation aims to ensure that third parties are granted the same (price) terms as those charged between the "mobile arm" and the "fixed-link arm" (i.e., that unit in the mobile operator's organization which offers retail fixed-link voice telephony products) within the company. This obligation applies to those services of mobile network operators which are provided using a fixed physical network termination point connected via the air interface within the operator's own public communications network.

4.2.3.1.6 Market analysis for new fixed-link termination markets

In the course of the year 2005, mobile network operators offered retail products which are essentially intended to replace a fixed-link telephone connection, as mobile reachability is ensured using a geographical telephone number. These retail products involved connecting retail customers using a fixed network termination point, which is why the operators were (also) to be regarded as fixed-link subscriber network operators receiving fixed-link network termination fees in this capacity. Therefore, these operators are now providing services which belong to the "Termination in individual telephone networks at fixed locations" market under Art. 1 No. 8 TKMVO 2003 (current version). For this reason, on October 24, 2005 the TKK

initiated market analysis procedures under Art. 37 TKG 2003 for these fixed-link termination markets and instructed official experts at RTR to prepare an expert economic opinion on whether, from an economic standpoint, the respective operators possess significant market power on the wholesale market for termination in their public telephone networks. The procedures are currently still pending.

4.2.3.1.7 Administrative Court ruling on market analyses for fixed-link network termination

Significant market power on termination markets

With the decisions issued on December 20, 2004, the TKK determined in Procedures M 8b/03 to M 8k/03 that – in addition to Telekom Austria – all other subscriber network operators possess significant market power on their own termination markets. For this reason, these operators were subjected to price regulation under Art. 42 TKG 2003 in the form of benchmarking, with the fee for Traffic Type V3 (= regional termination in Telekom Austria's network) being used as a reference value.

UPC Telekabel Wien GmbH and LIWEST Kabelmedien GmbH submitted complaints against these decisions to the Austrian Administrative Court, which rejected the complaints as unfounded in rulings issued on September 6, 2005.

The Administrative Court clarified that – contrary to the arguments presented in the complaints – no (relevant) nationwide Austrian termination market exists on which the parties only have small market shares. Rather, each operator always has a market share of 100% (by definition) on its respective operator-specific market.

The Administrative Court rejected the cable network operators' complaints as unfounded.

The Administrative Court also disagreed with the complaint that the TKK had applied an excessive "green field" approach which had "disregarded other legal circumstances in addition to general regulatory conditions." According to the Administrative Court, the complaint did not successfully argue that the disputed decision had disregarded the general conditions which would also prevail in the case of non-regulation. In fact, the Administrative Court stated that these issues had been "addressed in detail." For this reason, the Administrative Court also rejected the suggestion of submitting a reference for a preliminary ruling to the European Court of Justice (ECJ) in this matter. The Administrative Court also disagreed with the complaint's interpretation of the "green field" approach as a procedural defect.

In addition, the Administrative Court confirmed the "free rider" argument presented in TKK's official decision, which states that the termination fees of small operators are not reflected in the retail rates of other subscriber network operators (especially Telekom Austria) due to a lack of relevant incentives. This primarily creates an incentive to raise the prices of termination services even above the monopoly level. The parties' reference in this context to Telekom Austria's different retail fees for termination in mobile networks also failed to convince the Administrative Court, as those fees are based on regulatory measures and the disputed decisions "indicated accurately that no conclusions regarding the existence of significant market power can be drawn from the market behavior indicators of (previous) pricing policy and price development."

In the Administrative Court's opinion, the disputed decision also rightly accounted for the relative size of the termination markets only in the selection of regulatory instruments (FL-LRAIC cost orientation for Telekom Austria, benchmarking for all other operators) and not during the investigation of significant market power.

The Administrative Court found the regulatory measures to be proportionate.

As for the proportionality of the imposed obligation – the parties had specifically argued that it was a violation of this principle that they could only charge higher rates (compared to V3) if they could provide evidence of higher costs (as in the case of Telekom Austria) – the Administrative Court stated that the parties did not concretely explain why, in light of the competition problem identified, an obligation other than the one chosen would have been less invasive and therefore proportionate. In contrast, the disputed decision "addressed the issue of proportionality ... in detail and specifically considered whether each obligation to be evaluated ... was suitable ... for addressing the existing competition problem."

Finally, the Administrative Court also overruled the objection citing the TKK's lack of jurisdiction and rejected the complaints as unfounded.

4.2.3.1.8 Market analysis procedure regarding transit services in the public telephone network – M 9/03

EC vetoes draft decision

In the first round of market analysis procedures, the TKK also notified the European Commission of a draft decision (or "draft measure") regarding the fixed-link transit market on July 20, 2004. On August 20, 2004, the European Commission communicated serious doubts to the TKK regarding the compliance of the notified draft decision with Community law, and on October 20, 2004 the Commission issued a (veto) decision pursuant to Art. 7 Par. 4 of the Framework Directive, calling on the TKK to retract the draft measure. Subsequently, the TKK requested a preliminary ruling from the ECJ, which issued its decision on October 6, 2005, stating that the case was outside of its jurisdiction.

At the end of the period under review, Procedure M 9/03 was still pending.

4.2.3.1.9 Review of Telekom Austria's cost accounting system

Telekom Austria was identified as an SMP operator on the following markets:

- Retail fixed-link customers (access and carrier markets);
- Fixed-link origination;
- Fixed-link termination;
- Minimum set of leased lines;
- Terminating segments of leased lines;
- Unbundling.

On all of those markets, the TKK imposed an obligation to maintain accounting separation in order to prevent illicit cross-subsidization pursuant to Art. 40 TKG 2003. This means that Telekom Austria is required to break down costs and revenues by market as defined in the TKMVO 2003.

The regulatory authority must review the cost accounting system used for this purpose on an annual basis in order to ensure that illicit cross-subsidization can be prevented.

Cost accounting system complies with regulatory obligations.

In this review, the TKK came to the conclusion that the cost accounting system used by Telekom Austria complies with the relevant obligations arising from the significant market power decisions for the markets listed above.

4.2.3.1.10 Review of reference offer for wholesale leased lines

Obligation to publish a reference offer

In line with the obligation imposed in the TKK's Decision M 12/03-52 of October 27, 2004 regarding the wholesale market for terminating segments, Telekom Austria published a reference offer on January 31, 2005. Under Art. 38 Par. 4 TKG 2003, the reference offer must contain sufficiently detailed subservices, break down the relevant service offers into components according to market needs, and state the associated terms and conditions (including prices and any discounts).

Until the publication of the reference offer, Telekom Austria was required to provide leased lines under the previously applicable terms and conditions; upon request, existing contracts with communications network operators and service providers must be changed over retroactively to the terms and conditions applicable to the respective terminating segments within two months after the publication of the reference offer.

Public consultation on reference offer

On February 21, 2005, the TKK decided to instruct RTR to review the reference offer submitted by Telekom Austria for wholesale leased lines in order to ensure compliance with the conditions indicated in the market analysis decisions. Between February 25, 2005 and March 29, 2005, RTR carried out a public consultation with regard to the reference offer. Several points in the first version of the offer presented by Telekom Austria were regarded as problematic. As a result, in a letter dated May 3, 2005 the TKK requested that Telekom Austria adapt the following aspects of the reference offer:

TKK requests adaptation

- Reduction of the defined fee of EUR 25,000.00 for use of the web front-end;
- Enabling of cascaded coupling according to the requirements of the decision;
- Adaptation of the definition of availability to the definition used in Telekom Austria's general terms and conditions of business for retail customers, and enabling the use of improved availability and the provision of concrete service packages for fault elimination, for example by extending any existing SLAs to wholesale consumers or extending transmission line service for retail leased lines to wholesale customers as well;
- Adjustment of the connection fee and monthly provision fees;
- Adaptation of terms and conditions in the migration offer (e.g., with regard to ruling out migration capability for retail leased lines subject to contractual commitment periods, reduction of the flat processing fee in the case of unclear or inaccurate information regarding the leased lines to be migrated, reduction of the migration fees for direct connections and the validity period of the migration offer).

Voluntary changes in reference offer

Subsequently, negotiations between Telekom Austria and RTR (as ordered by the TKK) were held on the revision of the reference offer. In those negotiations, Telekom Austria expressed its willingness to reduce the amount charged upon conclusion of the contract for the implementation of the electronic ordering interface to EUR 6,687.00, and to make the requested changes with regard to cascaded coupling. In addition, adjustments were made in monthly fees in order to ensure that those wholesale customers who order direct connections are also not at a disadvantage compared to those who order retail customer lines in terms of the discounts granted. Moreover, the terms and conditions of the migration offer were adapted, and its period of validity was extended to July 6, 2005. Telekom Austria complied with the requested change in its definition of availability by amending its retail terms and conditions of business accordingly.

TKK discontinues procedure.

After the reservations it had expressed were remedied in the reference offer, the TKK decided on June 13, 2005 to refrain from enforcing changes in the offer.

4.2.3.1.11 Review of Telekom Austria's reference interconnection offer

RIO 2005 for origination and termination services

As a result of the market analysis procedures M 7/03 and M 8a/03, the TKK issued decisions on December 20, 2004, ordering Telekom Austria under Art. 38 Par. 3 TKG 2003 (inter alia) to publish a reference interconnection offer for its origination and termination services. Published by Telekom Austria in April 2005, this reference interconnection offer (RIO 2005) was reviewed by the TKK in order to determine whether Telekom Austria had fulfilled its obligations under Decisions M 7/03 and M 8a/03.

In this context, it was determined that Telekom Austria had largely based the RIO 2005 on the requirements of Decision Z 20/01, which still forms the basis for interconnection on the fixed-link network. However, several points required further explanation or adaptation on Telekom Austria's part. From the TKK's standpoint, these points were resolved in meetings with Telekom Austria and in a letter from Telekom Austria dated October 5, 2005:

Essentially, the topics addressed were utilization below capacity, reserve systems in the case of utilization below capacity, traffic distribution, security services upon initial interconnection, the costs of setting up IC links (Annex 2), the amount of hourly rates, number porting in the (0)5, 111 and 118 ranges, as well as the accessibility of numbers in the (0)780 range in carrier network operation.

After additional clarifications had been requested, the only item which remained controversial was the accessibility of (source network-priced) numbers in the (0)780 range (numbers for convergent services) in carrier network operation. As a result of a meeting between Telekom Austria and RTR (as instructed by the TKK) in October 2005, Telekom Austria announced that it would make these numbers accessible to carrier network operators and subsequently fulfilled this commitment. In addition, Telekom Austria also made the changes in the RIO ordered in TKK's decisions on Procedures Z 3/04, Z 4/04 (Setup costs, Annex 17) and Z 8/04 ff (PAC, Annex 28).

Telekom Austria fulfills obligations.

With the published reference interconnection offer, Telekom Austria therefore fulfilled its obligations under Decisions M 7/03 and M 8a/03.

4.2.3.2 Network access and unbundling

One essential area of regulation involves activities to create the conditions necessary to enable new entrants to provide their services on the market. In this context, open network provision (ONP) is of crucial importance. In order to enable competition between providers, it is necessary to ensure that providers have access to the telecommunications networks of competitors, essentially through the interconnection (IC) of networks.

The interconnection of communications networks serves to ensure interoperability between the subscribers of all public telephone networks (Art. 22 TKG 2003) and is defined in Art. 3 No. 25 TKG 2003.

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 only takes on a subsidiary role, another requirement is that no valid agreement on the respective interconnection service exists between the communications network operators and 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).

Since the first relevant order was issued in 1999, unbundling has been an essential regulatory measure and has enabled alternative communications network operators to connect retail consumers directly via Telekom Austria's (copper wire) access network. This means that alternative network operators no longer have to rely on constructing their own infrastructure, which would be desirable due to the greater flexibility, autonomy and sustainability it would provide, but which would be uneconomical in many cases. Instead, various unbundling options allow the subscriber line between Telekom Austria's main distribution frame and the retail consumer's location to be rented on terms defined by the regulatory authority and thus to be used to provide a wide variety of services. With regard to promoting high-level location quality and providing the population with high-quality, innovative services, the widely varied (especially high bit-rate) uses of subscriber lines are an especially welcome development.

4.2.3.2.1 Unbundling procedures

TKK issues draft decision on unbundling fees

In its session on November 28, 2005, the TKK issued a draft measure under Art. 128 TKG 2003 (as requested by Tele2UTA in Procedure Z 7/04) on the unbundling fees for Telekom Austria's local loops. The national consultation on the draft measure (pursuant to Art. 128 Par. 1 TKG 2003) was launched on November 30, 2005, and the (one-month) coordination procedure throughout Europe began on December 7, 2005.

The regulatory authority was required to redefine unbundling fees because the fees ordered in the preceding decision (Procedure Z 24/02) had expired and the parties were not able to reach a private-law agreement establishing follow-up regulations.

Main elements of the draft decision

Telekom Austria as a significant market power operator

The legal basis for the procedure was the official decision issued by TKK in Procedure M 13/03 on October 27, 2004. With this decision, which completed the market analysis procedure for the "Unbundled access, including shared access, to metallic loops and sub-loops for the purpose of providing broadband and voice services" market (or simply the "unbundled access market"), Telekom Austria was subjected to various regulatory obligations – including the obligation to offer services at the costs of an efficient service provider based on FL-LRAIC (forward-looking long-run average incremental costs) – due to its significant market power as identified in the market analysis.

Monthly fee for local loops reduced to EUR 10.70

Under this approach, the monthly rental charge for an entire local loop (i.e., subscriber line) was reduced from EUR 10.90 to EUR 10.70. As regards partial unbundling, the fees set in the previous orders (Z 15/00, Z 24/02) still apply, as the results of the investigation indicated no changes in this regard.

As in the previous procedures mentioned above, this order is based on the calculation of efficient service provision costs using an analytical bottom-up model. It was not possible to include the data supplied by Telekom Austria because Telekom Austria's (top-down) model does not depict replacement costs and therefore does not comply with the FL-LRAIC approach. The calculation of costs using only a bottom-up model had already been confirmed in principle by Administrative Court in a ruling handed down in June 2005 (Procedure Z 14/00). As the fundamentals of the FL-LRAIC approach had not changed in relation to the laws in force prior to the TKG 2003, it was also possible to cite the decision in Procedure Z 7/04; as a result, it can be assumed that the calculation of Telekom Austria's costs is still admissible on the basis of the existing bottom-up model alone. With the fees ordered in this decision, Austria's unbundling prices remain below the European average.

Fee calculation

The fees for one-time services such as setup or changeover, 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., accounting, payment due dates) largely correspond to the previous (and proven) regulations, with several adaptations required due to the specific request and material circumstances.

The new fees and other regulations ordered will enter into force from the time the (final) official decision is delivered; a right to termination will exist upon completion of the next market analysis for the unbundling market (toward the end of 2006).

Administrative Court ruling on the basic unbundling decision (Z 15/00)

In the request submitted by Tele2UTA, the TKK was only required in Procedure Z 7/04 to issue one new annex pertaining to fees as a supplement to the previous unbundling decision of March 12, 2001 (Z 15/00-69), which regulates the legal relationship between the parties. In its ruling of September 9, 2003, the Administrative Court overruled Decision Z 15/00-69 due to a violation of rules of procedure.

TKK issues replacement decision

Under the relevant judicial decision of the Administrative Court, an official decision which orders an annex (e.g., regarding fees) to another decision is likewise unlawful due to an "inextricable link" if the latter (i.e., base) decision is overturned by the Administrative Court. As precisely this situation arose between Z 15/00 (the main order) and Z 7/04 (the annex regarding fees), the TKK was required to complete Procedure Z 15/00 (as a basis) before completing Procedure Z 7/04. In its session on November 14, 2005, the TKK issued the replacement decision Z 15/00-150, which now forms the basis between the parties for unbundling Telekom Austria's local loops; in the ensuing session, the TKK issued the draft measure Z 7/04.

Consultation and coordination

The national consultation procedure ended on January 2, 2006. Comments were received from Tele2UTA, Telekom Austria, Inode, the Association of Alternative Telecom Network Operators (*Verband alternativer Telekom-Netzbetreiber*, or VAT) and Internet Service Providers Austria (ISPA). In the course of the EU-wide coordination procedure, the European Commission indicated on January 6, 2006 that it would not submit comments on the notified draft. Based on the comments received in the course of the consultation procedure, the TKK adapted several aspects of the draft decision (such as the regulation of rental charges for collocation space) and passed the final decision (Z 7/04-111) in its session on January 23, 2006.

4.2.3.2.2 Interconnection procedures

Mobile number portability

Whereas number porting on fixed-link networks was introduced in Austria in 2000 and has since functioned fairly smoothly, the introduction of mobile number portability was preceded by approximately two years of discussions on the issue in multi-operator working groups. In general, the technical preparations were handled amicably in these working groups, while other ideas were less compatible due to the differing interests of the companies involved. The legal basis was created in Austria on August 19, 2003 (Art. 23 TKG 2003), and the corresponding ordinance was issued as the Number Portability Ordinance (NÜV) on November 4, 2003.

General information on mobile number portability

Number porting allows retail customers to retain their previous telephone numbers when they switch from one telecommunications service provider to another.

Number portability is possible regardless of the contractual relationship.

Mobile number portability can apply to any mobile number, regardless of whether the subscriber maintains 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

Mobile number porting in Austria since October 2004

After one month of consultation and coordination, the TKK issued a total of six decisions which defined the precise terms and conditions between operators and set a start date of October 16, 2004. The operators were able to meet this deadline and to launch number porting between mobile networks for retail customers.

Administrative Court rulings

While no complaints were filed regarding the official decisions issued by the TKK in Procedures Z 25/03 (H3G – Telekom Austria) and Z 26/03 (H3G – UTA) and these decisions thus entered into legal force in formal and material terms, complaints were submitted to the Constitutional Court or Administrative Court regarding Decisions Z 16/03 (H3G – T-Mobile), Z 24/03 (Mobilkom – H3G), Z 01/04 (One – tele.ring) and Z 05/04 (tele.ring – Mobilkom). All of the additional petitions for suspensive effect were rejected by these courts, especially as the public's interest in the realization of number portability was a higher priority.

Administrative Court overturns TKK decisions

In decisions handed down on January 31, 2005 and March 31, 2005, the Administrative Court overturned the disputed TKK decisions. The reason for this ruling was that no fee was set for the costs of number porting between operators, as the TKK did not plan to set this fee until a one-year observation period had passed. In addition, an objection to the EUR 4.00 limit on the costs of porting to the retail customer was raised with the specific argument that such a determination can not be made in an interconnection order. Instead, excessively high fees charged to retail customers should be pursued in the course of supervisory procedures.

Continued procedures

Once the TKK decisions were overturned, the procedures reverted to the time prior to the decisions. However, regardless of the abrogation of the decisions, number porting was still carried out between all operators, meaning that retail customers did not experience any noticeable effects. In the course of the continued procedures, the cooperation among operators was enhanced in the working groups, and – especially in technical terms – a solution was developed which was largely accepted by all operators.

In addition, a new porting process was designed for large-scale customers with a total of more than 25 SIM cards. The costs of porting to the operators was studied in a technical/economic expert opinion.

New decisions

With explicit attention to the findings of the working groups, the TKK finally decided on four draft measures on December 19, 2005 and published them for national consultation and EU-wide coordination lasting until January 25, 2006.

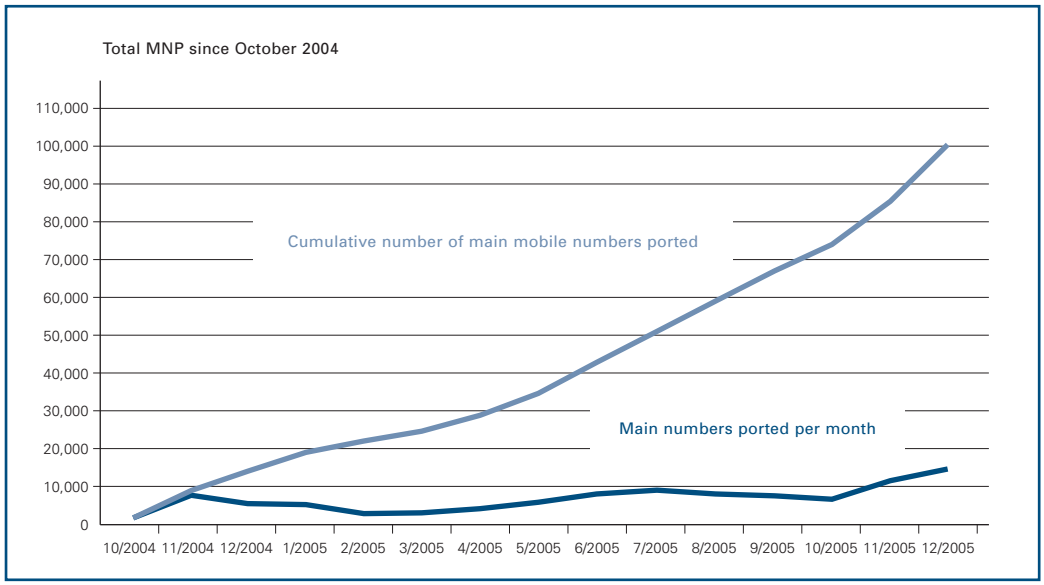
In these decisions, the fee to be charged between operators for number porting was limited to a maximum of EUR 8.21. The fee ordered had to be cost-oriented, and this limit equals the costs to that operator for which porting incurs the highest expense.

In addition, the technical interfaces negotiated and recognized by the operators were also mandated in the decisions, thus providing a solid technical basis for number porting. The porting process for large-scale customers was also regulated, and individual operators who have the technical means to do so were ordered to shorten response times (thus also reducing waiting times for retail customers). Moreover, the regulatory authority defined a system of penalties which provides for fines on a case-by-case basis. In this way, a disciplining effect could still be attained without major economic effects on the source operator in cases where the response time is exceeded in only a small number of cases. In order to compensate the target operator as far as possible, the penalty now defined in this context is based on the amount of the expected loss.

Over 100,000 mobile telephone numbers ported

Since the launch of number porting on October 16, 2004, over 100,000 primary mobile numbers have been ported (as of January 1, 2006). The chart below shows the development of mobile number porting up to January 1, 2006.

Figure 4: Development of mobile number porting in Austria



Source: RTR

TKK decisions on the definition of mobile termination fees

Seven dispute settlement procedures

In seven interconnection orders issued by the TKK on December 19, 2005 (relating to Procedures Z 2, 10/05, Z 7/05, Z 8/05, Z 9/05, Z 11/05, Z 13/05 and Z 14/05), the mobile termination fees of Mobilkom, T-Mobile, One, tele.ring and H3G were defined in relation to one another and in relation to UPC Telekabel Wien GmbH (UPC).

These procedures were initiated because the operators named above as well as UPC were not able to reach private-law agreements on the amount of mobile termination fees from 2005 onward. If certain prerequisites are fulfilled, each operator of a communications network can choose to call on the TKK to issue a decision as a substitute for the contractual agreement which the parties were unable to reach. In the first six months of 2005, tele.ring, H3G and UPC submitted requests to the TKK for dispute settlement.

Significant market power

In the definition of fees for the service of termination in the public mobile telephone networks of Mobilkom, T-Mobile, One, tele.ring and H3G, their position as companies with significant market power had to be taken into account. In decisions issued on October 27, 2004, the TKK had determined that all mobile network operators possess significant market power pursuant to the TKG 2003 on their specific mobile termination markets. Consequently, one of the obligations imposed on the operators was to charge a fee for termination in their public mobile telephone networks based on the long-run average incremental cost (LRAIC) to an efficient operator.

Specific obligations

In order to calculate these costs, the TKK commissioned an expert economic report in which the individual operators' costs for the efficient provision of mobile termination services were studied. In this context, it turned out that Mobilkom – the company which provides mobile termination services at the lowest price – represents the benchmark for the costs of an efficient operator as specified in the imposed obligations. As a result, the termination fees of all other mobile network operators had to be based on this value (6.79 euro cents excluding VAT).

Glide path intended to ensure longer-term planning horizon

The specific obligation to base charges on the costs (i.e., LRAIC) to an efficient operator was implemented in the form of a gradual adjustment to this value (a "glide path") in order to avoid disruptive intervention and to ensure a longer-term planning horizon – and thus stability – for operators. In addition, it was necessary to account for the initial investments of new companies entering the market (i.e., latecomer disadvantages).

Specifically, this "glide path" calls for all mobile network operators to reach the "target value" of 6.79 euro cents by the end of 2008 at the latest, with essentially uniform individual reductions for each mobile network operator on a semi-annual basis. As the starting levels for these reductions reflect the differences in the most recently agreed termination fees, the mobile network operators will reach the target level at different points in time, but at the latest by the end of 2008.

The table below shows the fees set by the TKK.

Table 3: Mobile termination fees

Mobilkom	T-Mobile	One	tele.ring	H3G
Amounts indicated in EUR cents				
By October 31, 2005 10.86	By October 31, 2005 13.18	By October 31, 2005 13.80	By December 31, 2005 13.80	By December 31, 2005 19.62
Nov. 1, 2005 – Dec. 31, 2005 10.34	Nov. 1, 2005 – Dec. 31, 2005 12.66	Nov. 1, 2005 – Dec. 31, 2005 13.28		
Jan. 1, 2006 – June 30, 2006 9.34	Jan. 1, 2006 – June 30, 2006 11.66	Jan. 1, 2006 – June 30, 2006 12.28	Jan. 1, 2006 – June 30, 2006 12.80	Jan. 1, 2006 – June 30, 2006 17.79
July 1, 2006 – Dec. 31, 2006 8.34	July 1, 2006 – Dec. 31, 2006 10.66	July 1, 2006 – Dec. 31, 2006 11.28	July 1, 2006 – Dec. 31, 2006 11.80	July 1, 2006 – Dec. 31, 2006 15.95

Source: RTR

In this context, the specific definition of mobile termination fees is subject to a time limit due to a decision to be issued for each individual mobile network operator in a repeated market analysis for mobile termination services; here the TKK assumes that the results of this procedure will be available by the end of 2006.

Possible merger of tele.ring and T-Mobile accounted for in the decision

The possible change of tele.ring's ownership due to T-Mobile's acquisition of the company was taken into account in these decisions by including an additional provision for circumstances in which supervisory approval is granted and the acquisition of tele.ring is completed. From that point (or from the first day of the ensuing month), the mobile termination fee set for T-Mobile will apply to termination services in tele.ring's public mobile telephone network after its shares are acquired by T-Mobile.

In the course of the consultation and coordination procedures for the seven draft measures, numerous interested persons and institutions submitted their comments. Among others, the European Commission submitted comments on the TKK's draft measures in November 2005, generally stating that the TKK should substantially shorten the duration of the [then applicable] glide path. According to the European Commission, this should ensure that the remedies imposed are effective and appropriate to address the competitive problems identified.

The comments of these persons, companies, and in particular the European Commission were taken into account by adapting the original glide path, which had called for the target level to be reached at the end of 2011.

Regulations for services with regulated fee limits and premium-rate services

Telekom Austria AG vs. atms Telefon- und Marketing-Services GmbH – Procedure Z 3/04

New Annex 17: Standardized operator treatment of subscriber objections to charges for value-added services

In May 2004, Telekom Austria filed a request for a partial interconnection order vis-à-vis atms with regard to regulations on services with regulated fee limits and on premium-rate services.

For the use of value-added services, the retail consumer is required to pay a service charge to its 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 the amount agreed upon in a private-law agreement to the value-added service provider.

Objective of request: Collection fee plus reimbursement of costs

One aim of Telekom Austria's request was to define reimbursement for the costs of handling subscriber objections to fee claims arising from calls to target network-priced value-added services in addition to Telekom Austria's collection fee of 10%.

Procedure suspended from July to December 2004

After the failure of dispute settlement negotiations before RTR, the TKK decided on July 19, 2004 on the basis of concurring requests from both parties to suspend the procedure until further notice due to multilateral negotiations regarding the subject matter of the procedure. As those negotiations failed to produce an agreement, the procedure was resumed by means of a TKK resolution at Telekom Austria's request on December 20, 2004.

An expert economic opinion drawn up in the course of the procedure calculated Telekom Austria's collection costs to be 10.89%.

2005: 10% collection fee plus reimbursement of costs

In a decision issued on September 16, 2005, the TKK again set the collection fee at its previous level of 10% for 2004 with reference to Telekom Austria's obligation to ensure that atms receives equal treatment to other service network operators. For the year 2005, the TKK ordered the same collection fee of 10% as well as an additional reimbursement of EUR 35.00 per subscriber objection, to be paid to Telekom Austria in cases where the number of objections exceeds a certain threshold. TKK's reasoning for this decision was that it would provide service network operators with an incentive to reduce the number of subscriber objections. At the same time, the regulations applying to subscriber objections until December 31, 2004 were adapted for the period starting on January 1, 2005 to account for a process agreed upon by several major network operators (the "WKO process"). In particular, this arrangement created the possibility of allowing the source network operator to pass subscriber objections on (with the subscriber's prior consent to the forwarding of his/her master data and traffic data) to the service network operator. In this way, the service network operator (or the information service provider connected to its network) can then handle the subscriber objection.

Finarea SA. vs. Telekom Austria AG – Procedure Z 04/04

Request for setup costs and collection fees

On the same issue as in Procedure Z 03/04, Finarea SA. filed a request in August 2004 for a TKK order specifying new interconnection terms with regard to collection fees and setup costs for service numbers. In contrast to Telekom Austria's request in Procedure Z 03/04, this request pursued a reduction of the collection fee from 10% to 3.5%. After numerous changes, Finarea essentially justified its request by citing the fact that the costs of this service are lower in other

countries, and that the service of fraud management included in the collection fee did not comply with the standard of cost orientation and was not required by Finarea.

After the failure of dispute settlement negotiations, the procedure was carried out before the TKK. An expert economic opinion drawn up in the course of the procedure calculated Telekom Austria's collection costs to be 10.89%.

Definition of fees according to principle of equal treatment

In a decision issued on September 16, 2005, the TKK again set the collection fee at its previous level of 10% for the period from October to the end of 2004 on the basis of concurring requests from both parties. For the period from the date of the request until October 2004, a valid interconnection agreement was in force between the two parties, thus it was not necessary to issue an order for that period. Effective January 1, 2005, the TKK set the collection fee at 10% with reference to Telekom Austria's obligation to ensure that Finarea receives equal treatment to other service network operators. For the year 2005, the TKK ordered an arrangement analogous to the one mandated in Procedure Z 03/04 described above. The TKK also ordered setup costs for service numbers at the same level charged to other operators with reference to Telekom Austria's obligation to ensure that Finarea receives equal treatment to other service network operators.

eTel Austria AG, Colt Telecom Austria GmbH and UTA Telekom AG vs. Telekom Austria AG – Procedure Z 13-15/04

Rejection for lack of written inquiries, discontinuation due to agreement

In December 2004, eTel, Colt and UTA submitted requests for partial interconnection orders vis-à-vis Telekom Austria. As in Procedure Z 3/04, the objective of the requests was to order revised regulations with regard to the operators' standard treatment of source network operators' objections to fees arising from value-added services charged by the target network. Up to that point, the services had been governed by Annex 17 of the interconnection order/agreement between the operators mentioned above and Telekom Austria. The requests were preceded by multilateral operator negotiations in the second half of 2004, which ended without an agreement toward the end of that year. The previous dispute settlement procedures involving RTR also failed to produce an agreement. In official decisions issued on March 7, 2005, the TKK dismissed the requests filed by eTel and Colt due to non-observance of the requirement that the inquiry must be in written form in both parties' interconnection relationships with Telekom Austria. The procedure involving UTA (now Tele2UTA) was discontinued on May 2, 2005 due to a bilateral agreement with Telekom Austria.

Payphone access charge (PAC)

Telekom Austria AG vs. eTel Austria AG, Colt Telecom Austria GmbH, MCI Austria GmbH and Tele2 Telecommunication Services GmbH – Procedure Z 8-11/04:

Huge increase in calls from payphones to (0)800 numbers

On October 14, 2004, Telekom Austria submitted requests for partial interconnection orders vis-à-vis the companies eTel Austria AG, Colt Telecom Austria GmbH, MCI Telecommunication Services Austria GmbH (now MCI Austria GmbH) and Tele2 Telecommunication Services GmbH (now Tele2UTA Communication GmbH) seeking a premium in the form of a payphone access charge (PAC) for calls from its public payphones to numbers in the (0)800 range. Telekom Austria justified the requests with the fact that the number of calls to (0)800 numbers from public payphones had risen enormously in the previous months, and the costs of using

the payphones for calls to (0)800 numbers were not covered by the IC charges for origination service in the carrier network. Telekom Austria argued that the main parties who benefit from toll-free calls to (0)800 numbers from public payphones were the providers of calling card services as well as the associated network operators, and that this goes beyond the limits of the universal service requirement regarding public payphones.

Expert report: Costs of payphones, effects on IC billing

After the parties failed to reach an agreement in a dispute settlement procedure before RTR, the TKK instructed RTR's official experts on December 20, 2004 to prepare an expert economic opinion on the costs of the public payphones as well as a technical expert opinion assessing the effects of a PAC on interconnection billing. The opinions were sent to the parties in late March and early April 2005. In addition, verbal negotiations were held with all parties to the procedure in attendance.

New Annex 28: PAC in the maximum amount of EUR 0.1058/minute

In the decisions issued by TKK on August 16, 2005, the existing interconnection orders/agreements with each network operator were expanded to include an additional annex (Annex 28). According to the provisions of this annex, Telekom Austria is entitled to collect a PAC from its interconnection partners (in addition to the origination fee) in the maximum amount of EUR 0.1058 per minute for calls from public payphones to toll-free services in the networks of the interconnection partners ((0)800 range). However, this amount only constituted a maximum limit; the premium most recently charged by Telekom Austria (from September 1, 2005) was EUR 0.075 per minute. In order to allow the interconnection partners to review interconnection billing, Telekom Austria was also required to designate calls from public payphones to toll-free services in the interconnection partner's network with the appropriate signaling parameter (calling party's category = "payphone").

Alternative network operators' objections: Not an IC service but part of universal service

In response to complaints submitted by the alternative network operators involved, the Administrative Court overturned the decisions mentioned above in its ruling 2005/03/0200 on December 19, 2005, citing that a fee charged as a premium on interconnection fees to cover a portion of the costs of using a payphone in interconnection is not actually a fee for an interconnection service. Even if there is no doubt that an interconnection order could contain provisions regarding such services which are inextricably linked to the main service and can be regarded as annex services to interconnection (as in the case of the collection fee, for example), the services for which Telekom Austria requested compensation with the PAC are not annex services in this sense. In the Administrative Court's opinion, the provision and operation of public payphones is not provided as a service to the interconnection partner but to the general public; Telekom Austria's restricted latitude for action in the operation of public payphones due to the universal service requirement is offset by financial compensation. Although it is also possible to define provisions regarding a cost contribution for public payphones in interconnection agreements, the regulatory authority is not to order fees for the (end-users') use of public payphones, as these are not interconnection services provided for the interconnection partner nor directly related annex services which are necessary for interconnection and the smooth handling of traffic between networks.

TKK's arguments: IC annex service, subsidiarity of universal service compensation

In light of the Administrative Court's legal interpretation, the TKK will now be required to issue replacement decisions dismissing the requests in the continued procedures.

Interconnection procedure before the Administrative Court (VwGH)

No. 2004/03/0204: atms Telefon- und Marketing Services GmbH vs. T-Mobile Austria GmbH (collection fee) – Z 23/03

Complaint regarding T-Mobile's collection charge unfounded

In a ruling handed down on October 18, 2005, the Administrative Court dismissed as unfounded the complaint filed by atms regarding TKK Decision Z 23/03-38 of October 11, 2004, in which T-Mobile's collection fee was set at 10% with reference to the collection fees agreed upon by other (non-SMP) operators.

Consideration of fees customary on the market is permissible.

In its justification of the decision, the Administrative Court explained that not just the costs but also the degree to which the disputed fees are customary on the market were taken into account in assessing the appropriateness of the fee conditions defined for collection – which represents an ancillary service to the basic service of origination. In the TKK decision, the costs to T-Mobile for the service in question were surveyed and the result was compared to fees customary on the market. In addition, the interests of the overall market were also considered for the sake of functioning competition. The costs to T-Mobile were thus accounted for appropriately in the decision-making process.

According to the Administrative Court, the TKK's interpretation that a collection fee of 10% of the service fee is customary on the market – and thus also appropriate from the perspective of other market participants – could not be regarded as inconclusive. Even if many interconnection agreements are based on the fees set by the regulatory authority in procedures concerning other parties, this could not be regarded as a result of the authority's ongoing decision practice – at least with regard to those network operators which are not subject to the regulatory requirement of cost orientation or equal treatment, especially as there were no determinations by the authority which would have bound T-Mobile in its pricing behavior for the services in question. Ultimately, the argument against rejecting operator-specific collection charges was not able to demonstrate any illegality in the determination made by the authority. The Administrative Court also noted that the authority had discussed the issue of operator-specific collection charges with due consideration of the parties' interests as well as those of the overall market, and determined that the desired reduction would benefit those service network operators which themselves had no connected subscribers. However, due to the service providers they support, they would have to assume responsibility for a considerable portion of subscriber objections.

4.2.3.2.3 Additional procedures concerning network access

Rebilling – Z 5/05

Rebilling: Resale of line access services

On March 15, 2005, eTel requested an order under Art. 50 TKG 2003 requiring Telekom Austria to enable the realization of a plan referred to by eTel as "rebilling," that is, the resale of Telekom Austria line access services in unchanged form – but with a wholesale discount – based on the transfer of subscriber lines offered by Telekom Austria to its own end-customers. As an alternative, eTel requested that the corresponding changes be made to Telekom Austria's reference offer for the resale of line access services, which (according to eTel) includes services which eTel neither requires nor wishes to purchase (primarily referring to the contribution of EUR 750,000.00 eTel is required to pay toward the investment costs associated with making Telekom Austria's network multi-client capable). In the mandatory dispute settlement

negotiations before RTR prior to initiating official proceedings, the parties were unable to reach an agreement, thus the procedure was continued before the TKK on May 2, 2005. A verbal negotiation scheduled for July 18, 2005 was postponed to August 16, 2005 at eTel's request due to a scheduling conflict.

Complaint about delay of proceedings

In a letter received on October 25, 2005, the Administrative Court stated that eTel had filed a complaint due to non-adherence to the six-month decision deadline required by law and at the same time requested that the TKK issue an official decision within three months.

Request dismissed

Once the appropriate draft measure had been drawn up and the legally required consultation procedure carried out, the TKK issued an official decision dismissing eTel's main request on December 19, 2005. In justifying its decision, the TKK explained that an obligation for Telekom Austria to make connection services available in the form requested by eTel ("rebilling") did not arise from the non-discrimination obligation imposed on Telekom Austria, nor was Telekom Austria required to make further access available in addition to its reference offer for the resale of line access services. Moreover, the non-discrimination obligation was limited by the principle of proportionality; for the services requested by eTel, Telekom Austria's reference offer is a suitable instrument for the non-discriminatory use of the desired wholesale services. In addition, the services requested by eTel were not necessary for ensuring competition in the long term because other forms of access were available to a sufficient extent. The TKK also dismissed eTel's alternative request, citing the fact that competitors do not have the right to demand that changes be made by the TKK in reference offers.

No discrimination, availability of other forms of access, no claim to changes in reference offers

4.2.3.3 Frequencies

4.2.3.3.1 450 MHz frequency allocation procedure

RTR carried out a consultation on the terms of use.

Already in April 2004, the Federal Minister of Transport, Innovation and Technology assigned frequencies from the 450 MHz range to the TKK for allocation. At that time, however, it was not possible to allocate those frequencies because the terms of use had not yet been defined. Subsequently, the federal ministry responsible negotiated the terms of use with Austria's neighboring countries. At the same time, RTR carried out a consultation procedure on certain key points regarding the frequency allocation. In May 2005, RTR published the consultation document, which specifically covered topics such as various possible ways of dividing the frequency range as well as coverage obligations and the services for which the frequencies could be used from the market participants' perspective.

The consultation showed that most market participants viewed broadband services as the primary area of use for these frequencies.

Subsequently, the focus was laid on broadband (also in coordinating the terms of use), as international coordination for narrowband applications could not be completed in the near term.

Once the Federal Ministry of Transport, Innovation and Technology had delivered the terms of use in late October 2005, the TKK defined the terms of the invitation to tender and published the invitation with the consent of the Federal Minister on December 20, 2005. The frequencies (2 x 4.44 MHz) to be auctioned off were previously used for the Austrian automobile telephone

network (the "C Network"). The frequency spectrum was divided into three packets to be allocated nationwide. Due to their 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. This fact was also taken into account in the definition of coverage obligations, which focused on municipalities with low population density.

Invitation to tender for frequencies in the 450 MHz range launched in December 2005

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 the submission of applications.

The minimum bid amounted to EUR 100,000.00 or EUR 125,000.00 per frequency packet.

Table 4: 450 MHz frequency allocation procedure: Frequency packets

Frequency packet	Frequency range MHz	Minimum bid
1	451, 300-452, 900 461, 300-462, 900	EUR 125,000.00
2	452, 900-454, 150 462, 900-464, 150	EUR 100,000.00
3	454, 150-455, 740 464, 150-465, 740	EUR 125,000.00

Source: RTR

The application deadline was February 27, 2006, and the allocation of frequencies is planned for April 2006.

4.2.3.3.2 Merger of tele.ring and T-Mobile

In August 2005, tele.ring Telekom Service GmbH and T-Mobile Austria GmbH submitted a joint request under Art. 56 Par. 2 TKG 2003 for regulatory approval of changes in tele.ring's ownership. The reason behind this request was T-Mobile's intention to acquire tele.ring. At the same time, the merger was also reported to the European Commission in compliance with the Merger Control Regulation.

TKK reviewing merger of tele.ring and T-Mobile

Under Art. 56 TKG 2003, in procedures concerning changes in ownership the regulatory authority is required in particular to assess the technical and competition-related effects in each case. The authority's approval may include incidental provisions to the extent necessary to avoid adverse effects on competition. Approval shall be refused in any case if, despite the imposition of incidental provisions, an adverse effect on competition is likely to arise as a result of the transfer.

Official experts examined the effects of the merger on competition

Due to the fact that tele.ring and T-Mobile were immediate competitors on the Austrian mobile market, it can not be ruled out that this change in ownership might have an adverse effect on competition. Therefore, the TKK commissioned official experts at RTR to compose an expert opinion examining the effects the planned merger could have on competition and, if applicable, the conditions which might be imposed in order to obviate such effects.

At the European Commission's request, the results of this opinion were submitted to the Commission together with additional information. In general, the regulatory authority and the relevant units in the European Commission cooperated closely in the course of the procedure. In the meantime, the Commission has initiated a Phase 2 procedure. Completion of the merger control procedure can be expected in April 2006, and the regulatory authority's procedure should be completed at the same time.

4.2.3.3.3 Terms of use for frequencies

In 2005, the topic of changing the terms of use for frequencies had to be addressed for the first time. Under Art. 57 TKG 2003, the regulatory authority may modify the prescribed frequency usage at the license holder's request if this is permitted on the basis of the intended purpose and the technical terms of use. In this context, the regulatory authority must account for technical developments and the effects on competition. In July 2005, Centrowave Breitbanddienste GmbH submitted such a request for a change in frequency usage. Centrowave wished to change the frequency allocation in such a way that the 26 GHz range frequencies in question could also be used to connect base stations. This was originally ruled out in the frequency allocation decision issued in February 2001, as these frequencies were primarily intended for connecting end-users. Although retroactive intervention in the terms and conditions of use defined in allocation procedures is always a problematic issue, the TKK came to the conclusion that a change could be approved due to changes in market circumstances and for the sake of promoting competition in line access services. The corresponding draft measure was published for consultation in late December 2005, and an affirmative decision was issued in February 2006.

4.2.3.4 Communications parameters

Under the provisions of the TKG 2003, RTR is responsible for the efficient administration of the Austrian telephone numbering space as well as all other communications parameters (see Table 5). In the TKG 2003, communications parameters are defined as "any characters, letters, digits and signals in their entirety that serve directly for network control of communications connections."

The legal basis for the administration of communications parameters can be found in the TKG 2003 as well as two ordinances issued by RTR: the Special Communications Parameters Ordinance (SKP-V) and the Communications Parameters, Fees and Value-Added Service Ordinance (KEM-V). For the various number ranges, the ordinances define usage features and assignment criteria, the procedure for obtaining usage rights, as well as fees and regulations for value-added services.

Table 5: Special communications parameters

Name	
International Signaling Point Code (ISPC)	Addresses a signaling point in the SS7 network, NI = "00."
National Signaling Point Code (NSPC)	Addresses a signaling point in the SS7 network, NI = "11."
Network Indicator (NI)	Indicates whether a signaling point code belongs to the national or international signaling network.
Data Network Identification Code (DNIC)	Identifies a data network according to ITU-T Recommendation X.121.
Mobile Network Code (MNC)	Addresses a mobile communications network (GSM or UMTS).
Tetra Mobile Network Code (T-MNC)	Addresses a Tetra mobile communications network.
International Closed User Group Number (ICN)	Addresses a closed international user group according to ITU-T Recommendation X.180.

Source: RTR

Focus of activities in 2005: Adherence to provisions of KEM-V

The focus of activities in the reporting period was on monitoring adherence to the provisions of the KEM-V, which went into effect in 2004. In this context, usage monitoring concentrated more on the field of value-added services (especially SMS-based services) as well as telephone numbers for private networks. Most violations in SMS-based services were related to subscription services which could not be canceled (e.g., ring tone subscriptions) or the failure to provide fee information at the start of service provision. As regards telephone numbers for private networks, these numbers were often misused as customer order hotlines.

Furthermore, in the course of general discussions and the consultation on VoIP, RTR published its views regarding the interpretation and application of the existing legal regulations (also) with regard to numbering (see Section 4.2.3.5). In the interest of technological neutrality as required under Austrian legislation, all number ranges must also be made available to the providers of VoIP services, provided that the specific terms of use are fulfilled. Toward the end of the year, it was necessary to carry out an increasing number of supervisory procedures due to violations committed by VoIP providers in connection with the use of geographical numbers.

Another focus of activity was the creation of a telephone number portal in the course of RTR's e-Government initiative; this portal will be available to the public in the first quarter of 2006. This will make it possible to submit telephone number requests and returns via a web interface. In addition, the customer (applicant) will be able to check the current status of each number request/return using this interface. It will also be possible to deliver correspondence (including official decisions) electronically. The web interface will also provide customers with access to information on previously completed transactions. The prerequisite for using this service is a one-time registration/authentication process.

Statistical analyses in the administration of communications parameters

RTR issued 918 official decisions in 2005.

RTR issued a total of 918 official decisions regarding telephone number administration in 2005; this represents an increase of 71%. The main reasons for this increase were the higher number of applicants due to the general approval regime (which replaced the former licensing system) as well as a new provision in the KEM-V stipulating that usage rights for unused telephone numbers automatically lapse after 180 days, after which a re-allocation must be requested if necessary (see Table 6).

Table 6: Number of telephone number allocation decisions issued

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

Source: RTR

Despite the 76% increase in quantity, RTR was able to improve its processing times for telephone number requests slightly or at least to maintain the previous year's level (see Table 7).

Table 7: Processing times for telephone number requests

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

Source: RTR

Table 8 provides an overview of all telephone number ranges administered by RTR as of December 31, 2005, including each range's level of utilization. The new provision in the KEM-V which calls for the automatic expiration of rights to unused telephone numbers after 180 days brought about a decrease of 3.6 million (to a total of almost 28 million) in allocated geographical numbers.

Table 8: **Allocated and utilized telephone numbers in Austria**

	Range	Allocated	Used	Level of utilization
Geographical subscriber numbers Telekom Austria	(0)1, (0)2xx, (0)3xx, (0)4xx, (0)5xx, (0)6xx, (0)7xx	25,705,400	16,423,076*	64%*
Geographical subscriber numbers Alternative network operators	(0)1, (0)2xx, (0)3xx, (0)4xx, (0)5xx, (0)6xx, (0)7xx	2,214,200	272,851*	12%*
Area codes for private networks	(0)5	266	201	76%
Area codes for mobile networks**	(0)6xx	8	6	75%
Dial-up internet access	(0)718	7,200	133	2%
Location-independent fixed network numbers	(0)720	212,000	5,246	3%
Toll-free services	(0)800	79,142	10,960	14%
Toll-free dial-up internet access	(0)804 00	333	29	9%
Services with regulated fee limits	(0)810, (0)820, (0)821	83,647	6,032	7%
SMS services in the range for services with regulated fee limits	(0)828 2	1,614	18	1%
Value-added services	(0)900, (0)930	122,457	23,776	20%
Event-charged value-added services	(0)901, (0)931	45,387	875	2%
Dialers (value-added services)	(0)939	10,401	83	1%
Public carrier networks	10	44	31	71%
Telephone troubleshooting hotlines	111	72	32	44%
Telephone directory assistance services	118	55	34	62%
Routing numbers for number portability	86	53	21	40%
Routing numbers for number portability	87	12	8	67%
Routing numbers for services	89	38	8	21%

Source: RTR

RTR issued a total of 14 affirmative decisions and two negative decisions in the administration of special communications parameters in 2005.

* 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).

** As of the cutoff date, the following eight area codes had been allocated: (0)644, (0)650, (0)660, (0)664, (0)676, (0)681, (0)688, (0)699.

4.2.3.5 RTR guidelines for VoIP providers

With the publication of its guidelines for Voice over IP (VoIP) service providers in 2005, RTR demonstrated again that it recognizes the increasing importance of VoIP services and also met the market participants' need for a classification of these services under the existing legal framework.

VoIP (i.e., voice communication via IP-based networks) has made considerable advances in technology as well as the number of users in recent years. RTR has duly accounted for this development and concerned itself with these issues intensively at the national as well as the international level for over two years now. Most recently, the regulatory authority published a position paper on VoIP and made it available for public consultation in April 2005. RTR's position paper as well as the related comments and opinions of those who participated in the consultation represented a major step toward the creation of guidelines for VoIP service providers.

Guidelines for VoIP services

Guidelines include classification of VoIP services.

The guidelines for VoIP services published by RTR in October 2005 primarily target communications service providers and network operators. In conjunction with the simultaneously published "Frequently Asked Questions (FAQs) on VoIP Services" as well as the document concluding the public consultation process, the guidelines clearly define RTR's position on VoIP-related issues based on the provisions of the TKG 2003 and the accompanying ordinances.

One noteworthy point in this context is RTR's classification of publicly provided VoIP services into two main groups: VoIP services (regulated as telephone services) which enable access to the classic telephone network (Class A), and (unregulated) "Internet-only" VoIP services (Class B).

Figure 5: Classification of VoIP services

VoIP Service:	Enables:	Classified as:
Class A	Access to/from PSTN	Communications service Public telephone service
Class B	No access to/from PSTN	Not a communications service Not a public telephone service

Number ranges (0)720 and (0)780 for innovative services

RTR's guidelines for VoIP service providers also focus on the telephone numbers available for these services. In this regard, RTR sees no immediate need for changes in the numbering regime put into effect last year under the Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V): Under this ordinance, the number ranges (0)720 and (0)780 were adapted/created 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 deals with 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).

In line with the classification of VoIP services in two groups, the guidelines explain the resulting requirements in connection with general approvals. In addition, the guidelines contain brief comments on the topics of monitoring, interconnection and competition issues in the context of VoIP services. One issue which is explicitly not covered is the question of how VoIP services are to be assessed with regard to relevant telephone markets. This question will be addressed in the process of reviewing the TKMVO 2003.

Further details can be found at http://www.rtr.at/voip/. In addition, Volume 1/2006 of RTR's publications series was devoted to the topic of VoIP.

4.2.3.6 ENUM

ENUM stands for electronic number mapping and refers to a service which allows telephone numbers to be mapped to Internet addresses; this service can be regarded as a precursor to increased convergence between the classic telephone network and the Internet. In technical terms, ENUM refers to a database which uses the Internet's Domain Name System (DNS) and allows the storage of various other communication addresses for each telephone number used worldwide. These might be VoIP addresses, e-mail addresses, instant messaging addresses, or even additional telephone numbers. ENUM is especially important in connection with VoIP, as ENUM allows classic telephone numbers to be mapped to VoIP addresses.

Austria as the worldwide leader in ENUM

In December 2004, Austria became the first country worldwide to launch commercial ENUM operations on the basis of an agreement between RTR and enum.at Dienstleistungs GmbH. In May 2005, Austria reached another milestone with the first allocations of telephone numbers in the range for convergent services ((0)780). The (0)780 number range is a unique feature of the Austrian communications landscape in that an ENUM domain must be entered for each assigned telephone number or serves as a prerequisite for the allocation of the telephone number.

Calls to (0)780 numbers generally terminate on the Internet, and for this reason they are routed to the Internet via the gateway by the PSTN. In any case, the target information is located on the Internet and is determined by means of a DNS ENUM query before the connection is established. The convergent services offered in the (0)780 range can be widely varied and are generally controlled by the ENUM entries configured by the holder of the telephone number.

Outlook

Apart from Austria, Poland and Romania have also launched ENUM operations, and we can expect these services to be launched in Germany, the Netherlands, Great Britain, Finland and Ireland in 2006. In addition, ENUM field testing is underway in approximately 30 countries.

While the "user ENUM" described above focuses on end-user applications, we can also expect what is known as "infrastructure ENUM" to gain importance in the future. Infrastructure ENUM forms the basis for handling VoIP traffic between providers; the ENUM query for a telephone number usually does not yield the direct address of the subscriber but that of a contact point with the relevant VoIP provider. Further information can be found at http://www.rtr.at/enum/.

4.2.3.7 Wayleave rights and rights of joint use

Section 2, Art. 5 ff 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. In the reporting period, no procedures pursuant to Section 2 TKG 2003 were carried out.

4.2.3.8 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). Universal service 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 to publicly available telephone services via a connection set up at a fixed location;
2. Provision of a directory assistance service covering all operators;
3. Creation of a subscriber directory for all operators as well as access to this directory;
4. Widespread coverage with public payphones.

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 were 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.

Subscriber directories and directory assistance services

Order of the regulatory authority in lieu of agreement

In order to ensure fair access to the required subscriber data for all of the companies operating in this field, the operators of public telephone services are required under Art. 18 Par. 1 No. 3 TKG 2003 to make subscriber directory data available upon request under Art. 69 Par. 3 and 4 to the publishers of multi-operator subscriber directories or directory assistance services for a cost-oriented fee, either online or in electronically readable format at least on a weekly basis. If the above-mentioned parties are unable to reach an agreement regarding the terms and costs of data provision, any of the parties concerned can call in the regulatory authority. Under Art. 18 Par. 4 TKG 2003, orders issued by the regulatory authority can replace agreements between these parties.

In the reporting period, the TKK issued official decisions to set the cost-oriented fee which Telekom Austria is allowed to charge for supplying data on the directory entries of its subscribers. Further procedures under Art. 18 TKG 2003 were opened regarding the cost-oriented provision of subscriber data by alternative telecom operators, and several of these procedures ended with an agreement between the directory assistance service provider and the telecom operator. The corresponding draft measures were published for consultation in December 2005, and the final decision was issued in February 2006. In contrast to the procedures carried out in 2004, only a definition of costs for the offline conveyance of data was requested.

In January 2005, the Austrian Administrative Court confirmed the legal standpoint the TKK had put forth in its official decisions on Procedures T 1/03 and T 2/03. The TKK had decided that an operator of a public telephone service should be required to provide data at a cost-oriented fee only regarding those subscribers to which it has assigned numbers itself. Therefore, Telekom Austria is not required to provide all of the data in its multi-operator directory under these terms and conditions.

The TKK made a further statement on the question of data provision by the authorized directory assistance service. According to the TKK, this issue is exclusively subject to private-law agreements, and the TKK can not issue orders regarding this topic in procedures under Art. 18 TKG 2003.

4.2.4 Enforcement of general conditions

4.2.4.1 Conciliation procedures

4.2.4.1.1 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 where violations of the TKG 2003 (No. 2) are alleged.

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. Another new provision is that complaints involving providers of broadcasting infrastructure (e.g., cable network operators) can be dealt with in these conciliation procedures. KommAustria has put RTR in charge of conducting these procedures.

Operators are required to take part in dispute settlement procedures, to provide all information necessary for an assessment of the situation, and to provide any documentation required. RTR's duty is to negotiate an amicable solution or communicate its opinion on the case in question to the parties.

The prerequisite for initiating a dispute settlement procedure under Art. 122 Par. 1 No. 2 TKG 2003 (formerly Art. 66 TKG [1997]) is an alleged violation of TKG 2003; therefore, these procedures are also suitable for disputes between operators.

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

Preliminary dispute settlement procedure involving RTR

Under Art. 121 Par. 2 TKG 2003, RTR is required to conduct mandatory dispute settlement procedures before the TKK deals with 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. The parties to the dispute settlement procedure are required to participate in these proceedings, to provide all information necessary for an assessment of the situation, and to provide any documentation required.

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 issue a decision within four months of receipt of the request.

4.2.4.1.3 Alternative Dispute Resolution (ADR)

ADR: Out-of-court negotiation of disputes

In addition to the above-mentioned means of amicably settling disputes between operators or between operators and customers (dispute settlement procedures under Art. 122, mandatory dispute settlement procedures under Art. 121 Par. 2 TKG 2003), Austrian legislation also provides for an additional out-of-court negotiation option among market participants in Art. 115 Par. 3 TKG 2003.

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. Such requests must be addressed to RTR in writing by all parties involved.

According to the criteria defined by RTR, 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. The participants in this negotiation process must be companies or interest groups.

End-users do not have access to these procedures, as they have different out-of-court settlement options at their disposal (cf. Art. 122 TKG 2003). Another criterion is that the request for RTR's involvement in negotiations is only possible using the ADR questionnaire available on the RTR web site, which must be filled out by all parties involved.

Role of RTR as a mediator in ADR

RTR regards its participation in negotiations as specified in Art. 115 Par. 3 TKG 2003 as a mechanism of out-of-court conflict resolution (alternative dispute resolution, or ADR) which is becoming more and more common in business practice. In addition to the accompanying conciliation and arbitration work, this also includes the moderation of negotiations and mediation of conflicts. RTR prefers the latter two forms of ADR, as they inherently do not assign any decision-making authority to the "third party" participant (i.e., RTR).

The objective of such an ADR process should be to allow the parties to resolve the conflict on their own and to create a win-win situation. In this way, ADR provides valuable support in the development of a solution-oriented culture of discussion and dispute management, promotes legal certainty by obviating drawn-out legal procedures, and frees up the operators' resources for their core business. At the same time ADR also strengthens self-regulating forces on the market.

ADR has been offered to market participants since 2003. Since that time, it has become clear that the operators also appreciate this form of dispute settlement. Although only one ADR procedure was carried out in 2005, RTR is convinced that market participants are fundamentally willing to settle conflicts out of court, as shown in the heavy use of the other negotiation options defined in the TKG 2003 (dispute settlement procedures under Art. 122, mandatory dispute settlement procedures under Art. 121 Par. 2).

4.2.4.2 Supervisory procedures

The duties of RTR and the TKK also include monitoring and enforcing general conditions, the provisions of the TKG 2003 as well as the relevant ordinances. In this regard, Art. 91 TKG 2003 defines the supervisory procedure. If in performing its duties the regulatory authority has reason to believe that a company has violated the provisions of the TKG 2003, the provisions of an ordinance issued on the basis of the TKG 2003, or an official decision issued on the basis of the TKG 2003, then a supervisory procedure is to be initiated. In the first step, the regulatory authority communicates its concerns to the relevant company along with an instruction to remedy any violations within a defined period (usually one month). In this context, the company is also given an opportunity to submit its comments on the circumstances in question. If RTR's request is not fulfilled, the regulatory authority can then order reasonable measures. Should this also fail to remedy the violations, it is possible in the final step to suspend or refuse the company's right to operate/provide communications networks or services, and frequency allocations 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.

RTR carried out numerous supervisory procedures in 2005.

In the reporting period, RTR carried out numerous supervisory procedures in connection with the use of communications parameters. For example, there were repeated cases in which

services were provided in number ranges not intended for such purposes (e.g., erotic hotlines in the (0)900 number range instead of (0)930) or in which telephone numbers for private networks were used as service hotlines (pizza delivery services, customer order hotlines in general, etc.). In addition, problems arose with certain companies which failed to fulfill their obligation to supply RTR with data, which also led to a supervisory procedure in one case. Another point was (and 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 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.

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

TKK reviews of general terms and conditions – Approval procedures

In market analysis procedures, an operator identified as possessing significant market power on a market relevant to telecommunications law can be subjected to a specific obligation to have its general terms and conditions of business approved by the regulatory authority. The regulatory 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 particular. In the approval of general terms and conditions, compliance with certain legal provisions is reviewed (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).

The TKK carried out two approval procedures for changes in general terms and conditions.

In 2005, two approval procedures were carried out before the regulatory authority with regard to changes in Telekom Austria's general terms and conditions of business. In Procedure G 52/05, Telekom Austria requested approval for a change in its general terms and conditions for transmission lines (approved by the TKK in an official decision on June 13, 2005), and in Procedure G 67/05 the same company requested approval for (new) general terms and conditions of business for voice telephony as well as service descriptions (approved by the TKK in an official decision on August 16, 2005).

4.2.4.4 Signatures

The Signatures Ordinance was simplified considerably as of January 1, 2005.

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 main duty in this context is to maintain secure electronic directories of certification service providers. 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.

On January 1, 2005, an amendment to the Signatures Ordinance (SigV) announced in Federal Law Gazette II No. 527/2004 went into effect. Aside from adapting to technical standards developed at the European level, the purpose of this amendment was to introduce the following simplifications:

- In order to stimulate the market for signature products, the fees for supervisory activities were revised. It is now no longer necessary to pay a fee for each qualified certificate.
- The inspection requirement for technical components and processes now only applies to the trusted systems used by providers of qualified certificates and secure signature creation devices. A certification for viewers and smart card readers is no longer required.
- In the course of registering a certificate applicant, it is no longer necessary to make a copy of the applicant's photo identification if the data on the identification card is documented, for example by reading out a machine-readable section of the card.
- The maximum validity of qualified certificates was extended from three to five years. Accordingly, the documentation period for qualified certificates was also changed from 33 to 35 years. The providers of non-qualified certificates are required to indicate the retention period for documentation in their certification practice statements.

RTR and A-SIT jointly published a recommendation on algorithms suitable for signatures.

In addition, the amendment to the SigV also adapted the algorithms and parameters for secure electronic signatures in line with the "Algorithm Report" (ETSI SR 002 176) developed 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 published a recommendation for interpreting this regulation in cooperation with the confirmation authority A-SIT; this recommendation will be updated to reflect the state of the art at least annually.

PKI integrated into RTR's in-house infrastructure.

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. In order to ensure sufficient funding for supervisory activities despite the elimination of the certificate-based fee, the public key infrastructure (PKI) used for operating the directory, which was located in a computing center until June 2005, was integrated into RTR's in-house infrastructure. The changes in the certification practice statement required for this purpose were coordinated with A-SIT and adopted by the TKK.

This directory is especially important due to an instruction issued by the Federal Ministry of Finance on July 13, 2005 in which a reference is made to the RTR web site with regard to certification services suitable for the electronic transmission of invoices. The number of inquiries answered by RTR in this context indicates that electronic invoicing will be the first high-volume application for electronic signatures.

As in previous years, numerous proceedings under the SigG were carried out in 2005.

In 2005, the TKK conducted 15 procedures under the Signatures Act. Eleven of these procedures (as well as six additional cases from the years 2002 to 2004 which were still pending at the beginning of the year 2005) were completed in 2005.

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. In 2005, A-Trust reported modifications of existing certification services on four occasions. Several reports concerned the adaptation of certification practice statements to the requirements of the amended Signatures Ordinance. Other reports were related to changes in technical or organizational processes of the certification service provider, changes with regard to recommended technical components and processes, as well as new areas of deployment for electronic signatures (especially signatures in official business with the government). The review of A-Trust – prompted by the integration of the ACOS smart card (MasterCard and Maestro) into the systems of the certification service provider – was likewise completed.

Certificates for the creation of electronic signatures in official government business are also issued within the framework of the new A-CERT GOVERNMENT certification service, which has been offered by the association Arge Daten – Österreichische Gesellschaft für Datenschutz since October 26, 2005.

One supervisory procedure concerned the impending expiration of the certification for a secure signature creation device. As the certification was renewed with only a minor delay, the authority refrained from taking supervisory measures against the certification service provider.

In the year 2005, four new certification service providers reported the launch of their services:

Four new certification service providers reported launch of services

- Since February 1, 2005, the Main Association of Austrian Social Insurance Institutions has been providing the "e-Card Vertragspartner Signatur" certification service, which is only offered to social insurance institutions and their contract partners. Since September 30, 2005, certification services have been offered for the creation of basic electronic signatures and administrative signatures using the e-Card. The e-Card is certified as a secure signature creation device.

- Since March 7, 2005, Trosoft Entwicklungs u. Vertriebs GmbH has offered the certification and time-stamp service "Trodat Seal," and since July 15, 2005, this service has also included processes for creating electronic signatures as specified in Art. 2 No. 3 lit. a to d of the Signatures Act ("advanced" electronic signatures). These signatures are suitable for electronic invoicing and other purposes.

- Energie-Control Österreichische Gesellschaft für die Regulierung in der Elektrizitäts- und Erdgaswirtschaft mit beschränkter Haftung reported that it will provide certification and time-stamp services starting on January 1, 2006, primarily for the companies it supervises in the electricity and natural gas industry. This provider also maintains that the certificates it issues are suitable for the creation of advanced electronic signatures and thus also for electronic invoicing.

- Since December 21, 2005, the City Administration of Vienna has been providing certification services in which municipal employees, contract partners, etc. can be issued certificates for basic electronic signatures and for signatures in official government business (within the constraints of legal provisions).

In the course of preparations for an amendment to the Passport Act of 1992, RTR was also confronted with the question of whether the Signatures Act applies to the digital signatures of the agency responsible for printing passports. This digital signature ensures the integrity of the biometric data stored on the passports, but does not serve the purpose of confirming the identity of a signatory (i.e., a physical person). For this reason, RTR concluded that the Signatures Act does not apply to the digital signature used in passports.

At the international 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 deals with cooperation between the various European supervisory authorities and the harmonization of their respective activities. In particular, these activities included developing common positions on the cross-border supervision of certification service providers and on server-based signature services.

4.2.5 Ensuring consumer protection

4.2.5.1 Conciliation for retail consumers

Consumer protection supported by RTR's activities as a conciliation body

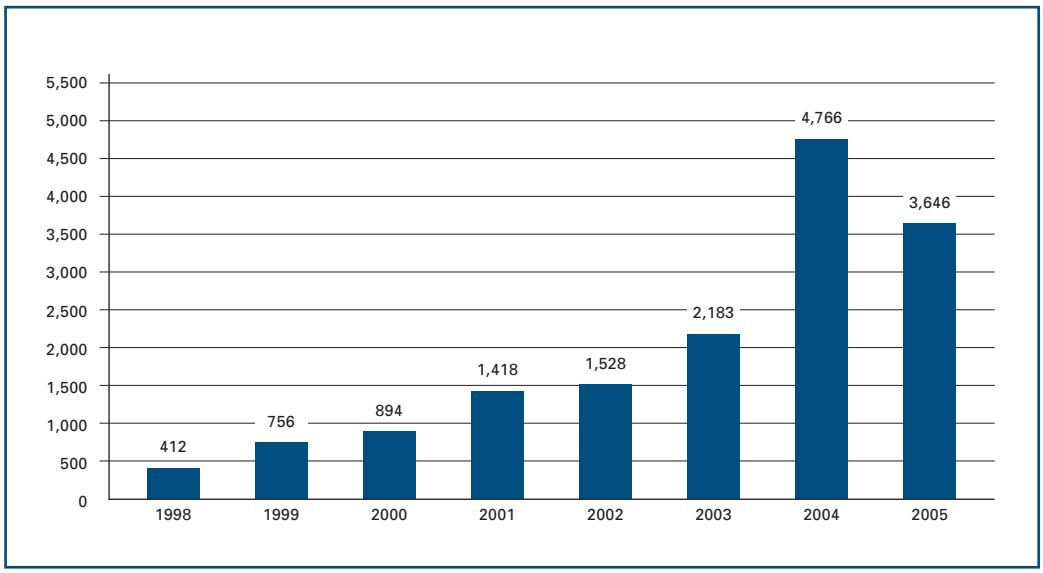
One of RTR's essential tasks is to act as a conciliation body in cases of dispute between customers and operators. The prerequisite for the initiation of a conciliation procedure is that the customer first attempts to reach an agreement with the operator independently. If it is not possible to reach 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.

These activities are based on Art. 122 TKG 2003 and the procedural guidelines issued by RTR (last amended as of January 1, 2005).

2005: Number of complaints decreased by 20%

The Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V) which went into effect on May 12, 2005 and contains effective provisions to protect users was probably among the main reasons behind the trend reversal in the number of complaints filed in 2005. Whereas the number of procedures skyrocketed in 2004 (climbing by more than 100% compared to 2003), the number of new procedures declined to around 3,700 in 2005. This represents a reduction of approximately 20% compared to 2004.

Figure 6: Number of conciliation cases, 1998 to 2005



Source: RTR

Decline in dialer complaints

In particular, the introduction of the "opt-in" principle for dialer services helped to reduce the number of complaints regarding these services to a negligible level where dialer access to domestic value-added numbers was concerned. However, disputes regarding invoices for billing periods from the year 2004 still brought about complaints regarding domestic dialer services in early 2005.

Reason for complaints: High telephone bills

As expected, the restrictive regulation on complaint-ridden dialer services prompted these service providers to switch to telephone numbers outside of Austria. The complaints in this area, however, have declined in terms of the values involved as well as their number compared to dialer services using domestic value-added numbers. The possibility of offering dialer services using "normal" foreign telephone numbers can only be created with the cooperation of one of the operators involved in establishing the telephone connection. If the costs of technical setup for an international call used for dialer access appear on a user's bill, the underlying data service is not provided free of charge. Instead, the operator which established the connection to the international number and the service provider will divide the international connection fee among themselves. In this way, the service provider receives part of the fee charged for establishing the international connection. In another potential scenario, the relevant connections might not even be terminated in the international zones for which the customer is invoiced. This is possible if one of the foreign network operators which receive calls for further routing forwards the call directly to the service provider for the provision of the value-added service. In this case, we can also assume that the fee is divided between the service provider and the network operator which terminates the call directly with the service provider. Due to the fact that international dialer services always involve a foreign network operator which establishes the connection as well as a dialer provider, it is also possible to develop solution proposals in the complainants' interest in these cases as well.

In the reporting period, the focus of complaints shifted somewhat toward numbers involving event-based charges. In particular, contests offered by broadcasters and financed using value-added services with event-based charges triggered massive complaints from users in some cases. From the standpoint of telecommunications law alone, these cases were generally not suited for the development of solution proposals in the users' interest. Rather, many participants underestimated the number of calls they had made to value-added services while taking part in these contests. In mid-2005, several of these contests were taken off the air, which led to a decline in the number of related cases.

Many conflicts arose due to event-based charges for telephone calls in contests.

One constantly increasing trend is the use of SMS/MMS-based message services, and accordingly this has been accompanied by an increase in the number of user complaints. Using a differentiated system, the Communications Parameters, Fees and Value-Added Services Ordinance (KEM-V) provides for extensive user information in order to ensure that the user only makes use of desired services in which fees are communicated accurately. In cases of dispute, one of the main tasks of the conciliation body is to review whether these fee information requirements were observed. This is done by analyzing the call data records presented by operators as well as the comments of the service providers involved by the operators.

Ability to bar value-added SMS messages

Especially the possibility of charging for passive value-added SMS messages caused repeated problems. In principle, this scheme makes it possible to charge customers for incoming value-added messages without the corresponding requests from the user. In such cases, the situation is exacerbated by the fact that these "gifts" are often very difficult to get rid of, as in some cases it was difficult to cancel these "services" or even to contact the service provider. These problem areas led to the creation of new SMS barring possibilities for the users of communications services as the barring requirement for value-added services which is defined in Art. 29 Par. 2 TKG 2003 also applies to SMS/MMS services. In cooperation with the mobile network operators, RTR succeeded in enforcing these requirements. As a result, all users of mobile services are now generally ensured the ability to bar value-added SMS services for their telephone numbers.

As in previous years, Internet connections involving consumption-based charges also created a certain potential for complaints. The sometimes very high invoices for data transfer volumes in broadband Internet access services were frequently disputed in the past. However, this type of complaint appears to have declined to a certain extent in 2005. On the one hand, the fees for exceeding data volumes included in service agreements have declined in some cases, and on the other hand products which are based on fair use policies or whose base fee includes very high or even unlimited data volumes are becoming increasingly common. In addition, the practice increasingly pursued by operators – to find amicable solutions in cases of dispute with users – has also achieved noticeable success. As a result, it was possible to resolve many invoice disputes without initiating conciliation procedures or even court proceedings.

In general, the cooperation between the conciliation body and the operators has been satisfactory. Many cases can be resolved by an informal description of the conciliation body's legal standpoint. In such cases, the operators offer their customers amicable compromises of their own accord, meaning that the conciliation body does not need to propose formal solutions.

For more detailed information on the conciliation body's work, please refer to its annual activity report, which will be published at http://www.rtr.at in early 2006.

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

Monitoring of general terms and conditions

Obligation to report terms and conditions as well as rates and charges

Under the TKG 2003. the operators/providers of communications networks and services are obligated to report their general terms and conditions as well as their provisions regarding rates and charges to the regulatory authority. Non-adherence to these reporting requirements (initial reports or change reports) can constitute an administrative violation subject to a fine of up to EUR 58,000.00 (cf. Art. 109 Par. 4 No. 3 TKG 2003). The reported terms and conditions as well as the rates and charges are published on RTR's web site.

Monitoring of terms and conditions, right to raise objections

The reported terms and conditions (but not rates and charges) are reviewed by the regulatory authority for compliance with certain legal provisions (cf. Art. 25 Par. 6 TKG 2003). If the reported terms and conditions fail to fulfill these legal standards, the TKK can raise an objection to them within eight weeks. According to the Austrian Administrative Court, the TKK's power to review general terms and conditions is an abstract, preventive and independent one which is complementary to the civil courts and does not have to rely on a ruling secured from the Austrian Supreme Court. In reality, it has only been necessary to raise objections to reported terms and conditions on two occasions. After reporting its terms and conditions, the operator can put them into effect immediately, but in so doing they run the risk of having to amend them if the TKK objects. As a result, operators are well advised to wait until the end of the objection period before putting their general terms and conditions into effect. In practice, operators are informed of the questionable clauses before the objection period ends, and they are given an opportunity either to amend their general terms and conditions in time (by withdrawing the previous report and filing a new report) or to submit justified comments regarding the changes. On average, operators generally have to re-submit their terms and conditions to the regulatory authority two or three times before the TKK can approve them. If the TKK raises an objection to the reported terms and conditions, the operator is prohibited in any case from putting the relevant clause(s) or terms and conditions into effect.

In 2005, a total of 145 procedures regarding general terms and conditions were initiated at the regulatory authority. The total number of reports for rates and charges was 241.

4.2.5.3 User rights

Itemized billing

One essential right of users in Austria is the right set forth in Art. 100 TKG 2003 for subscribers to receive itemized bills from their operators free of charge.

Itemized billing a standard part of every customer contract

This provision, which was introduced in the TKG 2003, improved consumer protection considerably compared to the previous legislation, in which operators were allowed to charge for itemized bills. It also made itemized billing a standard component of every customer contract relationship.

In general, passive subscriber numbers – i.e., the telephone numbers called from a certain line – are abbreviated on itemized bills. Exceptions are only made in cases where the charges for a call can only be deduced from the unabbreviated number or the subscriber has confirmed in writing that s/he has informed all current users (and will also inform future users) of the line.

The regulatory authority made use of its power (defined in Art. 100 Par. 2 TKG 2003) to "specify the level of detail and the form of provision of itemized bills" and issued the Itemized Billing Ordinance (EEN-V) on December 1, 2003. The ordinance subsequently went into effect on May 1, 2004.

In the wake of complaints regarding value-added text message services and subscriptions, RTR noted that prepaid customers (i.e., those who use the services of an operator using prepaid cards) generally do not receive an itemized bill from their mobile network operators. In this context, the mobile network operators referred to the materials regarding Art. 100 TKG 2003 and interpreted them in such a way that the wording of the law was restricted to mean that it is not necessary to provide prepaid customers with itemized bills.

Itemized billing for prepaid customers

However, according to the clear wording of Art. 100 TKG 2003, which can not be restricted by additional explanatory remarks, being a subscriber is the (sole) requirement for the right to receive itemized bills, and this is clearly the case with prepaid customers.

In order to eliminate any doubt as to the law, RTR considered it necessary to issue an amendment to the EEN-V in order to clarify the circumstances under which prepaid customers also have a right to receive itemized bills.

In material terms, a difference also exists with regard to itemized bills for prepaid customers: With the help of itemized bills, both customer groups should be able to review the amounts charged – regardless of whether they appear on an invoice or are debited against a prepaid credit amount – and thus control their expenditure in order to switch to another product or another operator as necessary.

As a result, the corresponding draft ordinance was released for public consultation in November 2005, and RTR issued the ordinance in early 2006 after due consideration of the comments received.

Barring of value-added text messages

Art. 29 Par. 2 TKG 2003 requires operators to allow subscribers to bar outgoing calls to premium-rate services. While the operators had already enabled this value-added service barring function for voice calls before the TKG 2003 went into effect, it had not yet been offered by mobile network operators for premium-rate SMS-based services (i.e., value-added text messages).

Barring of value-added text message services

This problem has now been remedied. Since early 2006, all of Austria's mobile network providers have offered the possibility of barring SMS-based value-added services. This barring option enables customers to block incoming value-added text messages and to protect themselves from sending expensive value-added text messages. Further information on this topic can be found in Section 4.2.5.1.

Experience with the KEM-V

The KEM-V brought about several changes which ensure additional protection for the users of communications services.

Among other things, dialer programs have been prohibited in the (0)900 and (0)930 number ranges since September 30, 2004, and since January 1, 2005 these services can only be offered in the (0)939 range, which is only available to subscribers who have explicitly requested access to such numbers. This provision in the KEM-V has all but eliminated dialer programs (using (0)9xx-range numbers) in Austria.

In addition, a time limit was introduced in Art. 107 KEM-V as of January 1, 2005. This provision requires that calls to (0)900, (0)930 and (0)939 numbers which are subject to time-based charges and cost more than EUR 2.20 per minute have to be terminated automatically by the communications service provider after 30 minutes. If the charge is less than EUR 2.20 per minute, then the connection must be severed after 60 minutes.

The KEM-V also introduced the (0)901 and (0)931 number ranges for services with event-based charges. What is unique about these number ranges is that the fee is charged per event (i.e., per call, text message, fax) and not based on time. In addition, the first two digits after (0)901 / (0)931 indicate the charge per call in increments of EUR 0.10 (i.e., (0)901/07xx means that the call will cost a maximum of EUR 0.70). As it is not necessary to provide recorded information up to a charge of EUR 0.80 per call, these numbers with event-based charges are especially attractive for (television) contests and voting events.

In general, the framework of rules defined in the regulations of the KEM-V for the protection of users appears to have met with broad-based acceptance among both users and operators in Austria. The required adaptations in services were generally introduced quickly, and it is possible to recognize the operators' efforts to respond quickly to any violations on the part of service providers. In this way, it has been possible to reach a level of protection and transparency which also protects the interests of the users sufficiently.

Amendment of Article 107 TKG 2003

Federal Law Gazette I No. 133/2005 introduced an amendment to Art. 107 TKG 2003 – referred to as the "spam regulation" in the TKG 2003 – which went into effect on March 1, 2006. Through this amendment, the Austrian legislature has now complied with EU law and thus also complied with an infringement procedure initiated by the European Commission.

Amendment of anti-spam provision in the TKG 2003

This amendment brought about substantial changes to the regulations previously in force, as the "opt-in" principle will also apply to businesses in the future. As a result, sending advertising e-mails without the prior consent of the recipient – not just for consumers (as previously) but now also for businesses – will not be permissible. The exception defined in Art. 107 Par. 3 TKG 2003 for "customer contacts" will remain in force, but in the future it will apply to all addressees. In addition to clarifications in wording, the new regulations also include a reference to the list maintained by RTR in accordance with Art. 7 of the Austrian E-Commerce Act (ECG). People who do not wish to receive commercial advertising messages can have their e-mail addresses placed on this list.

Experience with spam

Pursuant to Art. 7 ECG, RTR maintains an automated registry of persons and companies 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 included on the list under Art. 7 ECG from the list of recipients. The list can be queried by information service providers who submit a form with an authorized company signature. By the end of 2005, a total of 6,169 e-mail addresses had been registered on the list pursuant to Art. 7 ECG, and 2,010 service providers had been authorized to query the list.

List pursuant to Art. 7 ECG maintained at RTR: 6,169 entries as of Dec. 31, 2005

In addition, RTR also receives frequent complaints regarding unwanted advertising text messages in which the addressees are asked to call 0930 numbers, for example. Such cases are referred to the telecommunications offices, which initiate an administrative penal procedure in accordance with Art. 107 TKG 2003 if the relevant prerequisites are met. If the users are inadmissibly charged for these text messages, a written objection to the invoice and a subsequent conciliation procedure are recommended (see http://www.rtr.at/rufnummernabfrage, in German).

4.2.5.4 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.

To begin with, it is necessary to mention the significance of the KEM-V passed in mid-2004. This ordinance created Austria's first framework of rules defining the essential general conditions for the provision of value-added services. For further information on this ordinance, please refer to the 2004 Communications Report. Especially due to the transitional provisions contained in the ordinance, many of the rules in the KEM-V did not show their effects until the year 2005.

KEM-V: A comprehensive framework of rules

Clear changes in trends could be identified in value-added services in 2005. The most important of these changes was without a doubt the virtual disappearance of dialer services using domestic value-added telephone numbers. With the introduction of the "opt-in" principle at the end of 2004, the number of complaints regarding excessively high invoices due to the unwanted activation of dialer programs plummeted. The opt-in system means that the (0)939 range, which is mandatory for dialer services, is barred automatically for subscribers. Only in cases where subscribers explicitly instruct their operator to allow access to this number range is it possible to call numbers in the (0)939 range.

Domestic dialer services no longer a problem

Based on the available information, RTR assumes that the legal requirements of the opt-in system have been implemented in their entirety. Practically no cases were identified in which dialer services were provided in inadmissible number ranges in Austria. Austria's network operators also implemented this opt-in system in a timely manner.

New challenge: Dialer programs using international numbers

The downside of the development described above is the substantial increase in complaints regarding dialer services which use foreign telephone numbers. In these cases, the dialer program does not call a value-added service number in Austria, but a foreign telephone number (cf. also the information in Section 4.2.5.1). Art. 108 Par. 2 KEM-V grants Austrian providers the right to prevent such abuses by blocking the respective telephone numbers. However, it is not always easy to ensure that abuse can actually be ascertained. In many cases, it is only possible to differentiate between "normal" voice calls and abusive dial-in calls (prompted by dialer programs) to international telephone numbers by automatically evaluating the frequency and duration of calls to a certain telephone number. This form of call monitoring, which would have to be implemented by an operator, relies on the statistical analysis of all international calls made by subscribers and shows telephone numbers for which calling behavior appears atypical. If a telephone number becomes conspicuous due to an especially large number of calls and/or longer call durations, this can be regarded as an indication of potential dialer misuse. The operator can then take any available countermeasures, in particular by activating a selective barring function. However, it is important to use these helpful instruments with caution in order to avoid the premature barring of desired international calls which might indirectly cause economic harm to callers (e.g., potential business partners).

To our knowledge at this point, Telekom Austria possesses such a system and has used it to block international telephone numbers temporarily in the past. However, dialer calls which are not distinguished by an especially high frequency can not be identified and prevented using such a monitoring system because the relevant statistical characteristics do not appear. Only the resulting user complaints can provide (delayed) clarity in such cases. This complexity in the situation surrounding dialer programs using international telephone numbers also shows that there are no patent remedies to combat this problem without creating unacceptable restrictions on international communications. Effectively reducing the abuse of international dialer programs requires a package of factual measures which would have to be coordinated internationally. In addition to the monitoring of numbers described above, these could include the following measures:

- International networking and coordination: The "advantage" of international dialer programs is the fact that "suspicious" numbers are usually registered in several countries at the same time. If this information could be combined quickly and made available to numerous operators as soon as possible, it would be possible to take rapid preventive measures with broad-based effects. The first step in this direction was the consultation regarding the ECC recommendation, which includes a procedure for the exchange of information on the misuse of specific number ranges and telephone numbers between regulatory authorities, which can then make this information available to operators in their respective countries.

- It has also become increasingly obvious that the payment flows between domestic and foreign operators would be a suitable starting point for the prevention of misuse. The providers of fraudulent value-added services generally expect the service fees incurred to be paid out before the complaints submitted to operators expose these fraudulent activities. Naturally, operators issue invoices in arrears, and some operators' lengthy billing periods also serve to prolong the period during which misuse can go undetected. A user can not respond to misuse until s/he has received the corresponding invoice. If the operators conclude contractual agreements in which the amounts to be paid out are only transferred

once it is clear that no complaints exist for the respective period, then it will be possible to combat these fraudulent activities effectively. In cases of misuse, the charges can then be withheld from the service provider in time, thus eliminating the financial incentive for providers of fraudulent services.

Content-related misuse

Repeated cases of misuse in terms of content were also identified in value-added services. Examples include dating hotlines which did not actually arrange dates, or money-lending hotlines which did not actually grant loans. Such cases of misuse have to be pursued consistently using the means provided by legislation, especially sanctions under criminal law. In cases of suspicion, RTR reports the facts to the relevant public prosecutor's office.

Another problem area in 2005 concerned several contests in broadcasting in which participants had to call a value-added service number in order to take part. In general, participating in these contests involved calling numbers in the (0)901 range. These numbers are used for services with event-based charges, where a fixed amount is charged per call (regardless of its duration). In this case, fee information in the (0)901 range did not turn out to be a problem, as information on the amount charged is included in the 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 fees up to "07", the fixed charge can be deduced from the telephone number; upward of "08" (e.g., 0901 084353), the maximum permissible fee is charged for each call. Starting with "08," it is also necessary to inform the caller of the charges with a recorded message.

Together with the advertising requirements included in the KEM-V, it appears that fee information has been sufficient in this area. The conciliation body received very few complaints in which the users claimed not to have been aware of the costs of a successful connection.

Contests and value-added service numbers

However, a number of complaints submitted to RTR indicated that the users had mistakenly assumed that the calls were free of charge unless they were actually connected to the show host at the studio. Thus the problem often appears to have been the subjective perception of the users regarding whether a connection was established (and thus charged) from a technical standpoint.

Here it is important to note that a connection is established successfully when it is accepted at the service provider's network termination point. In this context, it is completely irrelevant whether the call is accepted with 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 here: If these messages contain 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 messages can be taken to indicate that the connection failed; on the other hand, the caller could understand the actual meaning: that the connection was established, but that the caller was not "lucky" and could not participate in the contest. The above-mentioned problem regarding the callers' ability to determine when charges accrue warrants further observation. In this context, it may help to include information requirements in the KEM-V regarding the specific point in time at which fees are incurred.

The number of complaints regarding such contests declined over the year, especially as several contest shows were discontinued. This is probably related to the legal classification of these games. For example, the web site of the Austrian Federal Ministry of Finance contains the following FAQ:

"Are television and radio contests which use value-added telephone numbers legal?"

"No. As a rule, these are "paid games of chance" which constitute a violation of the federal government's monopoly on gambling. There is no doubt that these are paid games because the broadcaster receives part of the telephone charges incurred. The fact that chance (predominantly) determines whether participants win or lose is decisive here, as this decision primarily depends on whether the participant happens to be connected to the telephone line (among many possible lines) which allows him/her to speak with the show's host. The participant in the game has no influence on this decision."

The debate regarding these games is therefore linked to various legal aspects, including Austrian legislation on gambling.

Charges for receiving value-added messages

The third point worth mentioning here concerns value-added text messages (SMS). These services are becoming increasingly common, and in most cases they work to the users' satisfaction. However, the introduction of "MT billing" for text message services has brought about a new risk. 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. In principle, therefore, it is possible to force expensive unsolicited messages on users. This potential misuse was counteracted by means of increased transparency requirements for operators vis-à-vis their customers in the form of itemized bills (also for prepaid mobile customers) and barring functions for value-added text messages (see Section 4.2.5.3).

Stable conditions for the provision of value-added services always comprise a bundle of measures which include ex ante obligations (essentially the information requirements and fee limits set in the KEM-V) as well as instruments for ex post review (mainly the right to an itemized bill free of charge). In this way, users who receive unsolicited value-added text messages can take protective action rapidly by barring those services. In addition, itemized bills provide important evidence for the purpose of contesting previously incurred charges vis-à-vis the operator.

In connection with value-added services, the clear structure of the Austrian numbering space is also an elementary requirement. The clear assignment of value-added services to certain number ranges is essential in this context. On the one hand, this creates clear conditions for competition, as it prevents these providers from using random number ranges for their services. On the other hand, it also has a signaling effect, as it informs users as to which services – and what costs – can be expected from which telephone numbers. Monitoring adherence to the corresponding rules in the KEM-V is an important task at RTR. For example, RTR reviews whether erotic services are offered in the (0)900 range and takes the appropriate countermeasures if necessary. The same applies to directory assistance services in the 118 number range. The importance of these measures becomes especially clear when we look at the situation in Germany, where erotic hotlines are often "hidden" behind directory assistance service numbers.

In the amendment to the KEM-V planned for 2006, the regulatory authority intends to pursue the path it has taken to date and to make adaptations as necessary.

KEM-V amendment planned in 2006

4.2.6 Promotion of international harmonization

4.2.6.1 International working groups

RTR's international activities primarily focus on European harmonization and the creation of similar competitive conditions throughout the European Union. One especially important part of RTR's commitment to these activities is collecting and using best practices from other countries, i.e., insights which can be used directly in RTR's day-to-day regulatory work. RTR's activities in this context include, for example, composing its own contributions to working group documents, actively participating in the meetings of working groups, responding to international questionnaires, and submitting comments and opinions.

Focus in 2005: Implementation of the new legal framework

The regulatory authority is heavily involved in its work as a full member of the European Regulators Group (ERG) and the Independent Regulators Group (IRG), as well as taking on an advisory function through Austrian representatives in the Communications Committee (COCOM). RTR's targeted cooperation in additional working groups in the European Commission and CEPT (e.g., Radio Spectrum Policy Group (EU), Working Group for Numbering, Naming and Addressing (CEPT/ECC) or the Forum of European Supervisory Authorities for Electronic Signatures (FESA)) cover all essential topics in regulation (as exemplified here by frequencies, numbering and signatures).

In terms of content, our work in 2005 was largely characterized by the implementation of the new legal framework in all EU member states. The table below gives a brief overview of the focus of activities in the ERG and IRG:

Table 9: Overview of ERG/IRG activities in 2005

Topic	Results (examples)
1 **Broadband/VoIP**	■ Status report on broadband, including case studies on individual countries ■ ERG statement on the treatment of VoIP under the new legal framework and VoIP status survey (addressing and emergency call services) ■ Expansion of the ERG's common position on bitstreaming to include cable networks
2 **Market analyses**	■ Revision of SMP concept: In 2003, ERG published a working document describing possible SMP indicators. A revision of this document was prepared in 2005. ■ Publication of a report on experiences in market analyses under the new regulatory framework
3 **Ex ante obligations**	Further development of the ERG Common Position on Regulatory Remedies (adopted in 2004) on the basis of experiences in market analyses and focusing on the following topics: ■ Emerging markets ■ New infrastructure ■ "Ladder of investment" model ■ Differentiation of regulatory measures in the same (parallel) market.
4 **International roaming**	■ ERG common position on the analysis of markets for international roaming
5 **Cost accounting**	■ ERG common position on cost accounting and support for the European Commission in the revision of the recommendation on cost accounting (C (2005) 3480).
6 **Transparency of rates**	■ Report on rate transparency (especially in number porting)
7 **Development of the legal framework**	■ Revision of the relevant markets recommendation: Preparation of an ERG statement on the European Commission's recommendation ■ Preparation for the European Commission's review of the legal framework planned for 2006 ■ Review of the Article 7 consultation process.

Source: RTR

4.2.6.2 Consultation and coordination mechanisms

Coordination procedures ensure harmonization.

For the purpose of harmonizing the decisions of the national regulatory authorities, the Framework Directive provides for a comprehensive consultation and coordination mechanism. While Article 6 of the Framework Directive provides for national consultation of draft measures which have significant effects on the market concerned, the European Commission can even veto the decisions of national regulatory authorities in procedures pursuant to Article 7. In Austria, these provisions have been implemented in Articles 128 and 129 TKG 2003.

Consultation pursuant to Art. 128 TKG 2003 (Article 6, Framework Directive)

The consultation procedure defined in Art. 128 TKG 2003 is carried out at the national level by the relevant authorities and allows interested parties to submit comments on draft measures (e.g., ordinances or official decisions) within a reasonable period of time. This makes it possible to hold a broad-based discussion of the regulatory authority's draft decisions. In the reporting period, eleven consultations pursuant to Art. 128 TKG 2003 were carried out by the TKK and two were conducted by RTR.

Coordination pursuant to Art. 129 TKG 2003 (Article 7, Framework Directive)

The coordination procedure defined in Art. 129 TKG 2003 is carried out for draft measures if they concern market definition (Art. 36 TKG 2003), market analysis (Art. 37 TKG 2003), interconnection (Art. 49 TKG 2003) or obligations under Articles 38-42 TKG 2003 and have effects on trade between member states.

In addition (and in parallel) to the consultation pursuant to Art. 128 TKG 2003, the draft and the reasoning behind the consultation must be conveyed to the European Commission and the other national regulatory authorities in the EU. The period in which those institutions can submit comments must be at least one month.

- In cases where a relevant market is defined which is different from the markets listed in the European Commission's Recommendation on Relevant Markets, and

- in determining the extent to which a company has significant market power alone or together with others,

the regulatory authority's decision is to be postponed by two additional months in cases where the European Commission concludes that the draft measures would create a barrier to the Single Market, or that the draft measures are not in line with European law or the objectives listed in Article 8 of the Access Directive. In these two particularly sensitive areas, the European Commission may even issue a veto as a last resort to prevent a decision by the regulatory authorities. If the Commission does not exercise this right during the two-month period, the national regulatory authority can adopt the draft measure.

In 2005, a total of 23 draft measures in RTR's Telecommunications Division underwent the international coordination procedure under Art. 129 TKG 2003.

Internationally coordinated procedures largely completed

The bulk of procedures concerned the identification of significant market power and effective competition under Art. 37 TKG 2003 (significant market power procedures) and interconnection orders. Most of these procedures had been completed as of December 31, 2005.

International coordination procedures (Article 7, Framework Directive)

CIRCA: List of procedures under Art. 7 of the Framework Directive

The European Commission is required to maintain and publish a list of all pending procedures pursuant to Article 7 of the Framework Directive as well as the comments submitted in connection with these procedures. This list can be retrieved from the Communication & Information Resource Centre (CIRCA) at the following address:
http://forum.europa.eu.int:80/Public/irc/infso/Home/main

In addition to the mandatory consultation procedures under Articles 128 and 129 TKG 2003, RTR also carries out consultations on important regulatory issues on its own behalf and at the request of the TKK and KommAustria.

In the EU overall, the implementation status of international coordination procedures related to market analyses at the end of 2005 was as follows:

- Approximately half of the market analyses to be carried out have been reported to the European Commission for consultation.
- The greatest progress at the European level (20 of 25 notifications) was made on Market 16, i.e., the wholesale market for mobile termination in the European Commission's recommendation.
- To date, only one national regulatory authority has submitted a notification regarding Market 17 (wholesale market for international roaming).

Austria leading in implementation of the new legal framework

- With 17 of 18 notifications, Austria is among the leading countries in the implementation of the new legal framework.
- Five countries have not yet submitted any notifications.

Figure 7: Status of market analyses within the EU

Simplified depiction	Relevant markets according to the European Commission																	
	Retail fixed-link voice						Retail leased lines	Wholesale fixed-link voice			Wholesale ULL broadband		Wholesale leased lines		Wholesale mobile			Whole-sale broad-casting
Country	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Austria	■	■	■	■	■	■	■	■	■	■/■	■	■	■	■	■	■	□	■
Belgium	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
Cyprus	□	□	□	□	□	□	□	□	□	□	■	■	□	□	■	■	□	□
Czech Republic	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
Denmark	■	■	■	■	■	■	■	■	■	□	□	■	■	□	■	■	□	□
Estonia	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
Finland	■	■	■	■	■	■/■	■	■	■	■	■	■	■	■	■/■	■	■	■
France	■	■	■	■	■	■	□	■	■	■	■	■	□	□	□	■	□	□
Germany	■	■	■	■	■	■	□	■	■/■	■	■	■	□	□	□	■	□	□
Greece	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	■	□	□
Hungary	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	□	□
Ireland	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	□	■
Italy	■	■	□	□	□	□	□	□	□	□	■	■	■	■	■	■	□	□
Latvia	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
Lithuania	□	□	□	□	□	□	□	□	■	■	□	■	□	□	□	■	□	□
Luxembourg	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	■	□	□
Malta	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	■	□	□
Netherlands	■	■	□	□	□	□	■	■	■	■	■	■	■	□	■	■	□	■
Poland	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
Portugal	■	■	■	■	■	■	■	■	■	■	■	■	■	■	□	■	□	□
Slovakia	■	■	□	□	□	□	□	■	■	□	■	□	□	□	□	■	□	□
Slovenia	■	■	■	■	■	■	■	■	■	■	■	□	■	□	■	■	□	□
Spain	□	□	■	■	■	■	□	□	■	□	□	□	□	□	■	■	□	■
Sweden	■	■	■	■	■	■	■	■	■	■	■	■	■	□	■	■	□	■
United Kingdom	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	□	■

■ Market delineation and/or SMP operators and/or obligations notified to the European Commission

□ Not yet notified

■ European Commission veto of draft decision

Source: European Commission (CIRCA server), as of January 17, 2006

At the end of 2005, the European Commission also launched an evaluation of the Article 7 process in the course of its review of the European legal framework.

5. The Austrian communications markets

5.1 Development of the Austrian media markets

5.1.1 General remarks on the year 2005

Advertising expenditure in Austria reached a record high in 2005.

After declines in the years 2001/2002 and a trend reversal since 2003, the positive developments on Austria's media markets continued in early 2005: At EUR 2.096 billion, gross advertising expenditure (classic advertising overall, not including cinemas, online advertising or yellow pages) reached a new high, climbing by 5.1% compared to 2004.

For the coming five years, this upswing in the advertising industry now shows a substantially more positive trend than in the five previous years. In particular, this is due to advertising growth in daily newspapers and in electronic media. In the latter case, ORF's television and radio stations generally remained at the high levels from the previous year, and at the same time Austria's private broadcasters, such as ATVplus and the private radio stations overall, showed substantial growth. Likewise, German satellite channels which provide Austria-specific content (in the form of special "advertising windows") also saw marked increases.

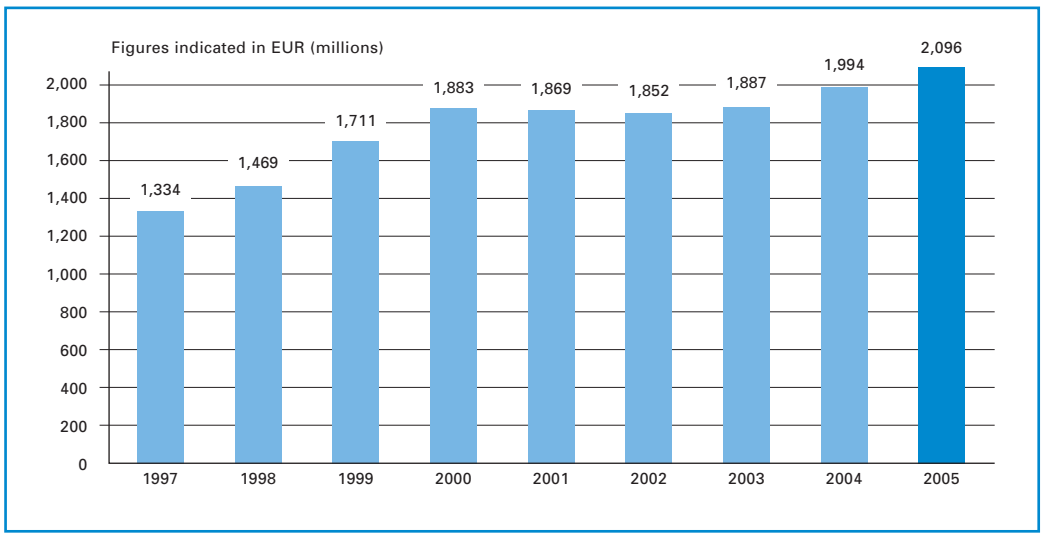
These developments in advertising also clearly indicate the information and entertainment platforms which continue to serve as the main suppliers of Austrian audiences: Radio stations reach 83.6% of the Austrian population on a daily basis, daily newspapers reach 74.2%, and television stations reach 68.4%. As a result, these three platforms form the core of the mass media in Austria.

On the television market, ORF was able to maintain its dominant position, although its market share has slipped in recent years (from 54.1% in 2002 to 48.2% in 2005). In the same period, the market share of German stations which broadcast Austria-specific advertising and other content climbed from 24.1% to 26.7%. Another encouraging development is the fact that ATVplus, Austria's first nationwide private television station, expanded its market share from 0.4% to 2.4% in that period. This can be taken as a sign that – although it was taken rather late – the decision to introduce a private television station in Austria was a reasonable one.

Furthermore, 2006 will also be a special year for Austria's nationwide television channels ORF1, ORF2 and ATVplus: On September 27, 2006, Austria will launch its first-ever digital terrestrial television broadcasting operations for 70% of households (Vienna, all provincial capitals and the surrounding areas). From that point on, there will be a simulcast phase lasting several months, and in the first half of 2007 analog terrestrial frequencies will be shut down in those areas.

In the field of radio broadcasting, 2005 was a special year insofar as Kronehit became the first private radio station to launch nationwide operation in Austria. This is regarded as a great opportunity for the future of radio broadcasting, as it will prompt many radio stations to focus more clearly on their coverage areas – be they local, regional or nationwide.

Figure 8: Development of overall advertising expenditure



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

More Austria-specific content on channels with "Austria windows"

By international comparison, Austria's media market is a small one which is also characterized by substantial concentration tendencies and market domination. As regards the diversity of opinions and the variety of offerings, the Austrian Broadcasting Corporation (ORF) still dominates in the electronic sector, as does the *Kronen Zeitung* in the field of daily papers and the NEWS publishing group in the magazine sector. In the television sector, the nationwide television channels ORF1 and ORF2 dominate the market by a wide margin. ORF's television channels not only compete with ATVplus and other private Austrian channels, but also with a large number of private and public channels from abroad which are in intense competition with ORF in cable and satellite television households. A majority of the private German-language stations offer partly Austria-specific content as a platform for the Austrian advertising industry. The tendency to produce independent programs in these "windows" of Austria-specific content continued in 2005, and in some cases this trend was reinforced by the transition from analog to digital satellite receivers, which allow broadcasters to deliver this content to a far larger number of viewers than was previously possible via cable networks (for more information on this topic, see Section 5.1.3).

ORF's dominance is also highly conspicuous in the field of radio broadcasting. With its four radio stations Ö1, Ö3, FM4 and Ö2 (which consists of nine regional channels), ORF achieved a market share of 80% in 2005. In the advertising-relevant 14 to 49 age group – which is key to the marketability of private radio stations – ORF holds a market share of 75%. Compared to 2004, the trend of slight shifts toward private radio stations was confirmed, but the combined market share of 22% for all Austrian private radio stations points clearly to the imbalance in Austria's dual broadcasting market.

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. The *Kronen Zeitung's* market position – which is unparalleled worldwide – manifested itself impressively in the newspaper's average daily reach, which even increased to 44.9% in 2005.

High concentration in the print sector

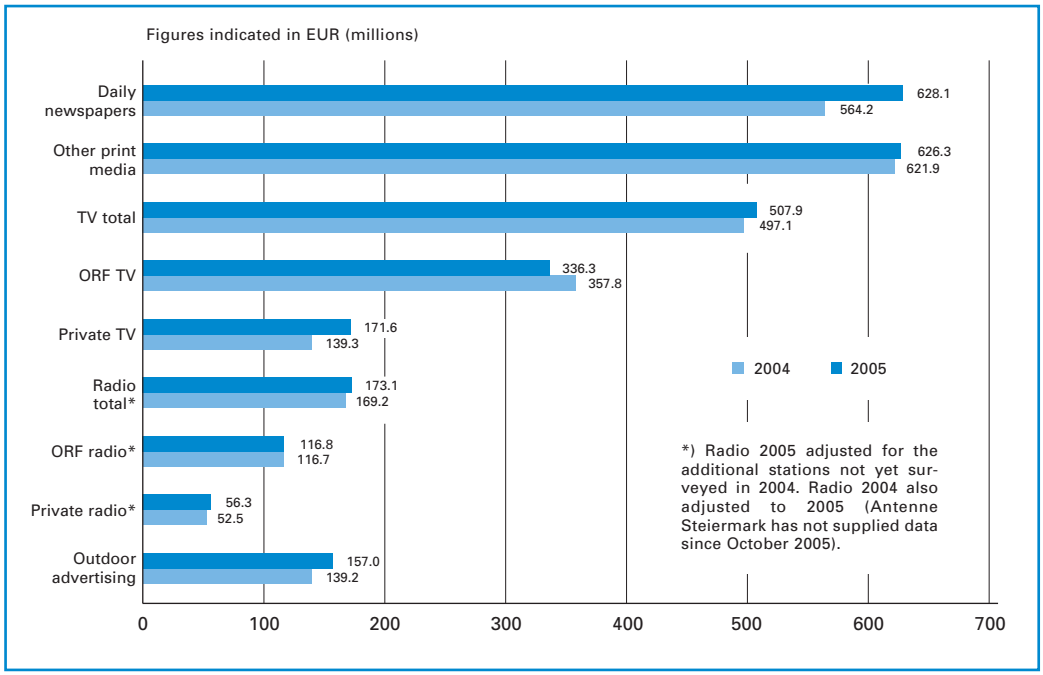
Apart from the high level of concentration, another unique situation in Austria (in the print media segments of daily newspapers as well as magazines) is that a considerable number of published and market-relevant titles are under the control of owners which are not Austrian but established elsewhere 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: 49.4%);
- *Tiroler Tageszeitung* daily newspaper (wholly owned by Moser Holding AG, 50% of which is owned by Athesiadruck Bolzano);
- *Der Standard* daily newspaper (49% owned by Süddeutscher Verlag);
- *WirtschaftsBlatt* daily business newspaper (50%: Bonnier Group);
- 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 49.5% stake).

5.1.2 Advertising expenditure

With the exception of ORF TV, all areas of the media industry saw growth due to the increase in advertising expenditure in 2005. Private television stations saw the largest percentage gains. Whereas growth in this area had already reached 18% in 2004, it rose to a remarkable 23.2% in 2005, or EUR 171.6 million in absolute terms. At the same time, ORF television lost 6% of its advertising revenues in 2005. The fact that this trend has continued can be seen in a comparison of figures with the previous years: ORF TV's lead in terms of advertising expenditure was quadruple the amount taken in by private television stations in 2002, triple that amount in 2003, 2 1/2 times in 2004, and now only double in 2005.

Figure 9: Advertising expenditure: 2004 vs. 2005



Source: FOCUS Media Research

Substantial growth for private television broadcasters

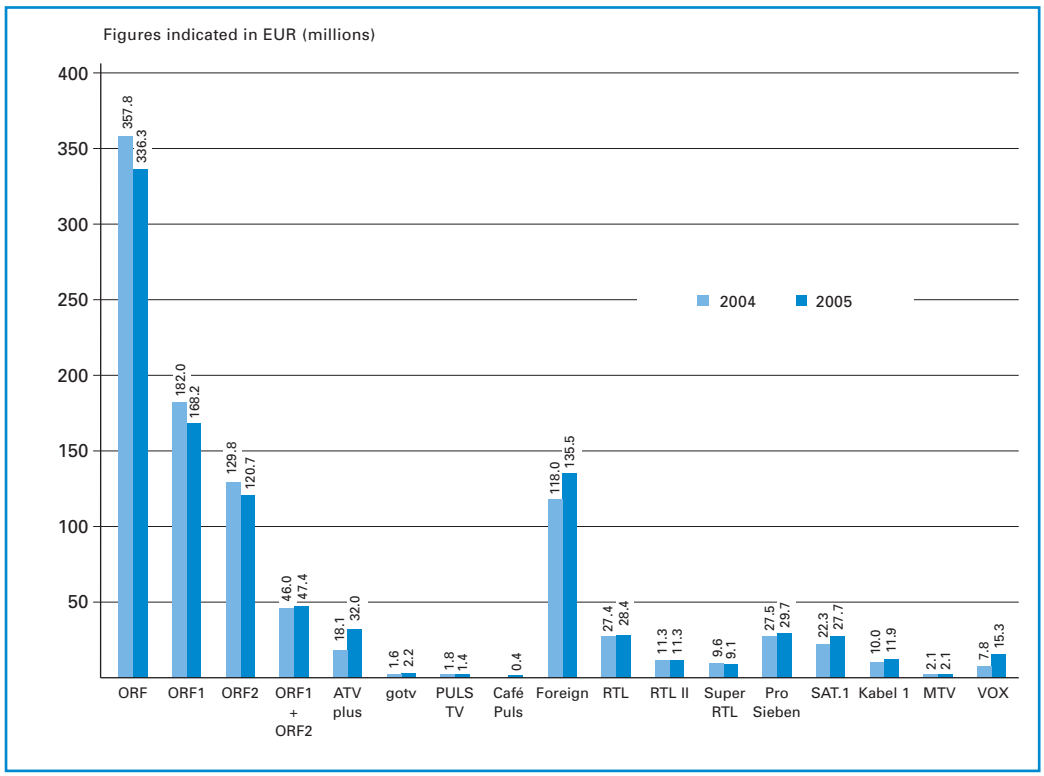
The absolute figures for these changes also clearly indicate the shift from ORF TV to private television broadcasters: The decline in ORF's revenues came to EUR 21.5 million in 2005, while growth in the revenues of private television broadcasters amounted to a full EUR 32.3 million.

The daily newspapers also saw considerable gains in advertising expenditure, as their share rose by 11.3% to EUR 628.1 million. The radio segment's revenues increased by 2.3%, almost exclusively due to the influence of private radio broadcasters.

Due to the sharp increase in advertising volume on the private television market, the discussion regarding German channels offering partly Austria-specific content in Austria reached an unprecedented level of intensity in 2005. While the proponents of this practice (i.e., inserting Austria-specific advertising content in the place 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, the critics have become even more adamant in their view that large quantities of Austrian advertising money are flowing to Germany and causing severe damage to Austrian media companies.

The figures speak for themselves: The leader among the private "window" programs in 2005 was once again ProSieben with EUR 29.7 million, followed closely by RTL with EUR 28.4 million. In third place, SAT.1 was able to increase its advertising revenues significantly, climbing EUR 5.4 million to a total of EUR 27.7 million. VOX saw the most significant growth (+EUR 7.5 million), and with total advertising revenues of EUR 15.3 million, the channel is ahead of Kabel 1 and RTL II. However, ATVplus clearly outstripped the foreign television broadcasters in 2005: With EUR 32.0 million in advertising revenues, the nationwide television channel is the undisputed leader among all private television broadcasters in Austria. Another interesting detail: In direct competition between the Austrian music channel gotv and MTV, the domestic broadcaster was ahead of MTV (even if only slightly) for the first time with EUR 2.2 million in advertising revenues.

Figure 10: Development of television advertising expenditure



Source: FOCUS Media Research (PULS TV from June 2004, Café Puls from September 2005)

60% of advertising revenues go to print media.

No major changes were recorded in each medium's relative share of advertising. As in the previous years, the largest share of advertising expenditure (60%) went to print media, with daily newspapers taking exactly half (30%) of those revenues. In total, this represents an increase of 1.0 percentage point compared to 2004; considered separately, daily newspapers saw an increase of 2.0 percentage points. Advertising revenues in the segment of print media excluding daily newspapers declined by 1.0 percentage point; this segment includes regional weekly newspapers with 9.8% (+0.2), illustrated periodicals and magazines with 15.2% (-1.2) as well as other specialized periodicals with 5.0% (-0.2).

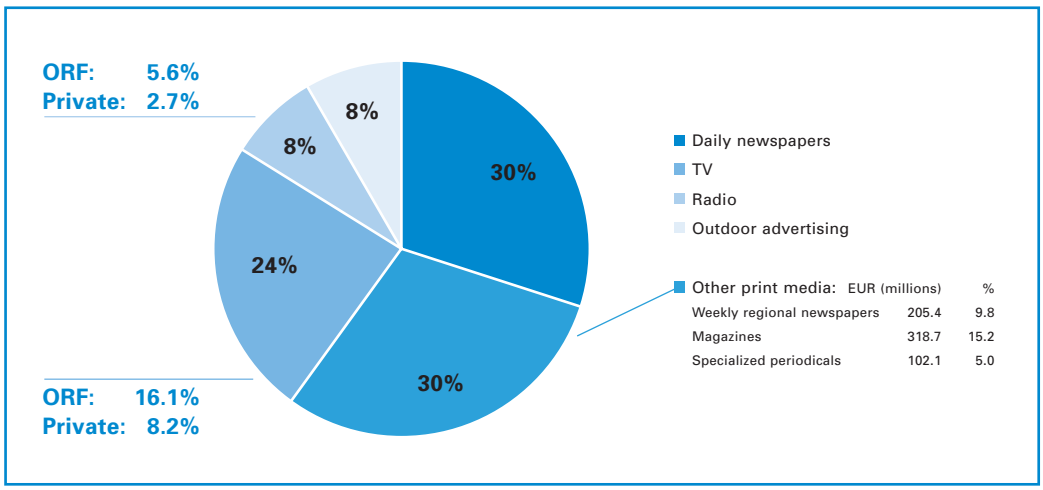
Almost one quarter (24%) of overall advertising expenditure in 2005 could be attributed to the television sector, which recorded a decline of 1.0 percentage point compared to 2004. The shares of ORF and the private broadcasters shifted from 19.5% and 5.1% in 2002, to 18.3% and 6.3% in 2003, 17.9% and 7.0% in 2004, and 16.1% and 8.2% in 2005 (respectively), thus clearly highlighting the trend mentioned above.

Private radio broadcasters seeing increased advertising revenues

8% of overall advertising expenditure went to the radio sector (down 1 percentage point on 2004), with shares of revenues shifting slightly from ORF toward the private radio broadcasters in 2005 (5.6% and 2.7%, respectively). However, it is once again remarkable that the ratio of advertising revenues is only 2:1 despite ORF's clear dominance in terms of radio market share among 14- to 49-year-old listeners: Although ORF's share of this market is almost 3 1/2 times that of the private stations (75% compared to 22%), the ratio of advertising expenditures is only 2:1. This is largely due to the advertising regulations to which, for example, ORF's regional programs are subject.

Some 8% of overall advertising expenditure went to outdoor advertising (billboards, illuminated signs, advertising on public transportation).

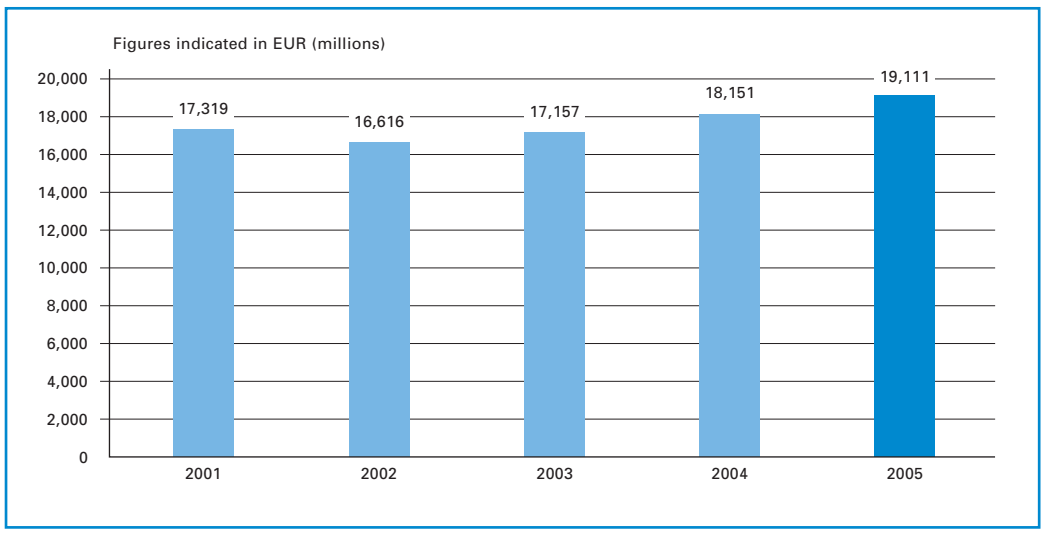
Figure 11: Share of advertising 2005



Source: FOCUS Media Research

Germany, which exerts considerable influence on Austria due to its geographical proximity, the common language and its strength as Europe's largest media market, also appears to have made it through the "vale of tears," as many industry observers have dubbed the situation in recent years. At least in comparison to previous years, 2005 was also a successful year for the media in Germany, where advertising spending reached a new high of EUR 19.111 billion. This represents an increase of 5.3% over the previous year (2004: EUR 18.151 billion).

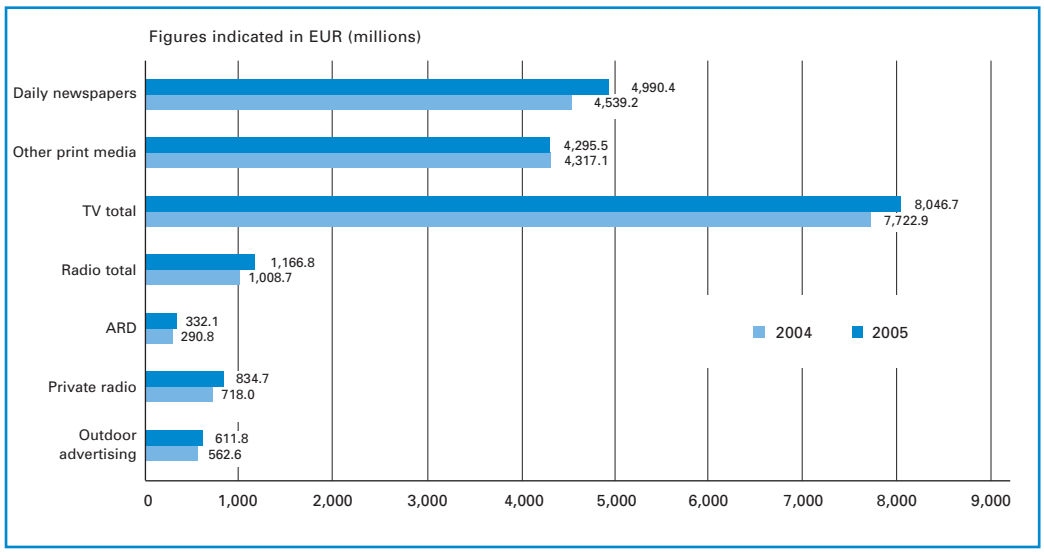
Figure 12: Development of overall advertising expenditure in Germany



Source: S+P Deutschland

Once again, German daily newspapers (+9.9%) as well as television stations (+4.2%) benefited most from this upswing, while radio and outdoor advertising also saw increases in revenues. Compared to 2004, revenues only declined in print advertising (excluding daily newspapers).

Figure 13: Advertising expenditure in Germany: 2004 vs. 2005

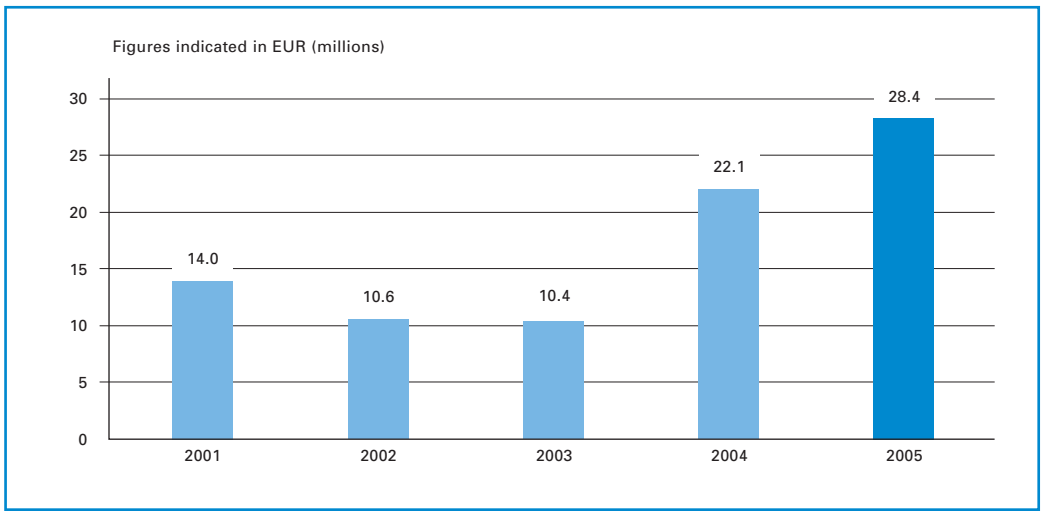


Source: S+P Deutschland

Rapid growth in online advertising

Finally, a look at online advertising expenditure: These figures are not included in classic advertising expenditure statistics, but they are increasingly becoming a factor which is not to be neglected. As the survey method was changed between 2003 and 2004, it is only possible to compare figures from 2004 and 2005, in which expenditure rose by 28.5% to EUR 28.4 million. This value is equal to almost exactly half of advertising revenues in radio broadcasting in 2005, thus pointing to the increasing advertising effectiveness of this new medium.

Figure 14: Online advertising expenditure in Austria



Source: FOCUS Media Research

5.1.3 Television

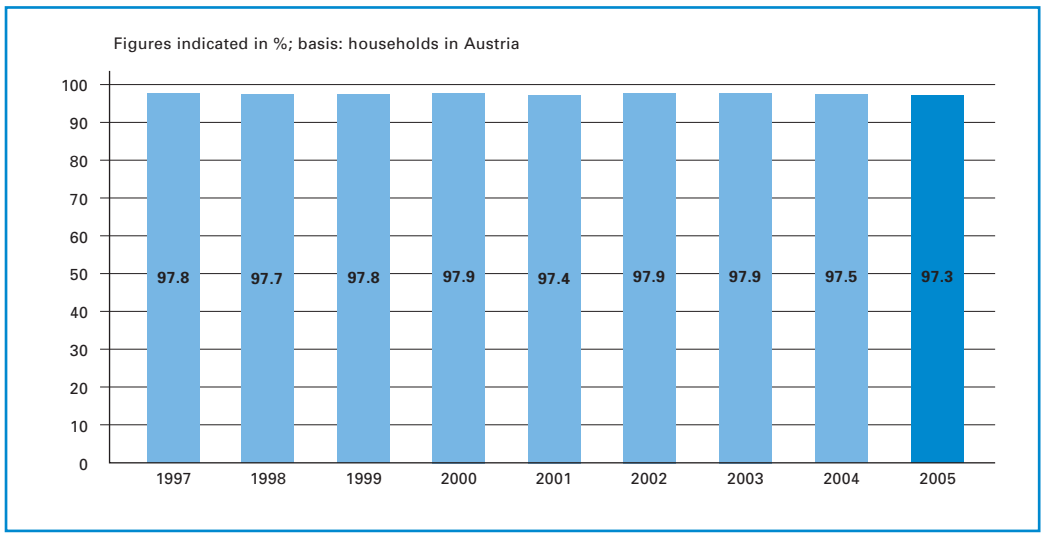
The most significant changes on the Austrian media market can be expected in the field of television, mainly due to technical advances and innovations. In 2005, the trends of the previous years solidified, in some cases becoming even more pronounced. With regard to new broadcasters, PULS TV – a Viennese regional channel launched in June 2004 – attracted the most attention. 2005 was thus the first full year of operation for this channel, which was designed exclusively for the greater Vienna area.

ORF's market share dropping but still at a high level

What was already visible in advertising expenditure is irrefutable on the viewer market: ORF's predominant position of power and the significant role this organization plays in society. However, in 2005 it could also be observed that the public broadcaster's lead is declining. The substantial gains in reach seen in the "window" channels, which moved into the field of information more than ever before, also contributed to this decline. Although Austria's viewers no longer depend exclusively on ORF as a source of opinions in television news, at the same time its penetration of the Austrian market remains a definitive one. After all, ORF's share still accounted for approximately half of the Austrian market in 2005, even if this figure did decrease by a full 3.1 percentage points to 48.2% compared to 2004.

In this context, the market can be considered almost identical to the overall population: According to the *Media-Analyse* (Austrian Media Analysis), 97.3% of all Austrian households had at least one television set in 2005.

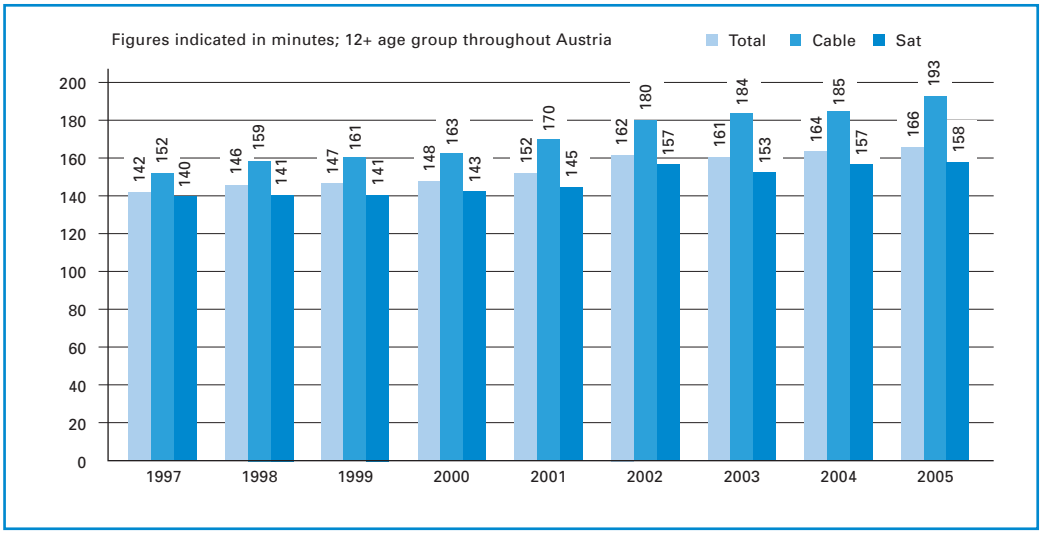
Figure 15: Percentage of Austrian households with television sets



Source: Media-Analyse

The viewing time of Austrian television viewers over 12 years of age has increased steadily in recent years. At 166 minutes per day, this figure reached a new high in 2005. The difference between cable households and satellite households is also at a record level: In households with cable television, viewers spend 35 more minutes per day watching television than in satellite households.

Figure 16: Development of viewing time

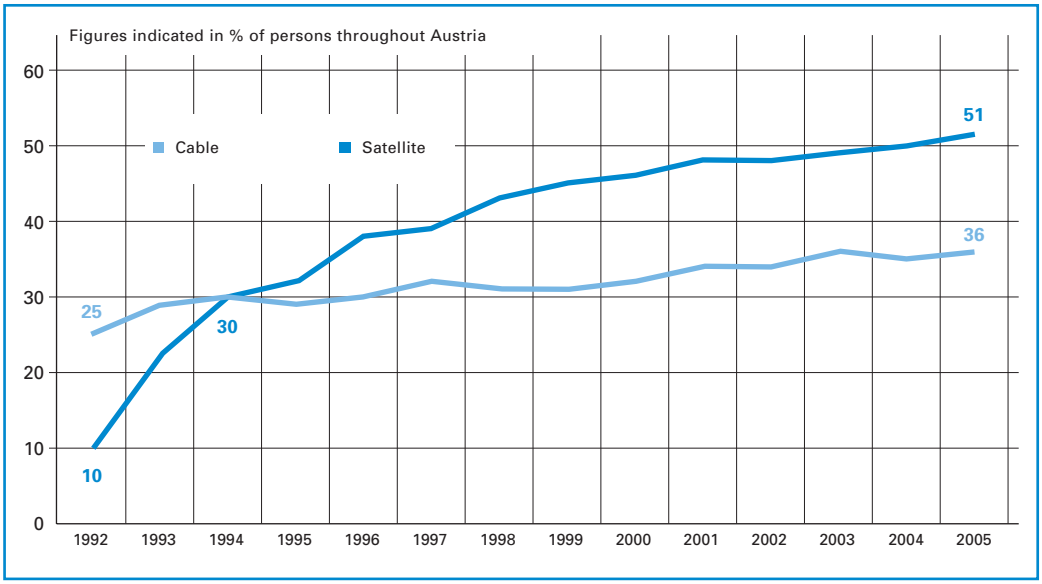


Source: Teletest

Satellite is the most popular reception mode in Austria.

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 receiving television channels via satellite caught up with the share of households covered by cable networks (30% each). Since then, the share of persons supplied via satellite and cable has increased to 51% and 36%, respectively. This means that one in two viewers in Austria already receives television channels via satellite.

Figure 17: Development of cable TV vs. satellite systems

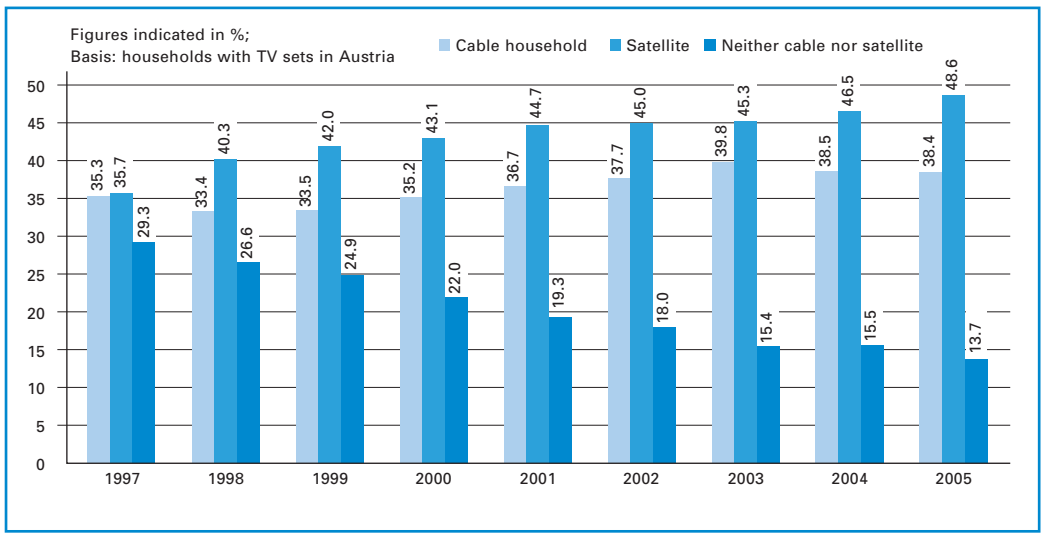


Source: Media-Analyse

In contrast, the number of households supplied exclusively by terrestrial television signals has been decreasing for some time, dropping by more than half over the last eight years. While 29.3% of households still received television channels exclusively via their home antennas in 1997, this figure had dropped to 13.7% by 2005. Due to the ongoing process of digitization in satellite reception, which also allows viewers to receive both of ORF's channels, the lower limit of this development does not appear to have materialized.

Terrestrial reception used in 13.7% of television households

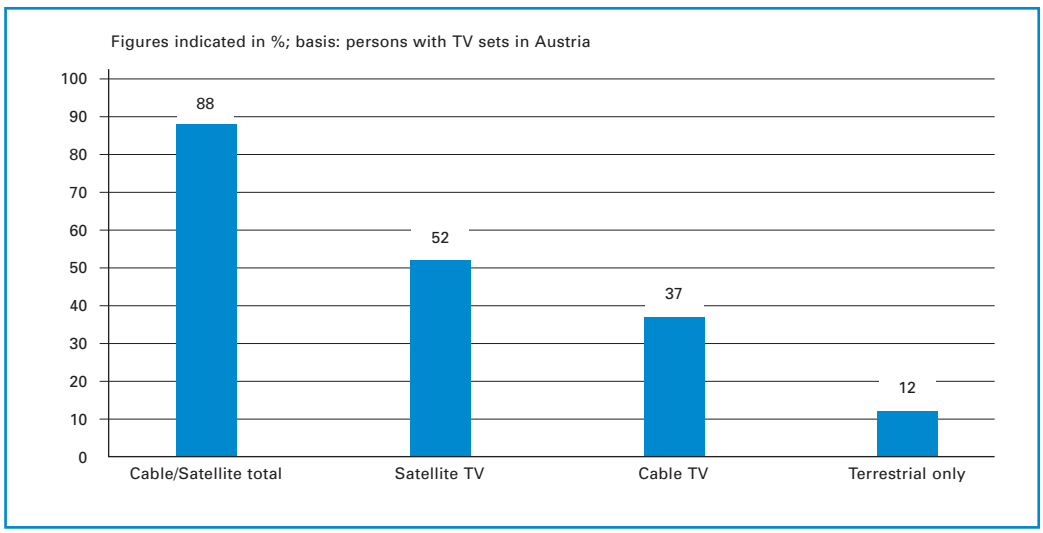
Figure 18: Development of reception modes



Source: Media-Analyse

In terms of the number of people (instead of households) reached, the share of people supplied exclusively by terrestrial means was only 12% in 2005, whereas the number of people supplied by satellite or cable reached 88%. The fact that even a smaller percentage of viewers than households are supplied exclusively by terrestrial means is probably linked to the fact that most terrestrial-only households have fewer members than typical cable or satellite television households.

Figure 19: Reception modes in 2005

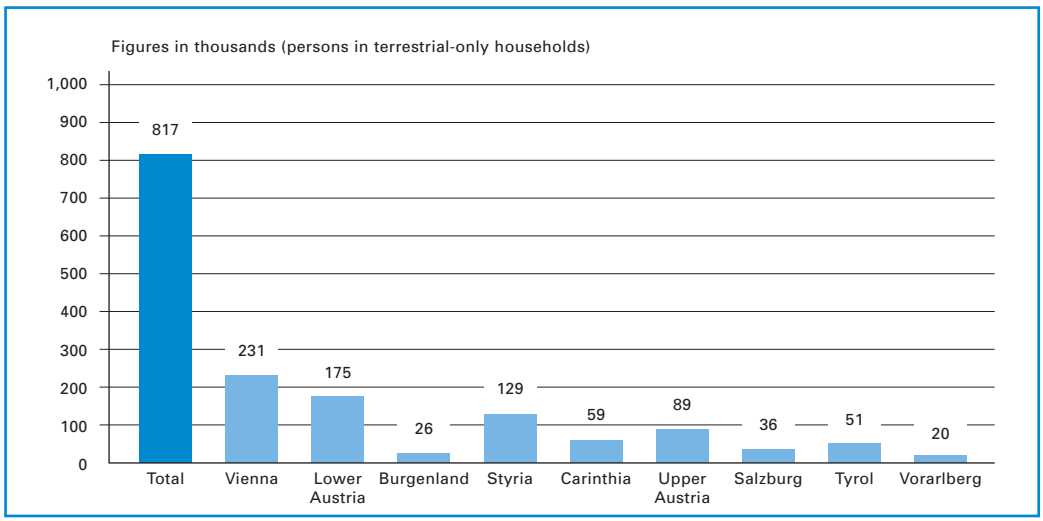


Source: Media-Analyse 2005

Terrestrial usage clearly higher in eastern Austria

Only 817,000 people with at least one television set in their households received exclusively terrestrial television in 2005. The largest share of these viewers was in Vienna (231,000), followed by Lower Austria (175,000). Even if these figures indicate how uncommon terrestrial-only reception is in Austria, they also provide evidence of how many people (for example in the east of Austria) were not provided with a German-language alternative to ORF's television stations until the launch of ATVplus in 2003 and then the start of PULS TV in 2004.

Figure 20: Terrestrial-only reception in 2005



Source: Media-Analyse

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

Progress of digitization in television transmission platforms

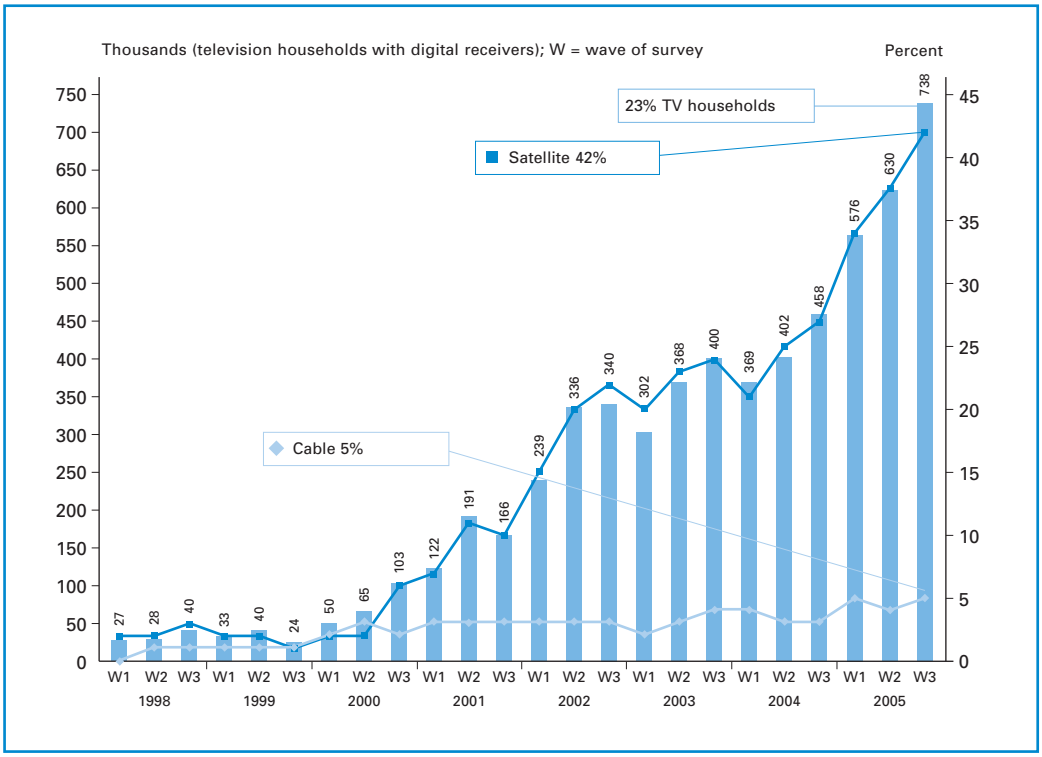
The digitization of broadcasting transmission in Austria is part of a pan-European objective on the path to a competitive and knowledge-based information society. Especially when it comes to making the services of the information society accessible to all people, digital television can make a valuable contribution to avoiding a "digital divide" in which people who live in rural areas, for example, are deprived of these services in the information society.

Preparations for broadcasting digitization have been going on since 2001.

The intensive preparatory work carried out since the creation of the Austrian Communications Authority (KommAustria) and RTR in 2001 and since the establishment of the Digital Platform Austria working group in 2002 will come to fruition with the launch of digital-terrestrial television (DVB-T) planned for the fall of 2006.

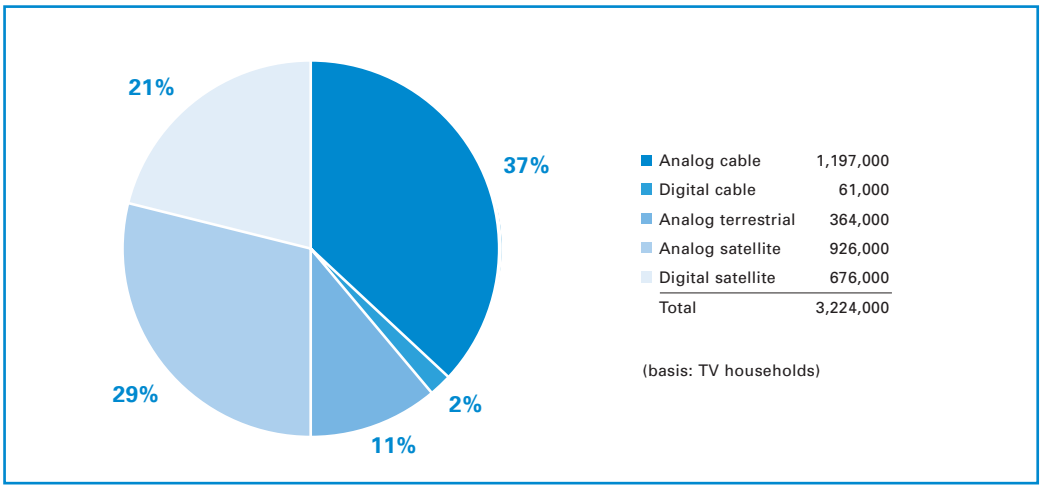
The most prominent feature of digitization in the three established television transmission modes (cable, satellite and terrestrial) is their varying speeds and degrees of progress.

Figure 21: Digital penetration in Austria



Source: FESSEL-GfK Fernsehforschung / Monitoring September – December 2005

Figure 22: Digital penetration in Austria – breakdown by reception type



Source: FESSEL-GfK Fernsehforschung / Monitoring September – December 2005

Digitization of satellite television

In terms of the extent of digitization, satellite is the undisputed leader among broadcasting platforms. At the end of 2005, 42% of Austrian satellite households were already equipped with a digital receiver. In addition to allowing viewers to subscribe to pay TV channels, for example, digital satellite reception (DVB-S) also offers the advantage that Austrian channels such as ORF, ATVplus and gotv can be received via this platform, while analog satellite households are still forced to rely on terrestrial reception in order to receive these programs.

Digitization of cable television

As shown in the chart above, digital penetration in cable households has remained constant at 3 to 5% in recent years. Digital cable television (DVB-C) is increasingly being offered in bundles with telephony and broadband Internet access.

Digitization of terrestrial television

In the year under review, KommAustria and RTR made the final essential preparations for the launch of regular digital terrestrial television (DVB-T) operation and the ensuing shutdown of frequencies used for analog terrestrial television broadcasting (see also Section 4.1.2.1).

Regular DVB-T operation to be launched in the fall of 2006

According to the plans announced by Austria's multiplex license holder, DVB-T will be launched in all high-density areas of Austria in the fall of 2006.

New Teletest starting in 2007

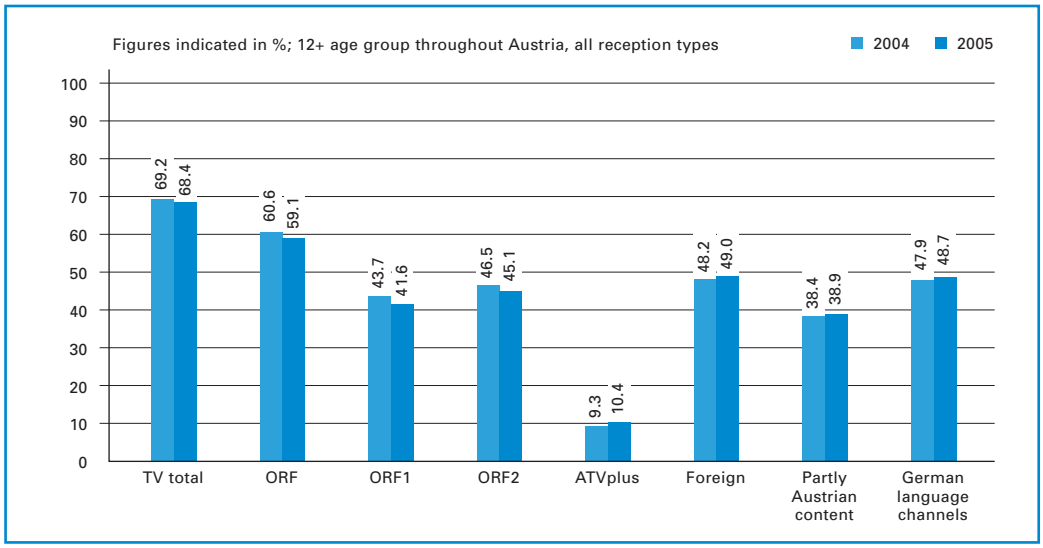
Regardless of how television channels are ultimately received by consumers, television viewing habits in Austria are surveyed in what is known as the "Teletest." At the end of 2005, the contract between ORF and the market research institute previously in charge of conducting this survey expired; starting in 2007, the survey will be based on a new method which should meet with greater acceptance on the market. In August 2005, therefore, a new "Teletest Association" was formed. This association includes ORF as well as all relevant private TV marketers in Austria. The initial results of this new "Television Audience Measurement Research" will be available from 2007 onward.

The Teletest figures for 2005 were surveyed as in the previous years: Channel selection and viewing time behavior were tracked electronically using a panel of 1,500 test households selected on the basis of demographic criteria.

The resulting daily reach figure, a measure indicating the number of people over the age of 12 who watched one of the channels on the market for at least one minute per day on an annual average, came to 68.4% in 2005. This represents a decline of 0.8 percentage points compared to 2004. ORF1 and ORF2 again attained the highest daily reach figures in 2004 with 41.6% and 46.5%, respectively. In 2005, the declines of 2.1 (ORF1) and 1.4 (ORF2) percentage points were considerable.

With a combined daily reach of 49% in 2005, foreign television channels pulled even further ahead of ORF1 and ORF2 than in previous years. Considering only those private German stations which provide Austria-specific content, the foreign broadcasters trailed ORF1 by only 2.7 percentage points in 2005.

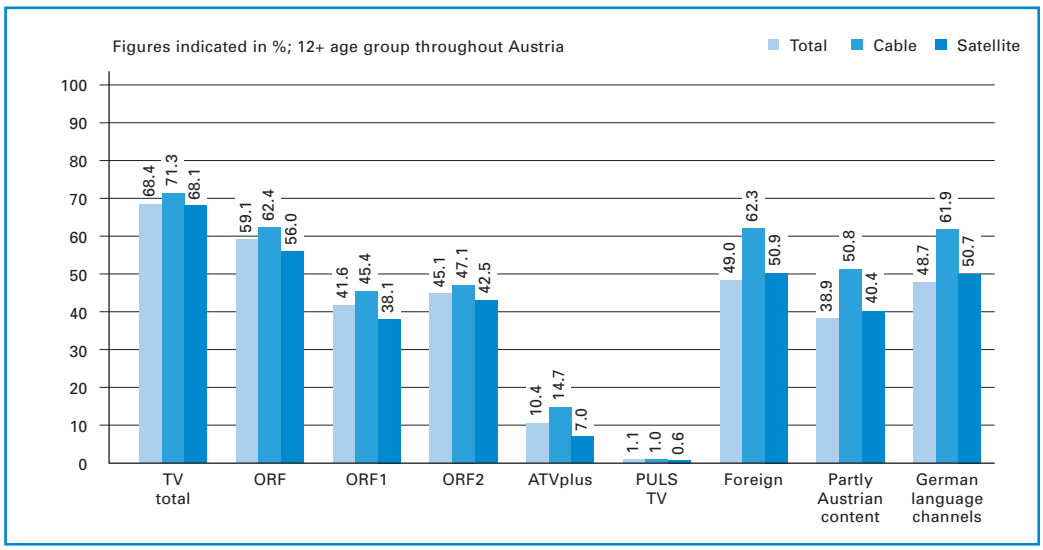
Figure 23: Development of daily reach (short term)



Source: Teletest

In cable households, the foreign channels which offer partly Austria-specific content have already caught up to the two ORF channels. In 2005, their reach was already 50.8%, while ORF1 and ORF2 recorded figures of 45.4% and 47.1%, respectively.

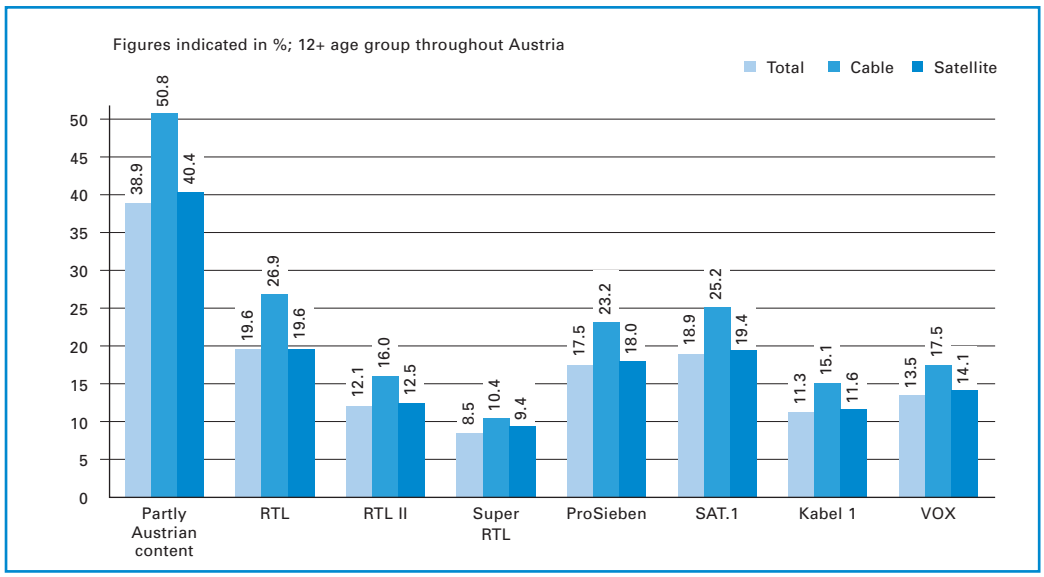
Figure 24: Daily reach of television channels in 2005



Source: Teletest 2005

Among the foreign channels with partly Austria-specific content, RTL is still in the lead with a daily reach of 19.6%, followed closely by SAT.1 with 18.9% and ProSieben with 17.5%.

Figure 25: Daily reach of foreign channels with partly Austria-specific content in 2005



Source: Teletest 2005

ATVplus expanded its reach to 10.4%.

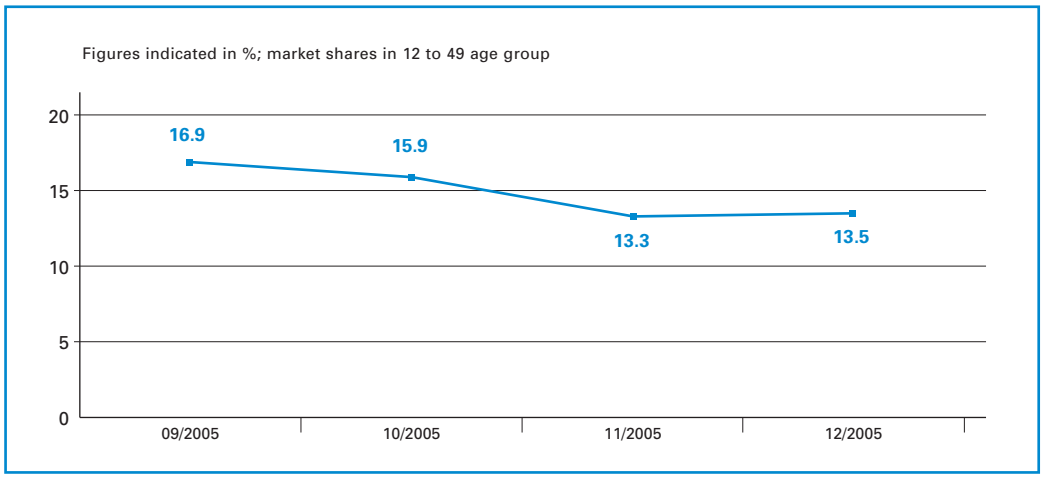
The Austrian private broadcaster ATVplus was again able to expand its reach from 9.3% to 10.4% in 2005, an increase of approximately 12%. Already in 2004, ATVplus had surpassed one "window" channel (Super RTL), which it also succeeded in doing in 2005. ATVplus now trails the next channel (Kabel 1) by only 0.9 percentage points.

Finally, a look at PULS TV: 2005 was the first year of full operation for this Vienna regional channel launched in mid-2004. The 1.1% daily reach figure shown in Figure 24 is based on all of Austria. Based on the actual coverage region, the channel's daily reach in 2005 averaged approximately 85,000 people, which corresponds to a daily reach of approximately 4% in Vienna.

As mentioned above, the fact that Austrian advertising content is broadcast on German channels in Austria is a rather controversial topic. In addition to Austrian advertising blocks, channels such as ProSieben, SAT.1 and Kabel 1 also offer shows designed specifically for Austria which can be received via cable or digital satellite. One example is the daily Austrian news show "Austria TopNews" on ProSieben. Starting at the end of August 2005, ProSieben, SAT.1,

Kabel 1 and PULS TV cooperated in producing a joint morning show known as "Café Puls," an infotainment magazine which airs from 6:00 am to 10:00 am. The reach figures have shown highly encouraging development thus far. According to the Teletest survey, this show's market share in the 12+ age group averaged 3.3% based on PULS TV alone as of the end of 2005. Considered across all four channels which broadcast the show, "Café Puls" even attained an average daily reach of 14.9% among viewers aged 14 to 49 in cable households between September and December 2005.

Figure 26: Market share of "Café Puls" morning show



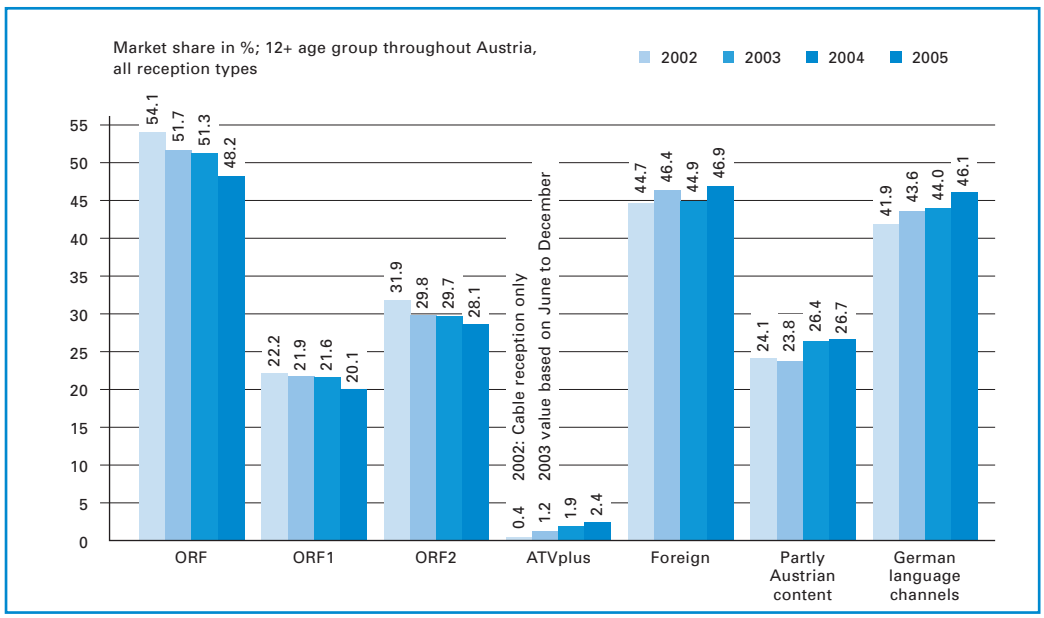
Source: Teletest 2005

However, this programming innovation is also not viewed in a positive light by all observers in Austria; in the field of cable television, for example, critics cite the fact that broadcasting the same show on multiple channels damages programming diversity.

ORF lost market share on the television market.

The market share mentioned above is the second indicator examined by the Teletest survey, which measures the relative market shares of each channel. Among the overall Austrian population over the age of 12, ORF's market share came to 48.2% in 2005, thus suffering a loss of 3.1 percentage points compared to 2004. Market share figures also clearly show that the total share of all foreign channels in 2005 – 46.9% – was only just behind that of ORF (1.3 percentage points). The channels which broadcast Austria-specific content were able to enhance their lead on ORF1 (26.7% compared to 20.1% for ORF1). Considered over the last four years, a steady development in favor of the fast-growing foreign channels offering partly Austria-specific content can be observed on the Austrian television market.

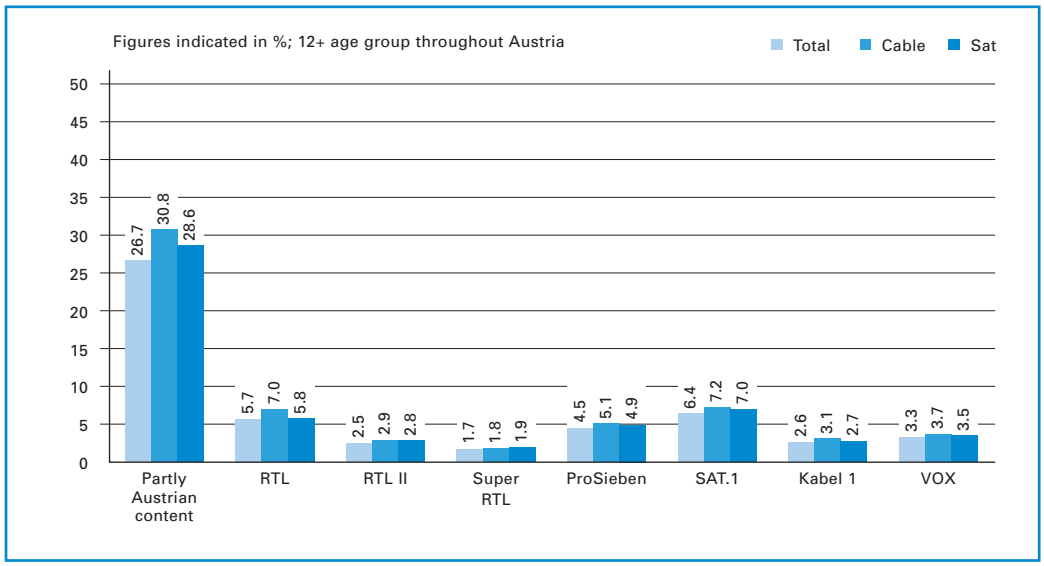
Figure 27: Development of market shares (long term)



Source: Teletest

For 2005, ATVplus recorded a market share of 2.4%, thus surpassing Super RTL and closely trailing Kabel 1, RTL II and VOX.

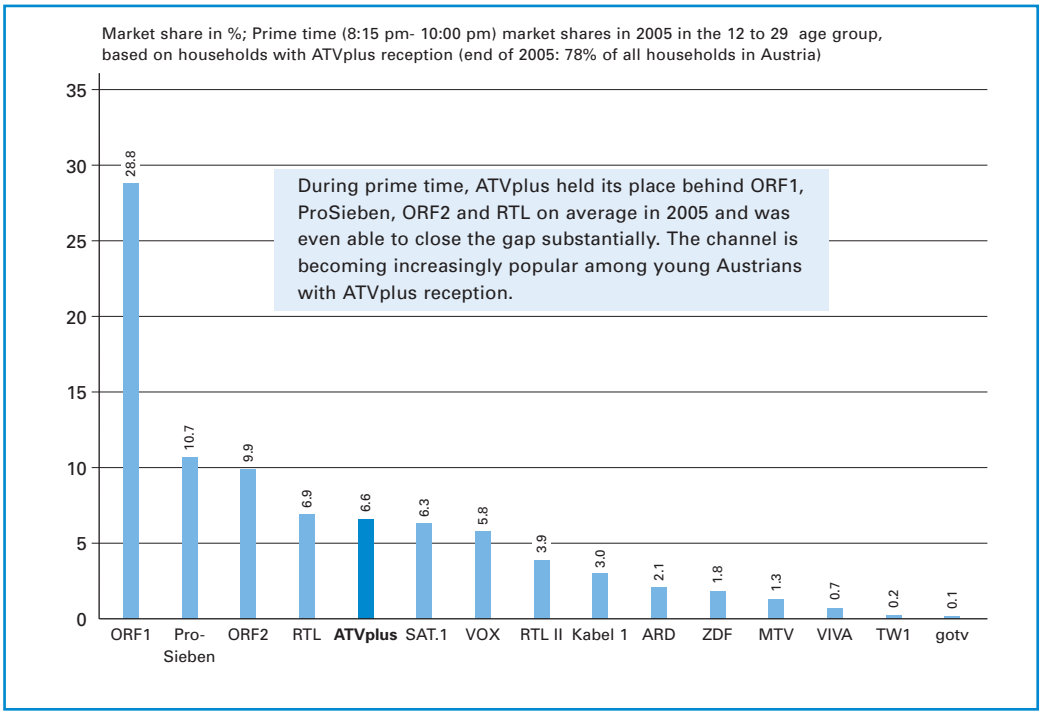
Figure 28: Market shares of channels with partly Austria-specific content in 2005



Source: Teletest 2005

ATVplus, the only nationwide private television station in Austria, addresses the very narrow target group of 12- to 29-year-old viewers. Between 8:15 pm and 10:00 pm, which is prime time for advertising (i.e., the time in which television has traditionally attained its highest reach levels), Teletest figures indicate that ATVplus was once again in fifth place in terms of market share. This is measured in relation to the number of households which can receive ATVplus, which totaled 78% of all households in Austria at the end of 2005. ORF1, which focuses on programming for younger people, led this segment with a market share of 28.8%, while ORF2 (which is designed for older viewers) was in third place with 9.9%. ProSieben took second place with a market share of 10.7%, and RTL came in fourth with 6.9%. With a market share of 6.6%, ATVplus was not far behind.

Figure 29: Prime time market shares in 2005



Source: Teletest

ATVplus also successful with its own productions

In addition to airing successful feature films, ATVplus also made efforts to arouse the viewers' interest with its own programming innovations. With casting shows such as *Bauer sucht Frau* ("Farmer seeks Wife"), the channel was able to record an average of 250,000 viewers per show, which represents a market share of approximately 8% among persons over 12 years of age and some 10% among 12- to 49-year-olds.

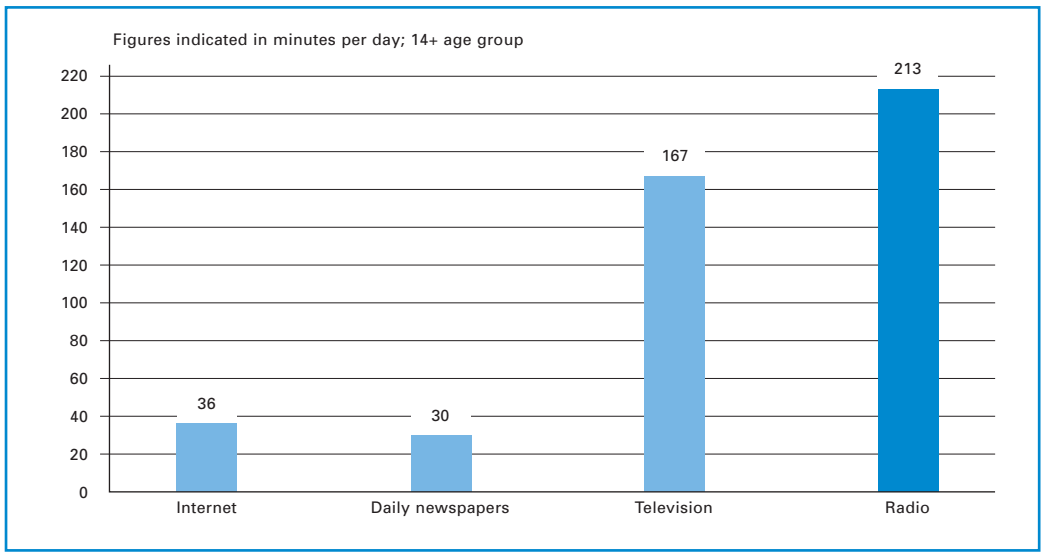
5.1.4 Radio

Radio usage is highest in Austria

In radio broadcasting, the year 2005 saw the launch of Austria's first nationwide private radio station "Kronehit" in January, the first private radio license renewals for two private stations in Styria and Salzburg, as well as increased cooperation among the larger broadcasters on the market. At the marketing level, a new international competitor also appeared on the market in addition to the established providers. This did not, of course, affect the dominance of ORF's radio stations in 2005, although the market leader Ö3 continued to lose marginal amounts of reach and the private radio stations recorded slight gains in this area.

According to the "Radiotest," a market research instrument based on telephone surveys and commissioned jointly by ORF and the private radio stations, radio listening in 2005 averaged 213 minutes per day among Austrians over 14 years of age. Therefore, radio has once again proven to be the most intensively used medium by far in Austria, followed by television with 167 minutes in 2005. The reading of daily newspapers has remained constant at 30 minutes per day in recent years. At the same time, Internet use increased sharply, from 29 minutes per day in 2004 to an average of 36 minutes per day in 2005.

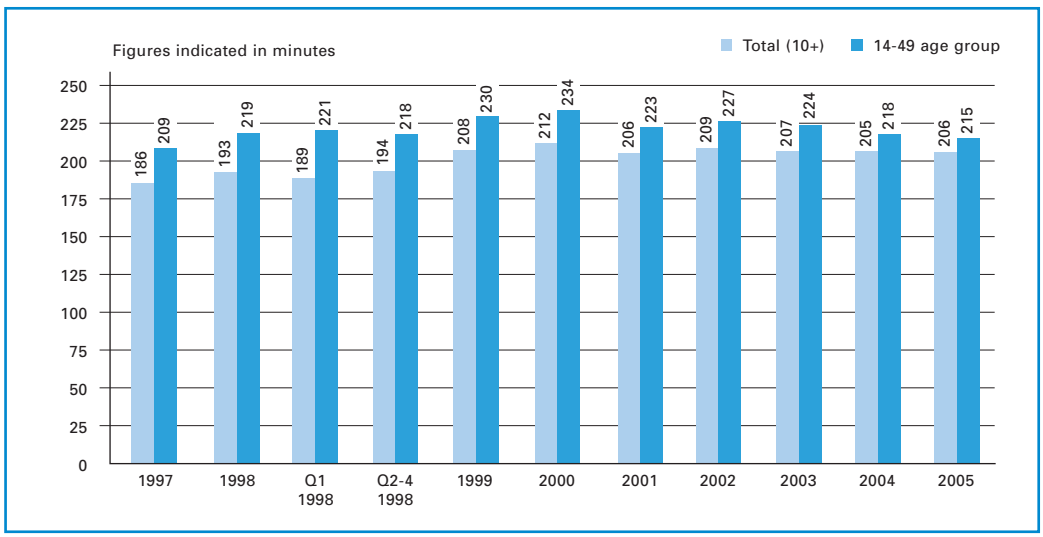
Figure 30: Media usage time per day



Source: Radiotest 2005, Teletest 2005, E&I 1997, AIM 2005

However, the downward trend in listening time continued in 2005, ultimately falling to 206 minutes per day. In the 14- to 49-year-old group, which is the main target group for private radio, this decrease is significant insofar as the difference from the 12+ target group is gradually declining. This means that radio listening time is converging more and more among the various age groups.

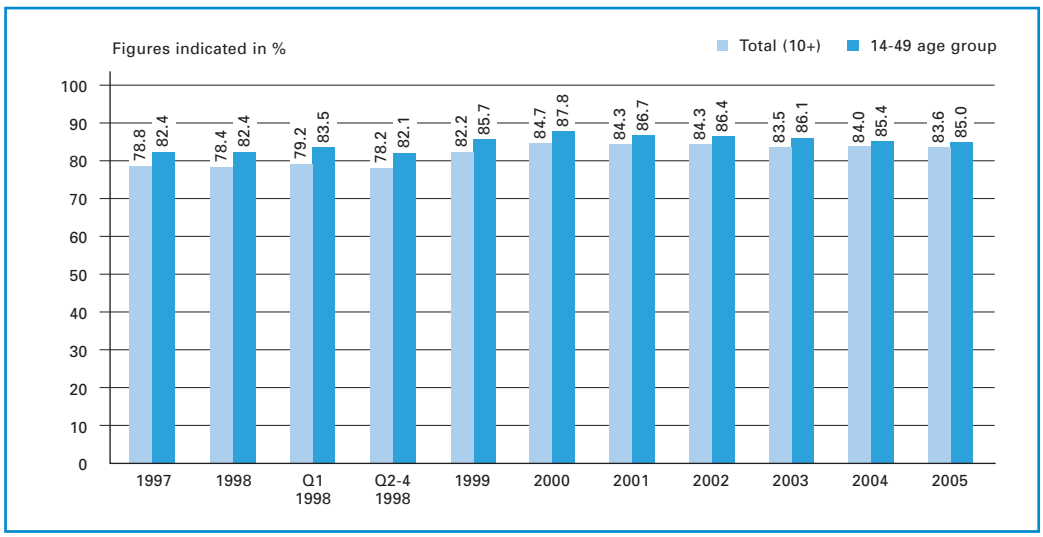
Figure 31: Development of listening time



Source: Radiotest

Radio not only reaches its listeners for a very long time, it also reaches the largest number of people. In 2005, 83.6% 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 0.4% on 2004). In the 14-49 age group, this figure came to 85.0% (down 0.7% compared to 2004).

Figure 32: Development of radio's daily reach



Source: Radiotest

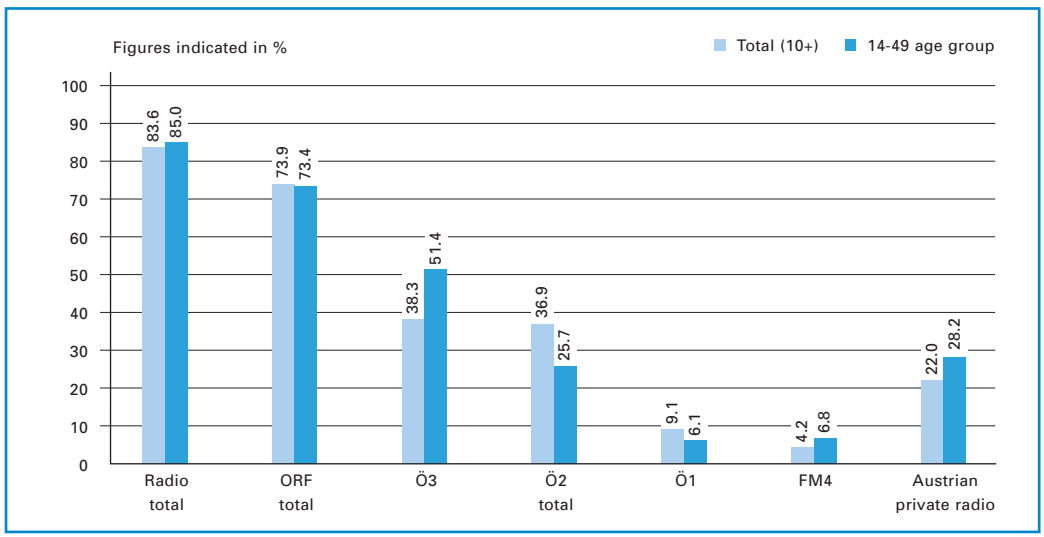
Upon closer observation of the reach levels of individual radio stations, it becomes clear that the trend of falling reach levels continued in 2005 for ORF's channel Ö3, the radio station with the highest reach in Austria. Whereas this decline came to 2.3 percentage points among 14- to 49-year-olds in 2004, the decrease was 2.0 percentage points in 2005. However, it is important to note that this occurred at a remarkably high level (51.4% at the end of 2005). In 2005, the private radio stations had a reach of 28.2% in this segment, which also represents a (slight) decline of 0.5 percentage points. Measured in terms of all residents of Austria in the 10+ age group, the private radio broadcasters' reach came to 22.0% (down 0.2 percentage points), while Ö3 reached a level of 38.3% (down 1.6 percentage points).

ORF regional stations maintain stable reach levels

ORF's provincial channels (internally known as Ö2) reached 36.9% in 2005, exactly the same level as in 2004.

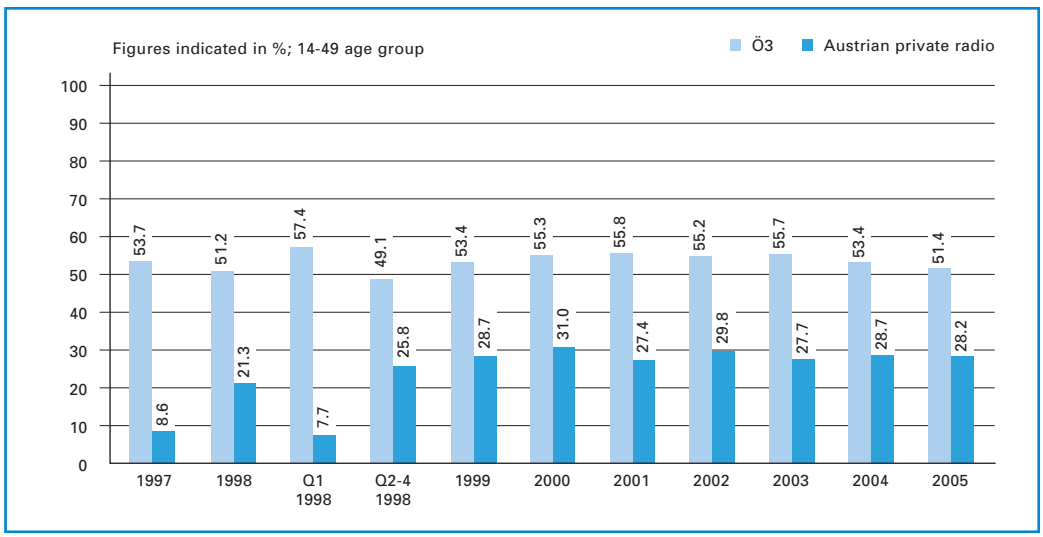
A comparison of the total reach of all ORF radio stations with that of the private broadcasters demonstrates the imbalance between these two pillars of Austria's dual broadcasting system even more clearly in 2005: In the 14 to 49 age group, the daily reach of Ö3 alone was still double that of all the private radio stations combined. In the 10+ age group, ORF's total daily reach was 73.9% (-0.9 percentage points) in 2005, while all of the private radio stations combined only reached 22.0% (-0.2 percentage points) of this population group.

Figure 33: Radio daily reach levels in 2005



Source: Radiotest 2005

Figure 34: Development of daily reach, Ö3 vs. private radio stations



Source: Radiotest

Kronehit's reach: 4.5% nationwide

Of all radio stations, the performance of Austria's first nationwide station Kronehit was followed with the most interest in 2005. On December 6, 2004, the broadcaster was issued a nationwide license for a combination of independent radio stations within the Kronehit network, which included numerous city and local stations as well as regional stations such as the former Radio RPN in Lower Austria. Observers watched with interest to see whether the advantages the operator now enjoys in terms of administration as well as programming (i.e., under Austrian programming regulations) due to the nationwide license would lead to changes in the radio station's reach.

Based on the figures for 2005, it is not yet possible to answer this question. Whereas the daily reach of Kronehit (as a network of multiple licenses) was 4.4% in the 10+ age group in 2004, this figure came to 4.5% in 2005. In the 14 to 49 age group, the station's reach did increase by 0.4 percentage points to 6.8% in 2005. If we look at the half-year figures for 2005, then it becomes clear that these slight increases can be attributed to the first six months of the year, while the figures for the second half of 2005 returned to roughly the same levels as in 2004. Thus it will be necessary to wait and see how Austria's first private nationwide radio station develops in the coming years; this will also have to be viewed in the context of the general development of the Austrian private radio segment.

It is also worth mentioning that in 2005 a number of private radio representatives once again demanded a reform of the Radiotest survey. These parties called for the introduction of what is known as an aided-recall survey situation. In this method, the person surveyed can choose from a number of brands, whereas the current practice in the Radiotest requires respondents to recall station names, thus distorting the results in favor of established brands. However, this method is obstructive to new names and distorts their actual reach figures downward. For their part, the opponents of this change refer to the fact that a discussion of the Radiotest's methods could call into question the survey's reputation as "hard currency" in radio usage research.

Table 10: Daily reach of radio stations in Austria

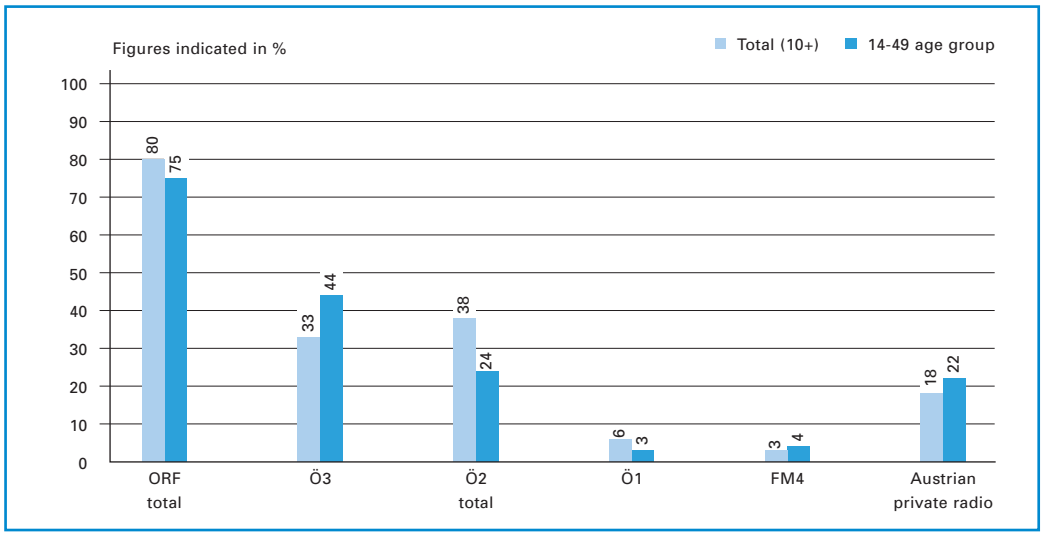
	Total	Vienna	Lower Austria	Burgenland	Styria	Carinthia	Upper Austria	Salzburg	Tyrol	Vorarlberg
Total as number of cases (unweighted)	**26,505**	**3,361**	**3,808**	**2,585**	**3,459**	**2,383**	**3,155**	**2,446**	**2,905**	**2,403**
Total daily reach										
Radio total	83.6	80.1	84.1	85.1	85.5	87.3	82.6	84.8	85.1	84.1
ORF total	73.9	64.9	76.1	79.4	77.0	81.5	73.6	74.7	74.0	76.7
Austrian private stations total	22.0	28.5	20.0	17.2	21.2	17.3	21.5	19.6	24.6	15.5
Other stations total	25.2	31.0	21.8	19.2	23.2	20.0	26.1	24.9	28.8	24.5
Minor stations total	4.1	3.2	2.4	2.4	2.6	3.0	5.6	6.6	5.7	10.7
Other minor stations	3.0	3.2	2.4	2.4	2.6	3.0	3.0	4.1	3.4	4.7
ORF's daily reach										
Ö1	9.1	13.8	8.4	6.9	8.4	8.3	7.5	8.6	7.6	6.6
Ö3	38.3	30.6	41.5	36.0	39.3	42.9	40.5	38.0	39.6	41.8
FM4	4.2	5.5	3.8	2.9	3.8	3.2	4.1	4.8	3.8	5.3
ORF regional stations total	36.9	28.0	38.0	49.8	40.1	45.2	34.9	38.5	39.0	39.8
Vienna	5.5	18.7	8.6	3.2	-	-	-	-	-	-
Lower Austria	7.7	8.8	28.4	3.6	0.4	-	1.8	-	-	-
Burgenland	2.8	3.4	2.1	45.3	1.3	-	-	-	-	-
Styria	6.0	-	0.5	2.7	38.5	0.9	0.2	0.3	-	-
Carinthia	3.2	-	-	-	0.6	44.7	-	0.2	0.5	-
Upper Austria	5.9	-	1.6	-	0.2	-	32.2	1.3	-	-
Salzburg	3.0	-	-	-	0.4	0.2	3.2	37.6	0.2	-
Tyrol	3.3	-	-	-	-	0.5	-	0.5	38.6	0.5
Vorarlberg	1.7	-	-	-	-	-	-	-	0.0	39.5
Private stations' daily reach										
RMS Top	21.5	27.0	19.6	17.2	21.0	17.0	21.4	19.6	24.6	15.5
Kronehit	4.5	4.6	7.4	7.7	2.8	1.6	5.9	2.3	3.2	-
Antenne stations total	6.3	2.1	1.0	3.5	15.9	11.6	2.5	14.4	5.8	13.8
HIT FM stations total	1.0	0.2	4.2	2.7	0.1	-	0.1	-	-	-
88.6 Supermix	1.5	4.7	2.6	1.6	-	-	-	-	-	-
Antenne Wien 102.5	0.6	2.1	0.8	0.6	-	-	-	-	-	-
Radio Arabella	3.0	11.3	3.7	2.1	-	-	-	-	-	-
Radio Energy 104,2	1.9	8.2	1.6	0.2	-	-	-	-	-	-
106,7 Party FM	0.4	0.3	1.3	1.9	-	-	-	-	-	-
Antenne Steiermark	2.5	-	0.1	2.9	15.7	0.4	0.0	0.2	-	-
A1 Radio	0.1	-	-	-	0.4	-	-	-	-	-
89,6 Das Musikradio	0.2	-	-	-	1.0	-	-	-	-	-
Soundportal	0.3	-	-	-	1.9	-	-	-	-	-
Radio Grün-Weiss	0.1	-	-	-	0.9	-	-	-	-	-
Antenne Kärnten	0.8	-	-	-	0.2	11.3	-	0.0	0.1	-
Radio Harmonie	0.3	-	-	-	0.1	4.3	-	-	-	-
Life Radio (Upper Austria)	2.4	-	0.8	-	0.1	-	13.0	0.3	-	-
Antenne Wels	0.1	-	-	-	-	-	0.8	-	-	-
Radio Salzkammergut	0.1	-	-	-	-	-	0.4	-	-	-
Antenne Salzburg	1.2	-	-	-	0.1	0.1	1.6	14.3	0.2	-
Welle 1 total (Sbg./UA)	0.6	-	0.1	-	-	-	1.8	4.6	-	-
Life Radio (Tyrol)	0.7	-	-	-	-	-	-	-	8.3	0.2
Antenne Tirol	0.5	-	-	-	-	-	-	-	5.6	-
Radio Osttirol	0.2	-	-	-	-	0.5	-	-	1.7	-
Radio Unterland/U1	0.5	-	-	-	-	-	-	-	5.5	-
Welle (Tyrol)	0.2	-	-	-	-	-	-	-	2.3	-
Antenne Vorarlberg	0.6	-	-	-	-	-	-	-	-	13.8
Radio Arabella Vorarlberg	0.1	-	-	-	-	-	-	-	-	1.6

Source: Radiotest 2005; Vertical percentage breakdown, 10+ age group, figures in %

Private radio stations achieved a total daily reach 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 14-49 age group, Ö3 attained a market share of 44% in 2005 (2004: 47%), while Austria's private radio stations achieved a total of 22% (2004: 20%). Due to the losses on Ö3's part as well as the gains experienced by the private radio broadcasters, the figures for these two competing segments did come closer to one another; however, Ö3's market share was still exactly twice that of Austria's private radio stations combined in 2005. As a group, ORF's nine provincial stations (Ö2) came to 24% in 2005 (2004: 23%).

Figure 35: Radio market shares in 2005



Source: Radiotest 2005

5.1.5 Print media

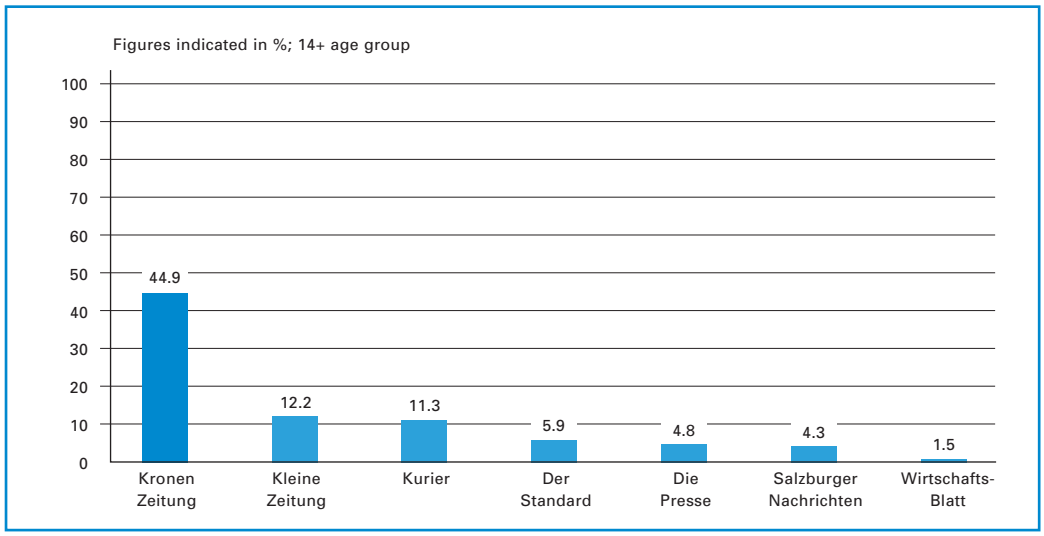
It is indeed a unique phenomenon in Austria that the *Kronen Zeitung* reaches a larger percentage of its country's total population than any other daily newspaper in the world. However, this success story is also the main factor responsible for the incomparably high level of market concentration in Austria. Nevertheless, Austria's leading daily newspaper was able to expand its daily reach even further to 44.9% of all Austrians over 14 years of age in 2005. This represents an increase of 1.1 percentage points over 2004 as well as a new record high. It also means that the newspaper was able to surpass the 3 million mark for the first time.

Kronen Zeitung attains new record in daily reach: 44.9%.

In 2005, the measurement method used in the *Media-Analyse* (Austrian Media Analysis) cited here was changed. However, comparisons with previous years are still admissible.

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* (49.4%) and thus also an indirect stake in the Mediaprint distribution company). The *Kurier* daily newspaper is in third place with 11.3% (+1.0% compared to 2004) in terms of daily reach among daily newspapers in Austria. The *Kleine Zeitung* published by Styria Medien AG came in second, with its daily reach remaining unchanged at 12.2%.

Figure 36: Reach of leading daily newspapers in 2005



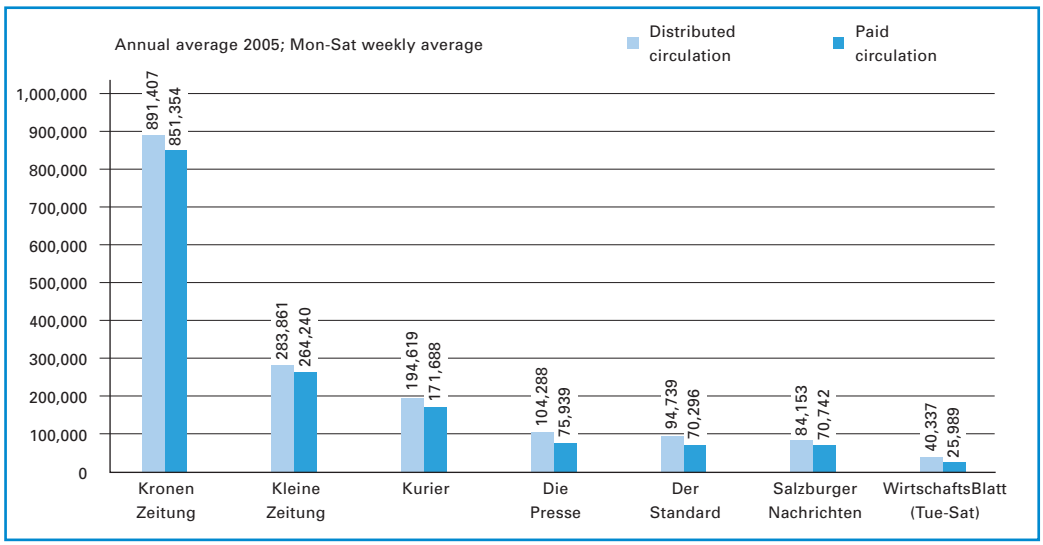
Source: Media-Analyse 2005

High-quality newspapers gained reach in 2005.

One particular trend in the year 2005 was that mainly the "high-quality" newspapers saw proportionally large increases in reach. *Die Presse*, a daily newspaper which belongs to Styria Medien AG, expanded its reach to 4.8% (2004: 4.4%), but once again it finished behind *Der Standard*, whose reach increased to 5.9% (2004: 5.4%). The *WirtschaftsBlatt* daily business newspaper was able to increase its readership by half, although it achieved this at a lower level (2005: 1.5%).

As regards the figures for copies sold, however, the *Kronen Zeitung* saw a slight decline of 0.7% to 851,354 copies on average over the week (Monday to Saturday). In this respect, the largest gain in 2005 was achieved by the *Kleine Zeitung*, which was able to increase its number of copies sold from 260,562 to 264,240 copies per day (up 1.4%).

Figure 37: Circulation figures for selected daily newspapers in 2005



Source: ÖAK

The statistics on "Readers per copy" compiled by the Austrian Circulation Survey (ÖAK) reveal how many people over 14 years of age read each sold copy of a newspaper. In this area, the leader in 2005 was the *Neue Vorarlberger Tageszeitung* with 4.8, followed by *Der Standard* with 4.3 and the *Kurier* with 4.0 readers per copy.

Table 11: Austrian daily papers – circulation and reach

Daily newspapers	Weekly average	Distributed circulation	Paid circulation	Reach in %	Readers ('000)	Readers per copy
Der Standard	Mon-Sat	94,739	70,296	5.9	404	4.3
Die Presse	Mon-Sat	104,288	75,939	4.8	325	3.1
Kurier	Mon-Sat	194,619	171,688	11.3	771	4.0
Kronen Zeitung	Mon-Sat	891,407	851,354	44.9	3,074	3.4
WirtschaftsBlatt	Tue-Sat	40,337	25,989	1.5	103	2.6
Kleine Zeitung (combined)	Mon-Sat	283,861	264,240	12.2	838	3.0
Kleine Zeitung (Graz)	Mon-Sat	188,752	174,728	8.1	557	3.0
Kleine Zeitung (Klagenfurt)	Mon-Sat	95,109	89,512	4.1	281	3.0
KTZ – Neue Kärntner Tageszeitung	*)	*)	*)	1.2	79	
OÖN – OÖ Nachrichten	Mon-Sat	123,481	103,680	5.0	345	2.8
SN – Salzburger Nachrichten	Mon-Sat	84,153	70,742	4.3	294	3.5
TT – Tiroler Tageszeitung	Mon-Sat	109,099	89,273	4.8	326	3.0
NEUE Zeitung für Tirol	Tue-Sat	26,543	7,914	0.8	58	2.2
Neue Vbg. Tageszeitung	Tue-Sat	11,326	6,782	0.8	54	4.8
VN – Vorarlberger Nachrichten	Mon-Sat	68,945	64,716	3.0	205	3.0

Austrian Circulation Survey (ÖAK) 2005 and Media-Analyse 2005, 14+ age group

*) Not reported in 2004 ÖAK survey.

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 *TV-Media* and *News* ranked second and third among weekly magazines in Austria with 13.9% and 13.1% in 2005, surpassed only by *Die Ganze Woche* with 15.1%.

Table 12: Reach figures for Austrian magazines and supplements

Magazines and supplements (selected titles)	2004 range in %	2005 range in %
tele	37.4	38.2
TV-Woche	41.5	37.9
Die Ganze Woche	16.7	15.1
Falter	1.2	1.4
News	15.8	13.1
profil	6.5	6.1
Format	3.3	3.2
TV-Media	11.5	13.9
E-Media	6.4	5.3
Seitenblicke	-	1.9
Wiener	3.0	2.6
Wienerin	4.6	4.2
Woman	7.9	8.3
Gewinn	5.9	5.3
trend	5.6	5.3
ORF nachlese	7.3	6.6

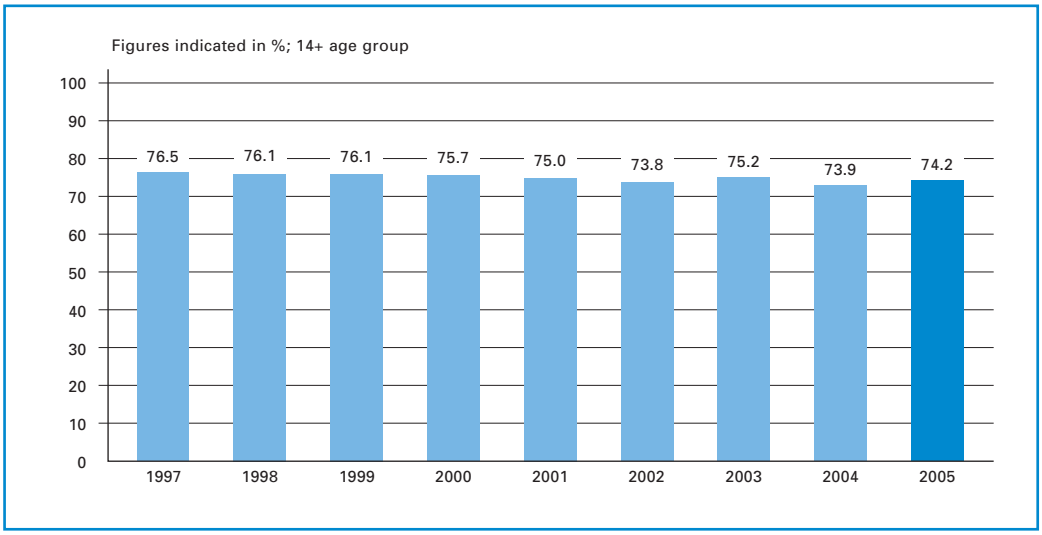
Source: Media-Analyse 2005, total for readers aged 14 and up

Discussion of measurement method in print media usage

Another point worth mentioning is that 2005 saw the launch of a new measurement tool which generates concrete results regarding reader usage of print titles by measuring reading activities: The MediaScan 2005 was implemented in Austria for the first time worldwide by MediaCom Vienna, and the survey was conducted by Fessel-GfK. Almost every publication sold is labeled with a barcode which contains important information. In this measurement survey, a panel of readers use a portable scanner to record the bar code for each reading activity. This method returned results which often diverged from those of the Austrian Media Analysis in 2005. It is not yet clear whether this new method of "measuring instead of asking" will be able to establish itself on the market.

Finally, let us take another look at the conventional Austrian Media Analysis in 2005 and the overall reach of Austrian daily newspapers, which has declined slightly (sometimes in waves) in recent years. After a decline in 2004, the total daily reach of Austrian daily newspapers rose slightly to 74.2% in 2005, showing an increase of 0.3 percentage points.

Figure 38: Development of daily reach among Austrian daily newspapers



Source: Media-Analyse

5.2 Development of the Austrian telecommunications markets

This section describes the development of the telecommunications markets in the year under review. We begin by providing a general overview, after which we discuss the markets in greater detail. The primary source of data used in this chapter was the Operator Survey 2006 recently carried out by RTR. Data collected pursuant to the Communications Survey Ordinance (KEV) as well as international surveys also served as secondary sources.

In the previous year's report, it was necessary to rely on estimates for 2003 and 2004 for comparison purposes. As a result, the inevitable imprecision of estimates has created a certain degree of divergence compared to previously published values.

5.2.1 General market development

Mobile and data communications services as drivers of growth

As in previous years, the Austrian telecommunications market saw increases in total volume, rapid growth in revenues from mobile and data communications, and generally declining rates and charges in 2005. In fixed-link voice telephony, however, traffic volumes decreased overall.

The net retail revenues on the Austrian telecommunications market increased by approximately 6.0% (from EUR 4.40 billion to EUR 4.67 billion) in 2004, followed by a rise of about 2.7% (from EUR 4.67 billion to EUR 4.79 billion) in 2005. These revenues can be attributed to the individual business segments as follows:

Table 13: Overall development of retail telecommunications revenues, 2003 to 2005

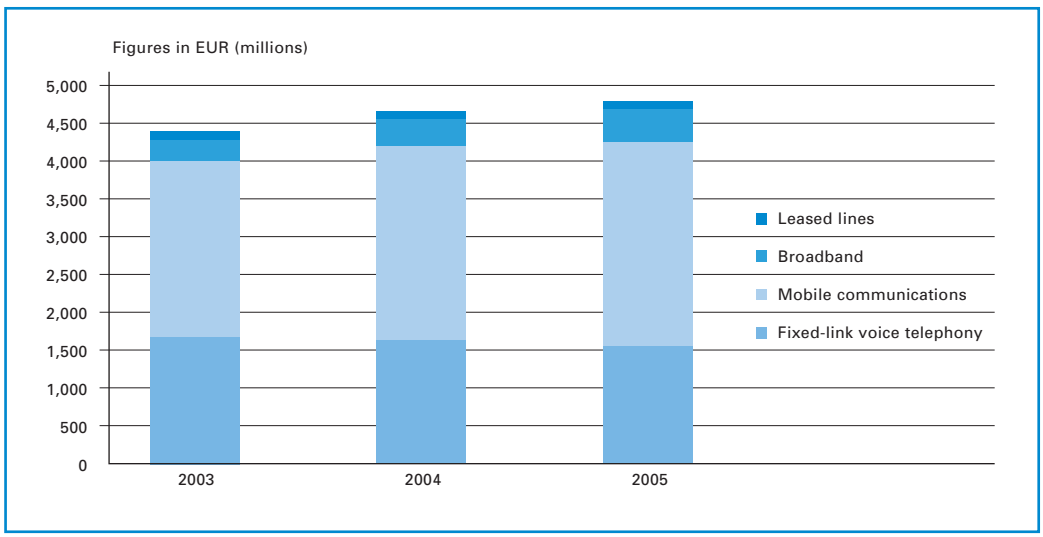
	EUR (millions) 2003	EUR (millions) 2004	EUR (millions) 2005	Change 2003-2004, %	Change 2004-2005, %	Share of total sales in %, 2003	Share of total sales in %, 2004	Share of total sales in %, 2005
Fixed-link voice telephony	1,686	1,640	1,560	-2.7	-4.9	38.3	35.2	32.5
Mobile communications	2,319	2,562	2,691	10.5	5.0	52.7	54.9	56.1
Broadband	279	361	440	29.4	21.9	6.3	7.7	9.2
Leased lines	117	102	102	-12.8	0.0	2.7	2.2	2.1
Total	**4,401**	**4,665**	**4,793**	**6.0**	**2.7**			

Source: RTR survey

Further increase in retail revenues from mobile communications

More than half of revenues can be attributed to mobile communications; this share rose from 54.9% in 2004 to 56.1% in 2005. With a growth rate of 5%, this segment also made the largest absolute contribution to overall growth in the telecommunications industry.

Figure 39: Breakdown of retail revenues, 2003 to 2005



Source: RTR

Due to increasing broadband penetration, broadband revenues rose from EUR 361 million in 2004 to EUR 440 million in 2005, thus showing an increase of about 21.9%.

Mobile communications as the toughest competitor to the fixed-link network

In recent years, mobile networks have developed into the toughest competitor for the fixed-link network in Austria. Another factor is the start of migration toward IP-based voice solutions (VoI, PN). However, the resulting declines in classic fixed-link network revenues were almost completely offset by the increases in broadband business.

Table 14 provides a qualitative overview of the major factors influencing market development. For more detailed information, please refer to the sections indicated.

Table 14: Trends on retail markets

Service	Revenues	Rates	Remarks	Section
Fixed-link voice telephony	Slightly decreasing	Stagnating/ decreasing	Partial substitution with mobile telephony, VoI and PN	5.2.2.1
Mobile communications	Increasing	Decreasing	Increasing share of data services	5.2.2.2
Broadband	Increasing	Decreasing	Declining significance of narrowband Internet access	5.2.2.3
Leased lines	Stagnating	Stagnating	Most revenues earned on the wholesale market, not on the retail market	5.2.2.4

In line with this general overview, the development of individual markets in Austria is described in greater detail in the sections below.

5.2.2 Legal framework and specific market developments

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

The legal framework for electronic communications markets, which was largely introduced in five EU directives[1] and became legally binding at the European level in 2002, was implemented in the Austrian Telecommunications Act 2003 (TKG 2003) and the accompanying ordinances. The TKG 2003 went into effect in August 2003, meaning that Austria was able to implement the EU legislation ahead of the deadline for national implementation. Once the first round of market analysis procedures was completed in early 2005, the next round of analyses already began with the review of the TKMVO 2003 at the end of 2005 (cf. also Section 4.2.3.1.1).

Fundamental changes in market delineation

The most essential preparatory measures specifically included an obligation to conduct comprehensive market analyses at regular intervals. Especially in their (potentially) broad analytical perspective, these periodic market evaluations differ substantially from their conception under the old (ONP) legal framework, in which competition analysis was effectively confined to surveying structural characteristics such as market shares. Another significant change introduced in the new regulatory framework in 2002 is related to issues of market delineation. In contrast to the old legal framework, the new methodology underlying market delineation should be based on economic principles. Under the previous framework, market delineation was based on the markets prescribed in the directives. Naturally, as market liberalization progressed, this method of market delineation no longer reflected the actual economic circumstances.

[1] Aside from 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.

As regards experience in (inter)national implementation, it is safe to say that although Austria was among the "early birds" in the implementation of the new legal framework (and thus had to cope with a higher level of uncertainty in the early stages of the process), the market analysis procedures under the new legal framework have been carried out by the Austrian regulatory authority relatively quickly and efficiently. Furthermore, thanks to very early and extensive preparations, this process was completed without support from external consulting services. RTR also published papers on major procedural and material aspects of the market analysis procedure in its own series of publications (Volume 5/2004).

The sections that follow give an overview of market developments and selected indicators, but in no way should they be considered exhaustive. Instead, the descriptions illustrate the complexity of market relationships and report 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 the reader in defining the focal points of this market overview.

5.2.2.1 Fixed-link voice telephony

5.2.2.1.1 Introduction

In order to ensure equal opportunities and functioning competition, the regulatory authority is also required to ensure that the barriers to market entry for new providers of telecommunications services remain low, and to create and subsequently maintain the appropriate conditions for fair competition. After approximately eight years of market liberalization and numerous market entries, some market segments are now undergoing consolidation processes, thus confirming the prevailing arguments regarding market phases. In particular, this refers to mergers and acquisitions among the largest alternative operators: UPC took over Inode, eTel took over Eunet, and in 2004 UTA was bought up by Tele2.

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

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 which possesses nationwide infrastructure and has the largest market share by far in the fixed-link voice telephony market. As Telekom Austria's market power would allow the company to prevent alternative providers from gaining access to customers and thus severely restrict competition, Telekom Austria was identified as having significant market power under the current legal framework as well as the previous one (i.e., from the year 2000).[2] As such, Telekom Austria is subject to special regulations regarding its prices as well as its terms and conditions of business. The com-

[2] For specific information on the individual decisions issued in this context, see Section 4.2.3.1.3.

pany 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 can 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 the local infrastructure would be economically inefficient in this case. As long as alternative access technologies such as power supply networks and wireless local loops (WLL) still lack the technological sophistication to be marketable and cable TV networks only have substitution potential in areas of high population density, the natural monopoly in local networks will largely prevail. Naturally, the mobile communications sector as a whole can also be regarded as a substitute for the fixed network. However, substitution effects of sufficient size did not yet materialize during the underlying observation period. This issue will also be observed and further investigated in future market analyses.

- 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.

Potentially competitive structures in the carrier segment

- In the past few years, carrier selection has proven to be a very effective means of promoting competition on the fixed-link market. This development can be attributed to the relative ease of market entry due to lower investment expenses (compared to building separate access networks) and the correspondingly large number of license applications. The stimulation of competition arising from the emergence of new providers has put downward price pressure on Telekom Austria and led to a reduction of rates throughout the entire industry, thus bringing about significant reductions in telephone costs for consumers (for more detailed information, see the section on rates and charges below). 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 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 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 generation of added value is confined to the retail level.

Table 15 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 VoIP, which is becoming an increasingly powerful factor influencing the entire fixed-link sector. VoIP (Voice over Internet Protocol) refers to a technology which allows voice communication via IP-based networks. This technology is expected to generate drastic changes in traditional circuit-switched voice telephony. At present, two main types can be identified among the numerous potential VoIP services, and this distinction is of interest 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 or Sipgate, for example. The current significance of VoIP has to be assessed in a differentiated way on the basis of characteristics such as residential and non-residential markets, but in principle it still affects all of the business models outlined in Table 15.

A detailed compilation of regulatory, technical and economic issues related to VoIP was published in RTR's publication series in early 2006 (Volume 1/2006).

Table 15: Business models in 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 provider (type)	**Purchased services (esp. from incumbent operator)**	**Self-provided services**	**Investment needs**
Subscriber network operator	▪ 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 operator	▪ Interconnection ▪ Poss. leased lines	▪ Operation of core network (e.g., transmission and switching facilities) ▪ (Service design) ▪ Pricing ▪ Sales/billing	Medium
Reseller (access network)	▪ Resale of access services	▪ Service design ▪ Pricing ▪ Sales/billing	Medium
Reseller (carrier network)	▪ Connection minutes	▪ Pricing ▪ Sales/billing	Low
Reseller of telephone services (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		

Whereas fixed-link markets used to be regarded as a whole, the various retail and wholesale markets are now described separately as shown below (though not entirely independently of one another) in line with the delineation of markets in the TKMVO 2003 and the European Commission's Relevant Markets Recommendation. 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 individual relevant markets are not discussed point by point but on the basis of specific focus areas.

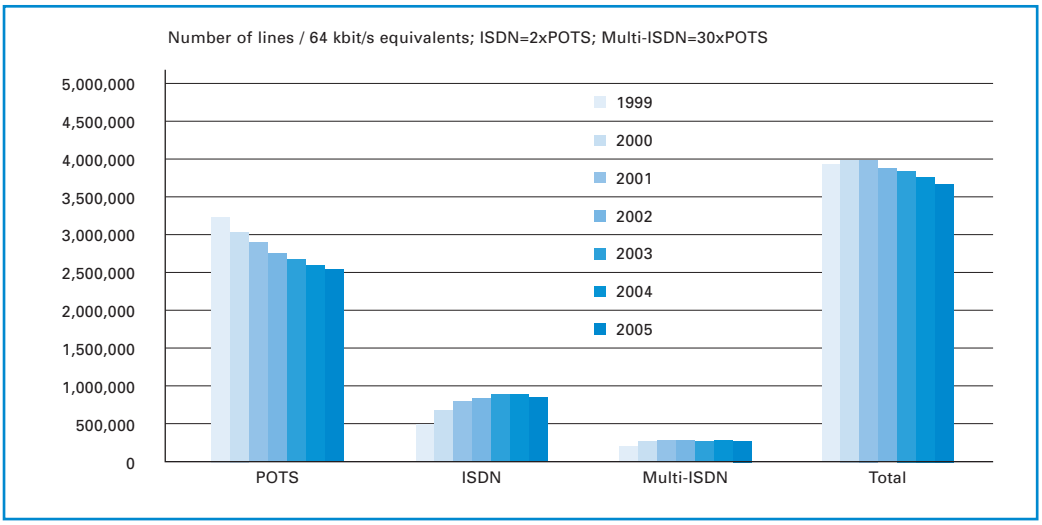
5.2.2.1.2 Retail market

Moderate declines in fixed-link revenues and volumes

Rapid growth in the number of subscribers on the mobile communications market caused a moderate yet steady decrease in total revenues from fixed-link voice telephony (cf. Table 13 and Figure 41). In terms of lines measured in 64 kbit/s equivalents, however, this decline was significantly less pronounced in the reference period (1999 to 2005). In the last two years, the decline only came to -2.05% and -2.44%; cf. Figure 40. 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 in 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 followed an upward trend in 1998 (+3.6%), they declined steadily over the remaining period (1999 to 2005), losing as much as 4.9% in 2005 (see Figure 41). This general decline can be seen (albeit to different degrees) in both revenues and traffic volumes, in the number of lines as well as calls, and among residential as well as non-residential customers.

Figure 40: Development of line types in 64 kbit/s equivalents (1999 to 2005)

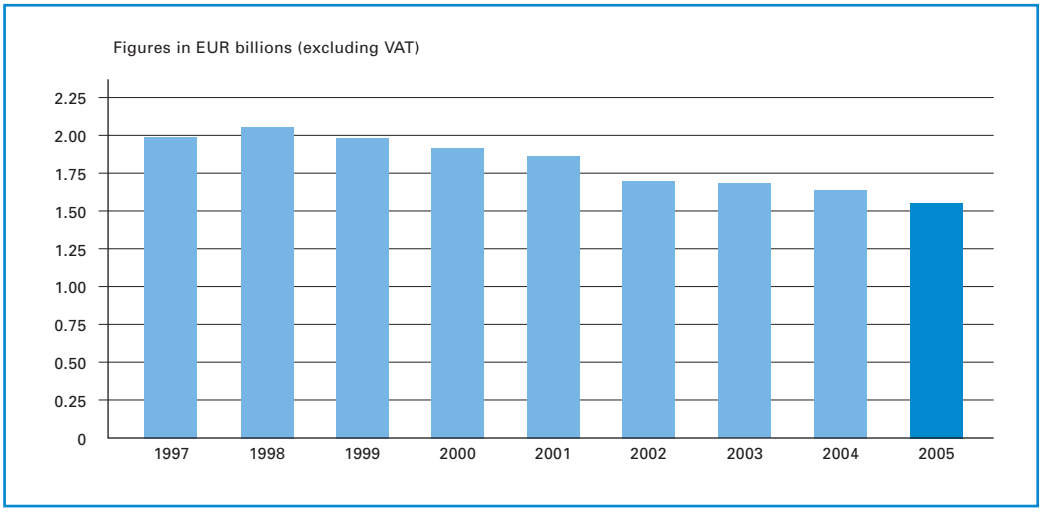


Source: RTR

Info Box 1: Income included in revenue calculations on the fixed-link retail market

- 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 telephones;
- Connection charges for directory assistance services;
- Connection charges for service numbers;
- Connection charges for online services;
- Revenues from the sale of calling cards and minutes to resellers;
- Monthly base fees;
- Charges for special coverage services;
- Connection setup charges.

Figure 41: Development of revenues on the retail fixed-link market, 1997 to 2005



Source: RTR

The market entry of new providers and their gains in market share are also reflected in the decreasing concentration on the fixed-link voice telephony market. High concentration on a market refers to situations where almost the entire value of a given parameter (e.g., revenues, number of subscribers, traffic volumes) is concentrated among a few operators or distributed unevenly among the individual operators at a given point in time.

Info Box 2: The Hirschman-Herfindahl Index (HHI)

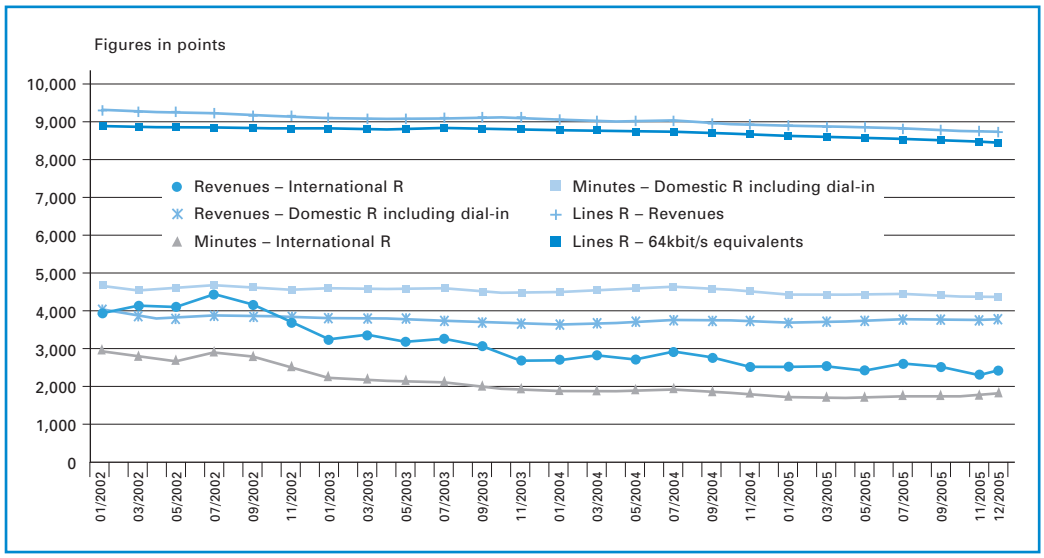
One of the most common measures of concentration is the Hirschman-Herfindahl Index (HHI), which is calculated as the sum of squares of the specific parameter values (in this case market share percentages). The value of this index is between 0 and 10,000. A value close to zero indicates low concentration and appears in cases where the market has a large number of participants of roughly similar size. The highest value of the index (10,000) indicates that there is a monopolist provider and thus 100% concentration of the parameter value.

The HHIs shown in Figures 42 and 43 indicate varying concentration rates in the individual parameters (i.e., rates and charges, call minutes and subscribers) over time. 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.

Stabilization of market structures

The substantially lower concentration rates in charges as well as traffic minutes are primarily due to carrier network operators. These operators' customers do not count as subscribers to their networks, but they move large volumes of traffic through the networks nonetheless. The concentration rate for revenues decreases more or less in proportion to the volume of traffic services provided by other operators. However, the access network operator still earns revenues from monthly base fees and connection setup charges. The fact that the rate of concentration in terms of call minutes among residential customers is higher than the corresponding distribution of revenue shares points to the effect of a specifically low ratio of revenues to minutes in narrowband Internet dial-up services. However, the latter has been decreasing steadily over time due to the increasing migration to broadband connections. In addition, the unlimited flat-rate product "Aon Complete" offered in the past, which generated high dial-up traffic volumes, has now been taken off the market. The previously larger difference for international calls compared to domestic calls among both residential and non-residential customers points to more pronounced price differences (in favor of the incumbent company) within this call category. However, this difference has been decreasing over time, plus the concentration developments in international calls are at a substantially lower level. In line with the results and predictions of the relevant market analyses,[3] the most competitive market structure can be found specifically in the market for international telephone services for residential customers. Moreover, stabilized concentration curves can be identified in the market for connection services.

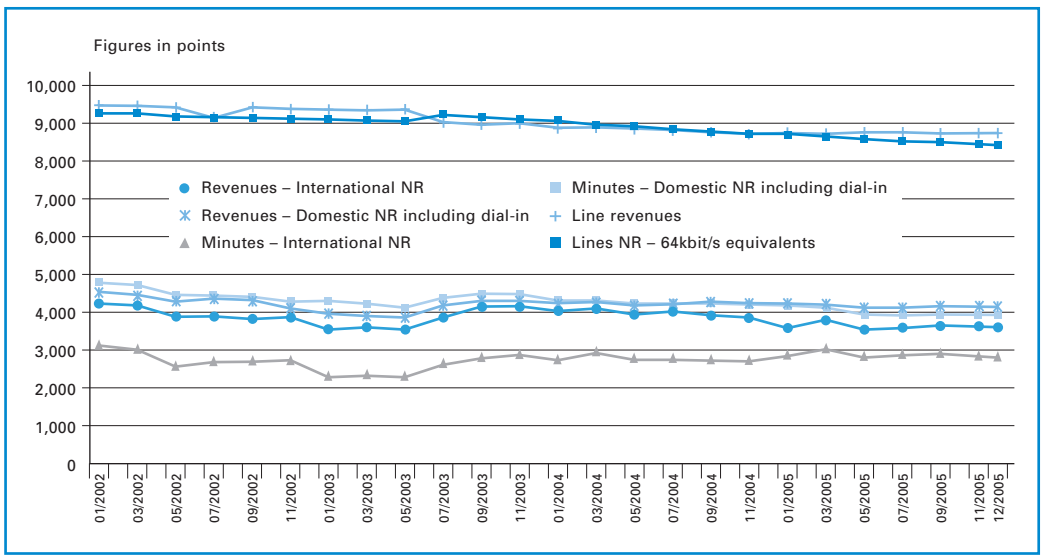
Figure 42: HHI for residential customer markets (R)



Source: RTR

[3] Compare also the description of Procedure M5/03 / Section 4.2.3.1.3.

Figure 43: HHI for non-residential customer markets (NR)



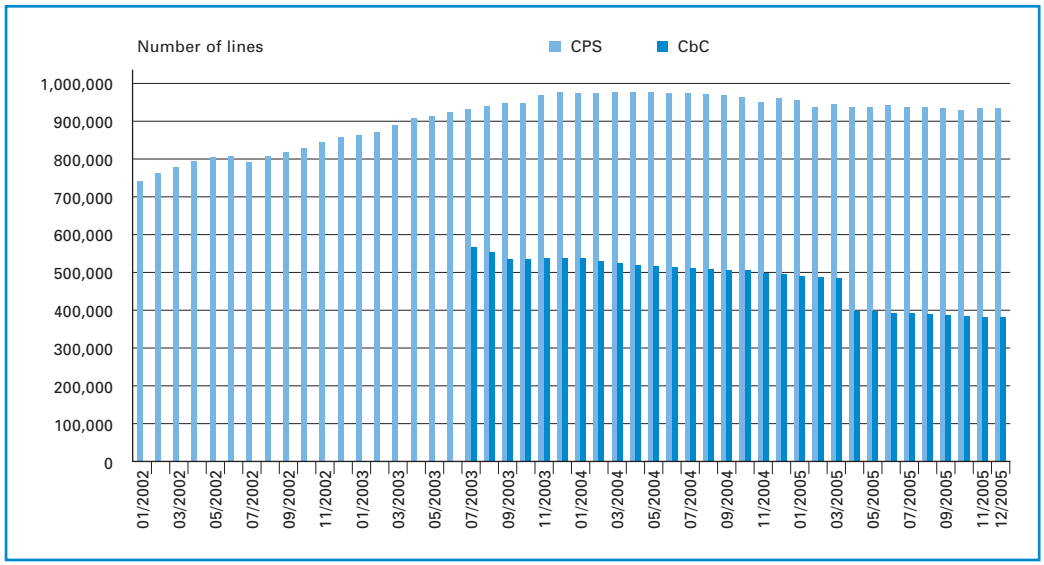
Source: RTR

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

The stagnation among alternative network operators in terms of connection services, which is also 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 Figure 44 clearly shows, CPS has enjoyed widespread acceptance. By the end of the reporting period, more than 930,000 subscribers in Austria had decided to have all of their calls handled by an alternative network operator. Data on CbC is more difficult to collect and it 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). Based on systematic data adjustments, the basic level among operators is clearly lower than the reference values indicated to date; accordingly, the current estimate is approximately 400,000 CbC customers. In general, a clearly declining trend can be identified in CbC (regardless of the increase shown in April 2005; see remark above), whereas CPS levels only show slight signs of stagnation. The latter can also be explained by the increasing transition from carrier pre-selection to source 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 simultaneously as complements to each other. 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 enabled competition quickly and allowed alternative network operators which 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 their services throughout Austria within a short time without requiring them to go through the difficult process of building their own (nationwide) networks.

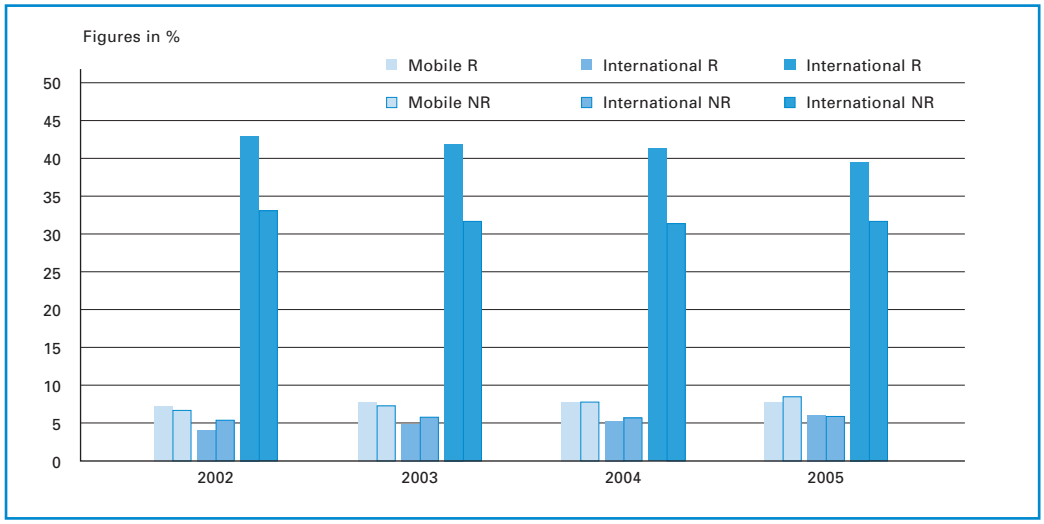
Figure 44: Development of CPS and CbC customers (01/2002 to 12/2005)



Source: RTR

Finally, Figure 45 provides insight into the demand-side calling behavior of residential and non-residential customers. On the one hand, the diagram reveals a high level of stability in demand structure over time, and on the other hand it also clearly shows that calls originating at fixed locations are predominantly (over 75%) made to the fixed-link network. Calls to the "national mobile network" and "international calls" are therefore secondary in significance.

Figure 45: Distribution of call minutes originating from fixed locations among residential (R) and non-residential (NR) customers each year (100%)



Source: RTR

Rates

Price competition as a result of competitive conditions

Since the start of market liberalization in early 1998, the fixed-link markets for telephone services discussed in this context have seen substantial declines in prices. Fierce price competition in recent years has led to a convergence of 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 price reductions has declined in the last few years, although a certain degree of pricing latitude can still be observed in international telephone services. However, 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 discussion of prices below refers mainly 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 below 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 business customer markets, however, we can assume that customers have frequently obtained (and still obtain) substantial rate discounts due to high traffic volumes.

First of all, a representative sample of the connection charges[4] 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 differentiation in pricing is, of course, not applied uniformly by individual providers.

Figures 46 and 47 show the connection charges for the call distances mentioned above on the basis of the underlying "minimum rate" and (since the abolishment of the minimum rate in Procedure G07/03) for Telekom Austria's subsequent rate plan "Tik Tak Privat." The approach of 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 in competition 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 (2005: UPC/Priority Telecom instead of UTA).

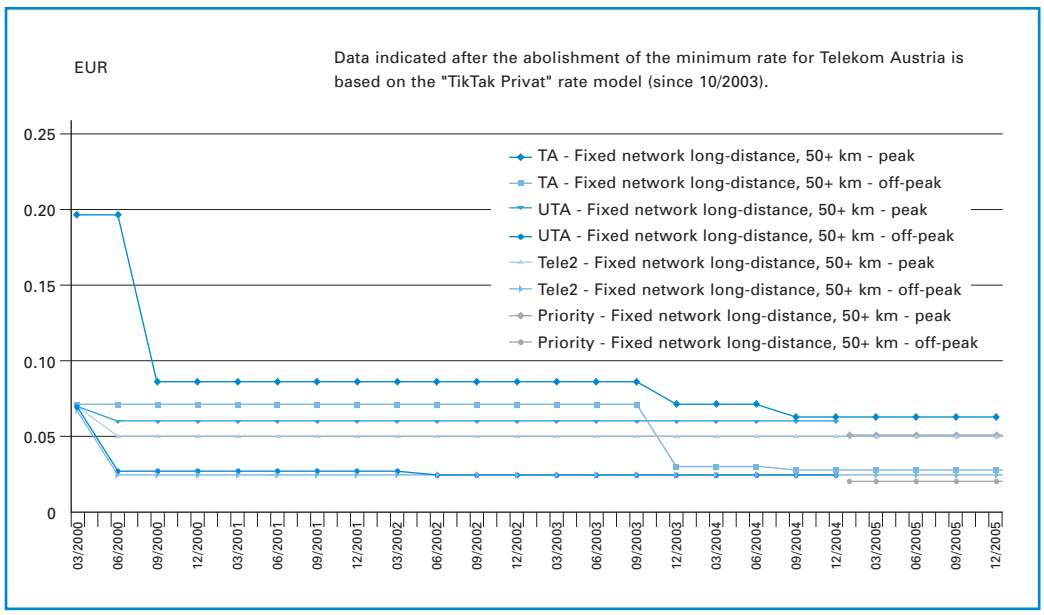
Increasing importance of bundled offers

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 (1998 to 2000, not shown). As shown in Figures 46 and 47, 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

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

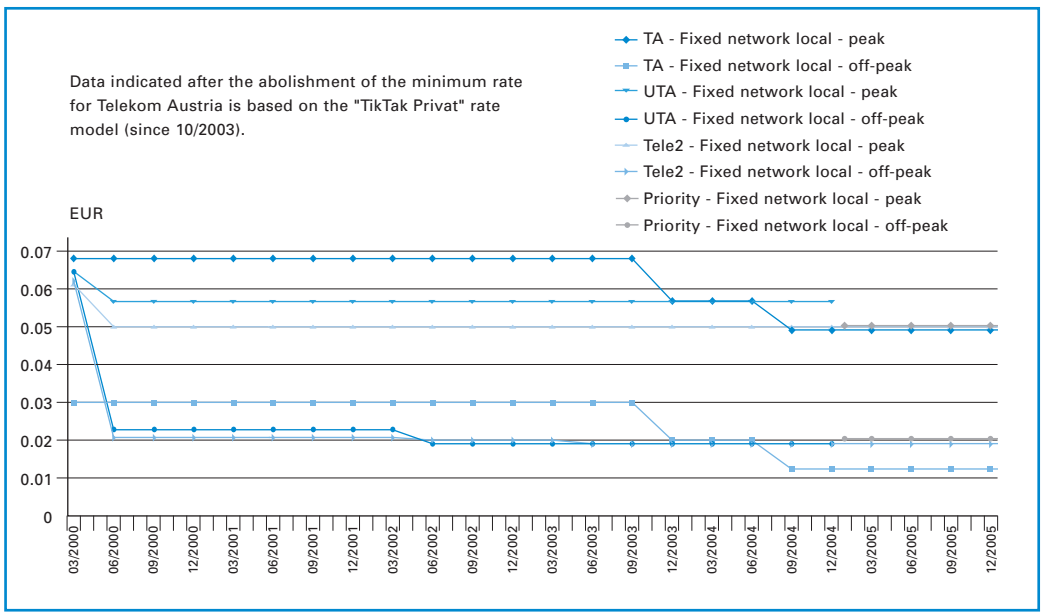
networks (up to 09/2003). In general, this also applies to charges for calls to national mobile networks (not included here). Likewise, the charts also show the direct and indirect price reductions in connection charges due to the abolishment of the minimum rate and the definition of "Tik Tak Privat" as the subsequent rate plan underlying all of the illustrations for the latter part of the period under review (10/2003 to 12/2005). Additional price reductions were only introduced in mid-2004, this time initiated by Telekom Austria. In general, Telekom Austria's redesign of rate structures and its launch of optional rates led to (further) decreases in connection charges. In contrast, the year 2005 shows no further price changes in the underlying rate comparison (this statement only refers to the selection shown in Figures 46 and 47, thus it can not be generalized to cover all voice products offered on the market). On the one hand, this can be attributed to prices approaching their overall cost level (as mentioned above), and on the other hand consumers are still able to enjoy price advantages through the bundled products (not reflected in Figures 46 and 47) increasingly offered on the market. In addition to the optional rate plans mentioned above, which essentially combine monthly fees and connection charges in a variety of ways, this also refers to bundles which go beyond the confines of (classic) voice telephony, in particular by including mobile and broadband services.

Figure 46: Comparison of connection charges for long-distance fixed-link calls within Austria



Source: RTR

Figure 47: Comparison of connection charges for local fixed-link calls



Source: RTR

In order to depict the prices of international calls from fixed locations, 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 16 also correspond to the essential rate groups in various comparisons provided on the Internet[5] and in the relevant international studies (OECD, Implementation Report of the European Commission, etc.).

Price differences between communications network operators and communications service providers in international services

The selection of operators is based on their relative importance for the overall market. Specifically, Telekom Austria is compared to the largest alternative operators representing each business model shown in Table 15. For example, Tele2UTA is the largest alternative carrier and source network operator, Amiga and Finarea (with their "Telediscount" brand) are particularly successful representatives of resellers on the markets for international services, and finally UPC/Priority Telecom is used as the largest alternative infrastructure operator in urban areas.

Based on comparisons with "Tik Tak Privat," Table 16 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.

[5] References can be found at http://www.rtr.at/web.nsf/deutsch/Telekommunikation_Konsumentenservice_Links (in German)

Table 16: Comparison of fixed-link rates for major international call destinations

	Telekom Austria ("TikTak Privat") **60/1**	**Tele2UTA** ("Classic") **60/1**	**Finarea** ("Telediscount") **1/1**	**Amiga** ("Amiga.premium") **1/1**	**UPC/Priority Telecom** ("Standard") **1/1** (minimum charge: EUR 0.02)
	Peak/off-peak connection charges in EUR				
Germany	0.1896/0.099	0.099/0.099	0.022/0.022	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	0.022/0.022	0.05/0.05	0.17/0.17
Turkey	0.36/0.324	0.349/0.349	0.182/0.182	0.10/0.10	0.31/0.31
Hungary	0.1896/0.099	0.099/0.099	0.022/0.022	0.05/0.05	0.19/0.19
USA	0.1896/0.099	0.099/0.099	0.044/0.044	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
United Kingdom	0.1896/0.099	0.099/0.099	0.044/0.044	0.05/0.05	0.17/0.17

Source: RTR, Q4/2005 to Q1/2006

Table 16 shows that Telekom Austria now only charges higher rates in certain areas compared to the largest alternative communications network operators in the residential user segment. Compared to the group of communications service providers which are "switchless" resellers or resellers with only very few infrastructure components, however, massive price differences can be identified. At the same time, it must be noted 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, which has intensified the (price) competition on the corresponding market for international services (cf. also the references in Footnote 3).

International comparison of rates

In this section, an international comparison is used as a benchmark against which the market result on the Austrian market for fixed-link voice telephony can be measured. Particularly significant indicators in this area include rates and rate developments.

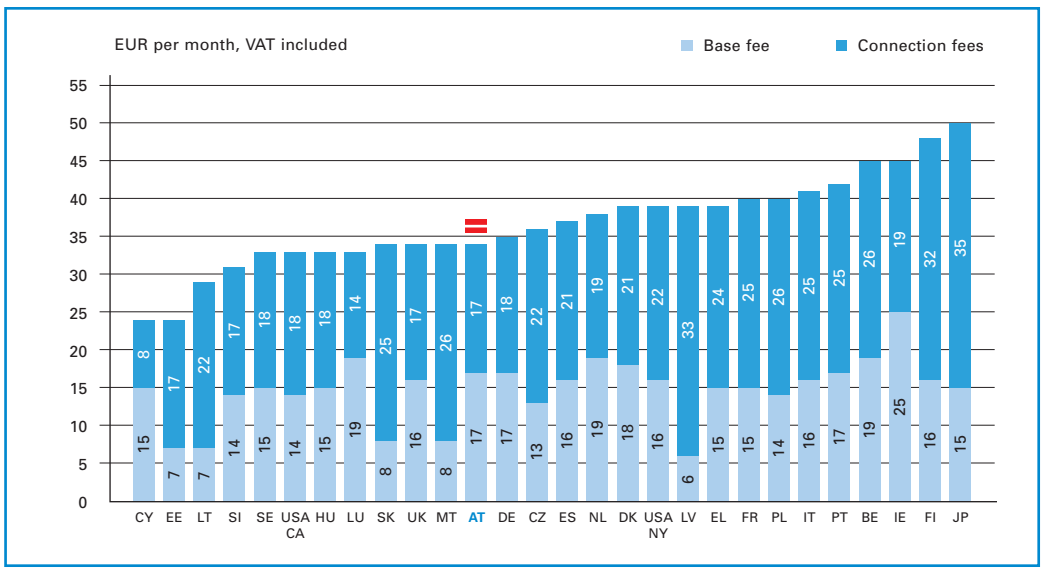
One problem inherent to international comparisons is the heterogeneous nature of rate models, billing structures, market structures, etc. Therefore, the figures indicated here must be interpreted with some degree of caution. Due to the numerous problems and inaccuracies which inevitably arise in such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

The data set used for this comparison was the 11th Implementation Report published by the European Commission (Annex II).

In general, this comparison only uses the standard rates of each incumbent operator. As this completely excludes the rates offered by alternative operators, it creates distortions which become even greater in cases where the incumbent's market share is lower and that of its – often far less expensive – competitors is higher. Such rate comparisons are subject to an additional limitation due to the widely varied and sometimes different forms of price differentiation among incumbent operators.

Residential customers

Figure 48: Residential customers: Average monthly expenditure



Source: 11th Implementation Report of the European Commission, September 2005

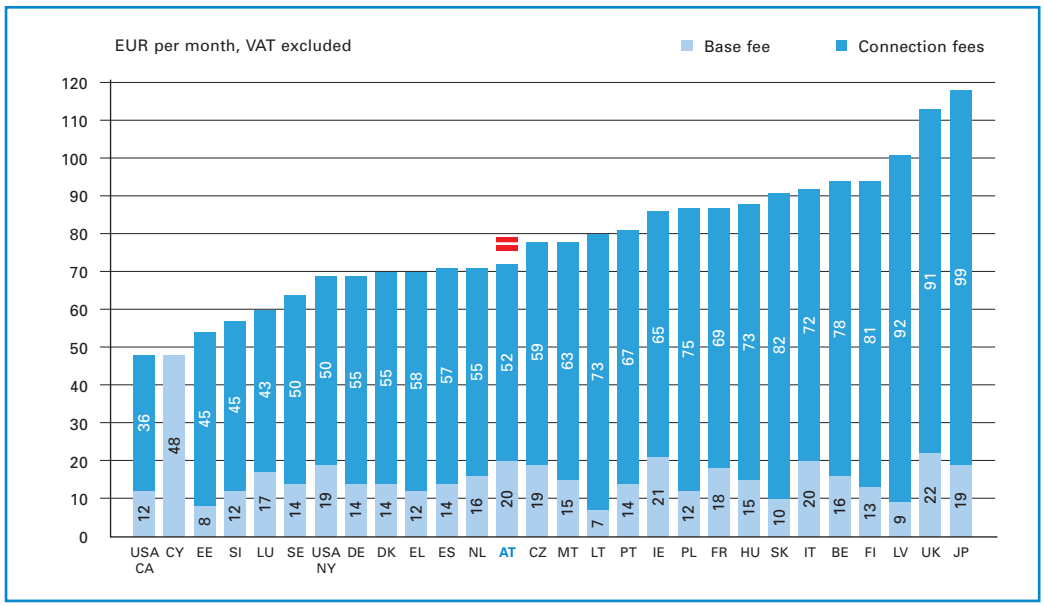
Austrian residential rates in the lower middle range by European comparison

With regard to the monthly base fee, the Telekom Austria rate package used in the comparison ("Tik Tak Privat") is just above the EU average. However, this relatively high monthly base fee is offset by low connection charges, which is why Telekom Austria is located in the lower middle range of operators based on a basket of services (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."

Business customers

Figure 49 shows the incumbents' monthly base fees and connection charges for business customers as of September 2005. As in the case of residential customers, Telekom Austria is again in the lower middle range among European operators (measured using a price basket). To reflect a representative European business user, the basket captures not only the fixed charge and the connection charge, but also national calls over various distances, international calls and calls to mobile networks.

Figure 49: Business customers: Average monthly expenditure



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

Source: 11th Implementation Report of the European Commission, September 2005

5.2.2.1.3 Wholesale markets

In order to offer products on the retail markets, operators rely on the services of other operators on the wholesale markets. The size and development of these markets are closely linked to the retail markets, as the demand for wholesale services arises from the demand for retail services. For this reason, the mutual effects between the retail and wholesale levels have to be taken into account in the analysis below.

RTR's TKMVO 2003 defined three relevant wholesale markets in fixed-link telecommunications as of October 17, 2003: The market for origination in the public telephone network at fixed locations, the market for termination in individual public telephone networks at fixed locations, and the market for transit services in the public fixed-link telephone network.

Origination

Origination refers to a wholesale service provided by subscriber network operators in which traffic initiated by users at the network termination points of their own communications network is carried to the nearest exchange capable of interconnection with other networks. An interconnectable exchange is one where such traffic is handed over to at least one other network operator.

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

Origination services are generally self-provided.

If an operator has customers directly connected 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.

Telekom Austria's origination services are crucial 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 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.

Table 17 shows Telekom Austria's origination charges during peak and off-peak times. On all wholesale markets, peak times are from Monday to Friday (business days) from 8:00 am to 6:00 pm, while all other times are considered to be off-peak.

Table 17: Telekom Austria's origination charges

Origination	Peak	Off-peak
Telekom Austria: to carrier network operators and service numbers	0.82	0.48

Figures in EUR cents (excluding VAT); as of December 31, 2005

Low volumes of origination minutes to target network-priced service numbers

In addition to those services, the service of origination to target network-priced service numbers is also used and provided on the origination market. These origination services are 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. As Telekom Austria possesses significant market power on the origination market, the regulatory authority mandated its origination charges (see Table 17). In contrast, the origination charges of the alternative network operators are not regulated.

Decline in origination minutes

Originating traffic minutes declined overall as a result of the decreasing number of retail customer minutes and lines. This has reduced origination minutes for which no revenues are generated on the wholesale market as well as origination minutes to carrier network operators. In contrast, origination traffic to target network-priced service numbers increased, but due to its low overall volume this type of traffic was not able to compensate for the declines in the other traffic types.

Termination

Termination is a wholesale service provided by each subscriber network operator in which incoming traffic is carried from the last interconnectable exchange before the network termination point to the termination point in the subscriber network.

Definition of operator-specific termination markets

The unique feature in the definition of termination markets is that they are specific to each network operator, that is, each subscriber network operator 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.

The analysis of termination markets carried out by the TKK came to the conclusion that each operator has significant market power on its own termination market.

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 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, UPC, which operates in certain regions of Austria, has the largest number of termination minutes among alternative operators, followed by Tele2UTA. The other fixed-link network operators handle substantially fewer termination minutes.

Two mobile network operators, T-Mobile and One, established new markets for termination at fixed locations in 2005: As these operators offer "mobile private branch exchange" services, their customers can be reached at geographical numbers; the call is terminated at a fixed location and forwarded to a mobile line if necessary.[6]

Due to its large number of connected subscribers, its size and its power on other markets, Telekom Austria would create different competition problems than smaller network operators in the absence of regulation. These problems require regulatory instruments 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.

Different regulatory obligations for Telekom Austria and ANOs

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).

Table 18 provides an overview of the regulated termination charges.

[6] For further information, see Section 4.2.3.1.6.

Table 18: Termination charges of Telekom Austria and ANOs

Termination	Peak	Off-peak
Telekom Austria	0.82	0.48
ANOs	1.28	0.71

Figures in EUR cents (excluding VAT); as of December 31, 2005

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 considered origination or termination as described in this context.

Operators which transport traffic out of their own networks provide transit services

Therefore, 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 operator's own network boundaries. 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 take in 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 in connection with origination and termination, transit network operators ensure that 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 in the form of traffic 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 veto of market definition

The European Commission did not agree with this market definition, 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 transit market analysis.

Transit market still regulated for Telekom Austria

As the European Commission took a different view and this market has not yet been analyzed further, the regulatory measures imposed under the old legal framework still apply. For this reason, Telekom Austria's transit charges for unbundled transit as well as bundled products are still subject to regulation (see Tables 19 to 21).

Table 19: Telekom Austria's unbundled transit charges

Unbundled transit	Peak	Off-peak
Regional	0.28	0.14
National	0.60	0.31

Figures in EUR cents (excluding VAT); as of December 31, 2005

Table 20: Telekom Austria's bundled product charges (origination and transit)

Origination	Peak	Off-peak
Single tandem	1.28	0.71
Double tandem	2.90	1.10

Figures in EUR cents (excluding VAT); as of December 31, 2005

Table 21: Telekom Austria's bundled product charges (termination and transit)

Termination	Peak	Off-peak
Single tandem	1.28	0.71
Double tandem	2.25	0.87

Figures in EUR cents (excluding VAT); as of December 31, 2005

Outlook

Instruction to prepare an expert opinion for another analysis of the origination market and termination markets

The TKMVO 2003 (Federal Law Gazette II No. 117/2005) defined the national origination market as well as operator-specific termination markets. On that basis, the TKK instructed official experts to prepare analyses of these markets in order to assess whether effective competition prevails or one or more companies possess significant market power on those markets. According to the results of the market analyses, further expert opinions were commissioned in order to investigate which regulatory instruments could be suitable for addressing the potential competition problems identified in each case.

Due to the European Commission's veto, the transit market was not included in the TKMVO 2003 (Federal Law Gazette II No. 117/2005; cf. Section 4.2.3.1.8). However, data has been collected from operators for the purpose of market definition.

5.2.2.2 Mobile communications

5.2.2.2.1 Providers

Active providers

Four mobile network operators, one MVNO and two resellers

In the reporting period, five fully integrated mobile network operators (MNOs) – which have been granted the corresponding frequency usage rights – as well as one mobile virtual network operator (MVNO) and two airtime resellers were active in Austria (cf. Table 22).

Table 22: Active providers of mobile communications services

Company	Type	Market entry
Mobilkom	MNO	1994
T-Mobile	MNO	1996
One	MNO	1998
tele.ring	MNO	2000
H3G	MNO	2003
Tele2UTA	MVNO	2003
eTel	Airtime reseller	2004
Yesss!	Airtime reseller	2005

Source: RTR

The fully integrated mobile network operators include Mobilkom, T-Mobile, One, tele.ring and H3G. Only those providers operate on all mobile communications markets. In the fall of 2005, T-Mobile took over tele.ring, and the corresponding approval procedures will be completed shortly. Given approval, this acquisition will reduce the number of competitively independent mobile network operators to four.

Mobile virtual network operators (MVNOs) are communications network operators which do not operate a radio communications network (or have the corresponding frequency usage rights), but they do operate essential network elements in the core network (HLR, MSC etc.) as well as possessing the corresponding addressing elements (e.g., a mobile network code) and administering SIM cards themselves. Operators in this category are active on all wholesale and retail markets with the exception of the national wholesale market for international roaming. According to the definition above, the only MVNO currently operating in Austria is Tele2UTA.

The primary function of airtime resellers is the separate marketing of mobile communications services in their own name and for their own account. However, they are not in any way involved in the production process underlying mobile services. Operators in this category only provide services at the retail level (customer support, billing and acquisition). In Austria, eTel und Yesss! can be assigned to this group; however, as a wholly-owned subsidiary of One, Yesss! can not be considered an independent provider in terms of competition.

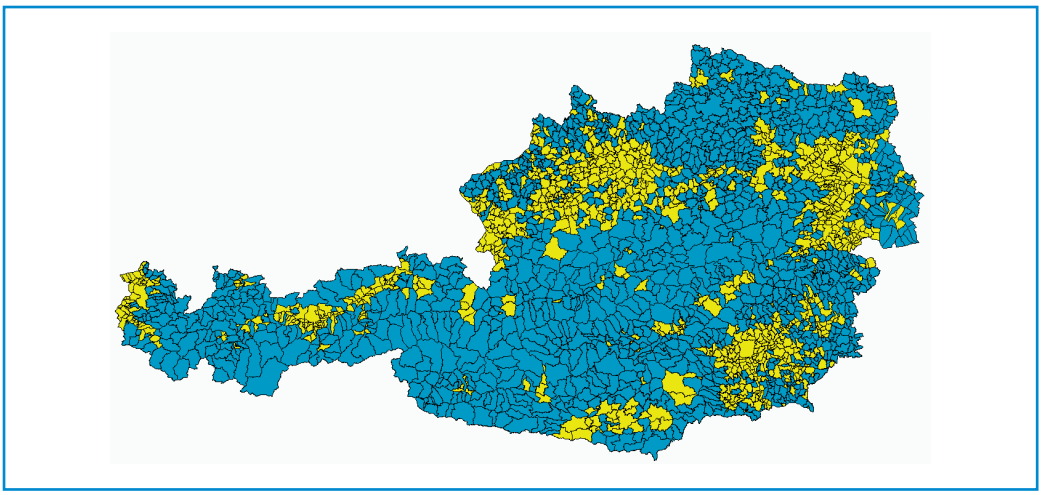
Allocation of 450 MHz frequencies

Improvement of broadband coverage in rural areas with 450 MHz frequencies

On April 18, 2006, the Telekom-Control Commission (TKK) completed the allocation procedure for frequencies in the 450 MHz range, allocating frequencies to Green Network AB (which has not yet begun to operate on the Austrian market) as well as T-Mobile Austria GmbH. These two companies emerged as the winners of the auction procedure by outbidding the Swedish company Nordisk Mobiltelefon AB.

These frequencies, which were previously used for the analog C-Network in Austria, display propagation characteristics which are especially favorable for service provision in rural areas. The technologies which can be used in this frequency range allow transmission speeds of 1 Mbit/s and higher. For this reason, in the relevant terms of use and coverage requirements, the TKK focused on the coverage of rural areas with mobile broadband wireless access (MBWA) technologies. Specifically, at least 310 municipalities with a density of less than 80 inhabitants per square kilometer are to be provided with broadband services by 2007, and 465 municipalities must be covered by 2009 (cf. Figure 50, areas shaded in blue).

Figure 50: Coverage requirements for 450 MHz frequencies



Source: RTR

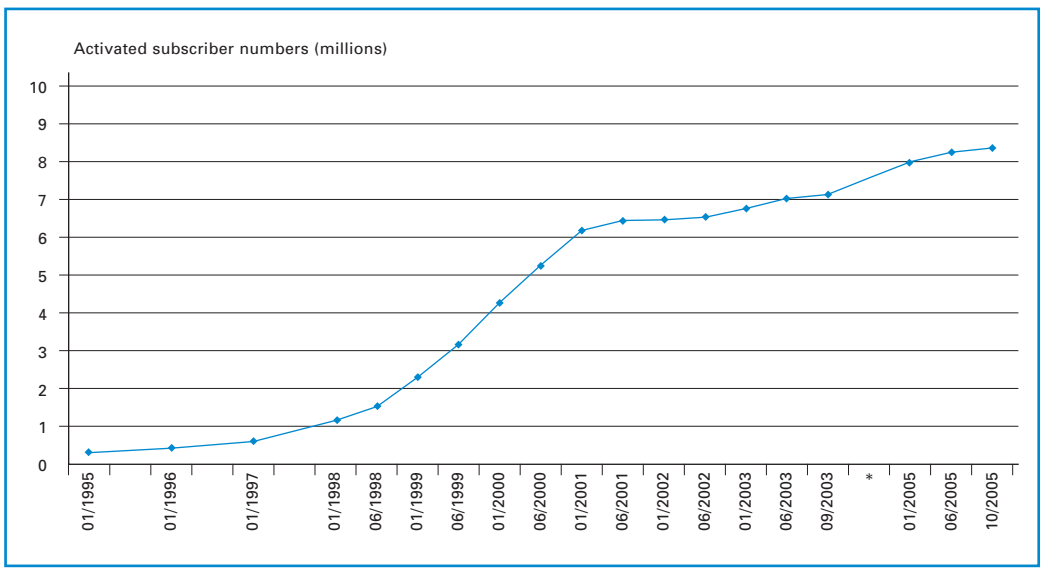
In the auction for these frequencies, the Telekom-Control Commission employed a combinatorial sealed-bid procedure for the first time. In the course of the auction, the bidders were allowed to submit bids for individual frequency packets as well as "package bids" for combinations of frequency packets. The applicants were required to submit their bids for frequency packets along with their applications, after which the bids could no longer be altered. The total proceeds from the auction came to EUR 5,974,900.00 and went to the Republic of Austria.

5.2.2.2.2 Market development

Penetration

At the end of 2005, Austria had a total of almost 8.4 million activated mobile subscriber numbers. This represents a penetration rate of approximately 102%.[7] Figure 51 shows the development of market penetration over time. Until the end of 2002, the development follows an S-shaped curve: After a phase characterized by a low adoption rate following the introduction of GSM in the early 1990s, a phase of strong market growth began around 1998 and lasted until early 2001. In 2001, the adoption rate contracted, only to stall completely in 2002. Since the end of 2002, the number of activated subscribers has continued to increase moderately.

Figure 51: Development of activated subscriber numbers



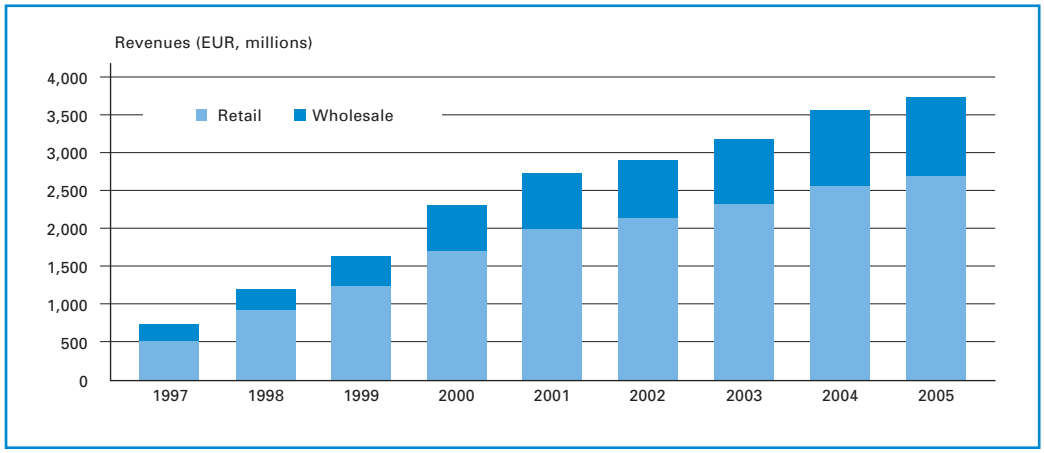
Source: RTR, Mobile Communications; * figures for 2004 not available

[7] Measured in terms of activated subscriber numbers.

Development of revenues

Similarly, the development of revenues has also been dynamic on this market (cf. Figure 52). Overall revenues from mobile services increased from approximately EUR 700 million in 1997 to more than EUR 3.7 billion in 2005. Growth rates in revenues have seen a substantial decline (from 80% in 1998 to approximately 5% in 2005). The share of revenues which can be attributed to wholesale services (interconnection, wholesale international roaming, resale of airtime) has risen from approximately 24% in 1997 to its current level of 28%.

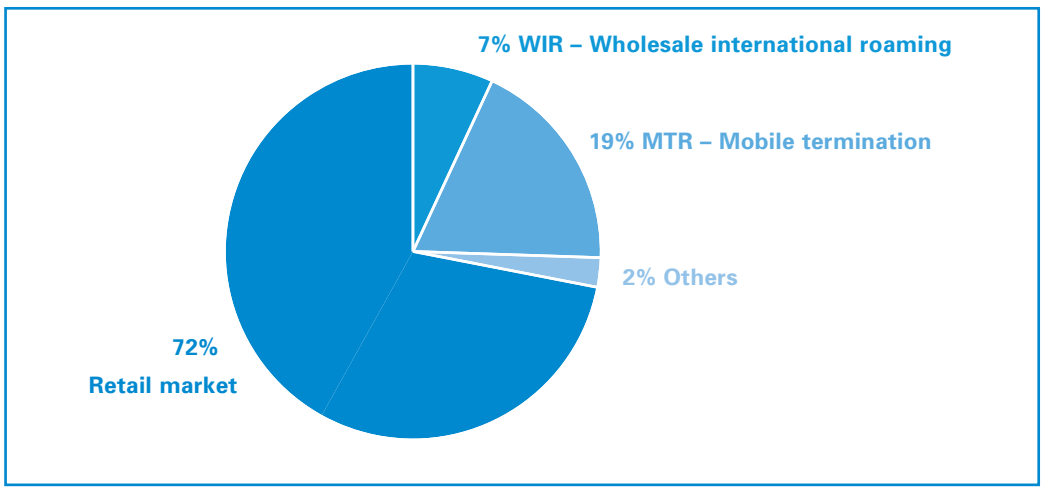
Figure 52: Development of revenues in mobile communications



Source: RTR

The majority of revenues (72%) are earned on the retail market (cf. Figure 53). Almost 19% of revenues can be attributed to mobile termination (MTR) and 7% to wholesale international roaming (WIR). A market analysis procedure is currently underway for the latter service. Two percent of revenues come from other wholesale products, such as SMS termination, origination, national roaming and airtime sales.

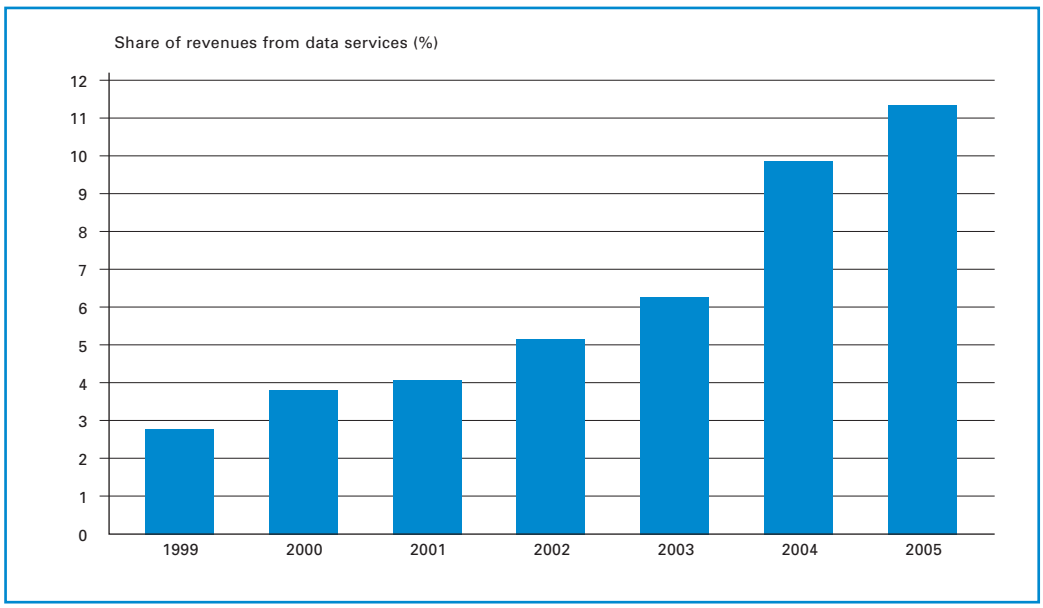
Figure 53: Revenues by value creation level



Source: RTR

Although the revenues from mobile data services have increased drastically since 1999, the bulk of revenues are still generated by voice services. Figure 54 shows the relative share of revenues from data services compared to overall revenues on the retail market. As the chart reveals, this share went from approximately 2.7% in 1999 to about 11% in 2005; growth in data services up to this point can mainly be put down to text messaging (SMS).

Figure 54: Share of data services in retail revenues



Source: RTR

The most significant innovation at the turn of the year 2005/2006 was HSDPA (high-speed downlink packet access); this refers to a further development of UMTS mobile technology which allows a data rate of over 1 Mbit/s for downloads and also exhibits a far shorter latency time. Operators in Austria will begin to offer data services based on this technology in early 2006.

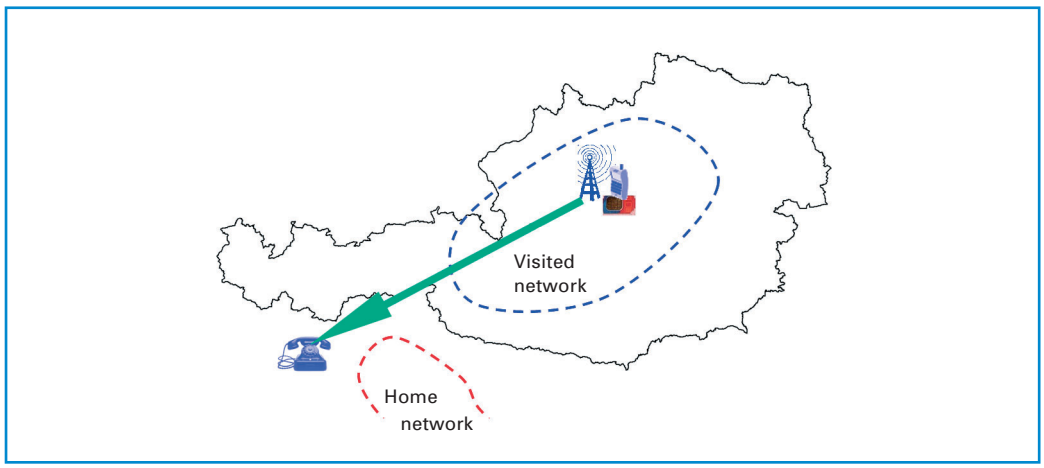
5.2.2.2.3 International roaming

Who roams in Austria, and where do Austrians roam?

International roaming is a highly topical issue at the moment. After years of examination, the European Commission now plans to regulate the prices for international roaming and is carrying out a consultation procedure on this matter. In parallel, the national regulatory authorities are analyzing the national wholesale markets for international roaming.

In mobile communications, the term "roaming" refers to the use of a mobile telephone outside the coverage area of one's own network operator (the home network), in which case the mobile phone uses the coverage service of another network (the visited network). In international roaming, the home and visited networks are located in different countries, and the coverage areas of the two networks do not overlap (or only overlap along shared national borders). The diagram below shows a call from a subscriber roaming in Austria to a number in his/her home country.

Figure 55: Call from a subscriber roaming in Austria to a number in his/her home country



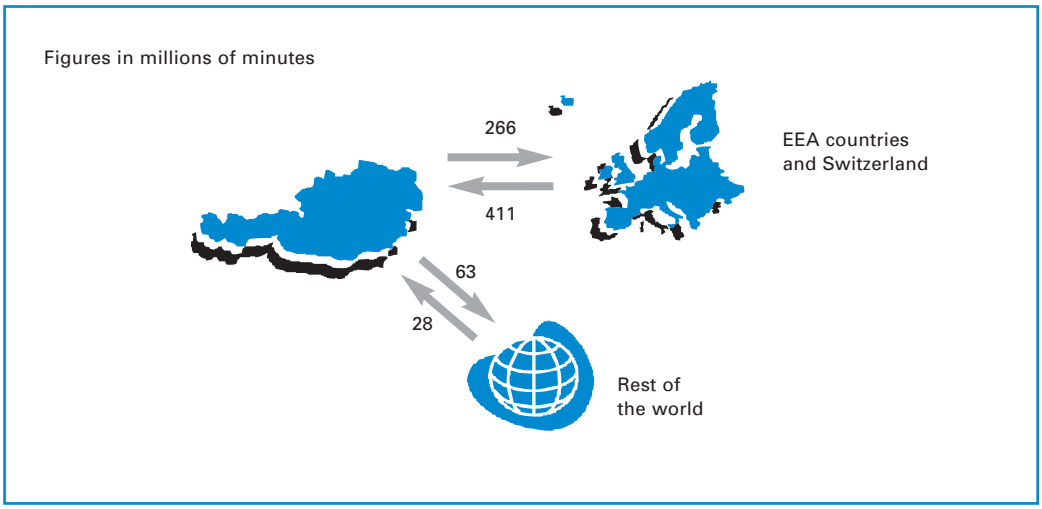
Source: RTR

The subscriber does not pay the visited network operator directly for the roaming service; instead, the amount is billed through the home network operator. The visited network charges the home network operator a fee known as an IOT (inter-operator tariff) at the wholesale level, and the home network charges the visitor a retail fee. The wholesale service provided by the visited network and the rate charged for this service (IOT) are the focuses of the analysis currently being carried out by the TKK on the national wholesale market for international roaming.

Traffic flows

As a typical tourism country, Austria has a net inflow of roaming traffic: Approximately 30% more call minutes can be attributed to foreign operators' subscribers visiting Austria (411 and 28 million minutes) than to Austrian operators' subscribers abroad (266 and 63 million minutes; cf. Figure 56). Over 90% of traffic comes from countries in the European Economic Area (EEA) and Switzerland, and 80% of the roaming traffic generated by Austrian subscribers is in those countries.

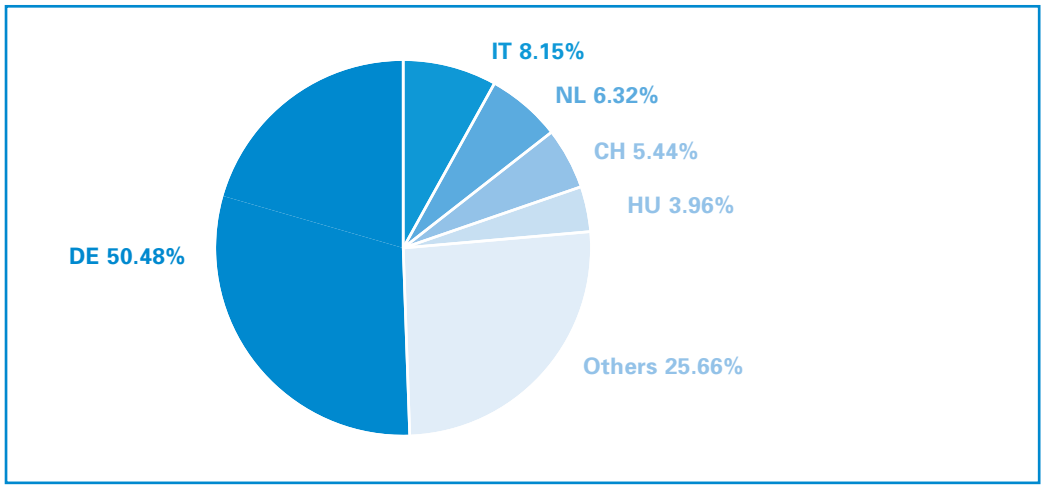
Figure 56: International traffic flows: Call minutes in 2004



Source: RTR

The five countries which use roaming services in Austria the most are Germany, Italy, the Netherlands, Switzerland and Hungary. These countries account for almost 75% of total demand; more than 50% of demand can be attributed to Germany alone.

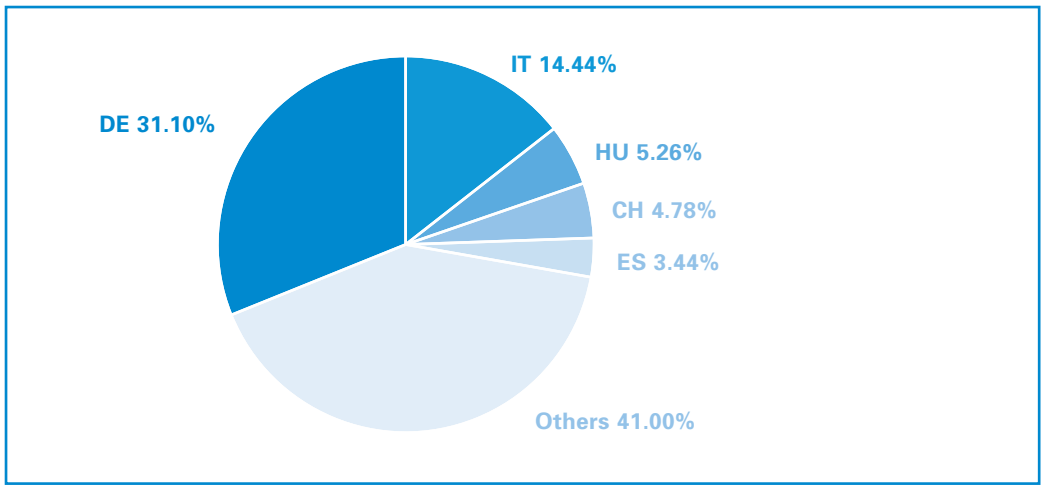
Figure 57: Who roams in Austria? (call minutes in 2004) *



Source: RTR

The countries in which Austria's mobile subscribers roam most frequently are Germany, Italy, Hungary, Switzerland and Spain (see figure below).

Figure 58: Where do Austrians roam? (call minutes in 2004) *



Source: RTR

* Data is not available for the entire year 2005, thus the calculations are based on 2004 data.

5.2.2.3 Broadband

5.2.2.3.1 Introduction

An alternative network operator or Internet service provider (ISP) might offer broadband access to 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 usually also 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.

Unbundling refers to an arrangement in which alternative network operators and other unbundling partners such as ISPs or leased line operators are not required to set up their own infrastructure to connect end-users directly but can use Telekom Austria's copper-wire access network (local loops) instead. The term "local loop" refers to the physical/electrical connection from the end-user to the switching facilities of the telecommunications network operator. This line, usually a copper wire pair, connects the network termination point at the subscriber's premises to the network operator's main distribution frame (MDF).

Most unbundled local loops are used for broadband access (xDSL), while voice telephony lines using unbundled local loops now play an increasingly subordinate role. The vertical relationship between unbundling and bitstreaming is described below.

Description of the vertical integration of unbundling and bitstreaming

Unbundling and bitstreaming are wholesale services offered at different stages of the value creation chain.

In unbundling, the respective subscriber's local loop is (electrically) 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).

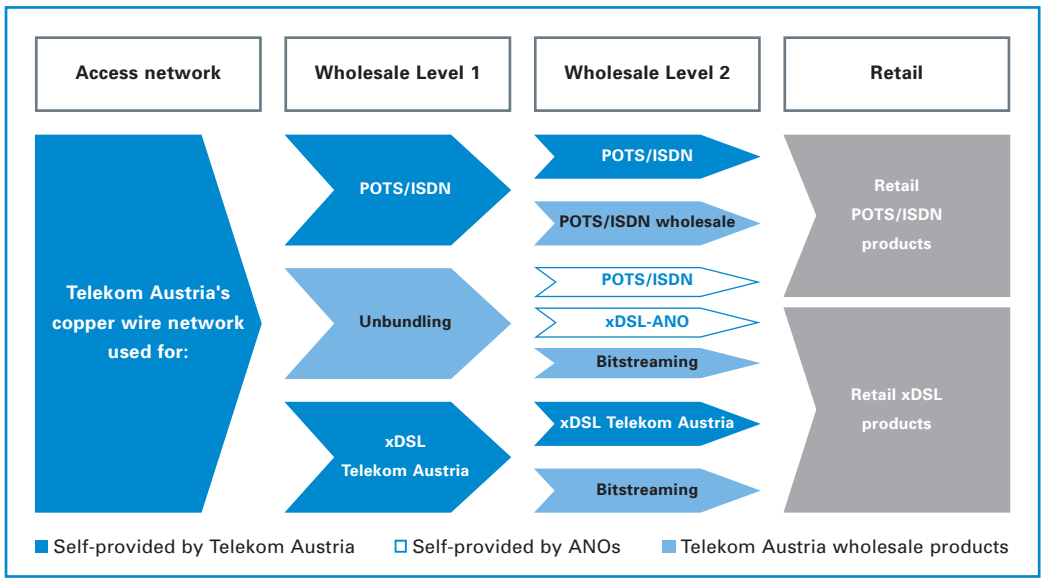
It is thus also possible to use the alternative wholesale product of bitstreaming (broadband xDSL access) at the next level of the value creation chain. The investments to be made by the alternative operator or ISP for bitstreaming are basically confined to constructing its own network infrastructure[10] in order to connect to at least one of nine ATM access points (PoPs) at which the

[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.
[10] This can also be implemented using leased lines.

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.

Finally, broadband xDSL access (e.g. Internet access) is offered at the retail level. The figure below illustrates the stages of the value creation chain described above.[11]

Figure 59: Levels of the value creation chain in the access network



Source: RTR

At Wholesale Level 1, Telekom Austria either uses the copper wire pairs in its access network to provide its own end-user products, or the local loop is leased to an unbundling partner. At Wholesale Level 2, Telekom Austria uses its broadband transmission systems (xDSL) and the underlying network to offer products to its own end-users or to offer these services as wholesale products to its competitors.

An ISP which uses Telekom Austria's wholesale products at Wholesale Level 1 (unbundling) engages in a higher level of autonomous value creation than a party which purchases these services at Wholesale Level 2 or the Retail Level. For this reason, unbundling intensifies competition on all downstream levels.

[11] Leased lines, cable TV networks and other access technologies were not included for reasons of clarity, as they would not have rendered any additional results and especially because a description of these technologies would not have provided any additional insight.

Broadband Internet

At the retail level, three main types of Internet access are currently implemented:

- Dial-in access (dial-in modem via PSTN/ISDN);
- Broadband access by means of digital subscriber line technologies (xDSL via own or unbundled local loops) or cable modem (cable TV networks/HFC);
- Leased lines.

These forms of Internet access differ in terms of bandwidth, prices, pricing categories (e.g., depending on data transmission volume) and quality.

The typical characteristics of broadband Internet access which set it apart from narrowband Internet access are as follows:

- Downstream capacity greater than 144 kbit/s (corresponds to 2x ISDN B channel + D channel);
- "Always on" service.

Various technologies used for broadband internet access

With regard to data rates, there is no (internationally) accepted standard definition of broadband access. Voice telephony can clearly be classified as a narrowband service. A conventional voice channel has a data rate of 64 kbit/s, while an ISDN line has 144 kbit/s (2x ISDN B channel + D channel). The regulatory authority has defined this data rate as the upper limit for narrowband services. Therefore, transmission speeds beyond that level are considered to be broadband.

Transmission technology

Digital subscriber line (DSL)

DSL is a technical means of implementing high bit-rate services on a conventional telephone line. One of the best-known designs is available on the market by the name of "ADSL" (asymmetric digital subscriber line). The term "asymmetric" points to the difference in transmission speeds in the downlink (to the subscriber, high bit-rate) and in the uplink (to the switching exchange, low bit-rate).

ADSL services may easily be realized together with an existing POTS or ISDN connection, since voice telephony (POTS, ISDN-BA) and the ADSL data service use disjunct frequency bands (i.e., ADSL works in the higher frequency band). The respective signals are split by means of frequency filters (also known as splitters) at the customer's end and at the local switching exchange. At the user's end, each subscriber has an ADSL modem, while at the switching exchange's end the modems are implemented technically in the DSLAM (Digital Subscriber Line Access Multiplexer), which compiles data packets from individual subscriber lines for further transmission (or, conversely, distributes the packets to the subscribers). In order to transport the data packets from the DSLAM on the MDF at the local exchange to the service provider (typically an ISP), a separate data network is used (e.g., based on ATM).

In addition to asymmetric transmission methods, there are also symmetric technologies (e.g., SDSL) in which the entire frequency spectrum on the subscriber line is used for high bit-rate data transmission.

Leased lines

Although broadband access (also to the Internet) can be implemented using leased lines (depending on the capacity), the characteristics of these lines differ from those of DSL services and Internet access via cable modem. In contrast to DSL services, leased lines provide dedicated capacity for exclusive use by the customer, thus ensuring consistent transmission quality. In DSL services, such dedicated capacity is only available in the local loop area, whereas on the backbone (e.g. ATM) the simultaneous use of transmission capacity (i.e., shared capacity) may have negative effects on usage due to potential transmission bottlenecks, depending on the dimensioning of overbooking factors. Broadband Internet access via leased lines is in higher demand among large companies.

Cable modem (CATV / HFC network)

Broadband access via cable modems takes an approach that is similar to DSL (shared capacity as opposed to dedicated capacity with leased lines). In this context, the infrastructure (or bandwidth) is not dedicated exclusively to each customer, even in the final section of the line to the customer (in contrast to DSL). Advertising, pricing, and response behavior in the case of product changes/expansions as well as bandwidths indicate that xDSL and cable modem access are equivalent in both technical and economic terms at the retail level.

Other access technologies for broadband Internet access

In Austria, other access technologies were not as widespread as xDSL and CATV in 2005:

- PLC (power lines): This technology has basically not progressed beyond the experimental stage. Pilot operations were partly discontinued after several years. As the electrical cables used for transmission are unshielded, part of the high-frequency energy used for transmission is radiated. In the same radio frequency range, this interference potential can cause substantial disturbances and even sustained interruptions in service for both fixed-link and mobile subscribers to emergency, security and rescue radio services, for amateur radio stations operated near a PLC system, and for shortwave radio reception.

- WLAN: At the moment, WLAN is spreading rapidly in Austria. It is used for quasi-mobile ("nomadic")[12] broadband access at hot spots (airports, train stations, cafés) and as an alternative to line-based broadband Internet access in rural areas where this service is not available (fixed wireless access). Although WLAN is spreading fast, the absolute number of end users is still relatively low (an estimated 15,000 at the end of 2005).

[12] Without, however, meeting all mobility requirements such as full coverage, handover, etc.

- 3G: All of the mobile network operators active in Austria operate a UMTS network in compliance with their license requirements (especially with regard to coverage levels). At present, this technology is not (yet) regarded as a substitute for line-based Internet access. The prices for mobile broadband access are (still) substantially higher than those charged for fixed-link broadband access with comparable download volumes. The widespread availability of HSDPA, a UMTS-based technical solution, is yet to be realized.

Other access technologies, such as satellite, FTTH (fiber to the home), etc., still play a secondary role in Austria.

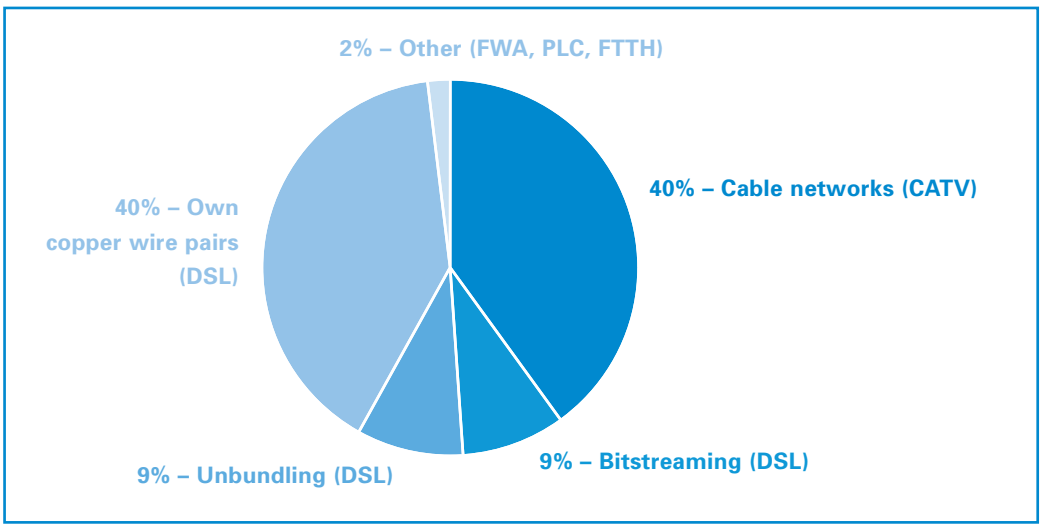
5.2.2.3.2 Retail market for broadband Internet

At the end of 2005, broadband Internet connections were available for almost all households in Austria (nearly 94%), and more than one third of households (35%) had taken advantage of this possibility. This comparison makes it clear that the services are offered by the network operators, but the customers' use of these services is nowhere near their full capacity.

The figure below shows the distribution of technologies used on the retail consumer market.

Figure 60: Types of broadband access

More than half of all broadband Internet access is provided via DSL.



Source: RTR (KEV)

The chart clearly shows that more than half of all broadband connections are DSL-based.

5.2.2.3.3 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 (Internet Service Providers Austria) and Telekom Austria, an agreement regarding a standard wholesale offer (the "ISPA offer") was reached in March 2000.

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.

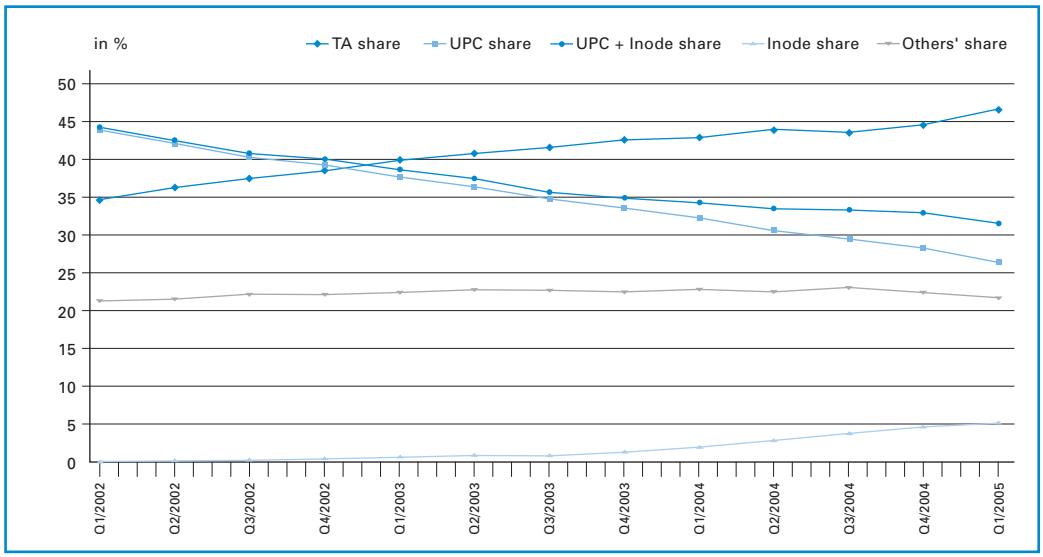
The wholesale xDSL-based product referred to as "bitstreaming" is largely provided by Telekom Austria (more than 90%). To a small extent, unbundling partners also offer bitstreaming services to other ISPs via unbundled local loops.

After a comprehensive analysis of the wholesale broadband market, the TKK issued Decision M 1/05, which identified Telekom Austria as an operator with 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 in large parts of Austria (approximately 1/3 of Austrian households) Telekom Austria is the only operator which owns access infrastructure.

The chart below compares the development of Telekom Austria's market share and that of its largest competitor, UPC/Inode.

Figure 61: Development of market shares

Telekom Austria records increasing market share.



Source: RTR

Because Telekom Austria was identified as an SMP operator, 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.

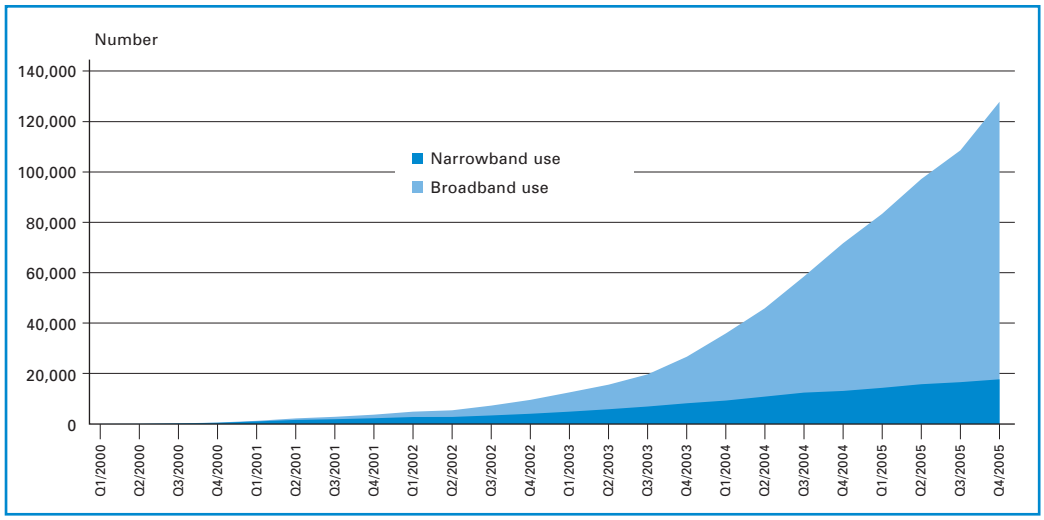
5.2.2.3.4 Wholesale unbundling market

Unbundling has been available in Austria since mid-1999. Since that time, its possible 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 13/03, Telekom Austria – which has a market share of practically 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, and Inode, Tele2UTA as well as numerous regional providers have taken advantage of these incentives (in some cases intensively).

The figure below shows the development of unbundled local loops between 2000 and 2005.

Figure 62: Development of ULLs (unbundled local loops) in Austria



86% of unbundled lines are used for broadband access.

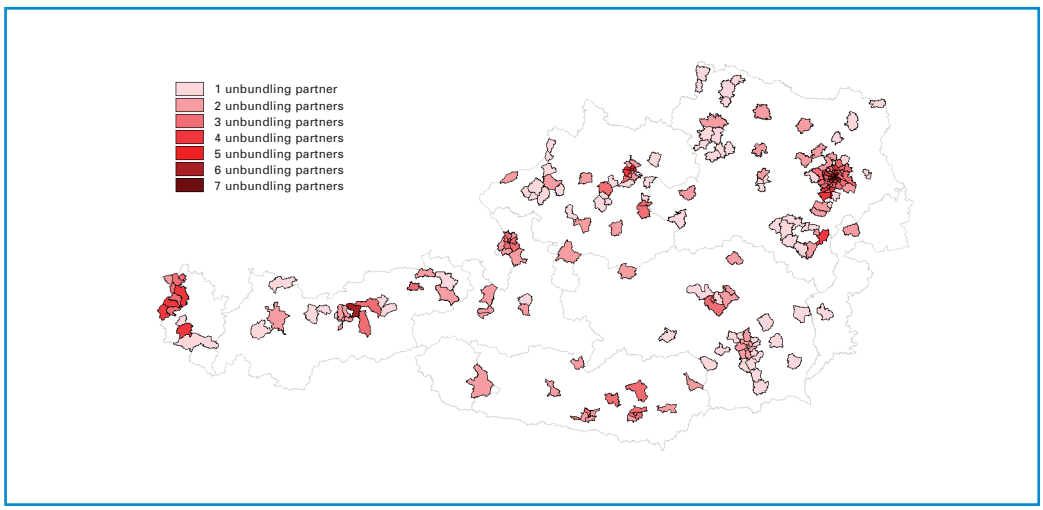
Source: RTR

The annual growth rate in the number of ULLs (unbundled local loops) came to approximately 80% in 2005. By the end of the year under review, a mere 5% of all Telekom Austria lines had been unbundled. As shown in Figure 62, the proportion of ULLs used for broadband is increasing steadily and had reached approximately 86% by the end of 2005.

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 MDFs as well as the population density in each area. However, the real 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).

The potential coverage of households is shown in Figure 63, which reveals the number of unbundling partners which operate a collocation at a main distribution frame (as potential competitors in addition to Telekom Austria and the cable network operators).

Figure 63: Potential coverage of households with ULLs



Source: RTR

58% of households are potential unbundling candidates.

The shaded areas in Figure 63 represent those areas where unbundling partners have infrastructure available. Especially in the capitals of Austria's provinces, multiple unbundling partners are represented, meaning that retail customers can choose one of several unbundling partners (up to seven) as their primary broadband access providers in addition to Telekom Austria and a local cable network operator.

The shaded areas in Figure 63 show that approximately 58% of Austrian households could already be unbundled. These figures make it clear that this market has enormous potential, although only about 130,000 of the 1.9 million potential households have been unbundled.

5.2.2.4 Leased lines

5.2.2.4.1 Introduction

Leased lines provide a fixed connection for data and voice transmission.

Leased lines support the transmission of voice, audio, video and data. With its ability to provide transparent transmission capacity between two points without switching functions (i.e., the user does not have the option of on-demand switching), a leased line is available as a point-to-point connection exclusively, constantly (24 hours/365 days) and at a guaranteed bandwidth. The data rates offered ranged from a few kilobits per second to 2 Mbit/s and even 155 Mbit/s or more.

Without leased lines, many communications services as well as other business activities would not be possible: Enterprises – referred to in this context as retail customers – generally use leased lines for LANs between two or more business locations (e.g., to connect a branch office to headquarters) or to interconnect private branch exchanges, for video conferencing connections and

for electronic data exchange between providers and their customers. Communications service providers and network operators which do not have (sufficient) infrastructure of their own also rely on leased lines to build or supplement their networks. For example, leased lines can be used to connect mobile radio transmitter antennas to a higher network level or to connect subscribers to a network. In this way, operators can expand the coverage area of their communications services or offer higher transmission capacities. 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 case.

On the retail market, products which allow data to be transported between two or more points are offered in addition to leased lines. These include the following:

- Frame relay;
- ATM;
- Broadband Internet access;
- IP VPN;
- Ethernet;
- Dark fiber.

Retail customers not only require leased lines.

These products are described in further detail in the Info Box below.

Info Box 3: Description of products

- **Frame relay**
  Frame relay (FR) is a network technology designed to transport packets of differing lengths. This technology creates a fixed channel between the two terminal points between which information is to be transmitted. The classic use of frame relay is for creating local area networks (LANs).

- **ATM**
  Asynchronous transfer mode (ATM) is a network technology which supports the transmission of data in cells or packets of a fixed length, thus making it especially suitable for time-critical applications (e.g., video, VoIP). Like FR, ATM sets up a fixed channel between two terminal points between which information is to be transmitted.

- **Broadband Internet access**
  Broadband Internet access provides access to the Internet at an IP interface between the network operator and the customer. The connection of locations with Internet access enables the exchange of data via the Internet according to the quality of the respective Internet connections.

VPNs connect multiple locations.

- **VPN**
  A virtual private network (VPN) offers the functionality of a private network (i.e., communication between specific locations only) but uses public infrastructure.

- **IP VPN**
  Internet protocol virtual private networks (IP VPNs) use the Internet protocol to offer the functionality of a virtual private network (VPN). In contrast to ATM, IP allows the transmission of data from the sender to the recipient without a dedicated connection. IP is well suited for local area networks (LANs) as well as wide area networks (WANs). The network operator is generally able to guarantee a certain level of data transmission quality in its network.

- **Ethernet**
  Ethernet is a network technology in which messages are divided into packets of different lengths and – in contrast to ATM – can be transported on the network without establishing a specific connection. Ethernet is the predominant network technology used in local networks; recently, Ethernet services have also been offered by network operators. These services can be categorized as those which offer the same functions as a leased line and those which offer different functions (e.g., on-demand switching functions).

Customers must provide their own switching components to use dark fiber.

- **Dark fiber**
  In this case, the customer is provided with a fiber optic cable between two points; in order to use this line to transmit signals, the customer has to furnish the appropriate technical transmission components.

Leased lines can be categorized in different ways. In particular (and according to the market delineation in the TKMVO 2003 and the European Commission's recommendation on relevant product and service markets), the following relevant markets are distinguished, also on the basis of the previously introduced differentiation of retail and wholesale customers:

- The minimum set of leased lines, which comprises specified types of leased lines up to and including 2 Mbit/s (retail market);
- Trunk segments of leased lines (wholesale market);
- Terminating segments of leased lines (wholesale market).

The relevant retail market comprises leased lines with a bandwidth up to and including 2 Mbit/s; the markets for trunk segments and terminating segments are not subject to bandwidth restrictions. Retail leased lines with bandwidths higher than 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. For a list of all relevant markets, please refer to Section 4.2.1.1.2.

In the sections that follow, the development of the leased line sector in Austria (and by international comparison) is discussed in greater detail.

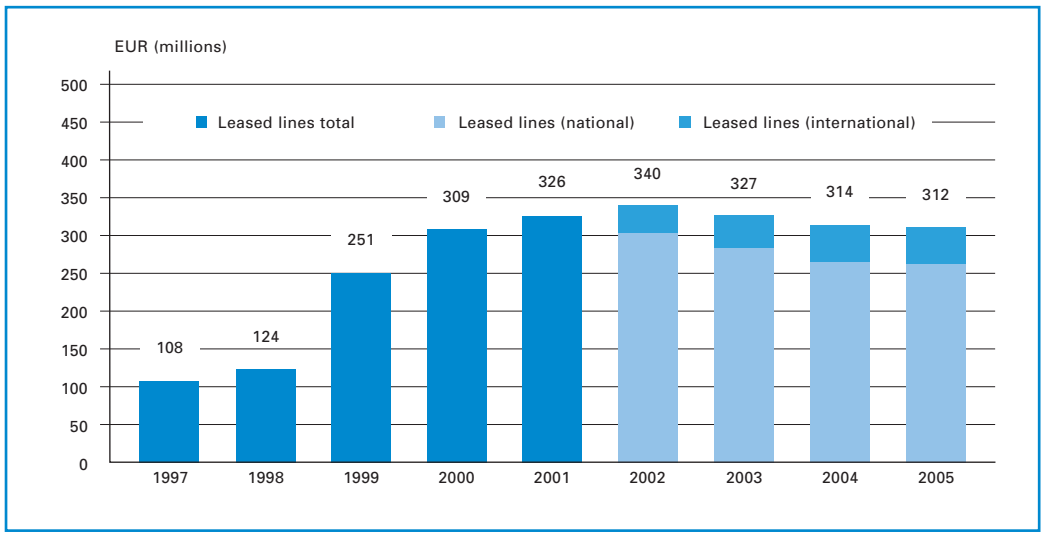
5.2.2.4.2 Market data

Development

Revenues from leased lines decreasing slightly

As of December 2005, approximately 74,000 national leased lines were in use in Austria, generating revenues of EUR 262 million. Compared to 2004, this represents a decline in the number of leased lines as well as the revenues they generate. In general, one can observe a decline or plateau in revenues from national leased lines starting in 2003. In contrast, revenues from international leased lines have risen steadily since the start of detailed data collection in 2002; 16% of all leased line revenues were generated by international leased lines in 2005. Nonetheless, the volume of leased line revenues has continued to decrease marginally over time, as can be seen in the chart below.

Figure 64: Development of revenues from leased lines, 1997 to 2005



Source: RTR

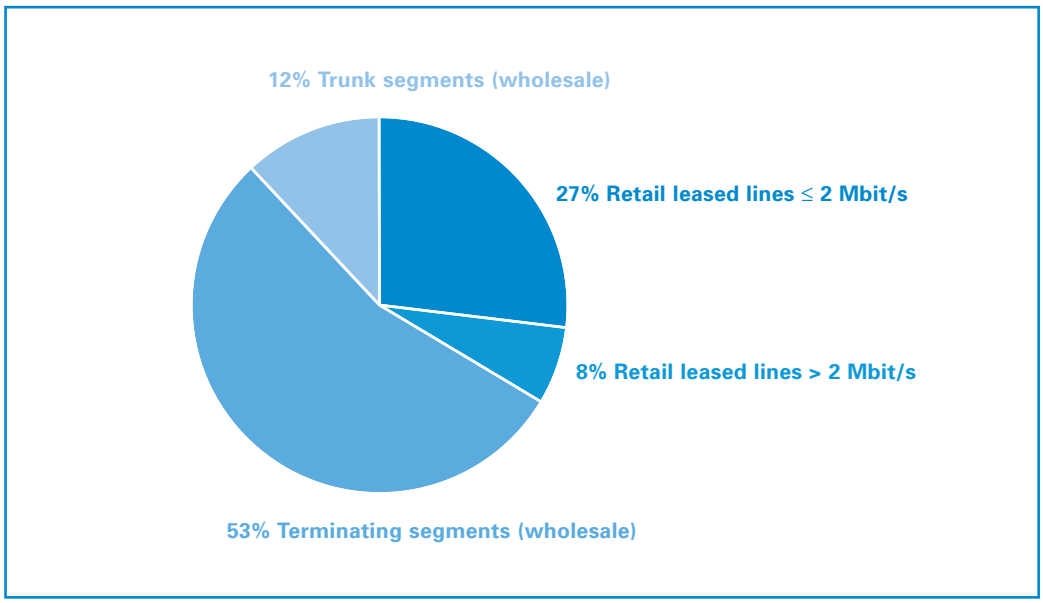
The divergence in the values for 2003 and 2004 from last year's Communications Report stem from the fact that the last indicated annual totals were estimates; the new figures represent the actual values.

Revenues increased only in the case of retail leased lines > 2 Mbit/s.

Since 2003, demand for retail leased lines with bandwidths higher than 2 Mbit/s has increased drastically, whereas the three relevant markets have shown a declining tendency. This is most clearly visible in the case of retail leased lines up to and including 2 Mbit/s. As in previous years, the highest percentage of demand for leased lines in 2005 was on the market for terminating segments, followed by retail leased lines up to and including 2 Mbit/s. Figure 65 shows the distribution of revenues in 2005 on the three relevant markets and for national retail leased lines with bandwidths higher than 2 Mbit/s, clearly indicating that the bulk of revenues can be attributed to the wholesale level. The demand for leased lines depends on the development of communications infrastructure, especially at the local level. Due to their small share of the overall market (8%), the increased demand for retail leased lines with bandwidths higher than 2 Mbit/s did not have a substantial impact on overall revenues from leased lines.

Figure 65: Distribution of revenues by segment

Highest demand generated by communications operators



Source: RTR, average for 2005

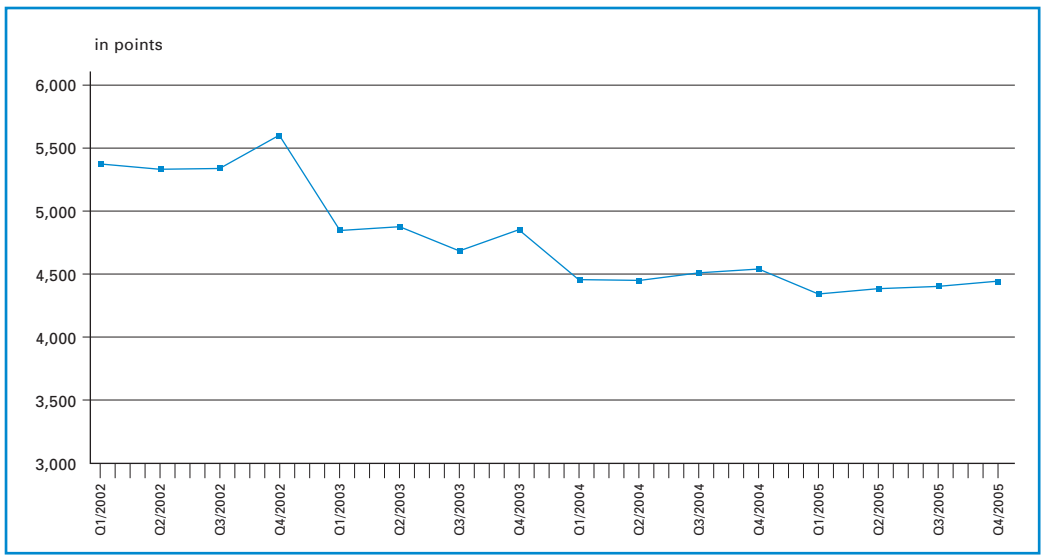
Concentration

The most important providers of leased lines in Austria are Telekom Austria and Tele2UTA. Other large providers of leased lines in Austria are EVN, Memorex, Salzburg AG and Wienstrom. A total of nearly 50 companies serve the demand for national and international leased lines. A majority of these providers operate on the retail market. In this segment, the market also saw the largest number of new entries in the reporting period, although the newcomers consistently have very small shares of the market.

Austria has almost 50 providers of leased lines, but concentration is still high.

The constantly increasing number of operators has also led to a decrease in market concentration, which, however, still remains at a high level. The HHI for the "revenues" parameter is used as a measure for concentration. The calculations include all revenues from national and international leased lines since the first quarter of 2002. Here it becomes clear that concentration appears to have leveled off at approximately 4,500 points after a period of dramatic decline. Figure 66 shows this development in graphic form. The outliers in the fourth quarter of each year are due to the revenues reported by one company.

Figure 66: HHI for leased line revenues



Concentration has decreased over time.

Source: RTR

The concentration in leased lines varies according to the relevant market; as a result, different regulatory remedies are used on each of these markets. As mentioned in Section 4.2.3.1.10, Telekom Austria's reference offer for wholesale leased lines was reviewed by the TKK in 2005, thus lowering the barriers to market entry for providers who do not have their own infrastructure.

Leased line providers come from many segments, including voice telephony operators as well as companies specializing in infrastructure. The latter are generally infrastructure providers from other industry sectors (e.g., power supply) which regard telecommunications as a secondary business area and can use their existing lines. Leased lines are also offered by regional network providers, and a number of Internet service providers have also added leased lines to their product range. International groups whose global networks are in part located in Austria also operate on the Austrian market. Pure resellers only have rather small shares of market.

5.2.2.4.3 International

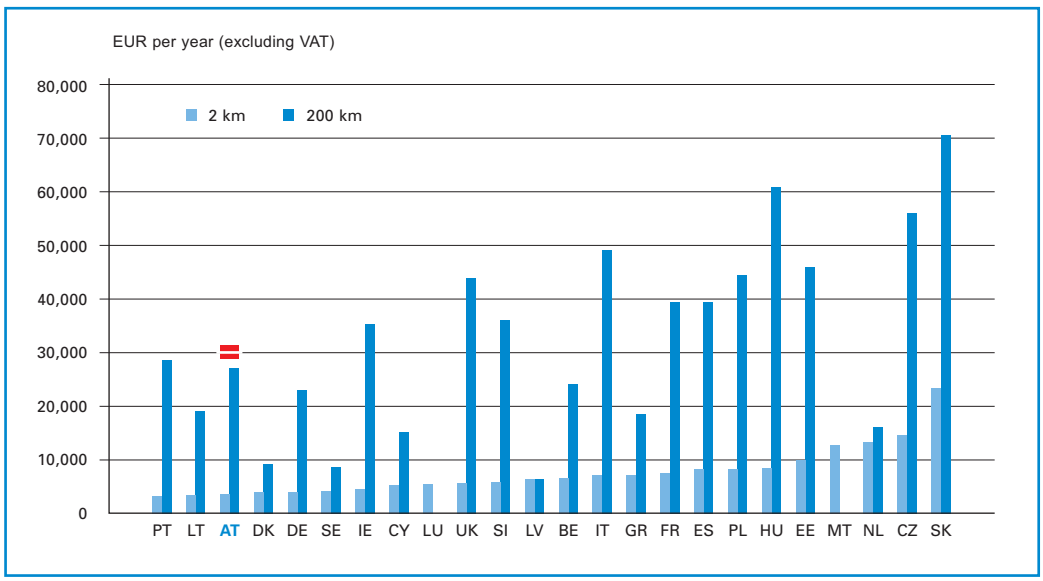
In this section, we measure Austrian prices based on an international comparison of rates at the European level. Here it is necessary to note that pricing models, billing structures, market structures, etc. are not always similar. Therefore, the figures indicated below must be interpreted with some degree of caution. The data set used for this comparison was the 11th Implementation Report published by the European Commission (Annex II).

Rate comparisons must be interpreted with caution.

The annual expenses incurred by a retail customer for 2 Mbit/s leased lines 2 km and 200 km in length are compared here. Connection setup charges and taxes are not included. No prices at all were included for Finland, nor for 200 km leased lines in the case of Luxemburg and Malta. The 2 Mbit/s data rate was chosen for this comparison because at the retail level it is the most important product compared in the Implementation Report. In the observation period, demand for 64 kbit/s retail leased lines in Austria showed a substantially larger decline than demand for 2 Mbit/s lines.

Figure 67: International leased line prices (2 Mbit/s)

Austrian prices are below the EU average.



Source: 11th Implementation Report of the European Commission

Telekom Austria's rates for 2 Mbit/s leased lines are below the average for both distances compared here. In fact, Austria's prices are among the lowest (3rd place) for the shorter lines.

5.2.2.5 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. Nine providers of certification services were active on the Austrian market in 2005:

- Arge Daten - Österreichische Gesellschaft für Datenschutz;
- A-Trust Gesellschaft für Sicherheitssysteme im elektronischen Datenverkehr GmbH;
- Generali IT-Solutions GmbH;
- Institut für Angewandte Informationsverarbeitung und Kommunikationstechnologie (IAIK);
- Mobilkom Austria AG & Co KG;
- XiCrypt Internetsicherheitslösungen GmbH;
- Main Association of Austrian Social Security Institutions (starting on February 1, 2005);
- Trosoft Entwicklungs u. Vertriebs GmbH (starting on March 7, 2005);
- City Administration of Vienna (starting on December 21, 2005).

In addition, Energie-Control GmbH reported on November 28, 2005 that it would be providing certification services starting in 2006.

The certification service providers mentioned above offered a total of 27 certification services covering the entire spectrum of certificates in 2005. In general, the services offered can be categorized as follows:

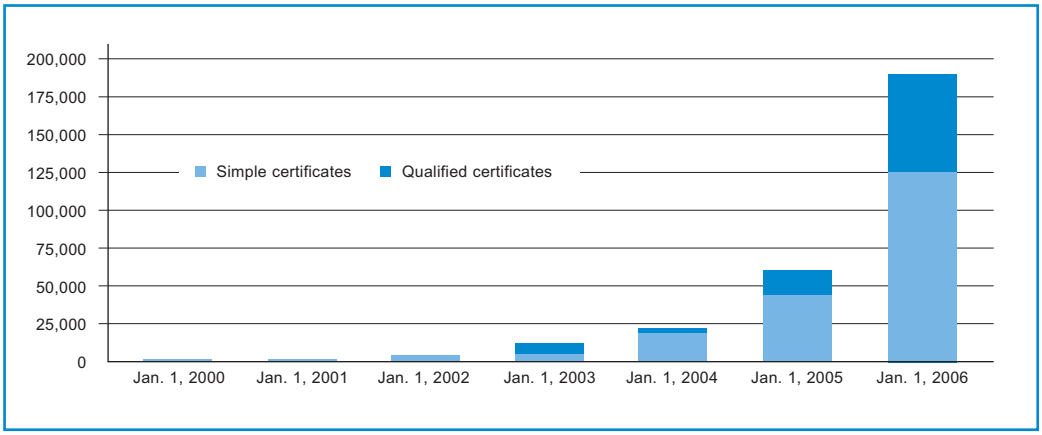
- **Qualified certificates for secure electronic signatures:** These certificates are issued only after an identity check by means of an official photo ID and only for keys stored on secure signature creation devices. As secure electronic signatures are legally equivalent to a personal handwritten signature, these certificates are mainly used for legal transactions. Secure electronic signatures have been offered in Austria since early 2002. In 2005, 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 and the Main Association of Austrian Social Security Institutions in 2005.

- **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. The corresponding certification services were offered by Arge Daten, A-Trust and Trosoft in 2005. 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.

Figure 68: Number of certificates issued by Austrian providers



Source: RTR

Since the Signatures Act (SigG) went into effect on January 1, 2000, the number of certificates issued in Austria has roughly tripled each year. As of January 1, 2006, approximately 65,000 qualified certificates and 125,000 non-qualified certificates existed in Austria,[13] thus making for a total of around 190,000 certificates.

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 tested and certified a total of 11 smart card types by the end of 2004. 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.

[13] This figure also includes those non-qualified certificates which are issued together with a qualified certificate on a chip card.

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 as a competence center

Under the KommAustria Act (Art. 5 Par. 3 No. 5 and Art. 9 KOG), RTR was assigned the legal mandate to set up and maintain a competence center for matters related to the audiovisual media and telecommunications industries. The sections that follow describe RTR's activities as a competence center in the reporting period.

6.1 Broadcasting Division

6.1.1 Research Institute for Electronic Mass Media Law (REM)

The Research Institute for Electronic Mass Media Law (*Forschungsinstitut für das Recht der elektronischen Massenmedien*, or REM) was founded in early 2005 and is dedicated to academic research on electronic mass media law at the Austrian and international levels.

REM conducts research on legislative initiatives.

REM was established as a non-profit association within RTR. The institute conducts basic and accompanying academic research on current legislative initiatives and is available as a resource for inquiries concerning this subject area. The REM Board of Directors comprises Prof. Walter Berka (University of Salzburg), Prof. Christoph Grabenwarter (University of Graz), Alfred Grinschgl (RTR), Prof. Michael Holoubek (Vienna University of Economics and Business Administration), Hans Peter Lehofer (Austrian Administrative Court) and Matthias Traimer (Austrian Federal Chancellery).

In addition, the association organizes the annual Austrian Broadcasting Forum, which is intended to support the regular exchange of ideas between academics and practitioners. The first Austrian Broadcasting Forum was devoted to the topic of "Media freedom versus content regulation" and took place on June 23-24, 2005 in Vienna.

Papers on the lectures given are available on the REM web site (http://www.rem.ac.at, in German).

6.1.2 Involvement in training and education measures for broadcasters

Under the KommAustria Act (KOG), RTR's legal mandate to maintain a competence center explicitly includes the cooperation of RTR's Broadcasting Division in training and education measures for the employees of broadcasting companies.

In the reporting period, the Broadcasting Division at RTR took part in two such measures for the training and continuing education of employees at broadcasting companies:

RTR took part in two education and training events in 2005.

On October 4, 2005, *Privatsenderpraxis* (an association focusing on private broadcasting practice) was presented to the broadcasting community. This association arose from an initiative of the Austrian Association of Private Broadcasters (VÖP) and organizes training and education for the employees of private radio and television broadcasters with the general objective of increasing the quality of private broadcasting in general (and thus also its competitiveness). Wolfgang Struber, Managing Director of Radio Arabella in Vienna, is the association's chairman.

In the first stage, around ten workshops per year will be held on all relevant subjects, from moderation to selling advertising time. These workshops are also open to licensed commercial broadcasters and their marketing organizations which do not belong to the association. Further information can be found at http://www.privatsenderpraxis.at.

Alongside its cooperation with commercial radio broadcasters, RTR also concluded a grant agreement with the *Verband Freier Radios Österreichs* (Austrian association of free radio broadcasters, or VFRÖ) in the fall of 2005 for the training and continuing education of employees at Austria's free radio broadcasters.

Since October 2005, the VFRÖ has organized training and education events for the makers of private radio and television in Austria, focusing on the needs of non-commercial broadcasters. By the end of 2006, a total of 26 continuing education events will have been organized throughout Austria. The focuses of this organization's program for December 2005 were basic courses on technology and journalism as well as moderation/elocution training and media law.

6.1.3 RTR study: "Interdependencies between various advertising markets"

In June 2005, RTR hired Uwe Hasebrink of the Hans Bredow Institute in Hamburg to draw up an expert opinion on the advertising markets in Austria.

Study presented to the public in November 2005

The study investigated the extent to which the existing advertising regulations in Austria attain their objectives in the development of a dual broadcasting system. In order to answer this question, research included theoretical considerations and experience in other countries as well as interviews with representatives of Austria's media industry. The initial finding was that there are hardly any systematic models or data with which the actual effects of individual regulations can be determined on the various sub-markets.

This opinion also draws attention to the public discourse on the further development of the dual system in Austria.

Joint deliberation of all stakeholders

In light of the fact that the precise effects of individual regulations can hardly be verified with certainty in the development of legal bases, it seems appropriate to recommend that the relevant regulations be well justified and transparent in an overall political vision of the Austrian media system.

According to the experts, it may be advisable to set up an independent commission which would publish a regular report on the state of the advertising markets, including recommendations regarding legal bases.

Problems related to the observance and general acceptance of the rules arise in particular where the parties concerned can not comprehend the reasons behind the rules. In this respect, the steady transformation of the media constantly brings about new challenges in media regulation, which must repeatedly review the extent to which the premises of applicable regulations are sustainable under changing conditions.

ORF's special position: Advertising proceeds and credibility

Another element of discourse refers to the position of ORF. This broadcaster, which is obliged to uphold public service principles and which, for peremptory reasons, must finance itself on the advertising market in addition to public broadcasting fees, must certainly be viewed from a different perspective than the commercial market participants. With regard to ORF, the economically oriented perspective which sees advertising results according to their nominal amounts can not be the only valid approach. It is also necessary to account for the fact that as a public broadcaster ORF enjoys the credibility and the corresponding trust necessary to fulfill its mandate. Decisions on advertising in the ORF organization should always account for this dimension as well as the criterion that no harm to programming should arise from the advertising forms used.

This study can be downloaded (in German) at http://www.rtr.at under "Portfolio" – "Studies."

6.2 Telecommunications Division

6.2.1 ICT Master Plan

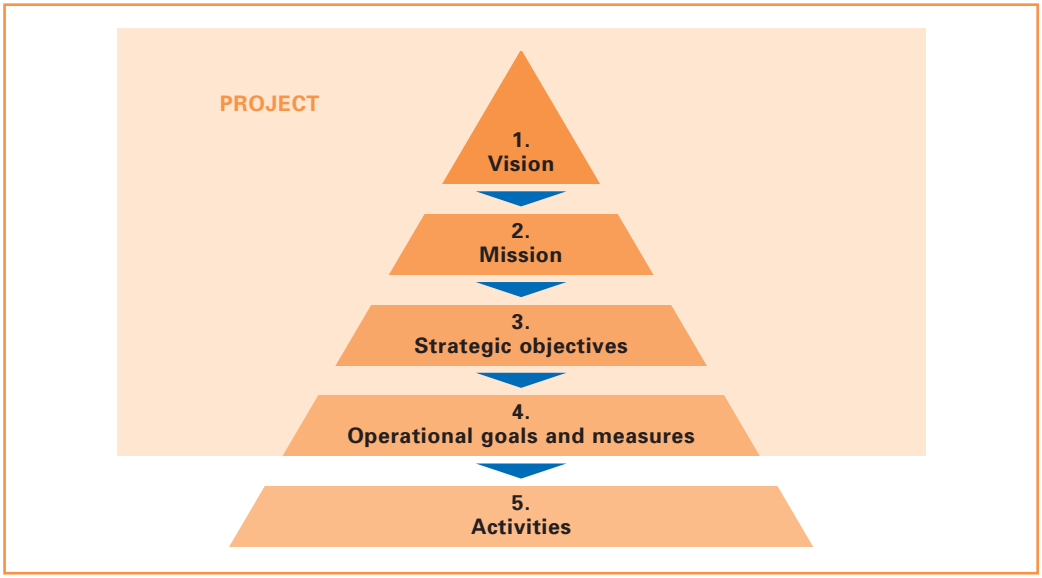
BMVIT and RTR drew up Austria's ICT Master Plan.

In June 2005, Federal Vice-Chancellor and Federal Minister of Transport, Innovation and Technology Hubert Gorbach instructed RTR to draw up an ICT master plan for Austria. In fulfilling this instruction, RTR cooperated closely with the Federal Ministry of Transport, Innovation and Technology (BMVIT) in conducting an analysis of strengths and weaknesses and a survey of the current situation regarding Austria's position on the ICT market, and developed strategic and operational goals as well as an appropriate package of measures.

It was possible to gain an initial picture of the ICT market through numerous discussions with experts at companies such as AT&S, Alcatel, Siemens and Microsoft as well as smaller companies and associations (Federation of Austrian Industry, Chamber of Labor, etc.), the relevant ministries (Federal Chancellery, BMVIT, etc.) and other organizations (Joanneum Research, WIFO, AWS, etc.). A detailed analysis based on numerous studies and sources was carried out in order to determine Austria's relative ICT position in the international context. This involved comparing not only infrastructure data but also capital, research, education, usage and other parameters relevant to ICT.

As a result of this research, the ICT Master Plan is based on an integrated four-level structure.

Figure 69: Structure of Austria's ICT Master Plan



Source: RTR

Vision: Austria should take a top position worldwide in the field of ICT.

The vision of the master plan is to position Austria among the top 5 countries worldwide in the ICT field in the medium term. The master plan was developed as an instrument to achieve this end. Based on the strategic and operational goals of the ICT Master Plan, a package of 44 implementation measures was developed and classified according to strategic objectives:

a. Creating awareness of the importance of ICTs

In order for Austria to earn a top position in international competition among business locations, it is necessary to create awareness of ICTs' high importance for Austria at the political, national and international levels. Measures in this context range from an extensive ICT information policy and national awareness-raising to an improvement of international perceptions.

b. Improving Austria's attractiveness as a location for ICT companies

More than ever, promoting research and development as well as providing training and education in the ICT field will be an essential factor in strengthening ICTs and thus also in enhancing Austria's attractiveness as a business location. Only in this way will it be possible to ensure high quality in products and services. In order to achieve this end, it will be necessary to facilitate business startups, for example by promoting "business angel" networks.

c. Expanding ICT infrastructure throughout Austria

It will become increasingly important to promote the development of infrastructure throughout Austria and to ensure the sustainable provision of broadband services for the entire population. In order to realize this objective appropriately, it will certainly be necessary to promote broadband services on the supply side. Moreover, the national promotion strategy should be combined with local initiatives in order to eliminate "dead zones" on the map as effectively as possible. However, this will require regular monitoring of the status of ICTs. In addition, the plan suggests measures to facilitate the development of ICT infrastructure – for example empty cable conduit or approval procedures.

d. Promoting the use of ICTs

These measures refer to the fulfillment of educational requirements, the enhancement of security and confidence in the use of ICT, the promotion of innovative services, the creation of the appropriate conditions for terminal devices and additional incentives for broadband use.

The master plan was presented in the course of the ICT symposium held on November 10, 2005 and organized by the BMVIT, the Austrian Federal Economic Chamber and RTR. The plan is intended to serve as a point of departure for further public discussion.

6.2.2 Demand-side survey

In fulfillment of its duties in the market analysis process and under the Communications Survey Ordinance (KEV), RTR regularly collects data from telecom operators in order to gain insight into the supply side of the market (e.g., revenues, market shares, etc.). However, as the market always involves supply as well as demand, it is indispensable for market-oriented regulation to conduct complementary investigations of the demand side of the market as well and to gather information on consumer preferences. Especially in issues related to market delineation, gathering information on demand-side substitution – and thus on the preferences of the demand side – is decisive. The process of market delineation, or specifically the review of the TKMVO 2003, was also among the reasons behind the demand-side survey. As a result, the process focused on the question of which products form the right point of departure for analyzing the existence of market power within an appropriately delineated framework (i.e., the relevant market in each case).

1,500 private individuals and 1,000 persons responsible for telecommunications at companies were surveyed.

The process of writing the questionnaires involved RTR's market experts as well as experienced external experts in empirical social research in order to meet the specific requirements of a retail consumer survey. The survey was carried out by the Institute for Empirical Social Research (IFES) in May and June 2005, and involved interviewing 1,500 private individuals from the Austrian population in the 14+ age group as well as 1,000 persons responsible for telecommunications at Austrian companies.

Aside from being used in the market analysis process, the data received was also published in the form of a report, as the survey provides interesting information on the demand for telecommunications products. The report was released in December 2005 and represents a

continuation of the 2002 report on the demand-side survey. Both publications can be downloaded from the RTR web site (http://www.rtr.at) under the category "Portfolio." The topics covered in the more recent report are as follows:

a. **Voice telephony: Fixed-link and mobile networks**

   The focus of the investigation in the field of voice telephony was the attitude of consumers toward fixed-link and mobile networks. In this context, central issues included how retail consumers view these different modes of access to voice telephony (Are they used differently, or do they serve identical purposes? How has the rise of the mobile network affected the fixed-link network?). The report discusses the topic using descriptions which account for response behavior in specific questions, and it supplements these descriptions in a differentiated way with the help of socioeconomic evaluations. In addition, the report describes the extent to which public payphones and calling cards are used by retail consumers.

b. **Internet: Narrowband and broadband Internet access**

   The section pertaining to the Internet focuses on the differences between narrowband and broadband access. The report shows which households and companies have an Internet or broadband connection, and it examines Internet usage as well as the decision criteria for different forms of Internet access.

c. **New technologies: VoIP and UMTS**

   The final chapter of the survey deals with two new technologies on the telecommunications market: VoIP ("Internet telephony") and UMTS. Here the report reveals the extent to which consumers are already familiar with UMTS and VoIP, the extent to which they are used, and which advantages and disadvantages consumers see in these new telecommunications products.

6.2.3 Legal and technical/economic studies on Lower Austria's taxation of broadcasting facilities

On June 21, 2005, the Lower Austrian provincial parliament passed an act on the taxation of broadcasting facilities under which the operators of mobile network transmitters are required to pay a provincial tax for the operation of broadcasting facilities with a transmission power of 4 watts or more which are not located on public property or in the air space above such property.

As a result, RTR was instructed by the Federal Minister of Transport, Innovation and Technology to compose a legal opinion as well as a technical and economic report on the act passed in Lower Austria. Both studies are available as downloads on the RTR web site.

The Lower Austrian provincial parliament finally overturned this act on December 15, 2005, once the provincial government of Lower Austria and all mobile network operators reached an agreement with regard to the increasing shared use of transmission systems in the future.

6.3 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 always carried out in the interest of the general public. In order to meet the public's information requirements, the regulatory authority undertook numerous public activities in the reporting period.

RTR web site

Web site: 7,000 documents

The key medium in the regulatory authority's public presence is its web site (http://www.rtr.at), which is divided into the following sections: Broadcasting, Telecommunications, Electronic Signatures, Grants, Portfolio and About Us. At the end of 2005, the web site comprised approximately 7,000 documents. Regular in-house content updates enable the interested public to follow regulatory activities continuously, ensure transparency in regulatory decisions and describe the development of communications markets. In addition, the RTR web site is used to publish all of the regulatory authorities' information products and to carry out public consultations on topics relevant to regulation.

Moreover, the RTR web site also offers e-government services via a web interface. In this way, for example, market participants can report services pursuant to Art. 15 TKG 2003 via RTR's web portal. In 2006, telephone number porting will be realized using a web-based form.

Publications

Publications document the diversity of the regulatory authorities' activities.

One essential focus of public relations work is RTR's publications. The annual Communications Report, which has become a standard reference work in the communications industry, documents the authority's activities in each reporting year as well as providing market data and presenting the regulatory authority as an organization. The Communications Report 2004 appeared in June 2005. The work of RTR's conciliation body for retail consumers was published in a separate activity report (as in previous years) and presented to the public in April 2005. In addition, four volumes of RTR's publication series were produced: two on topics related to broadcasting and two related to telecommunications. The authors of these publications include both in-house and external experts.

Table 23: Titles in RTR's publication series in 2005

Volume 1/2005	Reasonable terms and conditions between television broadcasters and producers in Austria
Volume 2/2005	Unbundling status report 2005
Volume 3/2005	Implementation of DVB-T in Austria
Volume 4/2005	Infrastructure creates growth: A key factor for Austria as an ICT location

Source: RTR

The broadcasting and telecommunications newsletters provide information on regulatory and international topics of interest at regular intervals. In 2005, nine issues of the broadcasting newsletter and eleven issues of the telecommunications newsletter were published. All of the RTR reports mentioned above are available as PDF downloads on the RTR web site.

Events

Events and lecture activities

RTR also transfers knowledge on relevant topics through lectures held by the organization's managers and selected employees. In the corresponding forums, the intentions and results of the authority's regulatory work are described and discussed. In addition, numerous specialist conferences as well as a large symposium were organized to support the advancement of expert knowledge and the proactive discussion of future developments.

In this context, highlights include the annual plenary assembly of the Digital Platform Austria working group, the Telecommunications Forum in Salzburg and the ICT Symposium. Moreover, RTR's Broadcasting Division offered two major specialist events on advertising provisions in the Private Television Act and the ORF Act in 2005. These were carried out in cooperation with the interest groups concerned (Association for the Audiovisual and Film Industry, Association for Broadcasting and Telecommunications, Austrian Association of Private Broadcasters).

Inquiries

Number of inquiries increased by 30%: 3,500 inquiries answered in 2005

Another important objective of RTR, which sees itself as an unbureaucratic service institution, is to handle inquiries submitted to the regulatory authority rapidly and efficiently. In 2005, RTR answered more than 3,500 written inquiries submitted to the e-mail address rtr@rtr.at. Compared to 2004, this represents an increase of 30%.

Table 24: Inquiries received and answered at the address rtr@rtr.at, 2003 to 2005

Year	2003	2004	2005
Number of inquiries	1,661	2,808	3,585

Source: RTR

In terms of content, these inquiries pertained to the entire spectrum of the regulatory authorities' activities. In addition to handling written inquiries submitted to the general mailbox, RTR's experts also dealt with numerous telephone inquiries on a daily basis.

Call center: More than 10,000 calls

As a complement to those activities, RTR's call center (0810 511 811) also provided information by telephone. The call center mainly handles initial advising for retail consumers, usually on the topic of telephone bill disputes and conciliation procedures. Table 25 shows the high level of acceptance this service facility enjoys.

Table 25: Volume of inquiries at the RTR call center, 2003 to 2005

Year	2003	2004	2005
Calls	6,844	8,589	10,138

Source: RTR

Media relations

29 press releases and 13 informal press conferences

As in previous years, the regulatory authorities' media relations work in 2005 concentrated on providing objective information on complicated regulatory topics. In addition to numerous individual interviews and press inquiries, 29 press releases were composed and 13 informal press conferences were held for representatives of the media.

7. The company

7.1 Staff structure and development

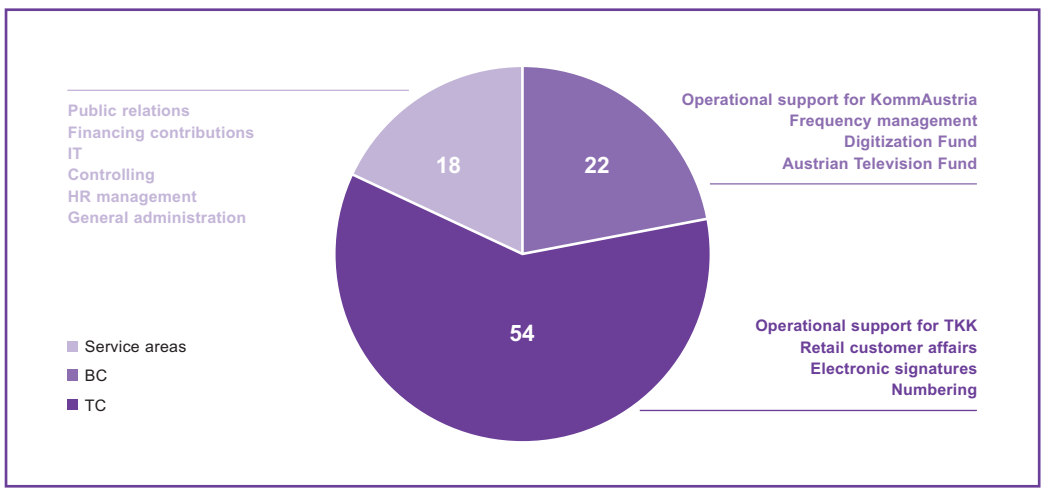
As of December 31, 2005, RTR's staff comprised 93.5 FTEs (full-time equivalents). The number of employees was adjusted to meet the requirements of the Broadcasting and Telecommunications Divisions, which are concerned with regulatory issues as well as matters related to funds and electronic signatures.

Despite growth in the size of the organization and the increasing complexity of tasks, the number of staff members in the organization's service departments has remained constant due to the consistent maximization of productivity.

In the specialist divisions, human resources are assigned to the respective focus areas according to the time spent fulfilling the authority's legal duties. In addition to classic regulatory activities, personnel resources for the supervisory authority for electronic signatures are also assigned to the Telecommunications Division. Similarly, resources are assigned to the funds set up at RTR (i.e., the Digitization Fund and the Austrian Television Fund) or to conventional regulatory activities in the Broadcasting Division according to the time spent on these activities. Human resources which can not be allocated directly are assigned to RTR's individual areas of activity as overhead according to their share of RTR's head count.

In addition, services can also be exchanged between the divisions. For example, the Broadcasting Division purchases business know-how from the Telecommunications Division. Accounting for these services is based on internal transfer charging using RTR's current hourly rates.

Figure 70: Distribution of FTEs by function



Source: RTR, as of December 31, 2005

7.2 RTR's financial statements for 2005

These financial statements have been drawn up in accordance with the Austrian Commercial Code (HGB) in its current version.

The external auditors at Deloitte issued an unqualified audit certificate for RTR's financial statements for the 2005 business year (January 1, 2005 to December 31, 2005).

RTR's income statement and balance sheet from the 2005 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), and income from fees collected (Art. 13 Par. 4 SigG).

The company closed the business year (January 1, 2005 to December 31, 2005) with a loss of approximately EUR 42,000.00, which mainly resulted from the 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 accounting for amounts from the capital decrease and the loss carried forward from the previous year in the amount of approximately EUR 1,923,000.00, covering the loss of approximately EUR 42,000.00 arising from duties under the SigG, and allocating the remainder from the capital decrease to appropriated capital reserves (EUR 143,000.00), the balance sheet result comes to EUR 0.00.

Table 26: Income statement for 2005

		2005		2004	
		EUR		EUR '000	
1.	Net sales		10,056,934.43		9,481
2.	Other operating income				
	a) Gains from disposal of fixed assets	9,782.17		0	
	b) Income from the reversal of accruals	17,680.75		12	
	c) Other	127,576.24	155,039.16	107	119
3.	Personnel expenses				
	a) Salaries	-5,093,311.93		-5.053	
	b) Severance payment expenses	-91,400.67		-105	
	c) Cost of statutory social insurance contributions as well as remuneration-dependent charges and mandatory contributions	-1,251,299.35		-1,065	
	d) Pension insurance expenses	-58,950.00		0	
	e) Voluntary benefit expenses	-99,992.99	-6,594,954.94	-94	-6,317
4.	Depreciation of intangible fixed assets and tangible assets		-364,212.25		-445
5.	Other operating expenses		-3,399,561.86		-3,328
6.	**Sub-total of Items 1 to 5, operating result**		**-146,755.46**		**-490**
7.	Income from other investments held as investment assets		86,870.70		92
8.	Miscellaneous interest and similar income		35,208.82		24
9.	Interest and similar expenses		-16,848.90		-2
10.	**Sub-total of items 7 to 9, financial result**		**105,230.62**		**114**
11.	**Result from ordinary activities = Net annual loss**		**-41,524.84**		**-376**
12.	Reversal of untaxed reserves		0.00		5
13.	Loss carried forward		-1,922,814.11		-1,552
14.	**Subtotal of Lines 11 to 13**		**-1,964,338.95**		
15.	Amounts gained from capital decrease		2,107,512.19		0
16.	Allocation to capital reserve		-143,173.24		0
17.	**Accumulated loss**		**0.00**		**-1,923**

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 27 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 2005, income and expenses were distributed as follows:

Table 27: RTR expenses by division

Amounts indicated in EUR '000	TC	BC	Total
Net sales	6,772	3,285	10,057
Other operating revenues	93	62	155
Personnel expenses	-4,650	-1,945	-6,595
Depreciation	-250	-114	-364
Other operating expenses	-2,027	-1,373	-3,400
Operating result	**-62**	**-85**	**-147**
Financial result	76	29	105
Result from ordinary activities	**14**	**-56**	**-42**
Offset of profit/loss carried forward	42	0	42
Accumulated profit (loss)	**56**	**-56**	**0**

Source: RTR

Table 28: Balance sheet as of December 31, 2005

Assets

		Dec. 31, 2005	Dec. 31, 2004
		EUR	EUR '000
A.	**Fixed assets**		
I.	Intangible assets		
	1. Industrial property rights and similar rights	85,673.30	165
		85,673.30	165
II.	Property, plant + equipment		
	1. Fixtures in rented buildings	91,243.33	220
	2. Other fixed assets, furniture, fixtures and fittings	120,903.60	169
		212,146.93	388
III.	Financial assets		
	1. Securities held as investment assets	2,836,277.93	2,831
		2,836,277.93	2,831
		3,134,098.16	3,384
B.	**Current assets**		
I.	Accounts receivable		
	1. Trade accounts receivable	1,438,337.37	929
	2. Other receivables	324,999.93	6,881
		1,763,337.30	7,811
II.	Cash on hand and at bank	2,874,929.17	1,366
		4,638,266.47	9,176
C.	**Prepaid expenses and deferred charges**	46,225.08	24
D.	**Trustee accounts / funds**	10,288,533.09	7,905
		18,107,122.80	20,489

Liabilities

		Dec. 31, 2005	Dec. 31, 2004
		EUR	EUR '000
A.	**Equity capital**		
I.	Capital stock	3,633,641.71	5,741
II.	Capital reserve		
	1. Appropriated	143,173.24	0
III.	Net loss for the year (loss carried forward: EUR 0.00)	0.00	-1,923
		3,776,814.95	3,818
B.	**Provisions**		
	1. Provisions for severance payments	425,800.00	347
	2. Other provisions	1,193,372.00	6,072
		1,619,172.00	6,419
C.	**Liabilities**		
	1. Trade accounts payable	457,889.17	248
	2. Other accounts payable, including:		
	Taxes EUR 172,197.73		
	Social security EUR 110,892.75	1,708,160.49	2,412
		2,166,049.66	2,660
D.	**Trustee obligations / funds**	10,545,086.19	7,590
		18,107,122.80	20,489

7.3 Notes on the structure of RTR financing

New legal regulations on the financing of the regulatory authority as of January 1, 2005

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, and the parties subject to the financing contribution requirement under the KOG contribute a maximum of EUR 2.25 million.

The Telecommunications Division is allocated federal funds amounting to EUR 2 million per year, and the parties subject to the financing contribution requirement under the KOG pay a maximum of EUR 6 million toward this division's budget.

In an amendment to the Communications 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 Austrian Communications 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 uses of these two funds to the Federal Chancellor, who must then present this report to the Austrian National Council.

The accounts for the funds developed as follows:

Table 29: Austrian Television Fund: Excerpt from RTR's 2005 annual accounts

	EUR	EUR
Balance in trustee account as of December 31, 2004		4,772,146.82
Income		
Increase from credits in 2005	7,500,000.00	
Interest	123,804.26	7,623,804.26
Payments		
Administrative expenses from 2004	-48,850.99	
Administrative expenses in 2005	-419,000.00	
Grant payments from 2004	-2,988,133.93	
Grant payments in 2005	-5,445,435.34	-8,901,420.26
Balance of initial funds, debits and credits in 2005 **= Balance in trustee account as of December 31, 2005**		**3,494,530.82**
Unpaid administrative expenses from 2005 to be paid out in 2006		-50,736.18
= Balance of trustee obligations as of December 31, 2005		**3,443,794.64**
Grants approved but not yet paid out		-3,349,318.73
Funds available in 2006		94,475.91

Source: RTR

Table 30: Austrian Digitization Fund: Excerpt from RTR's 2005 annual accounts

	EUR	EUR
Balance in trustee account as of December 31, 2004		3,132,869.76
Income		
Increase from credits in 2005	6,750,000.00	
Interest	116,206.41	6,866,206.41
Payments		
Administrative expenses from 2004	-265,762.73	
Administrative expenses in 2005 and RTR's participation in projects in 2005	-1,207,000.00	
Grant payments from 2004	-1,207,833.14	
Grant payments in 2005	-524,478.03	-3,205,073.90
Balance of initial funds, debits and credits in 2005 **= Balance in trustee account as of December 31, 2005**		**6,794,002.27**
Unpaid administrative expenses to be paid out in 2006 and RTR's participation in projects in 2005		307,289.28
= Balance of trustee obligations as of December 31, 2005		**7,101,291.55**
Grants approved but not yet paid out		-1,852,906.05
Funds available in 2006		5,248,385.50

Source: RTR

In 2005, the grants awarded by RTR mainly focused on successor projects to the DVB-T trial in Graz and the DVB-C trial in Linz. These activities mainly involved preparatory measures such as invitations to tender. The actual rollout of DVB-T will not take place until 2006; most of the funds available are earmarked for this purpose.

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 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 used up 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.

In the period from January 1, 2005 to December 31, 2005, RTR incurred costs amounting to a total of EUR 402,191.89 in fulfilling its duties under the SigG. On the other side, revenues amounted to EUR 251,415.39. The excess expenses are offset by the results from previous quarters (EUR 51,007.97) and the allocation of EUR 41,524.84 gained through the capital decrease.

As a result, the company's equity as of December 31, 2005 was as follows:

Table 31: Equity as of December 31, 2005

	EUR	EUR
Capital stock as of December 31, 2005 (after capital decrease)		3,633,641.71
Loss incurred in the fulfillment of duties under the SigG, January 1 – December 31, 2005	-92,532.78	
Profit from the fulfillment of duties under the KOG, January 1 – December 31, 2005	51,007.97	
Result from ordinary activities		-41,524.84
Charge of loss in 2005 against amounts gained in the capital decrease		41,524.84
Capital reserve as of December 31, 2005		143,173.24
Equity as of December 31, 2005		**3,776,814.95**

7.4 RTR Supervisory Board

In 2005, the RTR Supervisory Board consisted of the following members (in alphabetical order):

Table 32: Members of the RTR Supervisory Board in 2005

Members	from	to
Josef Halbmayr (Wiener Privatbank Immobilieninvest AG), Chairman of the Supervisory Board	October	December
Brigitte Hohenecker (Member of the Works Council, RTR)	January	December
Marion Kopp (Member of the Works Council, RTR)	October	December
Ina Sabitzer (Telecommunications Advisor in the Cabinet of the Austrian Federal Minister of Transport, Innovation and Technology), Member of the Supervisory Board	January	September
Franz Semmernegg (Member of the Management Board, Kapsch AG), Deputy Chairman of the Supervisory Board	January	December
Wilfried Stadler (CEO, Investkredit AG), Chairman of the Supervisory Board	January	September
Dieter Staudacher, LLM (Member of the Works Council, RTR)	January	March
Matthias Traimer (Head of Department V/4, Constitutional Service at the Federal Chancellery), Member of the Supervisory Board	January	December
Franz Watzer (Member of the Works Council, RTR)	April	September
Stefan Weiss (Telecommunications Advisor in the Cabinet of the Austrian Federal Minister of Transport, Innovation and Technology), Member of the Supervisory Board	October	December

8. Appendix

8.1 Tables, info boxes and figures

Tables

Info boxes

Figures

8.2 Abbreviations

3G	3rd Generation

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
CBP	Countervailing Buyer Power
CEPT	European Conference of Postal and Telecommunications Administrations (*Conférence Européenne des Administrations des Postes et des Télécommunications*)
CIRCA	Communication & Information Resource Centre
COCOM	Communications Committee
CPS	Carrier Pre-Selection

D

DNIC	Data Network Identification Code
DNS	Domain Name System
DRM	Digital Radio Mondiale
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexer
DVB-C	Digital Video Broadcasting – Cable
DVB-T	Digital Video Broadcasting – Terrestrial

E

EBIT	Earnings Before Interest and Taxes
EBU	European Broadcasting Union
EC	European Commission
ECG	E-Commerce Act (*E-Commerce-Gesetz*)
ECP	European Common Proposal
ECTA	European Competitive Telecommunications Association
EEA	European Economic Area
EEN-V	Itemized Billing Ordinance (*Einzelentgeltnachweis-Verordnung*)

E-GovG	E-Government Act (*E-Government-Gesetz*)
EHRC	European Human Rights Convention
ENUM	Electronic Number Mapping
EPI	Erich Pommer Institute
EPRA	European Platform of Regulatory Authorities
ERG	European Regulators Group
ETSI	European Telecommunication Standardisation Institute

F

FBZV	Frequency Range Allocation Ordinance
FESA	Forum of European Supervisory Authorities for Electronic Signatures
FFA	Austrian Television Fund (*Fernsehfonds Austria*)
FFFF	Austrian Television Film Fund (*Fernsehfilmförderungsfonds*)
FL-LRAIC	Forward Looking-Long Run Average Incremental Costs
FR	Frame relay
FS-G	Television Signals Act (*Fernsehsignal-Gesetz*)
FTE	Full-time equivalent
FTTH	Fiber to the Home

G

GHz	Gigahertz
GSM	Global System for Mobile Communication

H

HFC	Hybrid Fiber Coax
HGB	Austrian Commercial Code (*Handelsgesetzbuch*)
HH	Household(s)
HHI	Hirschman-Herfindahl-Index
HLR	Home Location Register
HSDPA	High Speed Downlink Packet Access

I

IC	Interconnection
ICN	International Closed User Group Number
ICT	Information and Communications Technologies
IOT	Inter-Operator Tariff
IP VPN	Internet Protocol Virtual Private Network
IPG	International Planning Group
IRG	Independent Regulators Group
ISDN	Integrated Services Digital Network
ISDN-BA	Integrated Services Digital Network – Basic Access
ISP	Internet Service Provider
ISPA	Internet Service Providers Austria
ISPC	International Signaling Point Code
ITU	International Telecommunication Union
ITU-T	ITU Telecommunication Standardization Sector

K

KartG 1998	Austrian Cartels Act 1998
KEM-V	Communications Parameters, Fees and Value-Added Services Ordinance (*Kommunikationsparameter-, Entgelt- und Mehrwertdiensteverordnung*)
KEV	Communications Survey Ordinance
KOA	KommAustria
KOG	KommAustria Act (*KommAustria-Gesetz*)
KommAustria	Austrian Communications Authority
KSchG	Consumer Protection Act (*Konsumentenschutzgesetz*)

L

LAN	Local Area Network
LRAIC	Long-Run Average Incremental Cost

M

Mbit/s	Megabits per second
MBWA	Mobile Broadband Wireless Access
MDF	Main Distribution Frame
MHP	Multimedia Home Platform
MHz	Megahertz
MMS	Multimedia Messaging Service
MNC	Mobile Network Code
MNO	Mobile Network Operator
MNP	Mobile Number Portability
MSC	Mobile Switching Center
MTR	Mobile termination
MUX	Multiplexer
MUX-AG-V 2005	MUX Selection Principles Ordinance 2005
MVNO	Mobile Virtual Network Operator

N

NI	Network Indicator
NSPC	National Signaling Point Code
NÜV	Number Porting Ordinance
NVO	Numbering Ordinance

O

ÖAK	Austrian Circulation Survey (*Österreichische Auflagenkontrolle*)
OECD	Organization for Economic Cooperation and Development
OGH	Austrian Supreme Court
OJ	Official Journal
ONP	Open Network Provision
ORF	Austrian Broadcasting Corporation (*Österreichischer Rundfunk*)
ORF-G	ORF Act (*ORF-Gesetz*)

P

PAC	Payphone access charge
Par.	Paragraph
PKI	Public key infrastructure
PLC	Power line communication
PN	Private network
PoI	Point of Interconnection
PoP	Point of presence
POTS	Plain old telephone service
PresseFG 2004	Press Subsidies Act 2004 (*Presseförderungsgesetz 2004*)
PrR-G	Private Radio Act (*Privatradiogesetz*)
PrTV-G	Private Television Act (*Privatfernsehgesetz*)
PSTN	Public switched telephone network
PubFG	Journalism Subsidies Act 1984 (*Publizistikförderungsgesetz 1984*)
PXT	Planning Exercise Team

R

REM	Research Institute for Electronic Mass Media Law (*Forschungsinstitut für das Recht der elektronischen Massenmedien*)
RFGV	Broadcasting Frequency Usage Fee Ordinance (*Rundfunk-Frequenznutzungsgebührenverordnung*)
RFMVO 2004	Broadcasting Market Definition Ordinance 2004 (*Rundfunkmarktdefinitionsverordnung 2004*)
RGG	Broadcasting Fees Act (*Rundfunkgebührengesetz*)
RIO 2005	Reference Interconnection Offer 2005
RPG	Regulatory and Procedural Group
RRC	Regional Radio Conference
R-VO	Reference Rate Ordinance (*Richtsatzverordnung*)

S

SDSL	Symmetric Digital Subscriber Line
SigG	Signatures Act
SigV	Signatures Ordinance
SKP-V	Special Communications Parameters Ordinance
SLA	Service level agreement
SMP	Significant market power
SMS	Short Message Service
2nd SVO-RF 2005	2nd. Broadcasting Threshold Value Ordinance 2005 (*Schwellenwert-Verordnung Rundfunk 2004*)
2nd SVO-TK 2005	2nd Telecommunications Threshold Value Ordinance 2005 (*Schwellenwert-Verordnung Telekommunikation 2004*)

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*)

TKK	Telekom-Control Commission
TKMVO 2003	Telecommunications Markets Ordinance 2003 (*Telekommunikationsmärkte-Verordnung 2003*)
T-MNC	Tetra Mobile Network Code

U

UDV	Universal Service Ordinance (*Universaldienstverordnung*)
ÜKVO	Monitoring Costs Ordinance
UMTS	Universal Mobile Telecommunication System
ÜVO	Monitoring Ordinance (*Überwachungsverordnung*)
UVS	Independent Administrative Board

V

VAT	Association of Alternative Telecommunications Network Operators (*Verband alternativer Telekom-Netzbetreiber*); also: value-added tax
VfGH	Austrian Constitutional Court (*Verfassungsgerichtshof*)
VFRÖ	Verband Freier Radios Österreichs (Austrian association of free radio broadcasters)
VHF	Very High Frequency
VoB	Voice over Broadband
VoI	Voice over Internet
VoIP	Voice over Internet Protocol
VÖP	Verband Österreichischer Privatsender (Austrian association of private broadcasters)
VPN	Virtual Private Network
VwGH	Austrian Administrative Court (*Verwaltungsgerichtshof*)

W

WAG	Securities Supervision Act (*Wertpapieraufsichtsgesetz*)
WAN	Wide Area Network
WARC	World Administrative Radio Conference
WG IPG	Working Group of the International Planning Group
WIFO	Austrian Institute for Economic Research (*Österreichisches Institut für Wirtschaftsforschung*)
WIR	Wholesale International Roaming
WLAN	Wireless Local Area Network
WLL	Wireless Local Loop

X

xDSL	x Digital Subscriber Line

Z

ZIV	Access Control Systems and Interoperability Ordinance
ZuKG	Access Control Act (*Zugangskontrollgesetz*)
ZVO	Interconnection Ordinance (*Zusammenschaltungsverordnung*)

8.3 Relevant legal sources

8.3.1 EU directives

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 L108 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 L108 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 L249 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 L201, 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 L108 of 24 April 2002, p. 33).
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 L13 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 L331 of 16 November 1989, p. 1, as amended by Directive 97/36/EC, OJ L202 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 L108 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 amended by Federal Law Gazette I No. 32/2001.
Administrative Penalties Act (VStG)	(*Verwaltungsstrafgesetz*) Administrative Penalties Act, Federal Law Gazette No. 52/1991 as amended by Federal Law Gazette I No. 117/2002.
Austrian Communications Act (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 amended by Federal Law Gazette I No. 21/2005.
Cartel Act 1988 (KartG 1988)	(*Kartellgesetz*) Federal Act on Cartels and Other Restrictions on Competition, Federal Law Gazette No. 600/1988 as amended by Federal Law Gazette I No. 61/2005.
Competition Act	(*Wettbewerbsgesetz*) Federal Act on the Establishment of a Federal Competition Authority, Federal Law Gazette No. 753/1996 as amended by Federal Law Gazette I No. 62/2005.
Consumer Protection Act (KSchG)	(*Konsumentenschutzgesetz*) Federal Act of March 8, 1979, enacting provisions for the protection of consumers, Federal Law Gazette 1979/140 as amended by Federal Law Gazette 62/2004.
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 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 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 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 amended by Federal Law Gazette I No. 136/2003.
ORF Act (ORF-G)	(*ORF-Gesetz*) Federal Act on the Austrian Broadcasting Corporation, Federal Law Gazette No. 379/1984 as 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, BGBl. I No. 20/2001 as amended by BGBl. I No. 169/2004.
Private Television Act (PrTV-G)	(*Privatfernsehgesetz*) Federal Act enacting provisions on private television, Federal Law Gazette I No. 84/2001 as amended by Federal Law Gazette I No. 169/2004.
Securities Supervision Act (WAG)	(*Wertpapieraufsichtsgesetz*) Federal Act on the Supervision of Securities-Related Services, Federal Law Gazette No. 78/2005.
Signatures Act (SigG)	(*Signaturgesetz*) Federal Act on Electronic Signatures, Federal Law Gazette No. 190/1999 as amended by Federal Law Gazette I No. 164/2005.
Telecommunications Act 1997 (TKG 1997)	(*Telekommunikationsgesetz 1997*) Federal act enacting a law on telecommunications and amending the Telegraph Routes Act, the Telephone Rates Act and the Cable and Satellite Broadcasting Act, as well as adding supplementary provisions to the Broadcasting Act and the Broadcasting Ordinance, Federal Law Gazette I No. 100/1997 as amended by Federal Law Gazette I No. 16/2003.
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. 70/2005 as amended by Federal Law Gazette I No. 133/2004.

8.3.2.2 Ordinances

2nd Broadcasting Threshold Value Ordinance 2005 (2nd SVO-RF 2005)	(*Schwellenwert-Verordnung Telekommunikation 2005*) TKK Ordinance 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.
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 Frequency Usage Fee Ordinance (RFGV)	(*Rundfunk-Frequenznutzungsgebührenverordnung*) Ordinance of the Austrian Communications Authority (KommAustria) on frequency usage fees for terrestrial broadcasting and on fees for permits and licenses under the Telecommunications Act where terrestrial broadcasting frequencies are concerned.
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 2005 (SVO-RF 2005)	(*Schwellenwert-Verordnung Rundfunk 2004*) 8th 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.
Communications Survey Ordinance (KEV)	(*Kommunikations-Erhebungs-Verordnung*) Ordinance of the Austrian Federal Minister of Transport, Innovation and Technology ordering statistical surveys in the field of communications, Federal Law Gazette II No. 365/2004.
Frequency Allocation Ordinance	(*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 2005)	(*Frequenzbereichszuweisungsverordnung*) Ordinance of the Austrian Federal Minister of Transport, Innovation and Technology on the allocation of frequency ranges, Federal Law Gazette II No. 306/2005.
Frequency Utilization Ordinance 2005 (FNV 2005)	(*Frequenzbereichszuweisungsverordnung*) Ordinance of the Austrian Federal Minister of Transport, Innovation and Technology on frequency usage, Federal Law Gazette II No. 307/2005.
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.
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 Costs Ordinance (ÜKVO)	(*Überwachungskostenverordnung*) Ordinance of the Federal Minister of Justice on the reimbursement of operators' costs for cooperation in the monitoring of telecommunications, Federal Law Gazette II No. 322/2004.
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 amended by Federal Law Gazette II No. 559/2003.
Multiplex Operator Selection Principles Ordinance 2005 (MUX-AG-V 2005)	7th Ordinance of the Austrian Communications Authority (KommAustria) specifying the selection principles for the issuance of a terrestrial multiplex license in 2005.
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 der RTR-GmbH*) 5th Ordinance defining a uniform nationwide reference rate for one-off compensation for the use of lines or systems secured by rights, and for the installation, operation, expansion or replacement of communication lines by their owners.
Signatures Ordinance (SigV)	(*Signaturverordnung*) Ordinance of the Austrian Federal Chancellor on electronic signatures, Federal Law Gazette II No. 30/2000 as 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 amended by Federal Law Gazette II No. 388/2001.
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, Federal Law Gazette II No. 117/2005.
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 amended by Federal Law Gazette II No. 173/2000.

8.4 Abbreviated company names

Amiga	AMiGA Telecom GmbH
Antenne Salzburg	Antenne Salzburg GmbH
Antenne Steiermark	Antenne Steiermark Regionalradio GmbH & Co KG
Arge Daten	Arge Daten - Österreichische Gesellschaft für Datenschutz (association)
A-SIT	Secure Information Technology Center – Austria
atms	atms Telefon- und Marketing-Services GmbH
A-Trust	A-Trust Gesellschaft für Sicherheitssysteme im elektronischen Datenverkehr GmbH
ATVplus	ATV Privatfernseh-GmbH
Centrowave	Centrowave Breitbanddienste GmbH

Colt	Colt Telecom Austria GmbH
Datakom	Datakom Austria GmbH
enum.at	enum.at Dienstleistungs GmbH
eTel	eTel Austria AG
EUnet	EUnet Telekommunikationsdienstleistungs GmbH
EVN	EVN AG
FESSEL-GfK	FESSEL-GfK Institut für Marktforschung Ges.m.b.H.
Finarea	Finarea SA.
H3G	Hutchison 3G Austria GmbH
IFES	Institute for Empirical Social Research (*Institut für empirische Sozialforschung GmbH*)
Inode	Inode Telekommunikationsdienstleistungs GmbH
KRONEHIT	KRONEHIT Radio BetriebsgmbH.
LIWEST	LIWEST Kabelmedien GmbH
MCI	MCI Austria GmbH
Memorex	Memorex Products, Inc.
Mobilkom	Mobilkom Austria AG & Co KG
One	One GmbH
ORF	Austrian Broadcasting Corporation (*Österreichischer Rundfunk*)
ORS	Österreichische Rundfunksender GmbH & Co KG
Priority Telecom	Priority Telecom 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*)
Salzburg AG	Salzburg AG für Energie, Verkehr und Telekommunikation
SAT.1 (Germany)	SAT.1 Satellitenfernsehen GmbH
SAT.1 (Austria)	SAT.1 Privatrundfunk und Programmgesellschaft mbH
Silver Server	Silver Server GmbH
Sipgate	Indigo Networks GmbH
Skype	Skype Technologies SA
tele.ring	tele.ring Telekom Service GmbH
Tele2	Tele2 Telecommunication Service GmbH (now: Tele2UTA)
Tele2UTA	Tele2UTA Telecommunication Services GmbH
Telekom Austria (TA)	Telekom Austria AG
Trosoft	Trosoft Entwicklungs u. Vertriebs GmbH
T-Mobile	T-Mobile Austria GmbH
UPC	UPC Telekabel Wien GmbH
VFRÖ	Verband Freier Radios Österreichs (Austrian association of free radio broadcasters)
VÖP	Verband Österreichischer Privatsender (Austrian association of private broadcasters)
Wienstrom	WIENSTROM GmbH
Yesss!	YESSS! Telekommunikation GmbH

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