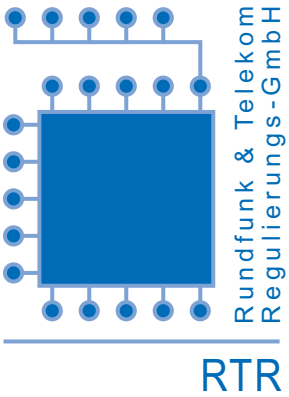
Communications report 2003



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Introduction

In our capacity as a convergent regulatory institution for broadcasting and telecommunications it is our essential task to comply with the statutory mandates and objectives with regard to the fields of broadcasting and telecommunications in order to ensure efficient competition in the interests of quality, diversity and, eventually, the consumers. This shall also secure a leading position with high locational quality for Austria in the European information society.

One of the central points in promoting an attractive business location is the continuous development of the communications markets as regards the quality and the diversity of the products and services offered, observing the interests of all stakeholders – politics, economy and consumers –, for the purpose of fair and sustainable competition. RTR-GmbH and the regulatory authorities contribute competent, objective and effective decisions that comply with the European and national frameworks, meet the requirements of the market players and are taken heedless of particular interests. Identifying new technological and economic trends early and considering them in the decision making process is essential for regulatory work. Also, the regulatory authority encourages self-regulation on the market by selectively applying instruments like moderation and consultation.

With this publication we are continuing the tradition of our reporting activities of previous years, once again adhering to the principle of transparency. We report about the year 2003 as follows: we give a detailed description of the regulatory activities for the Broadcasting and Telecommunications Departments of the regulatory authorities Austrian Communications Authority (KommAustria), Telekom-Control-Commission (TKK) and Rundfunk und Telekom Regulierungs-GmbH (RTR-GmbH), supplemented by outlines on international activities and the regulatory environment of the convergent regulatory institution. Essential market data of the media sector provide information about reach figures and market shares of the print and electronic media. The market data of the telecommunications sector that has largely been derived from comprehensive research by RTR-GmbH is structured according to the requirements of the new legal framework. Finally, the company RTR-GmbH is described whose activities are always guided by the principles of efficiency, economical management and effectiveness.

It is a great pleasure to present the Communications Report 2003 which gives a profound insight into the wide range of our activities.

Vienna, in June 2004 *Dr. Alfred Grinschgl* *Dr. Georg Serentschy*

1. Management Summary

1.1 Introductory remarks on the Communications Report

The Communications Report 2003, which includes the Annual Report 2003 as well as a comprehensive description of the current situation and of the development of the media and telecommunications markets, pursues several objectives that have to be seen against the background of various statutory reporting obligations pursuant to the KommAustria Act (KOG) and the Telecommunications Act 2003 (TKG 2003):

- RTR-GmbH, represented by the two managing directors of the Broadcasting and Telecommunications Departments, renders account to its owner and principal, the Republic of Austria, of the efficient management of the company, especially with a view to complying with the principles of efficiency, economy and effectiveness in the execution of the tasks. In particular, the annual report shall give an account of the completed tasks, the development of the staff and the operating expenses.

- Subsequently, RTR-GmbH reports to the respective bodies of the Austrian Federal Government, which have responsibility for the Departments, and to the National Council about the regulatory objectives stipulated in the KOG and the TKG. In this regard, the focus lies on the reporting obligation pursuant to § 34 (2) TKG 2003: "The regulatory authority shall inform the Federal Minister of Transport, Innovation and Technology about the achievement of the regulatory objectives set out in § 1 (2) TKG 2003 and submit a report to the National Council".

- Finally, this Communications Report gives a thorough and realistic insight into the problems and challenges involved in an endeavour to enable greater competition and diversity in the interests of the consumers and users of the service ranges provided by the broadcasting and telecommunications sectors.

Essentially, the Communications Report covers the following major topics:

1. **Management Summary:** this section gives a quick overview of the reporting obligations and other issues covered in this Communications Report.

2. **Objectives of the regulatory activities:** RTR-GmbH makes a central contribution to the achievement of the regulatory objectives, as stipulated in the relevant acts, in particular, the Telecommunications Act 2003 (TKG 2003), the KommAustria Act (KOG) and the Signature Act (SigG). Therefore, the objectives of the regulatory activities are described at the beginning of the report.

3. The integration of RTR-GmbH into the regulatory environment: RTR-GmbH cooperates with a large number of national and international institutions that are relevant to regulation. These relations are outlined in this section to provide for a better understanding of the cooperation and task sharing activities.

4. The activities of RTR-GmbH: this section describes the activities of the company in the business year 2003, subdivided into the Broadcasting and the Telecommunications Departments, and assesses their contributions to achieving the regulatory objectives.

Broadcasting

For the Broadcasting Department, the regulatory activities of KommAustria, for which RTR-GmbH acts as supporting body, in the field of radio and television broadcasting are described. Broadcasting frequency management and frequency coordination as well as forthcoming digital broadcasting transmission are explained in detail.

Telecommunications

In the Telecommunications Department, the business year 2003 was characterised by the transition from the old to the new regulatory framework; the respective activities are reported in three sub-sections according to the relevant legal framework. This section also

Electronic signatures

contains the activities in the field of electronic signatures.

Competence centre

The explicit statutory mandate given to RTR-GmbH to act as a competence centre for matters of the audio-visual media and telecommunications sectors is described at the end of this section.

5. The Austrian communications markets: this section provides information and facts on the development and the situation of the advertising market (broken down by all relevant media types) as well as the listener, viewer and reader markets. The facts on the advertising and consumer markets are based on data that is collected regularly and is recognised by the market players (e.g. FOCUS Media Research, Media Analysis). In addition, this section contains information on press and journalism subsidies which came within the competence of KommAustria as per 01.01.2004.

On the basis of the overall development of the telecommunications market, this section contains detailed data on tariffs, sales and volumes. The majority of the data is based on the operator query performed by RTR-GmbH and is backed up by international comparisons from different sources. The end of this section gives a short overview of the development in the field of electronic signatures.

6. The company: in this section we provide information on company-related issues, such as staff development, annual accounts and the supervisory board. Special information as to the funding of electronic signatures and the establishment of the Digitisation and the Television Film Funds are provided in the explanations of the annual accounts. The expenses incurred by RTR-GmbH in the process of its "classical" regulatory activities are also given, broken down by the Broadcasting and the Telecommunications Departments.

With this report, the management of RTR-GmbH renders account of the operative implementation of the regulatory objectives in the interests of all market players and for the benefit of the consumers. This implementation work is characterised by endeavours to efficiently perform and effectively accomplish the regulatory activities. For the management of RTR-GmbH, international benchmarking is also a guiding principle for efficiency in providing its services as an authority as well as in performing the activities as a competence centre.

1.2 Statutory tasks and objectives of RTR-GmbH

The development of the communications markets is of great importance to the overall economy.

It seems to be worth considering in this place how the statutory tasks can be reconciled with the regulatory objectives. For, the main purpose of regulation must always be borne in mind, i.e. to enable and secure fair and transparent competition and, finally, to develop economic benefit and benefit on the part of the consumers.

This Management Summary concentrates on the statutory tasks and the resulting objectives of RTR-GmbH. In addition, it describes the specific activities in which RTR-GmbH engages to fulfil its individual tasks and achieve its objectives.

The broadcasting market and the telecommunications sector, for the sake of simplicity summed up as "communications markets", are of essential importance to the overall national economy due to multiplier effects. Therefore, the long-term and sustainable development of these markets is also decisive for the attractiveness of a country as a business location.

Multiplier effects: the communications markets send out impulses to other industrial sectors – mutual interrelations give rise to a multiplier effect between the development of the communications markets and other economic branches. Potential efficiency increases in other industrial sectors, for example, depend on the use of advanced information infrastructure.

Value chain: in the value chain the communications markets are either upstream or downstream to other markets which are directly influenced by the development of these markets. Upstream markets are, for example, the manufacturer market for telecommunications infrastructure or film producers. Downstream markets are, for example, the advertising market and other service areas.

Location factor: high-quality and cost-efficient communications infrastructure will become an increasingly important business location factor in rising global competition.

Various benefits for the population: a positive development of the communications markets generates direct benefits for the population, e.g. better access to more information, increased diversity of opinion and various enhancements for everyday life.

Effects on the communications markets themselves: of course, the market development has an effect also on the markets themselves, i.e. on jobs, innovations and investments.

The development of the communications markets is given high priority.

Because of the particular importance of the communications markets, there are impulses at the international and national political levels to create clear framework conditions to promote the development of these markets.

Initiatives at the European level: endeavours within the European Union in 2003 were directed at adapting the legal framework conditions to the circumstances of the market by means of the new regulatory framework. Moreover, initiatives, such as eEurope 2005, were launched with a view to making Europe take the lead in the global information society.

Initiatives in Austria: the transposition of the new European legal framework in the Telecommunications Act 2003 (TKG 2003) was an essential further development of the legal framework conditions.

The regulatory authorities make important contributions to the development of the markets.

In the field of media policy, especially the initiative of the federal government to establish the Digitisation Fund and the Television Film Fund within the framework of an amendment to the KommAustria Act (KOG) shall be mentioned.

An important cornerstone in this sustainable implementation strategy directed at promoting the markets is the establishment of market-independent regulatory authorities to speed up the achievement of the statutory objectives.

Convergence: RTR-GmbH is designed as a convergent regulatory authority that covers both subject areas to take account of the gradual convergence of the broadcasting and telecommunications markets.

Independence: RTR-GmbH is independent of market players and particular interests, which is an essential prerequisite to be able to act impartially as mediator, catalyst or "referee" in case of conflicts and disagreements on the market.

Self-perception as competence centre

Competence centre: RTR-GmbH acts as a competence centre to ensure that the regulatory authority's experiences gained in everyday regulatory work can be put to optimum use for the stakeholders. In this capacity, it gives advice to the market players and provides valuable feedback to politics, which is necessary for the further development of the legal framework conditions.

The regulatory authority is bound by the regulatory objectives.

All activities of the regulatory authority shall be aimed at accomplishing the regulatory objectives, as referred to in the relevant acts. Subsequently, the activities and their contribution to achieving the objectives in 2003 will be described in greater detail.

1.3 Contributions of RTR-GmbH to achieving its objectives

Important cornerstones of successful regulation: consideration of the overall context

The regulatory objectives and tasks are laid down in the relevant acts. In 2003, a number of specific single measures were taken to support the achievement of these objectives either directly or indirectly.

Especially, the strong interdependencies require that all measures and all consequences be considered in an overall context, which is illustrated below.

Contributions to the achievement of the objectives pursuant to the KOG

The diagrams illustrate the relation between the activities of RTR-GmbH and their contribution to the achievement of the objectives.

Figure 1: Achievement of the objectives pursuant to the KOG

Objectives \ Activities	Licensing proceedings	Legal supervisory control over private broadcasters	Observation of the media market for media concentration	Set-up of media observation	Must-carry procedures	Site sharing procedures	Satellite licences	Measurements and pilot transmissions	Digital Platform Austria	Preparation of pilot operation Graz	Digitisation Fund	Television Film Fund	Frequency planning DVB-T	International broadcasting activities	Preparation and introduction of market analysis procedure
Ensure diversity of opinion and promote the quality of the broadcasting programmes including the technical prerequisites for their distribution	✔	✔	✔	✔	✔	✔	✔					✔			✔
Develop technical and economic schemes for a dual broadcasting market in Austria		✔	✔		✔	✔		✔	✔		✔		✔		✔
Ensure compliance with European minimum standards for content providers (protection of children, youths and consumers)		✔		✔								✔	✔		
Optimise the usage of the frequency spectrum for broadcasting	✔	✔			✔	✔		✔							
Provide expert knowledge in the field of convergence and promotion of the development of the communications markets								✔	✔				✔	✔	
Create and maintain a modern and high-quality communications infrastructure to promote locational quality					✔			✔	✔	✔	✔				✔

✔ Activity explicitly supports the achievement of the objective
✔ Activity has an influence on the achievement of the objective

In 2003, the Broadcasting Department was characterised, in particular, by the great number of licence proceedings as well as by the tasks of the regulatory authority with a view to introducing digital broadcasting. The latter comprises international frequency coordination, preparation of the pilot operation for digital terrestrial television in Graz as well as drawing up the "Digitisation Plan pursuant to § 21 (5) PrTV-G". In addition, all organisational and substantial measures were taken to handle new statutory tasks (Digitisation Fund, Television Film Fund).

Ensuring diversity of opinion

Licensing proceedings: the issuing of frequencies to existing radio broadcasters and the licensing of frequencies for new service areas strengthen the service efficiency of existing private broadcasters, increasing the diversity of media and opinion in the electronic sector.

Promoting the quality of the radio programmes

Legal supervisory control over private broadcasters: was confined to continuous observation and spot checks in 2003.

Ensuring diversity of opinion

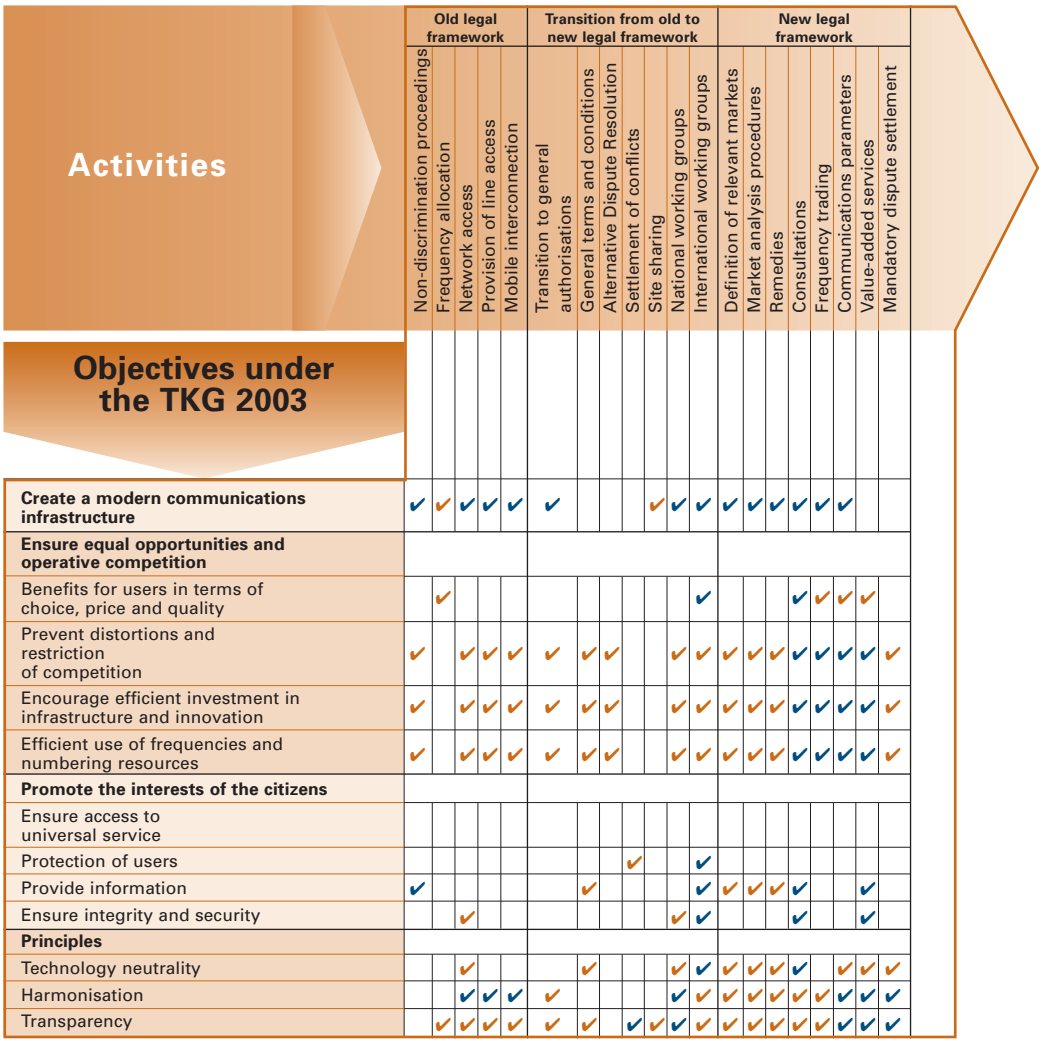
Site sharing: KommAustria will decide on the issue of shared use of ORF transmitter stations by private broadcasters if the contract parties do not reach an agreement.

Creation and maintenance of a high-quality communications infrastructure to promote locational quality

Digital Platform Austria: digitisation of broadcasting is a major priority of the work of KommAustria in terms of media and location policies. The Digitisation Plan and the preparations for the DVB-T pilot operation in Graz 2004 were essential work issues of the regulatory authority.

Contributions to objective achievement pursuant to the TKG 2003

Figure 2: Achievement of the objectives pursuant to the TKG 2003



Activities / Objectives under the TKG 2003	Old legal framework					Transition from old to new legal framework						New legal framework							
	Non-discrimination proceedings	Frequency allocation	Network access	Provision of line access	Mobile interconnection	Transition to general authorisations	General terms and conditions	Alternative Dispute Resolution	Settlement of conflicts	Site sharing	National working groups	International working groups	Definition of relevant markets	Market analysis procedures	Remedies	Consultations	Frequency trading	Communications parameters	Value-added services	Mandatory dispute settlement
Create a modern communications infrastructure	✔	✔	✔	✔	✔	✔				✔	✔	✔	✔	✔	✔	✔	✔	✔		
Ensure equal opportunities and operative competition																				
Benefits for users in terms of choice, price and quality		✔										✔				✔	✔	✔	✔	
Prevent distortions and restriction of competition	✔		✔	✔	✔	✔	✔	✔			✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Encourage efficient investment in infrastructure and innovation	✔		✔	✔	✔	✔	✔	✔			✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Efficient use of frequencies and numbering resources	✔		✔	✔	✔	✔	✔	✔			✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Promote the interests of the citizens																				
Ensure access to universal service																				
Protection of users									✔			✔								
Provide information	✔						✔					✔	✔	✔	✔	✔			✔	
Ensure integrity and security			✔								✔	✔				✔			✔	
Principles																				
Technology neutrality			✔				✔				✔	✔	✔	✔	✔	✔		✔	✔	✔
Harmonisation			✔	✔	✔	✔					✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Transparency		✔	✔	✔	✔	✔	✔		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

✔ Activity explicitly supports the achievement of the objective
✔ Activity has an influence on the achievement of objective

On the basis of a few specific examples the context shall be illustrated further:

Objective achievement requires intensive activities

Non-discrimination proceedings: by reviewing if there is discrimination by SMP companies, the regulatory authority contributes to fairness and transparency on the market. To provide an additional network access option to the competitors, i.e. resale of line access, several relevant proceedings were conducted in 2003.

Ensuring efficient frequency usage

Frequency allocation: transparent and non-discriminatory frequency allocation creates equal opportunities for the market players. In 2003, the regulatory authority contributed to eliminating existing legal uncertainties in the field of frequency allocation.

Operative competition

Proceedings in the field of network access: open network provision is a particularly important precondition for the creation of sustainable competition. Due to the strong growth of the Austrian mobile communications market, the mobile termination charges are of special importance. In line with previous decisions in this field, these charges were determined again in 2003. The gradual adjustment of the charges reflects the cost development of the network operators so that incentives for further cost reductions are encouraged.

Creation of a modern infrastructure

Shared use: by ruling on the framework conditions governing shared use (site sharing) for the first time, access to existing mast infrastructure was regulated.

Universal service: in 2003, no requests were made in this regard. However, on the initiative and with the intensive participation of RTR-GmbH, a contractual arrangement between the market players concerned was reached without conducting complex proceedings.

Operative competition

Transition to general authorisations: the transition from the licence obligation to a system of general authorisations further facilitated market access.

Alternative Dispute Resolution (ADR): ADR provides for faster and more cost-efficient conflict solution than court or administrative proceedings. RTR-GmbH defined a process which is to help find a solution that is acceptable to the conflict parties.

Consumer protection

Settlement of end-user disputes: the increasing number of dispute settlement proceedings reflects the special importance of these proceedings in terms of consumer protection. The number of settlement proceedings rose by 43% against the previous year. Frequently, dialer programs were the cause of the complaints. RTR-GmbH tries to further raise the awareness of the users and market players in this regard.

Operative competition

Mandatory conciliation proceedings: by the introduction of mandatory conciliation proceedings prior to proceedings before the TKK, it is possible to avert potential proceedings before the TKK, thus saving valuable time.

Mobile Number Portability: RTR-GmbH participated in an operator project on the introduction of Mobile Number Portability, with the objective of clarifying the essential framework conditions.

National working groups: due to intensive coordination activities with the market within national working groups, RTR-GmbH is able to recognise developments early and reflect them in relevant regulatory decisions.

Operative competition and harmonisation

International working groups: in the field of harmonisation major progress was made. "Best Practices" on important issues were worked out and published.

Market definition: RTR-GmbH was one of the first authorities in the European Union to define 16 relevant markets which are the basis for the market analyses to be performed.

Market analysis procedures: the type of competition problem is identified in the process of a market analysis for the first time as a basis for the selection of specific regulatory measures. The relevant preparatory work was completed in 2003 and data collection was started.

Regulatory measures: despite approximation to general competition law, some ex ante obligations will also be required in the foreseeable future. However, they will be applied in a more differentiated and accurate manner. In 2003, national and international preparatory work was sped up with regard to regulatory decisions to be taken in 2004.

Transparency and harmonisation

Consultations and coordination work: due to the increased flexibility provided by the new legal framework, an internationally coordinated approach becomes even more important. For this reason, essential decisions have to be subjected to mandatory consultations. The first consultations were completed in 2003.

Ensuring efficient use of frequencies

Frequency trading: trading of frequency packages is permitted under the new legal framework. In this respect, the regulatory authority already took a first key decision, considering the effects on competition.

Operative competition Consumer protection

General terms and conditions: the extension of most user rights to encompass all operators of communications services was a major improvement in the field of user rights. All operators of communications services have to notify their terms and conditions.

Ensuring the efficient use of numbering resources

Communications parameters: the Charges Ordinance 2003 (EVO 2003) specifies the charges for number ranges with regulated fee limits in greater detail. The Special Communications Parameters Ordinance specified the provisions for transparent, objective and reproducible allocation of specific communications parameters. Also, it was possible to further speed up number assignment.

Value-added services: to increase transparency, RTR-GmbH publishes a directory of value-added services numbers. The Charges Ordinance 2003 specifies the charges for number ranges for value-added services in greater detail. Call barring for value-added services is mandatory and free of charge for the first time.

The TKK acts as supervisory body under the SigG.

Contributions to the achievement of objectives with regard to electronic signatures: on an ongoing basis, RTR-GmbH supported the Telekom-Control-Commission (TKK) as supervisory body for the providers of certification services according to the Signature Act (SigG).

1.4 Outlook

Challenge for 2004: to continue the successful implementation strategy and apply the new legal framework.

An annual report is only a snapshot and, even though a number of specific measures were taken to promote the development of the markets, there are a great number of challenges for 2004 to which the regulatory authority and all market players will respond. Specifically, the following priorities shall be addressed:

New tasks: as per 01.01.2004 two funds, the Digitisation Fund and the Television Film Fund, were established at RTR-GmbH. Fast and transparent management of these funds, which are endowed with EUR 7.5 million each, are the declared objective for 2004. In addition, as per 01.01.2004, KommAustria was given the competence for the promotion of press and journalism.

Digitisation: in 2004, the first pilot operation for interactive digital terrestrial television will be launched in the service area of Graz. The findings will have a considerable impact on the future introduction strategy. Moreover, the call for tenders regarding the multiplex operation for digital terrestrial television will be prepared in 2004.

Development of a sustainability strategy which contributes to the positive development of the market on the basis of an overall view of the market and the interdependence of decisions.

Performance of market analyses and imposing appropriate measures to remove competition deficits with a view to promoting sustainable competition.

Continuation of the Broadband Initiative in order to contribute to making Austria take the lead in information society.

2. Objectives of the regulatory activities

The objectives and the tasks of the regulatory authority are laid down by law.

Rundfunk und Telekom Regulierungs-GmbH (RTR-GmbH) is organised as a convergent regulatory authority. The statutory tasks assigned to RTR-GmbH may be divided into four areas:

1. supporting body for the Telekom-Control-Commission (TKK);
2. supporting body for the Austrian Communications Authority (KommAustria);
3. execution of its own official tasks; and
4. management of a competence centre for issues in connection with the convergence of the media and telecommunications.

All activities performed in 2003 contributed to achieving the objectives of the regulatory authorities, as defined in the relevant acts.

Objectives of regulation pursuant to § 1 TKG 2003
The regulatory measures are intended to serve the following goals:

Creation of a modern infrastructure

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

Ensuring competition

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

Promotion of the interests of the citizens

3. to promote the interests of the citizens by
   a) ensuring that all citizens have access to universal service;
   b) ensuring protection for consumers, in particular by simple and inexpensive dispute resolution procedures as well as a high level of protection of personal data and privacy;
   c) providing information, in particular in the form of transparent tariffs and general terms and conditions; and
   d) ensuring the integrity and security of public communications networks.

The measures listed above shall be technology neutral to the extent possible.

Tasks and objectives pursuant to the KOG

The tasks are

- to issue licences for the provision of broadcasting services;
- to issue licences for the operation of the technical equipment required for the provision of broadcasting services;
- to execute legal supervisory control over private broadcasters; and
- to administer the resources of the Digitisation Fund and the Television Film Fund.

The objectives are

- to promote the market access of new providers;
- to ensure diversity of opinion and promote the quality of broadcasting programmes, including the technical requirements for their distribution;
- to develop technical and economic schemes for a dual broadcasting market in Austria;
- to ensure the compliance with European minimum standards by providers of content, in particular for the benefit of the protection of children, young persons and consumers;
- to optimise the use of the frequency spectrum for broadcasting;
- to provide expert knowledge in the field of the convergence of audio-visual media and telecommunications as well as to promote the development of markets in the audio-visual and telecommunications sectors; and
- to create and maintain a modern and high-quality communications infrastructure in order to promote high-level locational quality.

Competence centre pursuant to § 5 KOG

§ 5 (3) item 5 KOG assigns to RTR-GmbH the task of setting up and managing a competence centre, in particular for issues in connection with the convergence of the media and telecommunications.

Tasks under the Signature Act

According to the Signature Act, RTR-GmbH, as supporting body of the TKK, has the task of supervising the providers of certification services.

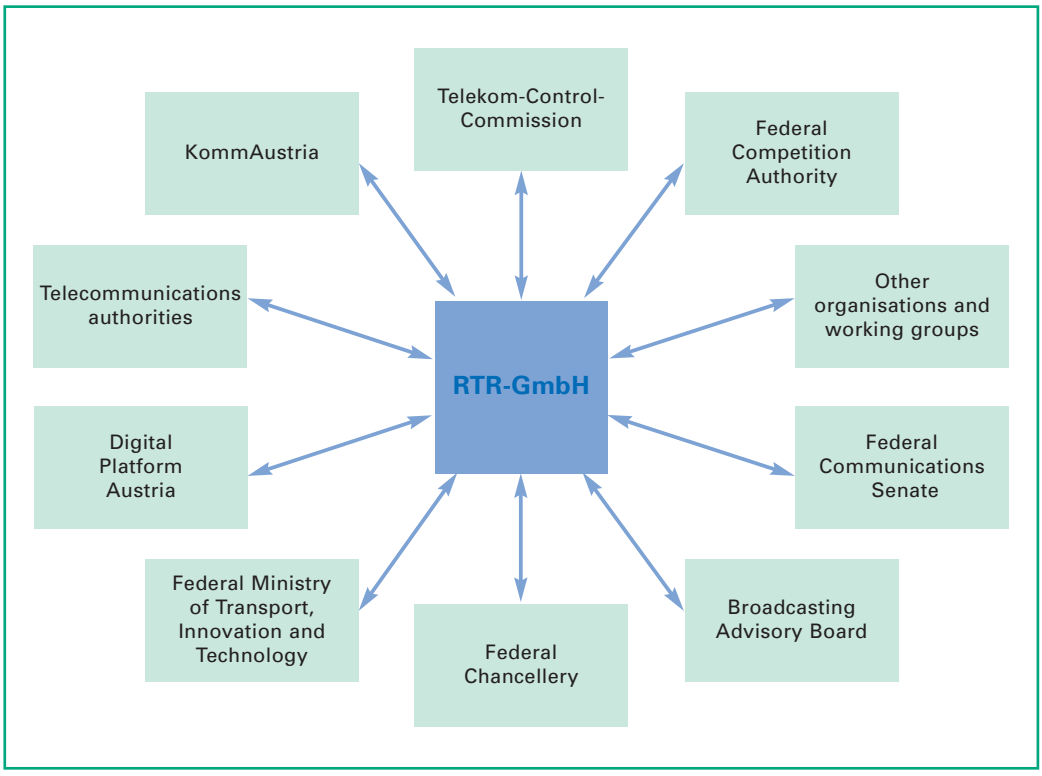
3. The integration of RTR-GmbH into the regulatory context

3.1 National context

To be able to achieve the above mentioned goals, RTR-GmbH is integrated into a highly differentiated "regulatory context" that is structured as follows:

RTR-GmbH cooperates with the relevant Austrian regulatory authorities.

Figure 3: RTR-GmbH in the national context



Rundfunk und Telekom Regulierungs-GmbH (RTR-GmbH)

RTR-GmbH is a convergent regulatory institution.

Rundfunk und Telekom Regulierungs-GmbH (RTR-GmbH) was established by the KOG, which took effect on 01.04.2001, and has the main task of providing administrative assistance to KommAustria and the TKK. As supporting body of the authorities KommAustria and TKK, it carries out the basic preparatory work for the regulatory decisions. The company is headed by two managing directors, one for the Broadcasting Department and one for the Telecommunications Department. The managing director of the Broadcasting Department is appointed by the Federal Chancellor and the managing director of the Telecommunications Department is appointed by the Federal Minister of Transport, Innovation and Technology. As to the technical matters of these departments, the company is run by the respective managing director alone, in all other matters by both managing directors jointly. The shares of the company are wholly owned by the state.

During the business year 2003, the following managing directors were responsible for RTR-GmbH:

- Broadcasting Department: Dr. Alfred Grinschgl
- Telecommunications Department: Dr. Georg Serentschy

Telekom-Control-Commission (TKK)

RTR-GmbH is the supporting body of the TKK.

The TKK takes the essential decisions in connection with the regulation of telecommunications. Its functions are described in § 117 TKG 2003 (see Section 4.2.1)

In 2003, the TKK was composed as follows:

- Dr. Eckhard Hermann (chairman),
- Dr. Elfriede Solé (substitute),
- Dr. Erhard Fürst,
- Dr. Martin Hagleitner (substitute),
- Univ.-Prof. Dipl.-Ing. Dr. Gottfried Magerl,
- Dipl.-Ing. Peter Knezu (substitute).

The Austrian Communications Authority (KommAustria)

RTR-GmbH is the supporting body of KommAustria.

KommAustria is an authority directly subordinate to the Federal Chancellor, comprising the head of the authority and, in 2003, a staff of two. With regard to its outward business practices, it is an independent authority and relies on RTR-GmbH, as supporting body, in the execution of its functions.

KommAustria takes first-instance decisions within the scope of its official activities and carries out tasks, in particular, within the framework of the following acts:

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

In 2003, the communications authority was composed as follows:

- HR Dr. Hans Peter Lehofer (head),
- HR Dipl.-Ing. Franz Prull (deputy),
- Mag. Michael Ogris.

On 30.09.2003, HR Dr. Hans Peter Lehofer resigned from KommAustria.

With the entry into force of the new Press Subsidies Act 2004 (PresseFG 2004) and the amendment of the Promotion of Journalism Act 1984 (PubFG) on 01.01.2004, KommAustria is now responsible for the management and allocation of the press and journalism funds. Here, too, RTR-GmbH assumes functions in respect of administrative support.

Contrary to the members of the TKK, the head and the staff of KommAustria are civil servants, or non-civil servants, who work full-time and have their offices and workplaces on the premises of RTR-GmbH.

Federal Ministry of Transport, Innovation and Technology (BMVIT)
The BMVIT is responsible for devising the framework conditions for the telecommunications market, drawing for advice on RTR's experience in day-to-day implementation, with a view to further developing these framework conditions.

Federal Communications Senate (BKS)
The BKS, which is based with the Federal Chancellery, acts as appellate body for decisions taken by KommAustria and exercises legal supervisory control over the Austrian Broadcasting Corporation (ORF).

Pursuant to § 12 (1) KOG, the five members of the BKS, three of whom have to belong to the judiciary, are independent in the performance of their duties and not bound by any instructions ("collegial body with quasi-judicial functions"). The members of the BKS are appointed by the Federal President at the suggestion of the Federal Government for a term of six years.

Digital Platform Austria
The working group Digital Platform Austria was established by the Federal Chancellor pursuant to § 21 PrTV-G to support the regulatory authority in drawing up a plan for the introduction of digital television. The constituent plenary assembly took place at the beginning of January 2002. Since then, expert panels of the working group on "Law", "Technology" and "Market/Content" have met at irregular intervals. The members of the working group were also involved in drawing up the "Digitisation Plan pursuant to § 21 (5) PrTV-G" for the introduction of digital terrestrial television, which was published at the end of 2003.

The working group is made up of about 300 experts from broadcasting companies, service providers, network operators, industry, trade, science and consumer protection organisations. The affairs of the working group are managed by the regulatory authority and its supporting body.

Federal Chancellery (BKA)
Cooperation between RTR-GmbH and the BKA takes place at many levels: KommAustria and RTR-GmbH, as authorities reporting to the BKA, are bound by instructions of the Federal Chancellor. At an operational level, there is close cooperation between the Department V/4 of the Constitutional Service in the BKA (media department), in particular on issues regarding the digitisation of broadcasting, further development of dual broadcasting as well as in the course of media political events.

Telecommunications authorities
While KommAustria is responsible for the management of the frequency spectrum for terrestrial broadcasting as well as for installation and operation licences for radio transmission systems, the telecommunications authorities are in charge of supervising these systems.

Federal Competition Authority
In matters of general competition law, RTR-GmbH cooperates with the Federal Competition Authority.

Other organisations and national working groups
In addition to the bodies mentioned, RTR-GmbH also cooperates with other technically relevant institutions and organisations (e.g. with the Telecommunications Vienna research centre or the Working Group Technical Coordination).

3.2 Instructions and stages of appeal

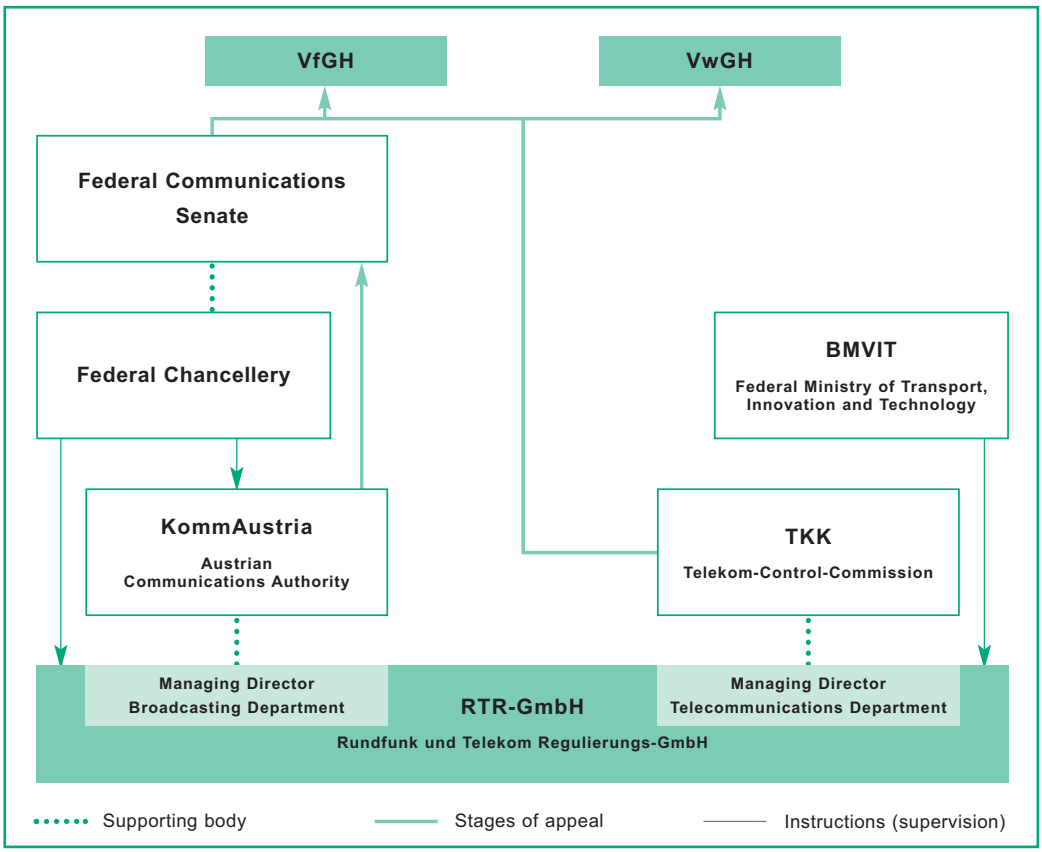
There are different types of appeal against decisions by the regulatory authorities.

The Federal Chancellor has the right to issue instructions to KommAustria as well as to the managing director of the Broadcasting Department, who is to be instructed in writing. The TKK is a collegial body with quasi-judicial functions, not bound by any instructions (Article 133 item 4 B-VG).

In the field of telecommunications, the Federal Minister of Transport, Innovation and Technology is entitled to issue written instructions to the managing director of the Telecommunications Department. Last but not least, the chairperson of the TKK (or the member of the TKK who is designated in the rules of procedure) and the head of KommAustria are entitled to issue instructions to the staff of RTR-GmbH in technical matters.

Appeals against decisions by the TKK can be filed to the Constitutional Court and the Administrative Court by means of a complaint. Appeals against decisions by KommAustria can be filed to the BKS, acting as second instance. Appeals against decisions taken by the BKS on appeal can be lodged with the higher courts.

Figure 4: Instructions and stages of appeal



3.3 International context

Internationally, RTR-GmbH cooperates with institutions relevant to regulation.

The technical integration of RTR-GmbH at an international level is an essential part of the regulatory activities and an obligation that is partly imposed on RTR-GmbH by law. Both Departments are closely linked to comparable institutions and authorities of other states, albeit to different degrees.

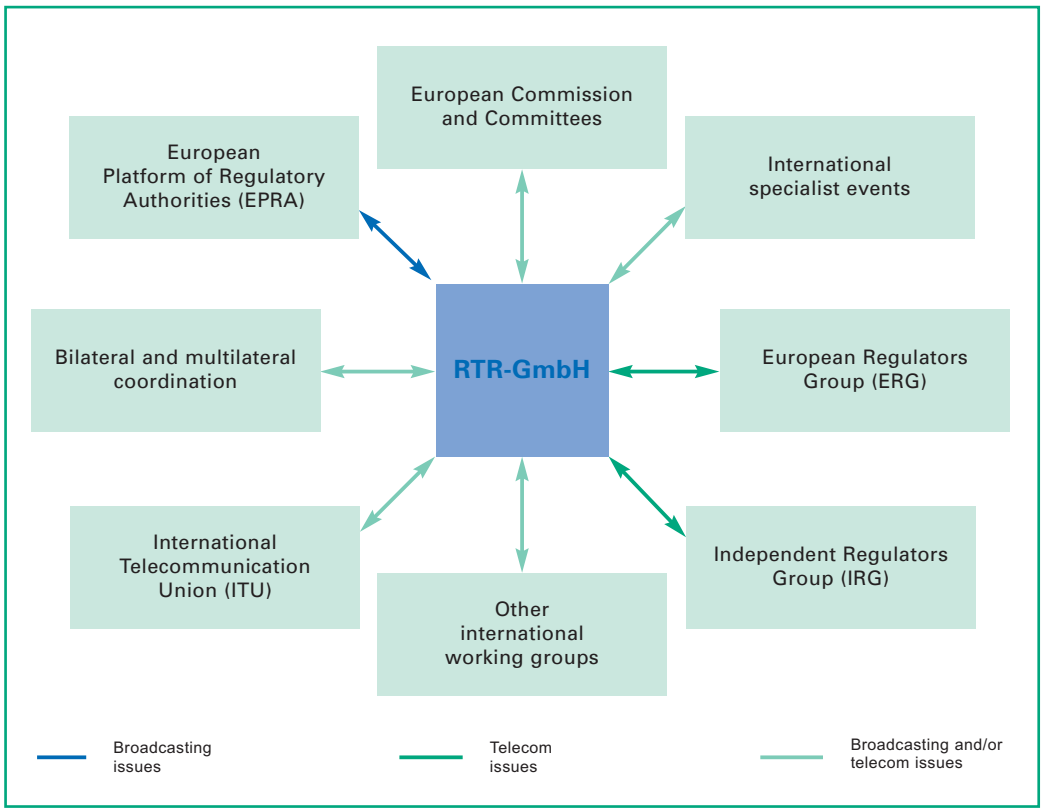
The internationalisation of the communications markets inevitably results in close cross-border coordination and cooperation activities of the individual regulatory institutions. Regulatory aspects and their potential effects on the market cannot be confined only to a single market but have to be always seen in an international market environment. This applies, in particular, to the fields of regulation where regulatory decisions have direct or indirect effects on the quality of Austria as an economic centre.

In many cases, the international activities are also designed to directly protect the interests of Austria in the further development of communications technologies. In this connection, in particular, the active participation of RTR-GmbH in international frequency coordination and planning work shall be mentioned.

Moreover, know-how from the international exchange of experiences and the benchmarking within the regulatory authorities is reflected in the national work of RTR-GmbH.

The following diagram illustrates the international work context of RTR-GmbH.

Figure 5: RTR-GmbH in the international context



For further information on the international work of the two Departments, see 4.1.7 and 4.2.3.8.

4. The activities of RTR-GmbH

4.1 Broadcasting Department

The regulatory activities in the Broadcasting Department in 2003 were characterised by the implementation of the tasks and objectives imposed by the KommAustria Act (KOG) on the regulatory authority and its supporting body. High on the list of priorities is the licensing of new radio broadcasters, followed by the execution of legal supervisory control over private TV and radio broadcasters as well as by the efforts directed at the introduction of digital broadcasting as well as coordination and planning work in the framework of frequency management.

4.1.1 Regulatory framework

New legal framework: essential changes in the regulatory framework with regard to access to the broadcasting infrastructure

In 2003, the regulatory framework for the activities of the Broadcasting Department of RTR-GmbH was fundamentally extended by the enactment of the TKG 2003, BGBl. 70/2003. The TKG 2003, which took effect on 20.08.2003 and transposed the set of electronic directives of the European Communities, for the first time created a consistent statutory basis for the regulation of electronic communications networks and services, including the markets for the transmission of broadcasting signals to end-users. The absolute novelty in this context are the competition rules of Section 5, equally applicable to the telecommunications and broadcasting infrastructures, which provides first for a delineation of the relevant national markets subject to ex ante regulation and, on this basis, for the execution of market analysis procedures.

In connection with the TKG 2003, it shall be mentioned that now also the notification obligation for the provision of a public communications network or communications service, thus, also the provision of a public communications network and/or service for the distribution of broadcasting signals is consistently regulated in § 15 TKG 2003. Following notification, the competent regulatory authority - KommAustria in the field of broadcasting - issues a general authorisation which does not only grant specific rights to the holders but also imposes some obligations on them.

In accordance with § 7 in connection with § 120 (1) item 1 TKG 2003, KommAustria has to set, by means of ordinance, uniform standard rates for one-time compensation of the right to use lines or systems. For this purpose, KommAustria, in its decision of 20.08.2003, started preparatory work to set nationally uniform standard rates in agreement with representatives of the parties concerned.

The activities previously carried out by the Broadcasting Department of RTR-GmbH, in its capacity as supporting body of KommAustria, such as frequency administration and frequency management for private broadcasting and broadcasting under public law are now regulated in the new TKG 2003 (Section 6).

In 2003, the activities of KommAustria and the Broadcasting Department of RTR-GmbH focused on promoting the market entry of new programme providers and ensuring that they are afforded proper broadcasting operation in a technical sense. Therefore, the core functions of KommAustria were to give approval for the provision of broadcasting services and for the operation of the required technical equipment and to execute legal supervisory control over private broadcasters.

4.1.2 Regulatory activities in the field of radio broadcasting

4.1.2.1 Licensing proceedings and allocation of new transmission capacities

Creation of new and improvement of existing service areas

In the business year 2003, 15 licensing proceedings were conducted in the field of radio broadcasting that were based on applications pursuant to § 12 PrR-G. These proceedings referred to transmission capacities that had not yet been allocated for use to a private radio broadcaster or the ORF.

Applications for the allocation of new transmission capacities can be filed with KommAustria any time. They have to give the necessary technical parameters about the intended use of the transmission capacities and will be published.

If there is no objection, the transmission capacity will be allocated to the applicant. In case of a justified objection, however, the transmission capacity will have to be put out to public tender (Wiener Zeitung, daily papers, web site of RTR-GmbH) which provides the opportunity to file applications within a period to be defined. If, subsequently, different applications are made, i.e. for the improvement, expansion or creation of a new service area, they shall be examined subject to the order specified in § 10 PrR-G.

§ 12 PrR-G stipulates that transmission capacities not yet allocated shall be allocated in the order specified in § 10 PrR-G:

- The allocation of transmission capacities to the ORF takes top priority but will take place only if they are required to meet the coverage obligation pursuant to § 3 ORF-G.
- Next, there is improvement of the coverage situation of licensed radio broadcasters, which, however, does not imply geographical expansion.
- Finally, transmission capacities shall be provided according to their availability for nationwide private radio broadcasting.
- Additionally, KommAustria has to examine if the transmission capacity applied for will be used for the creation of a new area (licence holder) or the expansion of an existing one. Both options represent legally equivalent alternatives. The criteria for decision are the diversity of opinion, economic efficiency of the radio programme as well as political, social and cultural considerations.

Double and multiple coverage shall be avoided to the extent possible.

4.1.2.1.1 Allocation of transmission capacities for improvement of the service quality

Six proceedings that were carried out pursuant to § 12 in connection with § 10 PrR-G resulted in the allocation of transmission capacities to improve the service quality in existing service areas:

- "Öblarn, Strimitzen 107.2 MHz" to improve the service quality in the service area "Oberes Ennstal" (Ennstaler Lokalradio GmbH);
- "Schoberpass, Jodl im Berg 101.2 MHz" to improve the service quality in the service area "Bezirk Leoben und östlicher Teil des Bezirks Liezen" (Harald Milchberger);
- "Friesach 101.1 MHz" to improve the service quality in the service area "Kärnten" (Antenne Kärnten Regionalradio GmbH);
- "Steuerberg 102.1 MHz" to improve the service quality in the service area "Kärnten" (Antenne Kärnten Regionalradio GmbH);
- "Brückl 96.1 MHz" to improve the service quality in the service area "Kärnten" (Antenne Kärnten Regionalradio GmbH);
- "Villach 6, Genottehöhe 99.7 MHz" to improve the service quality in the service area "Raum Wörthersee und Stadt Villach" (Privatradio Wörthersee GmbH).

4.1.2.1.2 Allocation of transmission capacities to expand existing service areas

Eight proceedings that were carried out pursuant to § 12 in connection with § 10 PrR-G resulted in the expansion of existing service areas:

- "Mürzzuschlag, Ganzstein 104.5 MHz" to expand the service area "Bruck an der Mur/Mur-, Mürztal" (Mur-Mürztal Radiobetriebs GmbH);
- "Kapfenberg 2, Maria Rehkogel, 106.1 MHz" to expand the service area "Niederösterreich" (Donauwelle Radio Privat Niederösterreich GmbH);
- "St. Johann im Pongau 2, Stenlehen 107.5 MHz" to expand the service area "Stadt Salzburg 106.2 MHz" (Welle Salzburg GmbH);
- "St. Michael im Lungau 105.9 MHz" to expand the service area "Innergebirg" (Pinzgau/Pongau/Lungau Radio GmbH);
- "Neukirchen am Großvenediger 2-104.4 MHz" to expand the service area "Innergebirg" (Pinzgau/Pongau/Lungau Radio GmbH);
- "Bad Aussee 3-104.2 MHz" to expand the service area "Salzkammergut" (Freies Radio Salzkammergut – Verein zur Förderung freier, nichtkommerzieller Radioprojekte im Salzkammergut);
- "Spittal an der Drau 5, Hühnersberg 99.3 MHz" to expand the service area "Villach Stadt und südlicher Teil des Bezirks Villach Land" (Radio Villach Privatradio GmbH);
- "St. Georgen am Attersee, Lichtenberg 88.4 MHz" to expand the service area "Raum Gmunden und Attergau" (RTVision Allgemeiner Medienverein).

4.1.2.1.3 Allocation of transmission capacities to create new service areas

New licence to "Freier Rundfunk Freistadt GmbH i.Gr."

In 2003, approval was granted for the provision of radio broadcasting in the service area "Freistadt 107.1 MHz" to "Freier Rundfunk Freistadt GmbH i.Gr.". Six applications for the allocation of transmission capacities to create new service areas were dismissed for lack of feasibility in terms of telecommunications technology. One application for the allocation of frequencies to create a new service area was dismissed for lack of available frequencies. Two applications for the allocation of transmission capacities to create new service areas were dismissed for non-compliance with the order to remedy shortcomings.

4.1.2.1.4 Pending proceedings

Additional nine allocation proceedings are pending at different procedural stages.
These are:

- Baden 2, Harzberg 93,4 MHz,
- Linz 2, Freinberg 96,7 MHz,
- Innsbruck 3, Natterer Boden 92,9 MHz,
- Göttweig, Benediktinerstift 107,1 MHz,
- Schwaz 2, Heuberg 100,2 MHz,
- Kremsmünster, Gusterberg 106,6 MHz,
- Gmünd, Schloßbichl 95,7 MHz,
- Hermagor, Kreuth 98,4 MHz,
- Ybbs an der Donau 96,5 MHz.

4.1.2.2 Event and educational radio programmes

For event and educational radio programmes licences that are limited in time can be granted.

Pursuant to § 3 (5) PrR-G, KommAustria may grant licences limited to a few months for the provision of local broadcasting services in a specific temporal context of an independent public event (event radio) as well as licences to training or educational institutions in the local area of this institution if the programmes are related to the functions to be performed by these institutions (educational radio).

In 2003, KommAustria licensed four event radio programmes:

- A radio project of the Jeunesse association at the Vienna Naschmarkt, a project of the town of Leonding related to the "leonart" cultural weeks, the event radio programme "sonne.at" in the Baden area as well as a programme related to the Gutenstein Festival.

- The application by Radio Event GmbH for licensing of an event radio programme during the Christmas market at Mils was dismissed, as Christmas markets are not considered an independent event within the meaning of § 3 (5) item 1 PrR-G.

In 2003, KommAustria licensed two educational radio programmes:

- An educational radio licence for one year was granted to the BG/BRG Freistadt which had applied for a self-produced programme for pupils, teachers and parents comprising music

broadcasts, project work of the junior and senior classes, interviews, news broadcasts as well as contributions by parents and teachers.

- FH Radio 94.4 MHz of Fachhochschule St. Pölten was again granted a licence for one year.

4.1.2.3 Legal supervisory control over radio broadcasters

4.1.2.3.1 Infringement and licence withdrawal proceedings pursuant to PrR-G

In 2003, legal supervisory control of KommAustria over the radio broadcasters in terms of infringements was limited basically to regular and spot checks of the radio broadcasters by KommAustria. In the period under review, no proceedings pursuant to § 25 PrR-G (simple infringements) or § 28 PrR-G (repeated or severe infringements, fundamental programme changes, licence revocation) were completed by means of notice.

In one case, proceedings were instituted against a radio broadcaster upon complaint of a competitor that the character of the programme had been fundamentally changed. Subsequently, however, the complaint was withdrawn and the proceedings were dropped. Other infringement proceedings that were instituted by KommAustria by virtue of office referred to the suspected infringement of § 17 PrR-G as to the extent to which it is permitted to take over programmes of other broadcasters. These proceedings were dropped.

The application by a licence holder for a determination that the selected structure of an operating company did not represent a forbidden licence transfer and was not an infringement, and that the licence had not expired pursuant to § 3 (3) item 1 PrR-G was found to be inadmissible and was dismissed. The proceedings that were subsequently instituted against this licence holder by KommAustria by virtue of office under § 28 PrR-G as well as § 3 (3) item 1 PrR-G (expiry of a licence upon failure to perform broadcasting operations for one year) were still pending at the end of the period under review.

4.1.2.3.2 Obligation to notify changes in ownership pursuant to § 7 (5) and (6) PrR-G

Changes in ownership of private radio broadcasters shall be notified to the regulatory authority.

§§ 7 to 9 PrR-G stipulate the licensing requirements (inter alia, reasons for exclusion as well as provisions designed to prevent excessive media concentration for the purpose of diversity of opinion) that have to be complied with during the entire licence term. A violation of these licensing requirements constitutes a ground for revocation of the licence.

Ownership restrictions to prevent excessive media concentration in the interest of diversity of opinion

To enable the regulatory authority to review compliance with these provisions, § 7 (5) PrR-G provides that any change in the ownership or partnership structures (either directly of the radio broadcaster or indirectly of the parent company) shall be notified to the regulatory authority. In special cases (if a new partner directly takes over more than 50% of a radio broadcaster's shares), a statement shall be obtained from KommAustria before this change in ownership is effected to determine whether the provisions of §§ 7 to 9 PrR-G are complied with also in the changed circumstances.

Also in 2003, as in the year before, changes in ownership took place for consolidation purposes. One specific consolidation process was initiated by Styria Medien AG and affected the radio broadcasters Antenne Kärnten Regionalradio GmbH & Co KG, Antenne Steiermark Regionalradio GmbH, Privatradio Wörthersee GmbH, Lokalradio Gute Laune GmbH & Co KG and Ennstaler Lokalradio GmbH.

4.1.2.4 Proceedings under telecommunications law in the field of radio broadcasting

"One-stop shop" KommAustria: responsible for broadcasting licences and licensing of radio communications systems under telecommunications law

For reasons of administrative streamlining ("one-stop shop") KommAustria is not only responsible for licensing under broadcasting law but also for licensing, under telecommunications law, of radio communications systems for the provision of broadcasting services (for private broadcasters and the ORF) pursuant to the TKG. If an application under telecommunications law refers to the licensing of a new radio communications system, this will be published and may give rise to a subsequent tendering procedure pursuant to §§ 12 and 13 PrR-G.

Applications exclusively under telecommunications law refer mainly to intended changes in radio communications systems, such as the installation of new transmitter antennas, change of sites or increase in performance. First, the Broadcasting Frequency Management Division examines such applications for compatibility with existing domestic and foreign transmitter stations. In most cases, an international coordination procedure is required (as it is the case with the application for a completely new transmission capacity where approval from potentially affected neighbouring states needs to be obtained. Then, the requested modification in the radio communications system licence can be approved.

In 2003, KommAustria approved changes in radio communications systems for private radio broadcasters in 16 cases. At the end of the year, another five applications were pending.

4.1.2.5 ORF transmitter stations

In telecommunications matters KommAustria has competence also for the ORF.

KommAustria, within the framework of its responsibility for all broadcasters, continued the documentation and registration of all radio and television transmitter stations of the ORF and private broadcasters. The ORF has about 1,800 transmitter stations at approx. 470 locations in Austria.

15 applications by the ORF for a licence or modification of a licence to install and operate rebroadcast receiver and transmitter stations for terrestrial analogue radio (VHF) were granted by means of a notice. International coordination procedures were initiated and partly completed in the year under review; for several of these stations pilot operation was approved. In addition, the installation and the operation of numerous VHF tunnel radio systems of the ORF were licensed. Finally, the proceedings on the allocation of the transmission capacity Pinswang 93.9 MHz that had been requested by the ORF and was published on 28.11.2003 were still pending.

In the field of digital radio broadcasting, the licences granted to the ORF for the installation and operation of several transmitter stations for the purpose of further testing of the T-DAB

(Terrestrial-Digital Audio Broadcasting) synchronised network were extended until 31.12.2004 for Vienna and until 01.04.2004 for Innsbruck. In the field of short wave broadcasting, the ORF was licensed to use frequencies from the WARC-92 extension bands from 31.03.2003 until 26.10.2003 (9,465 kHz) and from 26.10.2003 until 28.03.2004 (7,325 kHz and 9,495 kHz).

4.1.3 Regulatory activities in the field of terrestrial television

4.1.3.1 Shared use of ORF transmitter stations and frequency sharing

If the contract parties do not agree on site and frequency sharing, KommAustria will take a decision.

After the licensing proceedings for conurbation area TV in the service areas of Linz, Salzburg and Vienna had been completed, the licence holders had to conduct negotiations about site and frequency sharing with the ORF that had previously transmitted the programme ORF 2 on the channels now allocated to the private broadcasters in the licensing proceedings. Therefore, the licence holders had to reach an agreement with the ORF on shared use of the transmitter stations (§ 19 PrTV-G) on the one hand and on the conditions of shared use of the transmission capacity (§ 13 PrTV-G) on the other.

While the licence holders for the conurbation areas Linz and Salzburg reached an agreement with the ORF on the shared use of transmitter stations and transmission capacity, PULS CITY TV GmbH, licence holder for the conurbation area of Vienna, did not reach an agreement and filed for a ruling of KommAustria, pursuant to § 13 (5) in connection with § 19 (3) PrTV-G, after a negotiating period of six weeks. At issue were the amount of the charge for shared use of the transmitter as well as the term of shared use of the transmission capacity; the ORF programme "Wien Heute" was to be broadcast on channel 34 in any case.

After lengthy proceedings in which an opinion by a business administration expert was prepared and a hearing before KommAustria was conducted, KommAustria issued a notice on 23.01.2003 which basically ruled the following:

The ORF shall let PULS CITY TV GmbH use the transmission capacity Wien 1, channel 34, from Monday till Friday from 00.00 to 15.37, from 15.40 to 19.00 and from 19.25 to 24.00, as well as on Saturdays, Sundays and public holidays from 00.00 to 19.00 and from 19.25 to 24.00.

For the shared use of the ORF transmitter at the site Wien 1, Kahlenberg, an appropriate annual charge of EUR 262,620 net was fixed for the distribution of a television programme on channel 34 by PULS CITY TV GmbH.

In addition, the obligation was imposed on PULS CITY TV GmbH to let the ORF broadcast programmes of special local or regional public informational interest in the service area of Vienna, in particular, in connection with the coverage of elections at the federal, provincial and local levels as well as in the event of catastrophes, by using the transmission capacity Wien 1, channel 34.

This notice is legally effective.

4.1.3.2 Proceedings of the ORF subject to telecommunications law

KommAustria is also responsible for granting licences under telecommunications law for the installation and operation of broadcasting transmitter stations of the ORF (not only of private broadcasters). The respective activities in the field of radio broadcasting as well as the documentation and registration of all radio and television transmitter stations have already been described in section 4.1.2.5.

In the period under review, eight applications of the ORF for modification of the licence for rebroadcast receiver and transmitter stations were granted by means of notice; six such systems were granted pilot operation; international coordination procedures were initiated and partly completed in 2003.

4.1.4 Satellite TV

4.1.4.1 Licences

In 2003, KommAustria granted three new satellite licences.

The procedure for the award of licences for satellite broadcasting was laid down, consistently for radio and television, in the PrTV-G.

In 2003, the following licences were granted:

- K-TV Fernseh GmbH & Co KEG: licence for a 24-hour Christian special interest programme focusing on religious contents, distribution via ASTRA 1 H (the former licence was returned at the same time);
- Pro7 Rundfunk und Medienproduktion GmbH: licence for a window programme within the Pro7 backing programme focusing on news, infotainment and entertainment, distribution via ASTRA 1;
- telemediendienst GmbH: licence for an encoded erotical special interest programme (pay TV according to pay per view), distribution via ASTRA 1 H.

The following already licensed satellite broadcasting providers were permitted to use additional or different satellites:

- ATV Privatfernseh-GmbH (licence to use the Eutelsat Sesat and ASTRA 1G satellites);
- Fashion TV Programmgesellschaft mbH (licence to use the EUTELSAT EUROBIRD satellite);
- K-TV Fernseh GmbH & Co KEG (licence to use the ASTRA satellite).

In one additional case, licensing proceedings were instituted and are still pending. One application for granting a licence for the provision of a satellite distributed television programme was rejected for failure to comply with the order to remedy shortcomings.

4.1.4.2 Legal supervisory control over private TV broadcasters

In 2003, KommAustria detected gross violations of the provisions on the protection of minors for the first time.

In the period under review, two revocation proceedings were instituted, which resulted in the expiry of the licence of Sport Management International GmbH & Co KG and IRO & Partners Management- und Marketing Beratungsgesellschaft m.b.H. due to non-use. Revocation proceedings were instituted in another case and are still pending.

Criminal proceedings were instituted against the managing director of a satellite broadcaster for failure to notify programme distribution via a different than the licensed satellite. These proceedings ended with a warning issued to the managing director.

Furthermore, KommAustria established by means of notice that X-Gate Multimedia Broadcasting GmbH grossly violated the provisions on the protection of minors stipulated in § 32 (2) and (3) PrTV-G and instructed the licence holder to restore the lawful state within three days of service of the notice.

With regard to change in ownership, the partners of K-TV Fernseh GmbH & Co KEG changed. Also, X-Gate Multimedia Broadcasting GmbH transferred more than 25% of the shares that had been held at the time of licence award so that § 10 (7) PrTV-G applied. It was assumed that the requirements for a licence under the PrTV-G were met in the changed circumstances; therefore, the licence was not to be revoked. In addition to this, no other transfers of shares took place pursuant to § 10 (7) or (8) PrTV-G. However, two changes in ownership pursuant to § 10 (6) PrTV-G were notified.

Finally, the reports on compliance with the programme ratings, as defined in the European Television Directive, of all satellite broadcasters subject to reporting pursuant to § 52 PrTV-G, i.e. three licence holders in the period under review, were submitted to the BKA.

4.1.5 Cable TV

4.1.5.1 Cable broadcasting

In the field of cable broadcasting (mainly cable television, whereas cable radio plays a rather insignificant role), the activities of the regulatory authority concentrate on legal supervisory control over cable broadcasters and cable network operators. Moreover, distribution orders can be issued (so-called must-carry procedures).

The provision of cable broadcasting services is not subject to licensing, as no allocation of publicly administered scarce resources like radio frequencies is required. However, the start-up of cable broadcasting has to be notified to the regulatory authority pursuant to § 9 PrTV-G;

in substance, the cable broadcaster is subject to the legal supervisory control of KommAustria to the same extent as other Austrian broadcasters. In the period under review, the notifications received were regularly processed to be able to keep a complete and up-to-date list of cable broadcasters.

In the field of legal supervisory control, one cable broadcaster was requested to submit its records because a complaint had been filed with KommAustria, claiming contents that might be morally harmful to young people. Closer investigation of the programme records showed, however, that the respective cable programme did not broadcast any morally harmful contents so that further investigations were not necessary.

In the period under review, moreover, several proceedings regarding changes in ownership of cable broadcasters were conducted. In this context, KommAustria was to check to what extent the intended changes in ownership would affect the provisions of § 10 PrTV-G and violate the prerequisites for the provision of broadcasting services pursuant to the PrTV-G.

4.1.5.2 Communications networks

All communications networks shall be notified to the regulatory authority pursuant to § 15 TKG 2003.

Also, the unchanged, simultaneous distribution of received programmes, which is what cable network operators usually do, is not subject to licensing. Yet, this activity has to be notified to KommAustria; by the entry into force of the TKG 2003 this notification obligation now has a new statutory basis, i.e. § 15 TKG 2003, which replaces the former notification obligation that had been imposed also on cable network operators in § 9 PrTV-G. After receipt of a complete notification on the operation of a communications network and/or service for the transmission of broadcasting signals, the competent authority issues a general authorisation that replaces the former licences in the telecom area and now also encompasses providers and operators of public communications networks and services for the distribution of broadcasting signals. As a consequence, cable network operators that distribute broadcasting programmes via their cable networks, as well as operators of terrestrial transmitter networks (satellite operators would also be covered by the TKG but none were resident in Austria in the period under review), are obliged to notify the transmission of broadcasting programmes in Austria pursuant to § 15 TKG. KommAustria also has to be notified of a modification of the networks and services provided as well as of the termination thereof. In the period under review, the notifications received were regularly processed to be able to keep a complete and up-to-date list of broadcasters.

In the field of legal supervisory control, one case was discontinued that had already been initiated in 2002 under a complaint about the unencoded transmission of programmes that may be distributed by (foreign) broadcasters via satellite only in encoded form because their contents might be morally harmful to young people. Since “distribution” by cable network operators means unchanged and complete transmission of the received programmes, a cable network operator that performs decryption without the approval of the programme provider is to be regarded as broadcaster and will thus be responsible for the programme shown. In the

cases made known to KommAustria, this problem could be solved in so far as the respective programmes can be received only if they contain a protection for young persons or they are no longer transmitted at all. In these proceedings also the question of delimiting the activity of a mere cable network operator from that of a broadcaster was addressed.

The question which programmes will be fed into a cable network is usually settled by contracts between the respective cable network operator and the broadcasters. Under certain circumstances, KommAustria may instruct a cable network operator, pursuant to § 20 PrTV-G, to feed a cable broadcasting programme of local relevance into its cable network (so-called must-carry procedure) if corresponding contracts could not be negotiated. This constitutes a certain corrective to the quasi-monopolist position that a cable network operator enjoys in a specific area. In the period under review, no must-carry requests were made.

4.1.6 Broadcasting frequency management and frequency coordination

4.1.6.1 The work basis for frequency management

Frequency management and frequency coordination are an integral part of everyday work of KommAustria and RTR-GmbH in the field of broadcasting, which is in the interest of both the ORF as public law company and the private broadcasters.

In the field of broadcasting frequency management, the following broadcasting services shall be handled:

- analogue terrestrial TV broadcasting;
- digital terrestrial TV broadcasting (DVB-T);
- VHF radio;
- digital terrestrial audio broadcasting (T-DAB);
- medium wave;
- short wave; and
- satellite broadcasting since 2003.

In the frequency bands dedicated nationally and internationally to the above-mentioned broadcasting services also other radio services are operated, apart from the broadcasting services.

International coordination procedures are required for new transmission capacities.

In order to ensure efficient use of the frequency spectrum and to avoid interference between individual radio services or stations, domestic coordination as well as, generally, international coordination with the neighbouring states is necessary.

The fundamental rules for international coordination are laid down in the ITU Radio Regulations. As a matter of principle, the International Telecommunication Convention stipulates that radio stations cannot be put into operation unless they have been coordinated with all telecommunications authorities concerned.

Further, more detailed coordination rules can be found in international agreements set up either within the framework of the ITU (Regional Radio Conferences) or within the framework of agreements and conventions of CEPT.

Specifically, broadcasting frequency management is governed by the following international broadcasting agreements: analogue TV broadcasting stations are coordinated under the Stockholm 61 regional agreement (ITU conference), digital TV broadcasting stations are coordinated under the Chester 97 agreement (CEPT agreement). Analogue VHF broadcasting stations were coordinated under the Geneva 84 regional conference (ITU conference) and digital terrestrial audio broadcasting stations (T-DAB) under the Special arrangement of Wiesbaden 95 revised at Maastricht 2002 (band III) and the Special arrangement Maastricht 2002 (L band). Short wave is coordinated within the framework of the Radio Regulations and the international High Frequency Co-ordination Conference (HFCC, founded by broadcasters). The Geneva 75 agreement (ITU conference) is applied to medium wave broadcasting.

New frequencies can be made accessible only in the process of a coordination procedure, which usually takes three to six months. In special cases, bilateral and multilateral frequency negotiations are held with neighbouring countries to work out common solutions in difficult situations.

Essential for the coordination process: topography, altitude, radiated power

The number of countries to be included in the coordination process for conventional broadcasting in bands I, II, III, IV and V mainly depends on the altitude of the transmitter, the mean ground elevation around the transmitter in an area of three to 15 km and the sectoral radiated power and, thus, varies depending on the frequencies to be coordinated. Every single broadcasting agreement contains a set of rules as to how coordination distances are to be calculated. Generally, the number of countries actually affected is lower than that calculated on the basis of the coordination rules applied.

In the assessment of coordination inquiries, it is examined not only whether the new frequencies will cause interference with broadcasting transmitter stations currently in operation but also whether they will violate existing rights in the form of entries in the corresponding frequency plans.

The major ITU broadcasting agreements on coordination also provide for frequency plan administration. This task is carried out by the ITU Radiocommunication Bureau in Geneva.

Each coordination procedure consists of two stages: the first stage involves bilateral coordination with the respective neighbouring countries. The results are then reported to the ITU Radiocommunication Bureau. The ITU publishes all requests in a circular, specifying a period for objection by the relevant institutions in the respective countries. If no objection is raised, the relevant frequencies are published once more, signifying their inclusion in the corresponding frequency plan. This entry in the frequency plan means that the frequency is given international property rights.

4.1.6.2 Activities in the field of frequency management

International coordination procedures ensure access of the market players to new broadcasting frequencies.

In the field of television broadcasting, several bilateral, trilateral and multilateral frequency negotiations with the authorities of our neighbours Switzerland, Germany, Czech Republic, Slovakia and Hungary were conducted in 2003 to prepare for the introduction of DVB-T. The meetings were held in Salzburg, Vienna, Budapest, Munich and Berne. It was the aim of the meetings to make new frequencies available for DVB-T. The major focus was placed on the TV channels over 60 where military radio services had been resettled in some countries, freeing capacities. For the west of Austria good results were achieved with Switzerland and Germany, i.e. for the provincial capitals Bregenz, Innsbruck, Salzburg and Linz TV channels over 60 were obtained as results of the negotiations. In the provincial capitals in the east and the south nothing has been decided yet and further efforts will be required in 2004. In general, the negotiations are very complex, as every country pursues its own objectives that are often incompatible with those of the respective neighbouring country. Furthermore, the channels over 60 have particularly high coordination distances allowing for special objections under the international agreements. This requires negotiations with countries that do not border Austria directly and would normally not have to be involved in coordination procedures.

The experience has shown that media policy and frequency management are closely linked in the field of broadcasting: both media policy and the applicants usually request more frequencies than frequency management can provide. Therefore, it is important for Austria to safeguard its interests and secure enough frequency resources at the coordination and planning conferences. This, of course, results in outline conditions for media policy and, in particular, for the Digitisation Plan and its implementation.

In the course of preparing for the Stockholm 61 follow-up conference a public consultation was carried out by RTR-GmbH in the period under review not only to give the interested public the opportunity for comment but also to inform the radio network operators, quite generally, that the radio broadcasting network to be established and operated in the process of digitisation will differ considerably from the existing analogue network. The comments received by RTR-GmbH were published on the web site. The ORF commented in detail and expressed an interest in operating a frequency multiplexer in the future.

Also in 2003, the international coordination activities focused on the application of the coordination procedures according to the above-mentioned international agreements.

The number of coordination procedures initiated on Austria's part in 2003 involved a total of 81 broadcasting transmitter stations, including 51 radio and 17 television as well as 13 DVB-T transmitter stations. In the same year, RTR-GmbH handled 434 foreign coordination inquiries, including 231 radio transmitter stations, 113 analogue television transmitter stations and 90 DVB-T transmitter stations.

4.1.6.3 Participation in licensing and allocation procedures

Expert opinions on frequency matters are decisive factors for the licence award in terms of double coverage.

An important task involved in broadcasting frequency management is the preparation of technical expert opinions pursuant to the PrR-G and the PrTV-G for KommAustria. Depending on the request or the procedure, these expert opinions consider different items in connection with the technical implementation of transmission capacities, such as:

Implementability of the transmission capacity, active/passive interference, IF interference, coverage capabilities, coordination probability, double and multiple coverage, extension or densification of an existing licence, number of inhabitants covered, compatibility with flight radio systems. Practical experience shows that the expert opinions constitute important decisive factors for the procedures of KommAustria.

In 2003, comprehensive expert opinions and comments were prepared which are directly connected to the two major proceedings in Linz (double coverage ORF and LIFE Radio) as well as to the allocation of the transmission capacity 93.4 MHz. In addition, about 35 expert opinions and memos were drawn up for KommAustria in the process of handling a great number of applications for private radio provision (new licences as well as modifications of technical parameters of existing frequencies).

In 2003, a total of 15 radio and eight television applications of the ORF were handled regarding frequencies, mostly for modifications of the characteristic technical parameters of a transmitter. According to the coordination agreements and the Radio Regulations, the corresponding coordinations and registrations were carried out. To the applications by the ORF for short wave broadcasting in Moosbrunn for last year's winter and summer broadcasting periods the same procedure was applied.

4.1.6.4 Frequency book

Another task to be carried out by the regulatory authority under the PrR-G and PrTV-G is the maintenance of the frequency book. All licensed VHF and television broadcasting transmitter stations have to be entered in the frequency book. Thus, the frequency book gives an extensive and up-to-date overview of all licensed transmitter stations of the ORF and private broadcasters. At present, the frequency book contains about 1,800 ORF transmitter stations (plus 200 owned at community level with and without involvement of the ORF) and 300 transmitter stations of private broadcasters as well as about 100 transmitter stations of broadcasters at community level. The data is available to the public on the web site of RTR-GmbH (http://www.rtr.at).

4.1.6.5 Measurement vehicle

Since spring 2003, RTR-GmbH has been using a measurement vehicle that has the equipment to record, clarify and document the tasks to be carried out by the regulatory authority in the field of frequency management also by means of measurements. The purchase of the measurement vehicle allowed RTR-GmbH in 2003 to substantiate the calculations in the expert opinions in 40 measuring assignments.

The measuring equipment of the vehicle allows the measurement of field strengths at test points but also along routes, while the reception quality, particularly of VHF radio, is recorded automatically. Last year, Mr. Franz Lesnik of TB Lesnik provided his services on ten days a month in order to carry out the measurements on behalf of RTR-GmbH.

4.1.6.6 DVB-T pilot operation Graz

The preparations for the DVB-T pilot operation Graz in terms of selecting an appropriate TV channel approved by the neighbouring countries was completed in the period under review. Interference with existing analogue TV transmitter stations was determined with the aid of the measurement vehicle and rated as non-critical. Thus, the frequency-related parameters for the pilot operation of the TV channel 62, which is to be operated in Graz in a Single Frequency Network (SFN) at two sites, were finally defined. As an alternative, or in reserve, the TV channel 60, which is currently being used by the Graz University of Technology for experimental testing, was also coordinated on an international basis (see also 4.1.11.3).

4.1.7 International activities

Within the framework of the international tasks the following activities took place in 2003:

4.1.7.1 Conférence Européenne des Administrations des Postes et des Télécommunications (CEPT)

Precondition for the successful digitisation of broadcasting: participation of RTR-GmbH in international frequency coordination and planning

RTR-GmbH attended three meetings of the CEPT working group FM PT24. The group deals with the introduction of Digital Video Broadcasting-Terrestrial (DVB-T) in Europe as well as with the preparations for the revision of the Stockholm 61 agreement (RRC 2004/2005). Frequency management issues as well as the technical bases according to the latest developments and findings were discussed and submitted as European preparatory contributions to the ITU conference. In the FM PT24 group, leading European experts from more than 40 CEPT member states cooperate closely in the field of DVB-T to focus on and further the European interests within CEPT more strongly, in particular vis-à-vis non-European organisations.

4.1.7.2 Frequency Management Working Group (FMWG)

Division III of the Federal Ministry of Transport, Innovation and Technology (BMVIT), the superior telecommunications authority, which regularly attends the meetings of the FMWG enlisted the support and cooperation of KommAustria and RTR-GmbH because the European Common Proposals (ECPs) for die RRC 04/05 were to be drawn up at the two meetings in the reporting year, i.e. very important broadcasting issues were to be decided.

It turned out that the broadcasting issues could not be completed during the time available at the regular meetings so that an "Extraordinary FMWG Meeting" was convened in Helsinki, which a representative of KommAustria attended. There, one part of the ECPs was adopted, while the remaining EDPs will be dealt with at another meeting in Vienna early in March 2004.

In general, regular coordination activities and information exchange on frequency management issues took place with Section III of the BMVIT, as many CEPT groups work in an interdisciplinary context with regard to telecom and broadcasting services.

4.1.7.3 International Telecommunication Union (ITU)

Task Group 6/8: it was the task of the Task Group 6/8 to complete the technical report for the first session of the RRC 2004/2005. In 2003, a total of three meetings were held which were attended by more than 100 representatives of countries within the area to be planned. The planning region comprises the European Broadcasting Area, the African Broadcasting Area as well as Armenia, Azerbaijan, Georgia, Kazakhstan, Uzbekistan, Kirghizia, Tajikistan and the areas of the Russian Federation west of 170 degrees east longitude. At the last meeting in September 2003, the technical report of the TG 6/8 was completed. It will form the basis for decision for the first session of the RRC 2004/2005 as to how the area will be eventually planned at the actual conference that is scheduled for 2006. The major chapters of this report are dedicated to planning principles, methods and policies, technical bases, transitional scenarios, use of the frequency band III and conditions for shared use by digital radio and digital television, compatibility with other radio services and computerised planning.

Study Group 6: the activities and results of the ITU Study Groups were followed on the basis of the existing documentation. In 2003, the regulatory authority did not attend meetings of the Study Group 6 which deals with broadcasting issues in general, including many aspects of frequency management, and whose work results form the basis for all planning and coordination activities in the field of broadcasting.

4.1.7.4 European Platform of Regulatory Authorities (EPRA)

KommAustria is a member of EPRA (http://www.epra.org). During the reporting period, delegates of the regulatory authority attended the plenary meetings of EPRA in May (Naples) and in October (Cyprus), where representatives of approximately 45 European broadcasting regulatory authorities discussed issues such as convergence regulation, development of digital television, advertising, regulation of broadcasting under public law, media concentration, political advertising and European media policy. At the last plenary meeting in October, a working group on DVB-T was established for the exchange and analysis of experiences and developments in the field of digitisation in Europe. KommAustria takes part in this working group.

4.1.7.5 Revision of the television directive

In its 4th report on the application of the "Television without Frontiers" Directive (COM [2002] 778 final) the Commission announced that it would review the directive to update it and, if necessary, further develop the provisions according to which public consultations were to be held. The consultations were to involve all interested parties in a comprehensive discussion in order to obtain extensive information as to the extent to which the television directive needs to be updated and developed further.

Early in April 2003, the first round of the public consultation was held, with KommAustria participating, in which the themes "protection of general interests in television advertising, sponsorship, teleshopping and self-promotion" and "access to events of major importance for society" were discussed.

The second round of the public consultation was held from 23.06.2003 to 25.06.2003 and covered the themes "promotion of cultural diversity and of competitiveness of the European programme industry", "protection of minors and public order - the right to reply" as well as "application (related aspects)".

Subsequently, KommAustria submitted to the European Commission a written contribution commenting on the themes "protection of general interests in television advertising, sponsorship, teleshopping and self-promotion" and "protection of minors and public order".

In particular, KommAustria pointed out the problem of advertising windows that, according to the Austrian regulatory authority, would deserve special consideration in the course of revising the television directive, with a view to respecting and promoting cultural diversity in the European Union also in the future.

4.1.8 Cooperation with the Telecommunications Offices and radio supervision bodies

The administrative agreement of 2001 governs cooperation between KommAustria and the telecommunications offices.

As already mentioned, KommAustria is also responsible for deciding on applications by private broadcasters as well as the ORF for permits to install and operate radio communications systems and on subsequent modifications of the permits pursuant to TKG 2003 or, in case of applications already pending at that time under the TKG 1997. As the supervision of the broadcasting transmitter stations, however, is the responsibility of the Telecommunications Offices in Vienna, Linz, Innsbruck and Graz and, as second instance, the National Telecommunications Authority (BMVIT), the Federal Chancellery and the BMVIT drew up an administrative agreement already in 2001 to govern cooperation between KommAustria and the Telecommunications Offices. The main points of this agreement focus on mutual exchange of information as well as cooperation in the enforcement of the TKG and also in the field of frequency management. The validity of the administrative agreement has not been affected by the entry into force of the TKG 2003.

4.1.9 Tasks in the field of competition law

The amended Competition Act provides for cooperation between the Cartel Court, the Federal Competition Authority and regulatory bodies.

The amendment of the Cartel Act by the Competition Act of 2002 conferred powers to the sector-specific regulatory authorities that are established at the federal level also in the field of general competition law.

The powers include mainly the right to file motions in cartel proceedings, e.g. to stop abuse of significant market power. In addition, the Cartel Court can draw on the expertise of the regulators, asking them to comment on issues referring to the respective economic sector. Such comments may be also given unsolicitedly.

Moreover, the Competition Act provides for cooperation and exchange of information between the Federal Competition Authority and the regulators. Also, KommAustria has to be given the opportunity for comment in matters concerning the media sector (not only electronic media).

In the business year 2003, KommAustria dealt with ten cases of the Federal Competition Authority in the media sector (in particular, mergers and cooperations of media owners) and commented on them.

In 2003, KommAustria commented on two cartel proceedings at the request of the Public Attorney for Cartel Matters.

4.1.10 Federal Communications Senate (BKS) and Administrative Court (VwGH)

Appeals against decisions by KommAustria may be filed to the BKS.

Appeals to the BKS were filed against numerous notices of KommAustria, in particular, against the licences awarded in comparative selection procedures involving several applicants. In 2003, the BKS decided on 21 appeals, the rulings by KommAustria being upheld in the majority of cases; at the end of 2003, only four appeals were pending.

At present, some 20 cases are pending with the VwGH.

4.1.11 Digitisation of broadcasting

4.1.11.1 Digital Platform Austria

The digitisation of broadcasting constitutes a focal point of KommAustria's work.

The digitisation of broadcasting is one of the priorities in the activities of KommAustria and RTR-GmbH. The digitisation of the broadcasting transmission media is an irreversible technological development that is taking place all over the world; by now, the Digital Video Broadcasting (DVB) system, a European development, has become accepted as technical standard everywhere, except for the American continent. The PrTV-G (Section 6) of 2001, in particular, forms the legal basis for the digitisation in Austria.

The working group Digital Platform Austria was established early in 2002 on the initiative of the Federal Chancellor pursuant to § 21 PrTV-G to assist KommAustria, through the know-how of its members, in the preparatory work for the introduction of digital broadcasting in Austria. Therefore, it is involved, among other things, in drawing up the annual report on progress of the work in the field of the digitisation of broadcasting (Digitisation Report) and in working out the plan for the introduction of digital broadcasting in Austria (Digitisation Plan).

The working group has about 300 members from all areas involved in the digitisation of broadcasting (broadcasters, service providers, network operators, industry, trade, science, federal provinces and consumers). In addition to the plenary assembly, three expert panels on "Law", "Technology" and "Market/Content" exist. The working group is managed by the regulatory authority.

In the period under review, two plenary meetings of the Digital Platform Austria were held. At the meeting of 14.01.2003, the first Digitisation Report of the regulatory authority was presented which specified initial theses on the introduction of digital broadcasting in Austria. At the plenary meeting of 28.11.2003, the project status of the DVB-T pilot operation in Graz was presented and the Digitisation Plan, i.e. the strategy for the nation-wide introduction of DVB-T in Austria, was deliberated. Subsequently, both issues will be described in greater detail.

In addition to the two major events, numerous conferences of the expert panels took place, with speakers from Austria and abroad, to discuss the different aspects of digitisation, the results of which were to be reflected in the work of the regulatory authority.

The Digitisation Report, which is published annually in spring, provides greater insight into the work of the Digital Platform Austria and the regulatory authority in the field of digitisation of broadcasting. The report for 2003 is available together with other relevant documents on the web site of RTR-GmbH (http://www.rtr.at).

4.1.11.2 Digitisation Plan

The publication of the Digitisation Plan enables the introduction of digital terrestrial television.

In the second half of 2003, KommAustria concentrated on preparing the Digitisation Plan for the introduction of digital terrestrial broadcasting pursuant to § 21 (5) PrTV-G. After the Digital Platform Austria and the Federal Chancellery had made their contributions, as provided by law, the plan was published in time at the end of 2003 and is available for download from the web site of RTR-GmbH.

This plan contains the strategy outlined by the Austrian regulatory authority for the nation-wide introduction of DVB-T in Austria as well as a temporary time schedule for the implementation of this strategy until the year 2010. From a legal point of view, it is the prerequisite for further steps to be taken.

In addition, the plan constitutes the publication of the Austrian transition strategy in the framework of the eEurope 2005 Action Plan under which all EU Member States are requested to publish their respective strategies for the introduction of digital broadcasting. The eEurope 2005 Action Plan is part of the Lisbon Strategy to make Europe the “world's most competitive and dynamic knowledge-based economy” by 2010.

All stakeholders, the regulatory authority and the members of the Digital Platform Austria, are aware that the digital terrestrial platform is only one of the carrier technologies of information society. Yet, the Austrian legislator attaches special importance to the migration of terrestrial broadcasting in the PrTV-G. The introduction of digital terrestrial television is therefore a priority objective of the regulatory authority and the working group Digital Platform Austria.

Media policy objectives of the Digitisation Plan

Even though only about 16% of all TV households have exclusively terrestrial reception of television programmes, about 60% of all TV households depend on terrestrial transmission to receive Austrian television programmes. The reason for this is that all satellite households (about 45% of all TV-households) with analogue reception equipment depend on the terrestrial network for the reception of ORF1, ORF2, ATV+ or private conurbation TV because, for copyright reasons, the Austrian programmes are distributed via digital satellite only in encoded form (the given figures refer to the end of 2003).

Also, compared to the cable and satellite platforms, the terrestrial platform is especially suited to the distribution of regional and local television programmes. Therefore, the expansion and migration of this distribution platform will protect the existing Austrian television providers in competition with German-speaking foreign stations and increase Austrian media diversity in the electronic sector. In this connection, the digitisation of the terrestrial network will contribute greatly to preserving the Austrian cultural identity and expanding Austria as media and business centre.

The digitisation allows the frequency spectrum to be used much more efficiently. On an analogue TV channel one television programme including sound and broadcast videotex is distributed, whereas in digital mode three to four programmes can be transported due to a multiplexing technique, depending on the modulation of the technical parameters. In addition, there is still sufficient bandwidth for the distribution of supplementary services (electronic programme guide, digital broadcast videotext etc.). Multiplexing means that the signals of the different programmes are compiled into a common data stream that is transmitted. In a set-top box or digital terminal equipment the received data stream is split up into the individual programmes again.

Another advantage of the terrestrial platform is that television signals can be received regardless of the location: portable indoor TV reception by means of a small antenna and mobile TV reception e.g. via a hand-held computer or in a car are essential unique features of DVB-T that are also relevant to Austria.

The four-stage plan until 2010

The digitisation of the terrestrial network is a very complex process that will take several years and is influenced by a number of external factors.

Guidance to all market players: time schedule for the migration to digital terrestrial television

Accordingly, it is not possible today to predict the full development with certainty. Therefore, the first version of the Digitisation Plan concentrated on the steps to be taken in the next two to three years. The further development, in particular the specific approach in the migration and turn-off phases, will be determined and adapted according to technical experience, consumer acceptance and the results of frequency planning at the Stockholm follow-up conference, which will be completed at the beginning of 2006.

The migration process comprises four stages:

- Stage 1: The preparation phase (2003 until the end of 2005)
  Frequency planning and coordination;
  DVB-T pilot operations like in Graz in 2004;
  Preparatory surveys and studies;
  Preparation and implementation of the multiplex tender (beginning of 2005).

- Stage 2: Progressive provision in densely populated areas (2006)
  Development of network "islands" in the densely populated areas by the operator of the multiplex licence;
  Supply level: 60% of the population in the first year of licence award;
  Review of the Digitisation Plan and, if required, reworking.

- Stage 3: Switchover by region (2007 to 2010)
  Sequential switchover in the federal provinces and turn-off of analogue frequencies;
  Simulcast phase limited from six to twelve months in the individual regions;
  Close involvement of the programme makers in the switchover process.

- Stage 4: After the analogue turn-off (from 2010)
  From today's point of view, there will be five or six possible transmission channels;
  Call for tenders and award of further multiplex platforms;
  Level of provision: multiplex coverage of over 90% (stationary), two or three transmission channels with 70% stationary and 40% portable indoor receivers, further transmission channels in accordance with Digitisation Plan and economic resources.

4.1.11.3 Cooperation agreement on the DVB-T pilot operation Graz

Pursuant to § 21 (1) PrTV-G, the primary objective of the working group Digital Platform Austria, in cooperation with the regulatory authority, is to facilitate commencement of the progressive introduction of digital terrestrial television by 2003.

ORF, RTR-GmbH, Siemens and TA: project "pilot operation for digital terrestrial television in Graz"

To comply with this obligation, intensive preparatory work for DVB-T pilot operation was done in Graz during the period under review. The service area of Graz was selected because the Styrian Business Promotion Agency (SFG) promised to provide additional funding for the project.

The pilot operation is based on a cooperation agreement of four core partners, comprising Digital Platform Austria, the ORF, Rundfunk und Telekom Regulierungs-GmbH (RTR-GmbH), Siemens AG Österreich, and Telekom Austria AG. Moreover, the project is open also to other system partners like private television broadcasters, competitors of the core partners, university institutes, local enterprises etc.

At the invitation of Franz Morak, State Secretary for Media, the agreement was signed on 03.11.2003 in the Congress Hall of the Federal Chancellery by Dr. Monika Lindner, CEO of the

ORF, Dr. Alfred Grinschgl, managing director of the RTR Broadcasting Department, Dipl.-Ing. Albert Hochleitner, CEO of Siemens AG Österreich, and Heinz Sundt, CEO of Telekom Austria. It is the purpose of this agreement to perform a three-month pilot operation for digital terrestrial television (DVB-T) in the service area of Graz, which focuses on testing interactive supplementary services based on the European MHP (Multimedia Home Platform) standard. In addition, mobile TV applications will be tested. The pilot operation is scheduled to take place between April and June 2004.

On the internationally coordinated television channel 62 it will be possible to receive up to four television programmes with digital usage. 150 test households will be equipped with the set-top boxes required for the reception of the digital signals. Apart from ORF1, ORF2 and ATV+, there will be enough capacity for another programme with the working title "Channel 4" which serves as a platform for interactive supplementary services. "Channel 4" is designed as an open platform where private broadcasting providers are also invited to test supplementary services and interactive applications. The data collected by the market research institute FESSEL-GfK on acceptance and usage of the applications tested shall give some insight and orientation as to future business models in the field of television.

4.1.12 Digitisation Fund

4.1.12.1 Statutory bases

In an amendment to the KOG, a Digitisation Fund was set up at the beginning of 2004, which is to be administered by the managing director of the Broadcasting Department. The Fund is endowed with EUR 7.5 million annually from revenues of the state pursuant to the Broadcasting Fees Act (RGG).

The Digitisation Fund is to speed up the digitisation of broadcasting in Austria.

The provisions of §§ 9a to 9e KOG, which form the statutory basis, describe the objectives and the endowment of the Fund, they govern the use of the grants and stipulate the guidelines to be drawn up on the allocation of the grants, in addition to general and special prerequisites for the award of grants.

The resources of the Digitisation Fund serve for the promotion of digital transmission techniques and digital applications on the basis of European standards in connection with broadcasting programmes.

The resources may be used, in particular, for the following purposes:

Digitisation Fund: appropriate and platform neutral allocation of grants

1. Scientific studies and analyses on technical, economic, programme-related and consumer-oriented issues in connection with the introduction of digital transmission of broadcasting programmes.

2. Promotion of pilot trials and research projects on digital transmission of broadcasting programmes.

3. Development of programmes and supplementary services, such as electronic programme guides, navigators, interactive and mobile applications, which demonstrate digital added value of digital transmission and go beyond conventional broadcasting applications.

4. Measures designed for public information on digital transmission of broadcasting programmes.

5. Planning and establishment of the terrestrial transmitter infrastructure for the transmission of digital broadcasting programmes, with the view to optimising the transmitter network and achieving an appropriate degree of coverage in rural areas.

6. Promotion of the acquisition of terminal equipment required for the reception of digitally transmitted broadcasting programmes.

7. Grants to broadcasting providers to facilitate the transition from analogue to digital transmission.

8. Measures designed to create financial incentives for consumers migrating to digital terrestrial reception of broadcasting programmes early.

9. Financing of the expenses of KommAustria and RTR-GmbH incurred in the preparation and implementation of the Digitisation Plan (§ 21 PrTV-G).

RTR-GmbH shall provide an annual report on the use of the resources to the Federal Chancellor until 30.03. of the following year, who shall submit this report to the National Council.

The Digitisation Fund was set up on the initiative of RTR-GmbH within the framework of the Digital Platform Austria working group.

The Digital Platform Austria points out in the Digitisation Report 2003 that the migration from analogue to digital terrestrial broadcasting in Austria – as in many other EU Member States – will not be an exclusively market-driven process: "It is expected that extraordinary resources will be required, especially in the introduction phase which will be characterised by increased expenditure in the field of planning, trials, pilot operations, increasing public awareness and, eventually, the implementation of the expensive simulcast operation."

Even though grants from the fund will focus on terrestrial broadcasting, where the situation is especially difficult, the Fund takes a technology-neutral approach which is open to supporting all forms of digital broadcasting.

In 2003, in addition to general preparations, e.g. for the DVB-T pilot operation in Graz, the guidelines governing the allocation of grants from the Fund and the application documents were worked out.

4.1.12.2 Guidelines on grants from the Fund

The guidelines for grant awards to regional pilot projects from the Digitisation Fund were published on 31.10.2003 and took effect on 01.01.2004. The guidelines for grant awards from the Digitisation Fund, which are not limited to regional projects, are currently undergoing an approval procedure under subsidies law before the European Commission.

The guidelines contain provisions on the purpose to be subsidised, the costs eligible for grants, the personal and factual requirements for grant awards, extent and type of the grant, the procedure as well as the terms and conditions of the contract.

The grants are awarded to the applicant in the form of non-repayable subsidies. The subsidy for each project shall not exceed 50% of the costs eligible for grants. Cumulation with other state grants is not permitted. Cumulation with grants other than state grants is permitted, even though a project may be subsidised by the state only to the extent of 60% of the costs eligible for grants.

Natural persons and legal entities as well as partnerships under commercial law domiciled in a Member State of the European Economic Area are entitled to apply for grants.

Grants may be awarded only if the financing of the project to be subsidised has been secured, allowing for other subsidies and fundings. At the time of filing the application, the project must not have been started.

The grants are awarded by RTR-GmbH in accordance with the Digitisation Plan prepared pursuant to § 21 PrTV-G. Prior to the grant award, KommAustria shall be given the opportunity for comment.

4.1.13 Television Film Fund

4.1.13.1 Statutory bases

The Television Film Fund supports TV productions and enhances the efficiency of the Austrian film industry.

At the beginning of 2004, the Television Film Fund was established within RTR-GmbH. The Fund is endowed with EUR 7.5 million annually. It is designed to support the production of television films, series and documentaries, to contribute to improving the quality of the TV productions and the capacity of the Austrian film industry, ensure diversity of the cultural landscape and, moreover, contribute to strengthening the audio-visual sector in Europe.

The provisions of §§ 9f to 9g KOG in connection with §§ 9c to 9e KOG, which form the statutory basis, describe the objectives and the endowment of the Fund. § 9h provides for the set-up of a review board that is to comment on the eligibility for grants of the projects submitted. It consists of five members that are appointed by the Federal Chancellor for a term of three years. The members have to have experience in the film industry and several years of relevant practice.

RTR-GmbH shall provide an annual report on the use of the resources to the Federal Chancellor until 30.03. of the following year, who shall submit this report to the National Council.

In 2003, in addition to general preparations, the guidelines governing the allocation of grants from the Fund and the application documents were worked out. In October 2003, moreover, an information event was organised in cooperation with the Technical Association of the Audiovisual and Film Industry, where the framework conditions of the Television Film Fund were presented.

4.1.13.2 Guidelines on grants from the Fund

For the award of grants from the Television Film Fund, RTR-GmbH drew up guidelines that had to be approved by the European Commission in an approval procedure under subsidies law. In the decision of the European Commission C(2003)4634 fin (state aid no. N 512/2003) the guidelines on the award of grants from the Television Film Fund were approved until 31.12.2004.

The guidelines specify the legal provisions in greater detail. Accordingly, the purpose of the grant is the production of television films, series and documentaries, where subsidies can be awarded in the form of non-repayable grants to cover a maximum of 20% of the overall production costs of a television production. Grant limits vary by genre, with television series being eligible for grants up to EUR 120,000 per episode, television films up to EUR 700,000 and documentaries up to EUR 200,000. Cumulation with other state grants is not permitted. Only programme filling TV productions of at least 23 minutes length will be subsidised. Industrial, image or advertising films are not eligible for grants.

Independent producers are entitled to apply for grants. A producer is not considered as independent if a television provider holds a majority share in the production company. A majority share exists if a single television provider (directly or indirectly) holds more than 25% of the shares or voting shares or if two or more television providers together hold more than 50% of the shares or voting shares. Furthermore, a producer is not considered as independent if he/she works exclusively for one television provider in the field of television productions.

In addition to further provisions on personal qualifications, the procedure, payment mode, reporting (supervision rights), settlement, final review and reimbursement of grants as well as the terms and conditions of the contract are specified in greater detail.

4.2. Telecommunications Department

4.2.1 Regulatory framework

Situation prior to liberalisation

The role of the regulatory authorities in the process of liberalising the telecommunications markets in Austria can be best understood by considering the basic issues involved in opening the market. In many Member States of the European Union the provision of telecommunications services and the operation of telecommunications networks were reserved for state-owned telecommunications organisations (PTTs).

With the 1987 Green Paper (Green Paper on the Development of the Common Market for Telecommunications Services and Equipment COM(87)290 30.06.1987), the EU embarked upon a very ambitious programme which stated that the express goal would be full liberalisation of the telecommunications sector in all Member States and the creation of a common European telecommunications market.

Monopoly rights were abolished.

The predominantly state-owned monopolies of the telecommunications markets were given an expiry date as per 01.01.1998. Individual sectors, like the terminal equipment market (end of the 1980s) and the mobile telecommunications market (mid-1990s), had already been transformed into competitive markets earlier. The last step was the liberalisation of the fixed telecommunications networks and of fixed network voice telephony, which were "reserved services" that the state-owned PTTs of many countries, including Austria, dominated as monopolists to the end. The decision of the EU in favour of full liberalisation, and thus to give up previously prevailing monopolised control, was and is radical, and required complete rethinking by the institutions which were to be entrusted with opening up the telecommunications markets.

First phase of liberalisation: opening the markets

The goal was to open up the market fast.

This change in approach manifested itself in the total renunciation of traditional monopoly supervision authorities, usually based at "postal ministries", in favour of regulatory authorities for the telecommunications sector, which had to be newly established and were meant to be independent of any influencing control by operators and providers. Independence was to be guaranteed to both, the (former) monopolist and the owner. These regulatory authorities were originally not conceived as competition authorities in the classical sense, but rather as institutions which were to actively pursue the opening of the market. Only later, after having achieved a sufficient degree of intensity of competition, was there to be more focus on their character as sectoral competition authorities. For many EU Member States it was an absolute novelty, and a great legislative challenge, to establish an independent regulatory authority, having the clear mandate to open up the markets and to contribute, by way of intensified competition, to an improved range of services, higher quality and, last but not least, significantly lower prices for the benefit of the people and the economy. This new quality of the regulatory authorities, to be newly established, was also reflected in the European regulatory framework which was designed to support these regulatory authorities in pursuing and promoting the opening of the market. In a number of EU Directives, i.e. the Interconnection Directive, the Voice Telephony Directive as well as the Licensing Directive, Member States were requested to

transpose this regulatory framework into national law. In addition, there were a number of recommendations of the European Commission and some important documents of the ONP Committee which explained the contents of the Directives in closer detail without being directly part of the existing legislation. In Austria, the first European regulatory framework was implemented in the TKG 1997.

Second phase of liberalisation: new legal framework

With the entry into force of the TKG 2003, the first phase of liberalisation was completed.

In February 2002, the new European set of directives, comprising the Framework Directive, the Access Directive, the Authorisation Directive and the Universal Service Directive, was published in the Official Journal of the European Union, followed by the Directive on Privacy and Electronic Communications in May 2002. These directives were transposed into national law by the TKG 2003 which took effect on 20.08.2003. Thus, Austria was the fifth Member State to fully implement the set of directives.

The new legal framework provides for a completely new, more differentiated regulatory approach in many areas.

Market definition: First of all, the four existing markets were broken down into a total of 16 telecommunications markets by a recommendation of the European Commission and the ordinance by RTR-GmbH to implement this recommendation.

Significant market power (SMP): Until the entry into effect of the TKG 2003, a company with significant market power had been subject to a great number of special obligations, such as the non-discrimination obligation, ex lege, i.e. by law.

The TKG 2003 requires a more differentiated analysis of the markets and the regulatory measures.

Obligations: Under the TKG 2003, appropriate measures (so-called remedies) that are likely to remove the specific competition problem must be imposed on a company assessed in proceedings as having significant market power.

Consultations: Moreover, consultations on the assessment of SMP and the imposition of remedies shall be held in a procedure pursuant to §§ 128 and 129 TKG 2003 with the public, other European regulatory authorities and the European Commission (see also section 4.2.4.4).

General authorisations: Another step towards the removal of market entry barriers in the new legal framework was the abolishment of the licences. Under a general authorisation, an operator now only has to notify the regulatory authority of the start, the change or the end of its activities. Eventually, by permitting frequency trading and enabling the modification of usage conditions another step directed at full liberalisation was taken.

The following survey shows the changes by subject areas:

Table 1: Comparison of old and new legal frameworks

Essential issues were revised.

Regulatory issue	TKG 1997	TKG 2003
Market entry	Licence required	Notification obligation (§ 15)
Number portability	Obligation only for fixed network	Obligation now also for mobile networks (§ 23)
General terms and conditions as well as tariffs	Right to object was limited to licence holders	Extended right of the TKK to object (§ 26)
Definition of markets	Defined by European directive	Ordinance of RTR-GmbH (§ 36)
Assessment of SMP	Market share higher than 25%	Market analysis (§ 37)
Obligations of SMP companies	All obligations laid down ex lege	Determination of specific obligations by the TKK (§§ 38-47)
Prior approval of general terms and conditions as well as tariffs	Mandatory for SMP companies ex lege	Obligation must be specifically imposed on the company (§ 45)
Frequency trading	Not permitted	Permitted subject to approval by the TKK (§ 56)
Numbering ordinance	Ordinance of the BMVIT	Ordinance of RTR-GmbH (§ 63)
ADR procedure	Service for operators	Basis in § 115 (3)
Resolution of disputes between operators	Independent of any proceedings before the TKK	Mandatory proceedings subordinate to proceedings before the TKK (§ 121)
Resolution of end-user disputes	Disputes with a telecommunications services provider	Now also possible in case of disputes with resellers (§ 122)
Consultation	Voluntary consultations	Mandatory for specific draft remedies (§128)
Coordination procedure	Not provided	Harmonisation of measures in the European context (§129)

Competences of the TKK

The competences of the TKK were adjusted.

Pursuant to § 117 TKG 2003, the following functions are reserved for the TKK:

- to order shared use in case of a dispute pursuant to § 9 (2),
- to give rulings in cases pursuant to § 18 (3),
- to execute the right to object pursuant to § 25,
- to determine the financial compensation to be paid from the Universal Service Fund pursuant to § 31,
- to determine the contribution to be paid into the Universal Service Fund pursuant to § 32,
- to determine a company or companies as having significant market power on the respective relevant market and to impose specific obligations pursuant to § 37,
- to decide in cases pursuant to §§ 23 (2), 38, 41, 44 (1 and 2), 46 (2), 47, 48 and 49 (3),
- to approve general terms and conditions as well as tariffs and to execute the right to object pursuant to §§ 26 and 45,
- to allocate frequencies, pursuant to § 54 (3) item 2, for which provision is made in the frequency usage plan pursuant to § 52 (3),
- to decide on the permission to use frequencies pursuant to § 56,
- to change and revoke the allocated frequencies pursuant to § 57 and § 60, respectively,
- to decide on the right to provide communications networks or services pursuant to § 91 (3),
- to decide about injunctions pursuant to § 91 (4),
- to establish infringements and request the skimming off of excessive profits pursuant to § 111,
- to make a request to the Cartel Court pursuant to § 127.

4.2.1.1 Competence of the regulatory authorities to issue ordinances

Within the framework of the TKG 2003 the regulatory authorities are now also authorised to issue ordinances. This innovation mainly takes account of the problems of the past and enables the regulatory authorities to issue general enforcement orders in strictly delimited subject matters. The competences to issue ordinances shall be described in greater detail as follows.

Competence of the TKK to issue ordinances

The new legal framework enables the TKK for economical reasons to determine, by way of ordinance, a threshold value for the financial contribution to be paid pursuant to § 10 (5) KOG.

Competence of RTR-GmbH to issue ordinances

The TKG 2003 contains a total of six authorisations for RTR-GmbH to issue ordinances.

Reference rates

First of all, within six months of the effective date of the TKG, RTR-GmbH, in agreement with the representatives of the parties concerned, shall set, by means of ordinance, uniform nationwide reference rates for one-time compensation for the use of property, pursuant to § 7 TKG 2003.

Value-added services

Pursuant to § 24 (2) TKG 2003 RTR-GmbH shall make more detailed stipulations, by way of ordinance, on the provision of value-added services in a transparent manner and in compliance with appropriate user protection. This may include also access controls, time limits for phone calls, rules for dialer programs and provisions on tariff information.

In addition, pursuant to § 24 (1) TKG 2003, the regulatory authority may lay down, by way of ordinance, more detailed provisions on tariffs for number ranges with regulated fee limits as well as for numbers subject to event tariffing.

Market definition

One ordinance issued by RTR-GmbH that is already in force is the Telecommunications Markets Ordinance 2003 (TKMVO 2003) which identifies the relevant national markets for the telecommunications sector susceptible to sector-specific ex ante regulation. The markets defined in this ordinance form the basis for the market analyses (see section 4.2.4.2). Pursuant to § 36 (1) TKG 2003, this ordinance shall be reviewed periodically, but at least every two years.

Communications parameters

Finally, in the field of addressing and numbering RTR-GmbH was also given the competence (§ 63 TKG 2003) to issue, by way of ordinance, a plan for communications parameters that is to contain the requirements for the allocation of communications parameters. Following a consultation procedure, this ordinance is expected to become effective in spring 2004.

Itemised billing

The Itemised Billing Ordinance (EEN-V) issued by RTR-GmbH that specifies the level of detail and the mode of provision of itemised bills is also in force already. This ordinance takes account of the directives and a request of the European Commission and defines the level of detail and the mode of provision of itemised billing more closely.

4.2.2 Activities under the old legal framework

4.2.2.1 Non-discrimination

By reviewing non-discrimination the regulatory authority contributes to fairness and transparency on the market.

One task in the context of the regulation of competition is to monitor non-discrimination pursuant to the TKG 1997. SMP operators are under the obligation to act in a non-discriminatory way, which means that they must treat all market players as equals. This obligation also extends to services that they provide for themselves or for affiliated companies under their control. If an SMP operator provides an intra-company service at a specific transfer price, which should be cost-oriented, the operator is also under the obligation to provide the same service to all competitors at the same conditions. SMP operators have regular reporting obligations which serve to implement this regulation. In addition, the regulatory authorities have the right to inspect the books of these operators.

The most important regulatory instrument given to the regulatory authority in pursuing this objective is § 34 TKG 1997. This provision confers special supervision of abuse upon the regulatory authority: accordingly, services provided by an SMP company on the market or for itself or affiliated companies must be also offered to the competitors in a non-discriminatory

manner under this provision. If an SMP operator violates this principle by abusing its significant market power, the regulatory authority can impose a specific conduct on this company, or forbid such conduct, and declare agreements null and void in total or in part.

The entry into force of the TKG 2003 has not rendered the non-discrimination obligation obsolete, which applied only to Telekom Austria as SMP company according to the TKG 1997 in the period under review. The transitional provision of § 133 (7) TKG 2003 stipulates that the obligations having applied to SMP operators pursuant to § 33 TKG 2003 shall continue to apply until a notice pursuant to § 37 (2) TKG 2003 is issued or these obligations originating in the TKG 1997 are repealed with legal effect.

Proceedings: Activation fee with AonSpeed Self-Installation
(Proceedings W 1/03 and W 7/03)

A review for discrimination was carried out.

Both proceedings pursuant to § 34 TKG 1997 concerned the question to what extent Telekom Austria was under the obligation to refrain from charging an activation fee in the case of special retail offers of other Internet Service Providers (ISPs) from their customers in respect of the product "AonSpeed – Self-Installation" without charging costs from the respective ISP.

Preliminary investigations on W 1/03 produced insufficient evidence to justify a specific complaint by a Telekom Austria competitor so that the proceedings were dropped.

Both proceedings were dropped.

In the course of the proceedings W 7/03, Telekom Austria submitted calculations that showed that during a limited advertising campaign for the product "AonSpeed SI" the Telekom Austria wholesale sector had charged the costs for activation of ADSL lines to its own retail sector in the same way as to external parties of the ADSL wholesale contract.

The TKK dropped the proceedings mainly on the grounds that Telekom Austria was not under the general obligation to pass on in identical form the price benefits which its retail sector offered to its own ADSL customers during a limited advertising campaign to the ADSL wholesale partners, as this would considerably impair the opportunities of product and/or service differentiation between the different providers of ADSL based Internet access services. At the same time, however, Telekom Austria was asked to intensify the already existing wholesale advertising campaigns, pointing out that the total financial volume of these campaigns should be in adequate proportion to the ADSL retail campaigns carried out by Telekom Austria.

Proceedings: **Federal discounts**
(Proceedings W 4/03)

Discounts granted to federal offices were reviewed.

These proceedings, pursuant to § 34 TKG 1997, were instituted on the suspicion that Telekom Austria abused its SMP position by granting discounts to federal offices in violation of the staggered discounts approved on 14.01.1999 (notice G 21/98-6). During the preliminary investigations the agreement on the so-called "federal discount" as well as the invitation to tender for the government's voice telephony services by Bundesbeschaffungs GmbH were reviewed; no violation of § 34 TKG by Telekom Austria was found and the proceedings were dropped.

The proceedings were dropped.

Proceedings: **Termination of contract**
(Proceedings W 5/03)

The TKK was involved in cartel proceedings regarding the termination of a contract.

The TKK was requested to supply an expert opinion in the proceedings W 5/03 before the Cartel Court, in which a company fought termination of its contract by Telekom Austria.

The Cartel Court dismissed the company's request to establish abuse of SMP on the grounds that there was no abuse under cartel law, as the termination by Telekom Austria had been in compliance with the provisions of the contract concluded between the parties. As the exceptional right to terminate the contract in the case of reasonable suspicion of abuse of its telecommunications services, which was included in Telekom Austria's "General Terms and Conditions – Telephone", had become part of the contract due to the fact that it was reasonably possible to take notice of these terms and conditions via the Internet, Telekom Austria had exercised its exceptional right to terminate the contract. In violation of its obligation to clarify specific matters prior to conclusion of the contract, the terminated company had pretended upon conclusion of the contract to be an end-user and had not disclosed its business model (transfer of the telecommunications services obtained) to Telekom Austria during the term of the contractual relationship.

The Cartel Court, on the other hand, granted the motion for unblocking of two company lines on the grounds that Telekom Austria's right to refuse services under its "General Terms and Conditions" was restricted by § 63 TKG 1997 with regard to Telekom Austria's obligation to provide universal service; Telekom Austria did not sufficiently consider the interests of its contract partner in deciding to block the lines, thus abusing its position of SMP in this respect.

Proceedings: **Provision of line access**
(Proceedings W 6/03)

In 2003 several proceedings on resale of line access were conducted.

On 19.12.2003, Telekom Austria withdrew its wholesale offer for the so-called "resale of line access" that had been submitted to its competitors on the initiative of the TKK on 10.12.2003.

The term "line access" refers to a package of services which is provided by Telekom Austria also to its own end-users in connection with the provision of POTS and ISDN lines. As a rule, these services are funded by the fixed charge to be paid by the end-user. These services include e.g. provision of POTS or ISDN basic access to voice telephony service and associated services (e.g. emergency calls, freephone services, value-added services) for calls in one's own network and to third networks, set-up of new lines, line transfer, use of the subscriber number, fault clearance, temporary blocking and return to service, geographical porting of numbers and services provided by the Austrian Electronic System (OES) such as call diversion, calling number display, call waiting, three-party conference, call barring etc. Also, the provision of Call Data Records (CDR) to resellers is included for calls (e.g. to services numbers subject to target network tariffing) that are still handled via the Telekom Austria network for technical reasons.

The fact that such services are available within the framework of a wholesale offer (also referred to as resale) shall enable the competitors that do not have their own access network infrastructure and have so far provided only carrier services to offer their customers an overall package (tariff options) comprising line access and carrier services in the field of fixed network voice telephony.

Customers' selection options shall be enhanced.

In particular, the companies that currently provide voice telephony services mainly through carrier network operation (by means of Call-by-Call or Carrier Pre-Selection) shall be able to create new innovative tariff models and establish their own attractive brands with improved customer service and marketing activities in the future.

Customers with service areas outside conurbations will profit most from this option. Private customers in areas of low population density often do not have the opportunity to choose from several access network operators, as the set-up of a separate infrastructure or the unbundling of local loops is not sufficiently profitable for alternative providers due to lacking economies of density.

In some countries resale is already available as a form of access to the market.

At present, end-user services on the basis of resale products are available to alternative providers only in Denmark. In the UK and in Ireland, where the provision process is currently implemented in cooperation between historical and alternative providers; corresponding retail products are expected to be available in spring 2004. In Germany, the regulatory authority asked Deutsche Telekom in summer 2003 to submit a revised resale offer. In Norway, a wholesale offer has been provided since January 2003.

Already in autumn 2002, Telekom Austria had submitted an initial draft for a wholesale offer at the request of the TKK in the process of abuse proceedings pursuant to § 34 TKG 1997. However, several months of negotiations between Telekom Austria and the companies interested in such an offer showed that some provisions of this offer would perhaps violate the ban on discrimination stipulated in the TKG 1997. The competitors, for example, criticised the amount of the one-time advance payment to be made by each provider to Telekom Austria in return for the adaptations required in Telekom Austria's IT and switching systems as well as the fact that the monthly fees for the permission to use the Telekom Austria infrastructure exceeded the fees charged from Telekom Austria's own end-users by far.

No satisfactory agreement could be negotiated.

Therefore, at the suggestion of a competitor, the TKK, by virtue of office, instituted further abuse proceedings in May 2003 to review the terms and conditions of the wholesale offer.

To avoid delays in the proceedings, the TKK put RTR-GmbH in charge of the negotiations with Telekom Austria about the conditions of the wholesale offer in July 2003. In several meetings between RTR-GmbH and Telekom Austria substantial improvements regarding the terms and conditions were achieved: for example, the maximum number of resale lines to be changed or set up per day was increased; in addition, the period for the regular provision Call Data Records to resellers was shortened. Contract provisions regarding exceptional contract termination and termination of service by Telekom Austria in the case of impairment of network integrity were adjusted to the benefit of the contract partner. However, the most important result of the negotiations was that the one-time advance payment to be made by each reseller in return for the adaptations required in the IT and switching systems of Telekom Austria was considerably reduced. As for the monthly fees for the permission to use the Telekom Austria infrastructure, the resale fee offered by Telekom Austria last made it seem feasible for alternative providers to offer competitive access services on the market.

The one-time costs to enable resale were a critical item at issue.

As no agreement could be reached on all issues in dispute, the TKK asked Telekom Austria in a letter dated 01.12.2003 to further modify the wholesale offer in respect of the items under complaint. This referred, in particular, to the time of commencement of regular operation (01.10.2004, if one of Telekom Austria's competitors were to sign the wholesale offer before 23.12.2003) as well as clarifications as to the reseller's obligation to permit Call-by-Call and Carrier Pre-Selection (i.e. the reseller must allow its end-user to use Call-by-Call and Carrier Pre-Selection via third providers but may provide the low-cost tariff only on the condition that the end-user selects the reseller itself as Call-by-Call or Carrier Pre-Selection provider).

Since Telekom Austria had complied with this request by submitting the offer on 10.12.3003, the TKK had no reason to continue the proceedings that had been still conducted according to the old legal regime (TKG 1997) and discontinued the proceedings by the decision of 15.12.2003.

Telekom Austria submitted an offer which prompted the TKK to discontinue the proceedings.

In a letter of 19.12.2003 Telekom Austria notified the competitors interested in the wholesale offer that the offer had been withdrawn.

Subsequently, in the meeting of 07.01.2004 the TKK instituted the proceedings R 3/03 for discriminatory refusal to submit a wholesale offer to competitors regarding the resale of line access.

Proceedings: **Granting discounts in CUG communications**
(Proceedings W 8/03)

Cause of the proceedings: it was suspected that discounts were granted to an extent not approved.

These proceedings referred to discounts granted by Telekom Austria. The proceedings against Telekom Austria were instituted on the suspicion that discounts were granted to an extent not provided for by the approved staggered discounts (notice G 21/98). In these proceedings the TKK, in the process of the necessary delineation of the term "public fixed network voice telephony" as being subject to ex ante tariff and charge approval, defined the term "CUG communication" as follows: an internal communication between two users of a Closed User Group (CUG) which is not covered by the term public voice telephony exists if the communication between the users is not handled via the public communications or telephone network. In this case the communication is not conducted via network termination points of the public telephone network.

Proof was submitted that the tariff under complaint was no longer applied, and the proceedings were discontinued.

Further in the proceedings, Telekom Austria submitted conclusive documents that proved that the end-user tariff under complaint was no longer applied. Therefore, the proceedings were discontinued.

4.2.2.2 Frequency allocation

Transparent and non-discriminatory frequency allocation creates equal opportunities between market players.

In the field of frequency allocation no tendering procedures were carried out in 2003.

The entry into force of the TKG 2003, however, caused fundamental changes in the field of frequency allocation. The regulatory authority (and this refers exclusively to the TKK) was given the competence to allocate frequencies that have been declared to be a scarce resource by means of an ordinance of the BMVIT. All other frequencies are allocated by the BMVIT upon request.

Furthermore, it was laid down in the TKG 2003 that frequency holders may pass on the frequencies obtained (frequency trading).

The allocation procedure to be followed by the TKK was, however, incorporated into the new act largely unchanged.

Proceedings: Frequency allocation to Mobilkom and T-Mobile pursuant to § 125 (3) TKG 1997

In 1998 and 1999, Mobilkom and T-Mobile had been allocated frequency packages of 2x5 MHz each in the DCS-1800 frequency range by means of notices of the TKK.

Existing legal uncertainties in the field of frequency allocation were removed.

The proceedings were based on § 125 (3) TKG 1997 that stipulates that the authority may, on demand, allocate additional frequencies in 5 MHz packages from the frequency range reserved for DCS-1800 to existing holders of a licence for the provision of the reserved telecommunications service by means of mobile communications in the digital cellular mobile radio range if at least three years have elapsed since the licence applicant's licence notice for the DCS-1800 licence (granted in 1997) took legal effect. Before that, additional frequencies from the frequency range reserved for DCS-1800 may be allocated to existing licence holders only if their subscriber capacity is proved to be exhausted and all reasonable economic and technical options had been exploited.

This provision therefore enabled frequency allocation outside the regular frequency allocation procedure to Mobilkom and T-Mobile which were already licence holders at the time the provision took effect. On the other hand, this provision also created a protection standard in favour of One which was to be granted an exclusive right of usage in the DCS-1800 frequency range for a specific period.

This protection idea was to be broken only if the entitled operators Mobilkom and T-Mobile were to come close to their capacity limits.

The preliminary investigations in the proceedings conducted at that time had shown that there were capacity shortages in certain regional areas. Therefore, the frequencies were allocated for these regionally limited areas. One had filed a complaint against these notices with the Administrative Court (VwGH) after a complaint to the Constitutional Court (VfGH) had been dismissed. In the rulings of 09.09.2003, the VwGH quashed the notices on the grounds of unlawfulness owing to a violation of rules of procedure. The rulings of the VwGH referred to the decision of the European Court of Justice of 22.05.2003 which had ruled that the allocation of additional frequencies to Mobilkom free of charge would not violate the EC Treaty and the provisions of the directives if the fees paid by Mobilkom and One were economically equivalent. Therefore, according to the ruling of the VwGH, the TKK had to examine if the fees paid by Mobilkom and T-Mobile (ATS 4 billion each) for the licence were equivalent to the fee paid by One for its licence (ATS 2.3 billion). In the preliminary investigation the following issues were examined: the spectrum packages of the operators, the differences between GSM-900 and GSM-1800 networks, advantages and disadvantages

resulting from the time of market entry (first mover advantages) as well as the question to what extent One, at the time of bidding, had considered that frequencies might be allocated to Mobilkom and T-Mobile free of charge.

The frequency usage fees that had been paid were found to be economically equivalent.

The result of the investigations carried out by the TKK was that frequency usage fees paid by Mobilkom and T-Mobile were equivalent to that paid by One from an economic point of view. The decision is based on the fact that, taking into account the different spectrum packages, a comparison between the frequency usage fees paid by Mobilkom and T-Mobile and that paid by One (Mobilkom and T-Mobile had been allocated 8 MHz each from the GMS-1800 frequency range in return for their frequency usage fee, while One had been allocated 22.5 MHz from the GSM-1800 frequency range for a frequency usage fee of ATS 2.3 billion) showed that, also considering the technical differences of the frequencies from the GSM-900 and GSM-1800 frequency ranges, the frequency usage fees paid by Mobilkom and T-Mobile were considerably higher than that paid by One and that the allocation of 2x5 MHz free of charge therefore created economic equivalence and was thus justified. Moreover, One had known at the time of applying for the licence that frequency allocation free of charge to Mobilkom and T-Mobile was provided in the law. Therefore, One had been in the position to consider this fact in the financial valuation of its offer. According to the TKK, the first mover advantage that was also examined did not justify any other approach either.

Frequencies were allocated free of charge.

Therefore, the TKK decided in the meeting of 15.12.2003 that Mobilkom and T-Mobile be allocated frequency packages of 2x5 MHz each from the GSM-1800 frequency range free of charge, restricted to areas where capacity shortages existed. Pursuant to § 133 (2) TKG 2003, the decision was to be based on the factual and legal situation at the time when the initial notices had been issued (August 1998 and August 1999).

4.2.2.3 Network access: Interconnection and unbundling

Open Network Provision (ONP) is essential to create sustainable competition.

An essential area of regulation is to create the conditions that are necessary so that new market entrants can actually provide their services on the market.

In this respect, Open Network Provision (ONP) is of central importance. To facilitate competition between the new providers and the former monopolist, access to the telecommunications network of the former monopolist must be ensured, basically, by interconnecting the networks. Interconnection of networks is a highly complex issue that comprises the following three dimensions:

- physical interconnection;
- interoperability of the services (logical interconnection);
- charges for the interconnection services.

The European regulatory framework, which formed the basis for the TKG 1997, imposes a comprehensive obligation for interconnection upon operators, while the specific definition of this obligation is left to each member state's legislature. Of particular importance is the provision that the interconnection services offered by operators with SMP according to telecommunications law are to be cost-oriented, the FL-LRAIC (Forward Looking-Long Run Average Incremental Costs) approach being the cost concept to be applied by law (within the meaning of § 41 (3) TKG [1997] in connection with §§ 8, 9 ZVO). According to this approach, a new provider need not pay the fully distributed costs of the SMP operator, based on its historic purchase prices, but only for the services directly attributable to interconnection included in the costs of an efficient network operator for this interconnection service.

The new European regulatory framework for electronic communications networks and services was transposed into national law by means of the TKG 2003. In the field of interconnection, § 48 (1) TKG 2003 – in analogy to § 41 (1) TKG 1997 – stipulates the interconnection obligation for operators of public communications networks as follows: "Every operator of a public communications network shall be under the obligation to make an interconnection offer to other operators of such networks on demand. All parties involved shall aim to achieve the objective of facilitating and improving communications among the users of different public communications networks."

The design of the interconnection conditions depends mainly on the specific obligations, i.e. the "regulatory instruments", which are imposed on companies with significant market power within the meaning of § 35 TKG 2003 by the TKK pursuant to § 37 TKG 2003. The proceedings pursuant to § 37 TKG 2003 in which effective competition on the defined markets is determined or, otherwise, at least one company is found to have SMP and, subsequently, specific regulatory steps are taken, were not completed in the period under review.

Proceedings: Determination of mobile network interconnection charges
(Proceedings Z 28/02, Z 29/02, Z 30/02 and Z 2/03)

As the Austrian mobile communications market is growing strongly, mobile termination charges are of particular importance.

In the TKK interconnection rulings of 14.04.2003 regarding Z 28/02, Z 29/02, Z 30/02 as well as Z 2/03, the mutual mobile interconnection charges of Mobilkom and T-Mobile as well as the interconnection charges in relation to tele.ring and UTA were determined, since no agreement under private law had been reached between the operators for the period from 01.01.2003.

In keeping with the statutory provisions as well as with previous regulatory practice of the TKK, "reasonable" charges for interconnection services (termination and origination) with the public telecommunications networks of the parties to the proceedings were to be ruled, as none of the parties has SMP within the meaning of § 33 TKG 1997 and, therefore, it was not necessary to determine "cost-oriented interconnection charges" as stipulated by law for SMP operators.

In line with previous decisions in this field, these charges were ruled once again in 2003.

As in previous dispute resolution cases, the TKK commissioned economic official experts also this time to determine the full costs relevant to interconnection. The experts calculated the proportionate costs of the network elements that are needed for termination and origination of interconnection services. These costs include all expenses of the network elements involved in termination and/or origination (e.g. the air interface) as well as the proportionate overhead costs, which are attributable to interconnection services; thus, these costs shall be regarded as "relevant to interconnection".

The gradual adjustment reflects the cost development of the network operators.

In the above-mentioned dispute resolutions the termination and origination charges for Mobilkom and T-Mobile were reduced, using the criterion of reasonableness as a basis, as can be seen in the table below. The previous level of the interconnection charge of tele.ring (19.62 euro cents for termination and origination) was upheld with these decisions until 30.09.2003.

The stated amounts refer to the charges per minute (in euro cent, exclusive of VAT) that are to be paid for the respective interconnection service; the charges are flat, i.e. independent of time and volume. For connection set-up services and unsuccessful connections no additional charges fall due. The charge is calculated on the basis of per second billing of the successful connection.

Specifically, the ruled charge has been derived as follows: until the expiry date of the present ruling (30.09.2003) Mobilkom and T-Mobile each shall pass on half of the "productivity growth" from the interconnection charges that had applied until 31.12.2002. The productivity growth is the difference between the full costs according to the calculations by the economic experts in the mentioned proceedings and previous calculations by the experts in the proceedings Z 5, 7/01, Z 8/01 and Z 14, 15/01.

By ruling these charges the TKK has put a temporary stop, in particular, to the payment of excessive interconnection charges that lead to distortions of competition and undesired subsidising, taking into account the relative position of the respective company, and

Table 2: Mobile network interconnection charges

	Validity	Termination	Origination
Interconnection charges Mobilkom	01.01. – 31.03.2003 01.04. – 31.08.2003 01.09. – 30.09.2003	11.25 11.11 10.86	10.75 10.61 10.26
Interconnection charges T-Mobile	01.01. – 31.03.2003 01.04. – 31.08.2003 01.09. – 30.09.2003	13.80 13.49 13.18	13.20 12.80 12.40

in euro cent (excl. VAT)

has followed the trend towards a uniform market price in the longer term. Moreover, the market success or productivity growth of a company was rewarded by the fact that only 50% of the productivity growth had to be passed on; it is an incentive to perform further cost reductions.

The rulings act as incentives for further cost reductions.

With this decision the Universal Mobile Telecommunication System (UMTS) operators were compensated for their investments on a flat-rate basis, i.e. they partly did not have to pass on the cost savings achieved. Thus, the TKK supports the fast build-up of the necessary cost-intensive infrastructure, providing incentives to invest.

Proceedings: Quashing of the notices Z 22/99 and Z 25/99 by the VwGH – porting of services numbers

The costs for the porting of services numbers were newly calculated.

In the ruling of 03.09.2002, the VwGH quashed the notices of the TKK of 09.05.2000, Z 22/99-95 and Z 25/99-91, which dealt with the mutual porting conditions of services numbers. As services numbers had been ported neither between Telekabel and Telekom Austria nor between T-Mobile and Telekom Austria within the period of validity of the quashed notices and both Telekabel and T-Mobile had withdrawn the motions instituting the proceedings, the proceedings between Telekabel and Telekom Austria as well as between T-Mobile and Telekom Austria were discontinued.

However, between UTA as well as eTel, as universal successor of European Telecom, and Telekom Austria portings did take place within the period of validity of the quashed notices so that the TKK decided to commission supplementary expert opinions. Aided by the new expert opinions, the TKK concluded that, at the time when the quashed notices had been

issued, the porting of services numbers had not yet been an instrument existing on the market and, therefore, its costs could only be determined on the basis of specific quantities (portings). However, the number of actually performed portings was lower than assumed, as the market did not accept the porting of services numbers to a sufficient degree. On the basis of available figures, the costs applicable to the porting of services numbers were then newly calculated. On 20.01.2003, the TKK issued notices substituting the quashed notices Z 22/99 and Z 25/99, in which the costs for the porting of services numbers were newly determined to be EUR 20.11 (as compared with previously EUR 8.66).

Proceedings: **Quashing of the notice of the TKK of 09.05.2000, Z 2/2000-13, by the VwGH as well as issuing of a substitute notice Z 2/2000-49 on 10.06.2003**

Quashing by the VwGH necessitated a substitute notice on fixed network interconnection.

In the ruling of 11.12.2002, Zl. 2000/03/0190-9, the VwGH quashed the notice issued by the TKK on 09.05.2000, Z 2/2000-13, in respect of Telekabel and Telekom Austria for "unlawfulness as a result of violation of procedural provisions", i.e. exclusively for formal shortcomings. Specifically, the VwGH criticised that the expert opinions used in the underlying proceedings had not been served. However, these expert opinions had been served to the parties in the proceedings Z 33/99 that were conducted between the same parties at the same time and had been decided three weeks earlier and, therefore, the parties had been familiar with the contents in any case. Furthermore, the VwGH criticised
lack of substantiation in the opinions of the external experts appointed in the proceedings for determining the Weighted Average Costs of Capital (WACC) of Telekom Austria. As a consequence, the second external economic expert opinion used in the proceedings, which was based on the WACC, was eventually also found to be inconclusive.

On the other hand, the VwGH confirmed in this ruling that the essential calculation bases of the TKK were correct in respect of the interconnection charges.

The VwGH upheld essential cornerstones of the original ruling.

In detail, the VwGH ruled that:

- it was permissible to use a Bottom-Up model, in addition to a Top-Down model, for calculating cost-oriented charges according to the Forward Looking-Long Run Average Incremental Costs (FL-LRAIC) approach;
- the assumed parameters (e.g. economic useful life, consideration of planned traffic volumes) on which the economic expert opinions were based and the use of international comparative values in the Bottom-Up model for determining the FL-LRAIC costs for interconnection services were sufficiently explained;
- the underlying Bottom-Up cost accounting model of the Scientific Institute of Communications Services (WIK) was considerably more sophisticated in a technical sense than the model of Telecom Italia submitted by Telekom Austria;

- the efficiency reduction on the cost accounting results from the Top-Down cost accounting model of Telekom Austria applied in the proceedings was permissible, in particular, if Telekom Austria did not supply any relevant data itself,
- the method for computing the Weighted Average Costs of Capital was permissible.

The procedural shortcomings criticised by the VwGH were remedied in continued proceedings by means of a supplementary opinion by the external experts as well as by serving this supplementary opinion and all opinions of the proceedings Z 33/99 to the parties also in this case. In its meeting on 10.06.2003, the TKK adopted the substitute notice Z 2/00-49.

Proceedings: **Rejection of motions to issue provisions for the porting of mobile network numbers**
(Z 3/03 to Z 7/03)

The porting of mobile radio communications numbers was not a mandatory interconnection service.

On 14.04.2003, H3G requested an interconnection ruling on the porting of mobile subscriber numbers against T-Mobile, One, tele.ring, UTA and Telekom Austria basically on the grounds that it would be necessary to rule a sector-specific solution. H3G stated moreover that, as the TKG 1997 did not distinguish between mobile and fixed network numbers as to the porting of numbers, it would be justified to rule on the interconnection service "porting of mobile network numbers". On 12.05.2003, the TKK decided to reject H3G's motion, since at the time when the interconnection service of porting of mobile network numbers had been demanded from the respective opponents, this feature had not been a mandatory interconnection service. Pursuant to § 9 NVO, the obligation to port subscriber numbers applied only to fixed network operators. A notice issued by the TKK that rules on an interconnection service might, however, only refer to an interconnection service which the parties would have been obliged to provide within the meaning of § 41 TKG 1997. This did not apply in the case in question for lack of statutory prerequisites and therefore the TKK could not impose such an obligation on the parties because an interconnection ruling, in fact, has the character of contract.

Proceedings: Unbundling of the local loop
(Z 24/02)

Charges for access to unbundled local loops were newly determined.

In the letter of 30.09.2002, UTA filed a motion against Telekom Austria for a sub-ruling on unbundling. The legal relationship of the parties with regard to unbundling of Telekom Austria's local loops was at that time based on the ruling by the TKK in the proceedings Z 15/00. This motion therefore referred only to sub-areas of this legal relationship, i.e.:

- a new determination of the charges for unbundling that had expired on 30.09.2002 as well as
- a ruling on provisions regarding "unbundling of a local loop with automated teller machine function".

With regard to the monthly charges for the local loop (and for sub-sections thereof), UTA requested a reduction of the charges by 10% from EUR 10.90 to EUR 9.81 and for sub-section C2 (in-house distribution point to network termination point) from EUR 8.43 to EUR 7.59. With regard to the charges for other services, UTA requested a reduction by 6%. These requests were basically substantiated by an increase in efficiency of the processes at Telekom Austria. In addition, UTA requested a ruling on provisions for unbundling of a local loop for connection of an X.25 terminal (e.g. an automated teller machine) at the customer end. In this respect, UTA pointed out that Telekom Austria did not permit the unbundling of such local loops because it wanted to secure the market segment "unbundled customers with automated teller machines (business customers/commercial customers)" for itself. Telekom Austria opposed this motion.

In the meeting of 20.01.2003, the TKK adopted the notice Z 24/02-32, ruling on the basis of an opinion obtained during the proceedings that charges were to apply in the same amount as until 30.09.2002, i.e. EUR 10.90, until 30.09.2004. The motion for a ruling on provisions regarding the unbundling of a local loop with automated teller machine function was rejected because the requested provisions neither came under unbundling nor under network provision and therefore a decision in proceedings pursuant to § 41 TKG 1997 was not possible.

4.2.2.4 Site sharing

Shared use of infrastructure is provided by the TKG.

Pursuant to § 7 (2) TKG 1997, owners or all persons entitled to use an antenna mast are under the obligation to tolerate the shared use of this mast by holders of licences for the provision of public telecommunications services if this is technically feasible, in particular in terms of frequencies. Pursuant to § 7 (3) TKG 1997, an appropriate monetary compensation shall be paid to the owner of the mast.

Proceedings: Shared use of antenna masts
(Proceedings D 1/03)

By a ruling on the framework conditions for shared use for the first time, access to existing mast infrastructure was regulated.

In the letter of 17.07.2003, H3G filed a motion against One for a ruling on provisions regarding the shared use of antenna masts. § 133 (1) TKG 2003 stipulates that administrative proceedings that are still pending at the time of entry into force of the TKG 2003 are to be completed in line with the prevailing legal position until the entry into force of this federal act. Therefore, the proceedings D 1/03 were conducted in accordance with the provisions of the TKG 1997, in particular § 7 (2 to 8) in connection with § 111 item 8 TKG 1997.

H3G requested the ruling of a notice that would replace a framework agreement on site sharing pursuant to § 7 (7) TKG 1997. In another letter dated 11.09.2003 this motion was partly adapted fundamentally. Since One commented on the motions of H3G, an agreement was finally reached between the parties on the phrasing of large parts of the framework ruling. However, the central issue of the charge to be paid by H3G to One for shared use was still in dispute. In this respect the TKK commissioned an opinion by a business administration expert to determine the costs attributable to One for shared use.

After sending this opinion to the parties for comment and after a hearing on 17.11.2003 the notice D 1/03-37 was unanimously adopted in the meeting of the TKK of 15.12.2003. The framework agreement ruled in this notice largely corresponded to the agreements that were customary in this sector in this respect. The ruling on the charge for shared use was made, pursuant to § 7 (3) TKG 1997, on the basis of the costs of One, taking into account, in particular, the number of operators sharing the specific mast ("refunding model"). In addition, H3G as applicant for shared use also has to pay to One a price that depends on specific criteria applying to the installation of antennas on a mast, which is to ensure efficient use of the sites. For shared use of specific sites the parties shall conclude individual usage agreements on the basis of this framework ruling.

In the proceedings D 1/03, the TKK ruled (in substance) on shared use of antenna masts for the first time. Previously, only once – in 1999 – a motion had been filed (proceedings D 1/99) which had to be rejected, since the antenna mast was not a mast within the meaning of § 7 TKG 1997.

4.2.2.5 Universal service

RTR-GmbH actively supports the market players to reach an agreement on the costs for universal service outside of formal proceedings

Universal service is the provision of a minimum set of public telecommunications services to all users at an affordable price regardless of their place of residence or work.
The major services are:

1. provision of access at a fixed location;

2. provision of access to emergency services;
3. provision of access to inquiry services;
4. provision of access to the subscriber directory; and
5. nation-wide coverage with public pay phones.

In Austria, Telekom Austria is obliged to provide universal service. The net costs arising from the provision of this service are compensated by the market players at the request of the universal service provider and after verification of the costs by the regulatory authority (§ 29 TKG). In this case, the regulatory authority would establish a Universal Service Fund and handle the organisational aspects of financing (§ 30 TKG).

In 2003, no requests were made in this regard. However, under intensive mediation and participation of RTR-GmbH, an attempt was made to reach a contractual arrangement between the market players concerned without embarking on complex proceedings. Such an arrangement would eliminate uncertainties for the companies concerned as to the amounts of the expenses and revenues involved in the provision of universal service.

4.2.3 Activities regarding the transition from the old to the new legal framework

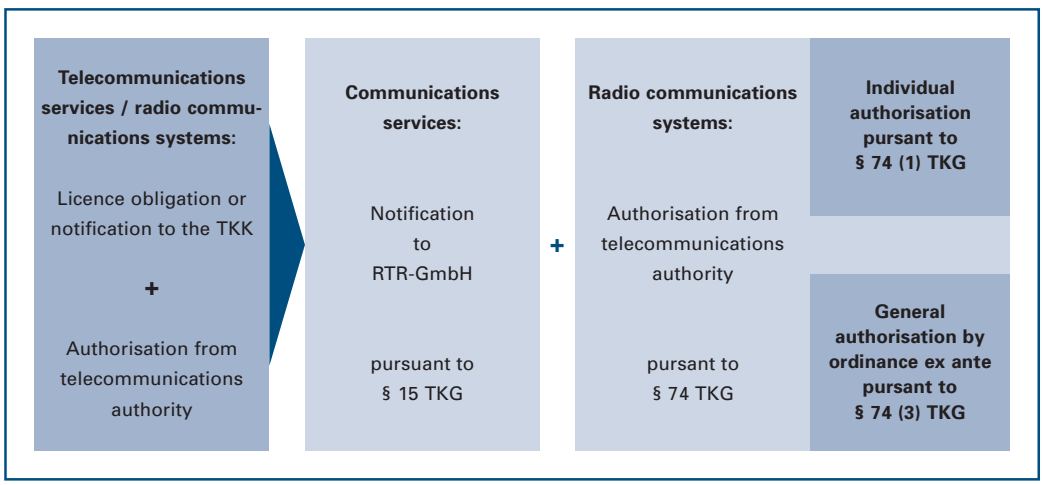
4.2.3.1 From the award of licences to the notification obligation

The system of general authorisations facilitates market access.

The second half of 2003 was characterised by a change in the regulatory regime. While under the old regime licensing was mandatory pursuant to § 14 TKG 1997, the TKG 2003 facilitates market entry for new providers of communications services in that service provision need only be notified to the regulatory authority. This put an end to the licence award procedure.

The requirements that were reviewed in the process of licence award (economic and technical capabilities) need no longer be proved in the new notification procedure. Also, the fee of EUR 5,087 that had to be paid per licence is no longer levied: no fees fall due for notification of the service.

Figure 6: General authorisation

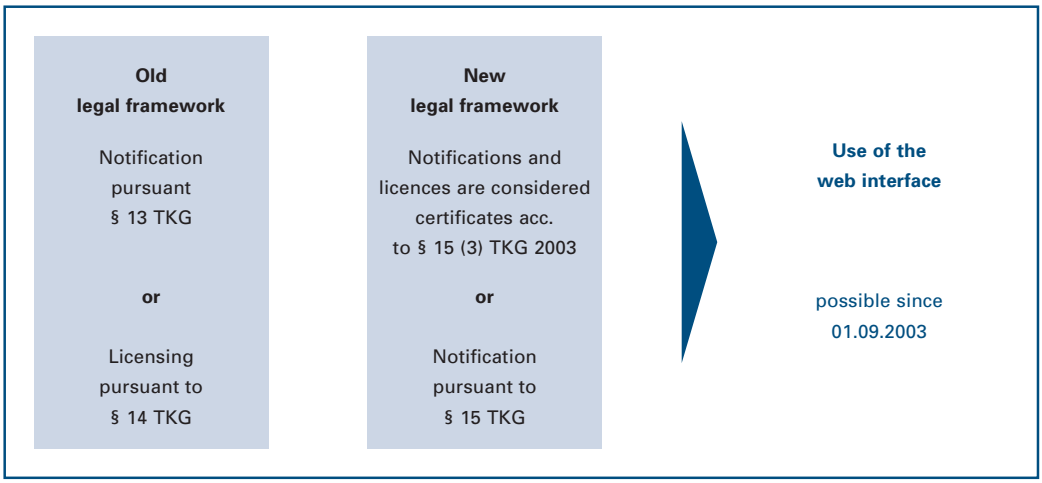


However, with the entry into force of the TKG 2003 the range of notifiable services was extended. According to the TKG 1997, for example, resale of communications services (e.g. resale of carrier network services, call shops, Internet cafés etc.) was explicitly exempted from the notification obligation. Under the TKG 2003, they are also subject to the notification obligation.

The range of notifiable services was increased.

To ensure fast processing of notifications, the regulatory authority designed a web interface via which the notifications can be filed.

Figure 7: Prerequisites for use of the web interface



The providers profit from the fact that notification of the services and all modifications can be done fast and unbureaucratically.

Figure 8: Advantages of the web interface

One-stop shop	No media break	Security
■ Central access point for different notification obligations of providers ■ Notifications are filed in a single step even if two regulatory authorities are involved (RTR-GmbH and KommAustria)	■ No manual data collection ■ Faster processing of notifications ■ Sources of error are reduced	■ Confidential communication ■ Authenticity of filed notifications ■ User administration according to role model ■ Reproducibility of errors and abuse (history) ■ Protected server infrastructure

RTR web interface provides for fast and unbureaucratic notification.

By 31.12.2003, 111 providers had already made use of electronic notification.

4.2.3.2 General terms and conditions and tariffs of SMP operators

Ex ante approval of general terms and conditions helps to prevent distortions of competition.

The paradigm shift effected by the TKG 2003 did not bring about any fundamental changes with regard to the approval of the tariffs and the general terms and conditions for 2003.

According to § 18 in connection with § 111 TKG 1997, the TKK had to approve the general terms and conditions as well as the tariffs of SMP operators of voice telephony via a fixed network as well as only the general terms and conditions of SMP operators of voice telephony via a mobile network. Under § 133 (7) TKG 2003, these obligations will apply to SMP operators until a market analysis procedure pursuant to § 37 TKG 2003 has been completed. Since the first market analysis procedure under new legal framework will be completed only in the course of 2004, SMP operators do not face any relevant changes despite the entry into force of the TKG 2003.

Proceedings: Tariff approval for the "nx64k" product
(Proceedings G 08/03)

With this notice, the TKK approved the general terms and conditions as well as the tariffs of Telekom Austria for a new product (nx64k) that was to replace the previous leased lines of Datakom. The product covers all bandwidths below 2 Mbit/s. For the reintegration of Datakom into Telekom Austria, which was subject to approval, Telekom Austria made a corresponding application.

Proceedings: Tariff approval for new voice telephony tariffs
(Proceedings G 07/03)

For the first time, the criterion of "affordability" was taken into account in a decision.

In the notice G 07/03, the TKK approved a fundamental restructuring of the Telekom Austria tariff scheme. As major change, the minimum tariff option was abolished. Subscribers using this tariff option were transferred to the standard tariff option.

The abolishment of the minimum tariff option was justified in substance, as Telekom Austria, in general, experienced a decline in subscribers, while the costs for the access network remained the same. Many customers have only mobile phones and have therefore given up their fixed network connections. In addition, many customers of alternative network operators switched to the tariff option with the lowest fixed charge, i.e. the minimum tariff option. As a result, Telekom Austria did not achieve the legally required breakeven in the field of fixed charges any longer.

In its decision, the TKK took account not only of the element of cost-orientation already mentioned but also of the criterion of affordability.

4.2.3.3 Alternative Dispute Resolution (ADR)

ADR provides for a faster and more cost-efficient conflict solution than court or administrative proceedings.

Since April 2003, RTR-GmbH has offered Alternative Dispute Resolutions (ADR) to the players of the Austrian communications market for the solution of conflicts.

In principle, four basis forms of out-of-court conflict resolution can be distinguished: moderation, mediation, conciliation and arbitration. From the mechanisms of alternative dispute resolution offered, RTR-GmbH prefers moderation of negotiations and mediation of conflicts.

With the help of ADR, potential conflict items may be recognised early, thus preventing the conflict from escalating. The service offered by RTR-GmbH enables the conflict parties to take charge of conflict solution themselves by seeking a common settlement along self-determined lines that meets their interests in the best possible way (win-win situation). ADR encourages legal certainty because lengthy appellate proceedings are avoided.

In the TKG 2003, ADR was embodied also on a statutory basis. Pursuant to § 115 (3) TKG 2003, RTR-GmbH may be asked to participate in negotiations about disagreements resulting from the TKG 2003, according to criteria to be announced by RTR-GmbH.

The following criteria, downloadable from http://www.rtr.at/adr, must exist to handle a conflict within the framework of ADR:

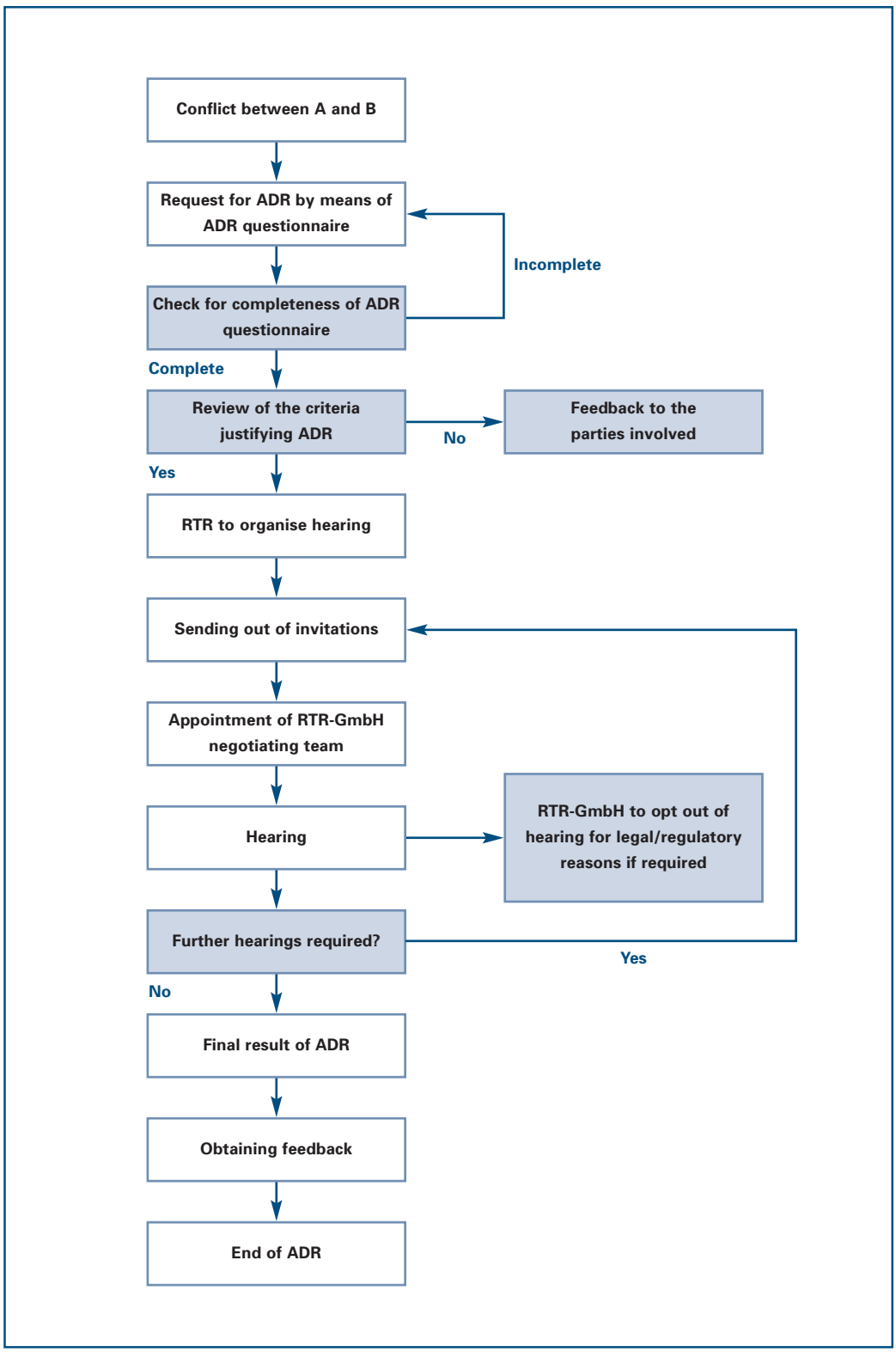
- There must be evidence that the conflict parties tried to solve the conflict by themselves first.
- The conflict must result from the TKG 2003 and associated regulations. The conflict issue must be related to communications services.
- Conflict parties or their interest groups other than end-users are entitled to ADR. End-users are users that do not provide public communications networks or public communications services, with the exception of publishers of subscriber directories and providers of directory inquiry services.
- A conflict between the same parties that has already been subject to ADR or has been decided with legal effect cannot be submitted to ADR again.
- Each conflict party shall ask RTR-GmbH to take part in the negotiations by completing the ADR questionnaire provided for download.

In justified cases, RTR-GmbH reserves the right not to conduct ADR. If the review of criteria is negative, this will be communicated to the parties.

The ADR process is briefly explained in the following chart on the basis of two conflict parties; however, it applies accordingly to any number of conflict parties.

Figure 9: ADR process

ADR is conducted according to a clearly structured procedure.



Each conflict party shall request RTR-GmbH to participate in negotiations by completing the ADR questionnaire that is used to record the facts of the conflict briefly and concisely.

If the criteria for ADR are met, RTR-GmbH arranges for the ADR hearing. In preparing for the hearing, the conflict parties will be asked to consider different conceivable variants for conflict resolution. In the interest of prompt action, statements, replies etc. are not intended in the ADR process. For fast conflict solution it is indispensable that persons representing the conflict parties in the ADR hearing have sufficient negotiating power.

In principle, RTR-GmbH accompanies the hearing as moderator or mediator. It does not make any proposals for dispute resolution and does not "decide" on the conflict in order to give the conflict parties the opportunity to work out a satisfactory solution for themselves.

In exceptional cases, RTR-GmbH reserves the right to opt out of the hearing if the negotiated solution should turn out to be extremely problematic for RTR-GmbH from a regulatory or legal point of view.

The principal objective of the ADR hearing is the unanimous resolution of the conflict that is satisfying to all conflict parties. It may be required that several sub-goals – as important contributions to successful ADR – must be achieved (e.g. scheduling another hearing, agreement on part of the conflict etc.).

To be able to conduct a review of the ADR process, RTR-GmbH will ask each conflict party to give a feedback about the ADR process and the negotiating team as soon as a negotiation result has been reached.

Objective of ADR: conflict solution by mutual agreement acceptable to both conflict parties

ADR was readily accepted by the market players. In 2003, a total of 18 ADR cases were handled, 5 of which were also proceedings pursuant to § 66 TKG 1997 (now § 122 (1) item 2 TKG 2003). The majority of the cases (11 in total) were resolved by an agreement of the conflict parties. Three cases were still pending at the time of reporting. In the remaining cases, either the issues were eventually not handled under the ADR regime or one conflict party did not want ADR or did not respond to the ADR request by his opposite conflict partner. Only in one case no agreement was reached in the process of ADR proceedings.

4.2.3.4 Proceedings pursuant to § 122 TKG 2003

Pursuant to § 122 (1) TKG 2003, RTR-GmbH may serve as conciliation body if disputes between a customer and an operator cannot be solved satisfactorily (item 1) and if violation of the TKG 2003 (item 2) is claimed.

Users, operators of communications networks or services and interest groups may be the complainants.

Under the TKG 2003, RTR-GmbH can now also act as 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 handled within the framework of conciliation proceedings. KommAustria put RTR-GmbH in charge of conducting these proceedings.

The competence of RTR-GmbH under the TKG 2003 now also covers resellers of telecommunications services.

The operators are obliged to take part in the conciliation proceedings and to answer all inquiries necessary to assess the situation, as well as to provide any documents required. RTR-GmbH shall negotiate an amicable solution or communicate its opinion on the case in question to the parties.

The precondition for instituting conciliation proceedings pursuant to § 122 (1) item 2 TKG 2003 (formerly § 66 TKG 1997) is the allegation that the TKG 2003 (formerly TKG 1997) has been violated, which is why these proceedings are suitable for disputes between operators.

Example: subscriber directory

Proceedings: Provision of the subscriber directory against reasonable compensation

On 17.04.2003, telegate filed a motion for resolution of a dispute pursuant to § 66 TKG 1997, now § 122 (1) item 2 TKG 2003, against Telekom Austria, claiming that the subscriber directory should be made available against reasonable compensation for the purposes of directory inquiry services and the publication of subscriber directories. telegate justified this request basically with the fact that the price demanded by Telekom Austria for this service was unreasonable and excessive and did not correspond to the actual costs. Therefore, telegate requested the determination of the actual costs for the provision of the subscriber directory or data therefrom. On 18.06.2003, RTR-GmbH communicated its opinion on this case to telegate, stating that a violation of the TKG must be claimed in order to justify the invocation of the regulatory authority, which was not the case in the motion in question. Moreover, § 19 (4) TKG 1997 provides that "providers of a public telephony service shall make their subscriber directory available to other providers against reasonable compensation". However, as telegate was not qualified as provider of a public voice telephony service, Telekom Austria was not obliged to provide the subscriber directories.

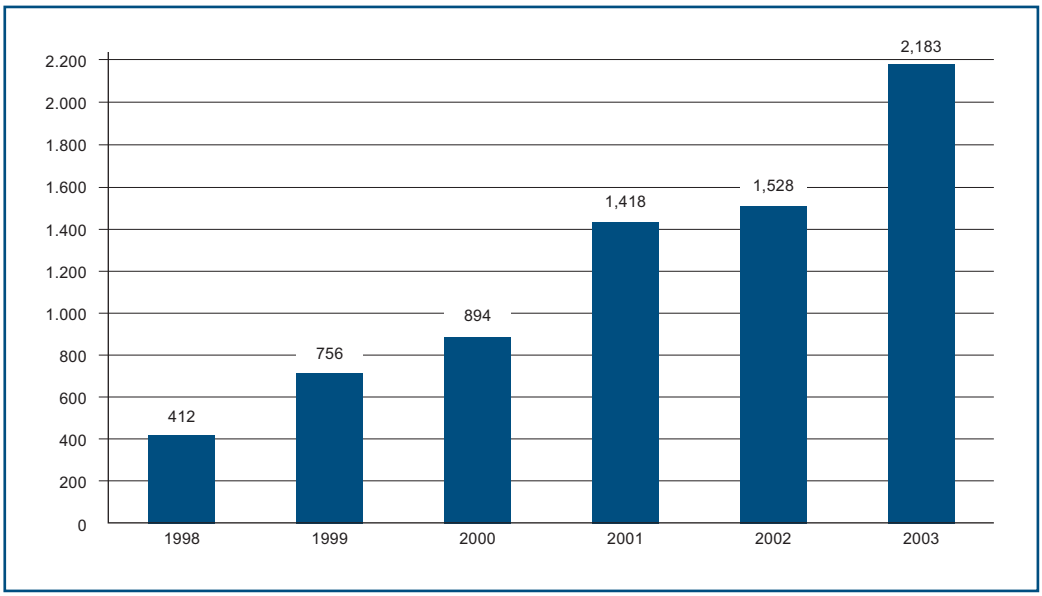
Conciliation cases

The conciliation body takes account of the protection of the users.

In 2003, 2,183 complaints according to § 122 (1) item 1 TKG 2003 were submitted to the conciliation body of RTR-GmbH, which is an increase of almost 43% against the previous year.

The following diagram shows the constantly growing number of conciliation cases from 1998 to 2003.

Figure 10: Conciliation cases from 1998 to 2003



2003: rise in conciliation cases by 43%

The steady increase in the number of complaints filed with the conciliation body is due to the fact that the conciliation body has become more widely known on the one hand and that new advanced communications services have been developed (e.g. in the field of the Internet or SMS) on the other.

Frequently, dialer programs are the cause of complaints.

The "classical" complaint about voice telephony connections did not occur often in 2003, whereas about one third of the complaints referred to data connections set up via a PC modem to domestic value-added numbers. Usually, these connections were established by so-called dialer programs, i.e. differently designed software that is, as a rule, offered on the Internet for download and sets up a connection to a high-cost number, mostly a domestic value-added number.

Among other things, these complaints are the reason why RTR-GmbH has been authorised by the TKG 2003 to define, by way of ordinance, "details on the transparent provision of value-added services that takes adequate protection of the users into account" (§ 24 (2) TKG 2003).

Limited download volume often gives rise to complaints.

Also, there was a marked increase in complaints in 2003 concerning the costs of the transfer volumes with ADSL lines. Some customers were not aware of the costs incurred in downloading data from the Internet, others did not realise which data volumes might be involved in specific Internet actions (e.g. downloads of films, listening to the radio via the Internet, provision of data, e.g. songs, to other users).

RTR-GmbH publishes an annual conciliation report.

More detailed information on the activities of RTR-GmbH in the field of resolution of end-user disputes is available in the report of the conciliation body for the year 2003, which was published in March 2004 and is also available online (http://www.rtr.at). In addition to a variety of statistical aspects, this publication also comprises a description of issues and problems frequently occurring in conciliation proceedings.

4.2.3.5 Mandatory conciliation proceedings

Mandatory conciliation proceedings conducted before RTR-GmbH may avert potential proceedings before the TKK.

According to § 121 (2) TKG 2003, RTR-GmbH shall conduct mandatory conciliation proceedings, before the TKK handles requests regarding shared use of a communications network, provision of the data for the subscriber directory or directory inquiry service, charges for number portability, equal treatment obligation, access to network equipment and network functions, provision of leased lines, charges for Call-by-Call and Carrier Pre-Selection, further obligations regarding access and interconnection as well as costs of the interconnected line.

In these cases RTR-GmbH shall try to achieve an amicable solution within six weeks. The parties to the conciliation proceedings are obliged to participate in these proceedings and to answer all inquiries necessary to assess the situation, as well as to provide any documents required.

If an agreement is reached between the parties, the proceedings before the TKK shall be suspended; otherwise, the proceedings will be continued before the TKK which has to decide within four months of receipt of the request.

Proceedings: Spam SMS (RVST 10/03) and mobile interconnection (RVST 6/03 and RVST 9/03)

The first cases were successfully completed.

In the period under review, the TKK received a number of requests on the basis of which conciliation proceedings before RTR-GmbH had to be conducted pursuant to § 121 (2) TKG 2003. The requests referred to the provision of the data for the subscriber directory, to interconnection as well as to the area of number portability.

With the active participation of RTR-GmbH, an agreement was reached between the parties in some cases and the proceedings before the TKK were dropped. In the proceedings RVST 10/03, for example, Tele2 Telecommunication Service GmbH and Mobilkom Austria AG & Co KG agreed on provisions regarding the avoidance of unwanted messages ("spam SMS").

In two conciliation proceedings regarding the amount of the mobile interconnection charges of One GmbH and tele.ring Telekom Service GmbH., the parties to the proceedings, tele.ring Telekom Service GmbH and Mobilkom Austria AG & Co KG as well as One GmbH and tele.ring Telekom Service GmbH, reached private-law agreements; therefore, the proceedings before the regulatory authority were dismissed and the orders already placed for expert opinions were cancelled.

4.2.3.6 Operator project on mobile number portability

RTR-GmbH was involved in an operator project on the introduction of mobile number portability.

Against the background of the new EU guidelines, which also stipulate mandatory number portability, an operator project designed to prepare an implementation variant for mobile number portability in Austria had been launched jointly by the National Telecommunications Authority (OFB) and RTR-GmbH already in mid-2002. The mobile and fixed network operators involved in the project continued the project in 2003 and, actively assisted by RTR-GmbH, tried to reach amicable solutions in the following working groups:

- routing;
- tariff transparency and end-user billing;
- intercarrier billing;
- administrative processes;
- data exchange/databases; and
- legal and commercial issues.

Since the established and the "younger" mobile network operators on the one hand and the alternative fixed network operators on the other held different views on some fundamental issues, these operator groups worked out three diverging overall plans in spring 2003 and, subsequently, presented them to the OFB and RTR-GmbH. In parallel, the operators asked the Employees' Association and the Austrian Consumers' Association (VKI) for their opinions on tariff transparency.

In mid-September 2003, the operator project came to a standstill when one group of operators refused to take part in further discussions of the working groups because they considered it unlikely that an amicable solution would be reached.

The goal was to define the basic framework conditions.

Anxious to achieve some progress in terms of a customer-friendly, effective and efficient solution, the Federal Minister of Transport, Innovation and Technology invited the top managers of the operator companies in July 2003 to take part in a round table discussion to clarify the major items relevant to a corresponding ordinance text already in advance and to achieve a uniform position. After public consultation, the Federal Minister eventually issued the Number Portability Ordinance on 04.11.2003. With the TKG 2003, mobile number portability became mandatory for the operators. The operator working groups continued their work on the basis of the TKG 2003 until 30.10.2003, when one operator instituted interconnection proceedings before the TKK regarding mobile number portability.

In the following mandatory conciliation discussion that was conducted at RTR-GmbH until the end of the year, some aspects of the proposed solutions were sorted out but no overall agreement was achieved. It is now up to the TKK to find a solution for mobile number portability in Austria in 2004.

4.2.3.7 National working groups

Thorough coordination within national working groups is essential for the work of the regulatory authorities.

In a liberalised voice telephony market with many network operators it is indispensable for numerous inter-network functionalities, such as value-added services or number portability, to have a coordinated approach by the individual networks, especially in the technical field. Early in 1999, RTR-GmbH launched a discussion platform, the Working Group Technical Coordination (AK-TK), encompassing the network operators and their suppliers from industry.

The main goal of the AK-TK is to draw up recommendations.

The main objective of the AK-TK is to have a general exchange of information, in addition to drawing up recommendations on technical-administrative processes between the operators. Even though such recommendations have no legal effect, it is important information which would be taken into consideration, provided the regulatory framework is complied with, if there were a dispute pending with the TKK which, as a matter of principle, aims at a resolution by discussions between the operators and considers the working group to be a means to reach this end.

In the plenary sessions of the AK-TK, sub-groups with a defined mandate are set up for specific subjects, the results obtained are discussed and submitted draft recommendations are voted upon. In this forum, RTR-GmbH, which has no voting right, acts primarily as a "catalyst" to overcome conflicting views between the operators, but also contributes topical issues for work and discussion.

The AK-TK has produced major results on specific issues (e.g. the technical plan for number portability in the fixed network, consensus on the size of collocation space etc.) but also regarding the general atmosphere and climate. RTR-GmbH will continue to promote the AK-TK as a major forum of the Austrian telecommunications market, and it invites all network operators to participate actively.

On 10.09.2003, modified rules of procedure of the AK-TK took effect, taking into account provisions of the TKG 2003 and the reorganisation of decision-making.

The following sub-groups held meetings in 2003:

- Working Group Technical Coordination in Telecommunications (plenary);
- AK-TK sub-group regarding value-added services;
- AK-TK sub-group on number portability;
- AK-TK sub-group on fraud;
- AK-TK sub-group on unbundling.

In addition, extraordinary sub-group meetings were held on the following issues:

- New Numbering Ordinance(NVO)/Charges Ordinance (EVO);
- TKG 2003.

Another important discussion platform, incepted by RTR-GmbH in 2001, is the "Regulatory Dialogue for Mobile Communications". It is the objective of the mobile regulatory dialogue to regularly discuss regulatory issues with industry independently of proceedings and to exchange views on selected issues, such as market delineation and market analysis in the new legal framework, mobile gateways and video telephony. For this purpose, about ten meetings are held every year, in which the major experts of the Austrian mobile communications operators and the regulatory authority take part. The respective topics are discussed and, if possible, the lectures are published on the web site of RTR-GmbH. The exchange of views is entirely without prejudice to any future proceedings before the TKK.

The Dialogue is a platform for discussion of regulatory issues outside of proceedings.

4.2.3.8 International working groups

The international work of RTR-GmbH in 2003 was entirely characterised by the transition from the old to the new legal framework. The new groups founded under the new legal framework, i.e. the European Regulators Group (ERG) and the Communications Committee (CoCom), took up operation and reached initial milestones of their work programmes. An essential success factor of these working groups is to ensure sufficient transparency for the market. For this reason, all important documents and issues were submitted to public consultations with the market for the first time and published on the web sites of the working groups.

International coordination with other regulators is essential for harmonised implementation of the new legal framework.

RTR-GmbH participated actively in international working groups, chairing the IRG working groups on Significant Market Power and on Regulatory Measures (Remedies).

A special challenge in 2003 was to integrate the new EU acceding countries into international work. The ten new countries to join the EU started to participate actively in the ERG, the IRG and the CoCom in 2003.

Higher flexibility (transition from ex ante obligations to the selection of suitable remedies on a case-by-case basis to remove competition deficits) and increased complexity due to a more detailed market definition under the future regulatory framework require increased cooperation at an international level.

The new legal framework requires intensified international cooperation.

The new legal framework, for example, provides for mandatory consultation of essential regulatory decisions (see Article 7 of the Framework Directive). Specifically, draft decisions that refer to

- Articles 15 or 16 of the Framework Directive or
- Articles 5 or 8 of the Access Directive or

and have an effect on trade between Member States shall be subjected to consultation. This includes, for example, procedures of market definition, market analysis and SMP assessment.

The regulatory authorities, as well as the EU Commission, face the challenge of ensuring that the consultation procedure can be conducted

1. efficiently, i.e. with limited use of resources,
2. within short time limits and
3. with the utmost transparency for all parties involved (in particular the market players).

In 2003, the organisational prerequisites for these consultations were created. Individual regulatory authorities started initial consultations already at the end of 2003, but the major part of consultations is expected to take place in 2004.

Overview and interaction of the major working groups

RTR-GmbH was active mainly in the ERG and the IRG.

In practice, the independent regulatory authorities coordinate themselves on an informal basis in the Independent Regulators Group (IRG) where, among other things, common positions are worked out. For this purpose, the IRG maintains expert working groups to deal with different issues. Official IRG positions are voted on in the plenary meetings. Subsequently, IRG results are discussed together with the European Commission in the ERG. The CoCom provides a common platform for the EU Commission, ministries and regulators and ensures that Member States are officially consulted on implementation issues.

Table 3: **International working groups**

	CoCom	ERG	IRG
	Communications Committee	European Regulators Group	Independent Regulators Group
Founded in	2002	2002	1997
Participants	EU Commission Ministries Regulatory authorities	EU Commission Independent regulatory authorities	Independent regulatory authorities
Purpose	Advice to the EU Commission on implementation issues Consultation of the Member States	Advice to the EU Commission on implementation issues	Cooperation and coordination between regulatory authorities
Web site	http://forum.europa.eu.int/Public/irc/infso/cocom1/home	http://www.erg.eu.int	http://irgis.icp.pt

Overview of the results of 2003

In 2003, the following results were achieved:

Market definition
The IRG had an advisory function in preparing the Commission Recommendation on relevant product and service markets within the electronic communications sector[1].

Harmonised interpretation of the SMP concept[2]
Based on the Commission guidelines on market analysis and the assessment of significant market power[3] (SMP), the indicators of the SMP guidelines were examined in greater detail and further indicators were added to create the conditions for consistent interpretation and application of the SMP guidelines to the greatest possible extent.

In the field of harmonisation major progress was made.

Regulatory measures (remedies)[4]
The new regulatory framework offers increased flexibility because the regulatory instruments are selected in dependence on the identified competition problems. To be able to achieve the utmost harmonisation also in the selection of appropriate remedies, the Commission together with the regulatory authorities prepared a report in which appropriate remedies are matched to the identified competition problem in order to remove the competition problems.

Recommendation regarding Article 7 consultations[5]
This Recommendation provides in greater detail the information to be communicated by the respective national regulatory authority (NRA) to the EU Commission to ensure proper notification.

Broadband
The UMTS roll-out in Europe was monitored on a regular basis. In addition, the focus was placed on the definition of bitstream access[6].

1 Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services.
2 ERG Working paper on the SMP concept for the new regulatory framework, May 2003.
3 Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services.
4 Draft joint ERG/EC approach on appropriate remedies in the new regulatory framework, November 2003.
5 Commission Recommendation of 23 July 2003 on notifications, time limits and consultations provided for in Article 7 of Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (OJ L19, 30.07.2003, p. 13).
6 Interim Common Position on Bitstream Access, November 2003.

Further issues on which the IRG or the ERG prepared reports in 2003:

"Best Practices" on major issues were prepared and published.

- PIBs (Principles of Implementation and Best Practice) on mobile termination;
- PIBs on Forward Looking-Long Run Incremental Costs;
- PIBs on cost recovery principles;
- PIBs on call barring;
- PIBs on disconnection;
- PIBs on itemised billing;
- Report on universal service designation.

Additional benefits for RTR-GmbH from international activities

Regular exchange of experiences with other regulators provides valuable inputs for everyday work.

In addition to the specific results from the activities described above, RTR-GmbH benefits from the information network with the independent regulatory authorities and the EU Commission. Specifically, this cooperation often allows RTR-GmbH to draw on current international regulatory experiences in other countries for its regulatory decisions. By now, regular surveys of data on various regulatory issues, "Best Practice" analyses and mutual inquiries and answers among regulatory authorities have become an indispensable part of everyday work.

All mentioned documents (including the work programme and the Annual Report 2003) can be retrieved from the web sites of the working groups. Further explanations on the documents are also available in the telecommunications newsletters of RTR-GmbH of 2003.

4.2.4 Activities under the new regulatory framework

4.2.4.1 Market definition

Correct market definition is required to carry out the subsequent market analysis.

Essentially, the European regulatory framework is based on the idea that specific restrictions and obligations are imposed ex ante on companies with significant market power (SMP operators, i.e. companies having significant market power within the meaning of the TKG) and, contrary to general competition law, it is not required that market power be abused for these restrictions and obligations to apply.

In many cases, it is only this determination and the associated legal consequences that enable new service providers to commence business activities. Accordingly, the regulatory consequences linked to identifying significant market power are asymmetrical and designed to support the process of liberalisation and orientation towards competition.

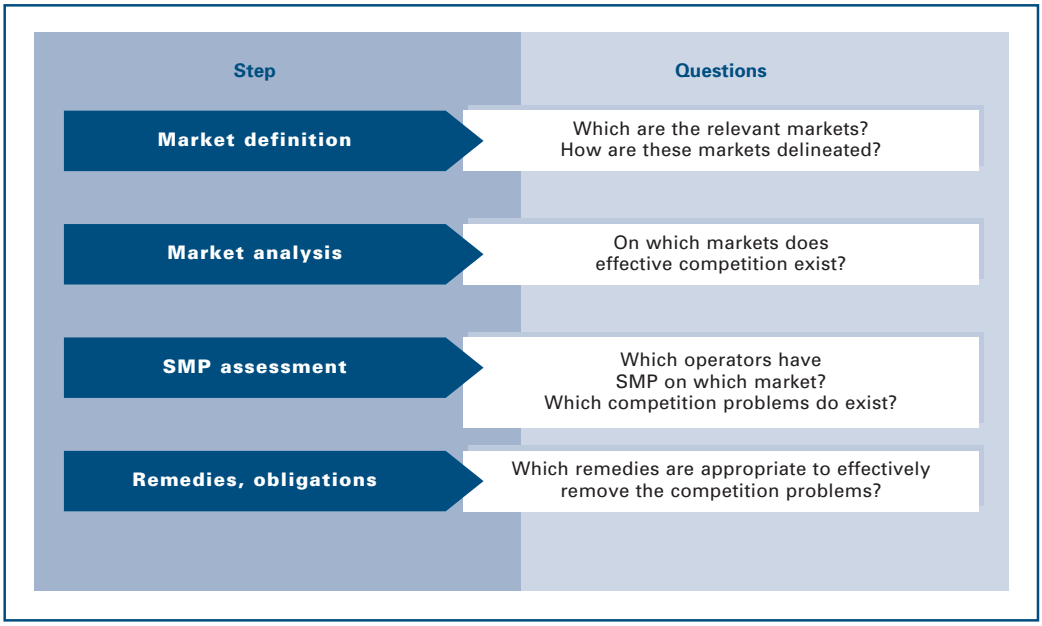
Under the national regulatory framework in effect until 19.08.2003, pursuant to § 33 (1) item 1 TKG, a company is considered to have significant market power within the meaning of the TKG if it is not exposed to any or only insignificant competition on the market of product/service and geographical relevance or if the criteria listed under § 33 (1) item 2 TKG are met. In accordance with Article 4 (3) of EU Directive 97/33/EC, § 33 (2) TKG stipulates that a company shall be presumed to have significant market power when it has a share of more than 25 % on the market of product/service and geographical relevance. In cases where a company's market share is far below or far above the 25% limit, the criteria listed under § 33 (1) TKG shall not be reviewed, unless the regulatory authority has reason to doubt this presumption. If a company's market share approaches 25%, the company's market power will be reviewed using, additionally, the criteria listed in § 33 (1) item 2.

The last proceedings conducted under the TKG 1997 pursuant to § 33 TKG 1997 – M 1/02 – were completed on 20.09.2003, identifying Telekom Austria as having SMP on the markets for the provision of the public voice telephony service and public leased lines each by means of a fixed telecommunications network, as well as on the market for interconnection services.

In the first months of 2002, a new regulatory framework for electronic communications networks and services was created that comprises five directives of the European Parliament and of the Council, which Member States were to transpose into national law by 25.07.2003. With the entry into force of the TKG 2003 on 20.08.2003, Austria was among the first countries of the European Union to fulfil this obligation. Contrary to the previous legal framework, the new regulatory framework adopts a more differentiated approach to the determination of companies with significant market power and the imposition of ex ante obligations to counter the competition problems identified in a market analysis. At the same time, in many areas the new legal framework provides for a clear approximation of sector-specific supervision of competition towards general competition law as well as greater harmonisation of the regulatory activities of the individual national regulatory authorities in the EU Member States (§§ 128, 129 TKG 2003).

Basically, the new regulatory regime consists of a four-stage process.

Figure 11: Analysis steps in the new regulatory framework



The process is progressive and takes place step by step.

In the first stage, the communications markets that may be subject to sector-specific regulation are defined; the second stage provides for an analysis of these markets with a view to determining if there is effective competition; in the third stage, it is determined if (at least) one company has significant market power. Finally, if SMP exists, the remedies that can be used to solve the current and potential competition problems identified are established in the fourth stage (broken down into SMP assessment and remedies in the above chart).

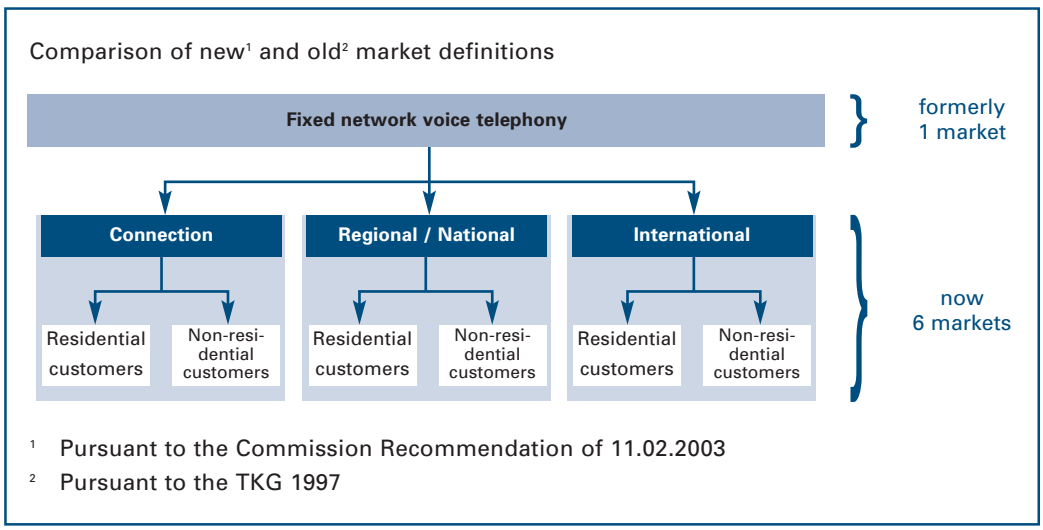
Delineation of communications markets

Pursuant to § 36 TKG 2003, Rundfunk und Telekom Regulierungs-GmbH shall define, by means of ordinance, the relevant national markets susceptible to sector-specific regulation, in line with the national circumstances and with the principles of general competition law, taking into account the requirements of sector-specific regulation. This ordinance shall be reviewed periodically, but at lest every two years. The definition of the relevant markets shall comply with the provisions of Community law.

The European Commission, for example, now recommends six markets for the former market for voice telephony in the fixed network, which are presented below:

Figure 12: Example: definition of fixed network voice telephony market

The new legal framework provides for a more differentiated analysis of the markets.



The Telecommunications Market Ordinance 2003 (TKMVO 2003)

After the entry into force of the TKG 2003, RTR-GmbH instituted proceedings to issue an ordinance regarding the telecommunications markets pursuant to § 36 (1) TKG 2003, taking into account the Recommendation of the European Commission of 11.02.2003 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation, in accordance with the statutory requirements.

RTR-GmbH was among the first authorities of the EU to define 16 relevant markets as the basis for market analyses.

The TKMVO 2003 took effect pursuant to § 135 (2) TKG 2003 as per 17.10.2003 and refers to all telecommunications markets of product/service relevance in Austria susceptible to ex ante regulation, with the relevant geographical dimension of the whole national territory. In the TKMVO 2003 the following 16 telecommunications markets were defined:

1. Access to the public telephone network at a fixed location for residential customers (retail market).
2. Access to the public telephone network at a fixed location for non-residential customers (retail market).
3. Publicly available national telephone calls provided at a fixed location for residential customers (retail market).
4. Publicly available national telephone calls provided at a fixed location for non-residential customers (retail market).
5. Publicly available international telephone calls provided at a fixed location for residential customers (retail market).
6. Publicly available international telephone calls provided at a fixed location for non-residential customers (retail market).
7. Call origination on the public telephone network provided at a fixed location (wholesale market).
8. Call termination on individual public telephone networks provided at a fixed location (wholesale market).
9. Transit services in the fixed public telephone network (wholesale market).
10. The minimum set of leased lines, which comprises the specified types of leased lines up to and including 2 Mbit/s (retail market).
11. Trunk segments of leased lines (wholesale market).
12. Terminating segments of leased lines (wholesale market).
13. Unbundled access, including shared access, to metallic loops and sub-loops for the purpose of providing broadband and voice services (wholesale market).
14. Access and call origination on public mobile telephone networks (wholesale market).
15. Voice call termination on individual public mobile telephone networks (wholesale market).
16. Wholesale national market for international roaming on public mobile networks (wholesale market).

In principle, the TKMV complies with European requirements.

The market for wholesale broadband access has not been defined in the ordinance yet. To define this market data have to be collected and evaluated first.

The next step will be the definition of the market for wholesale broadband access.

4.2.4.2 Market analyses

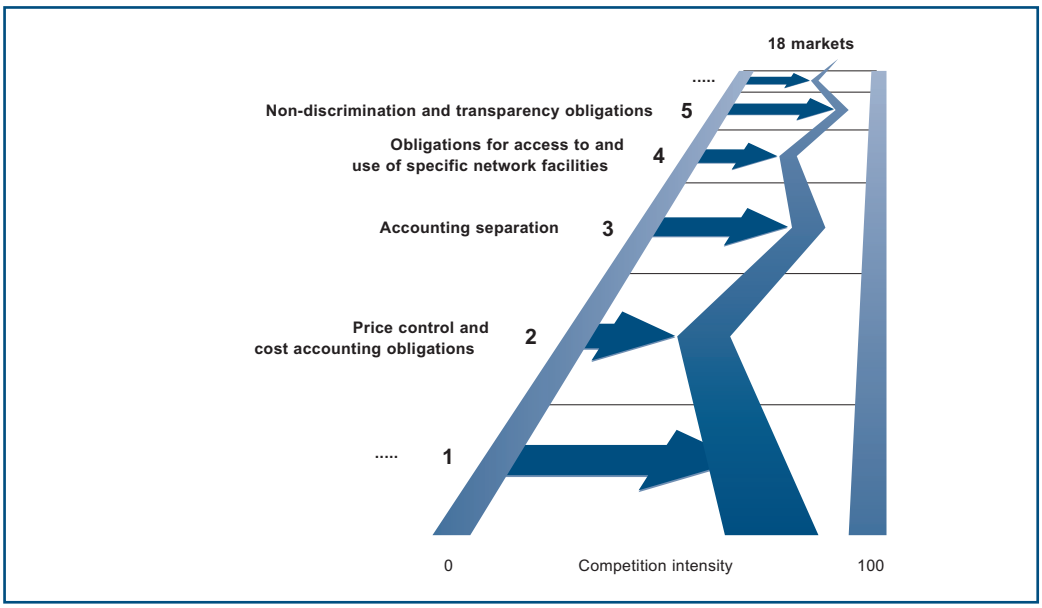
Market analysis: the type of competition problem is identified to select specific remedies.

Subsequent to issuing an ordinance on the communications markets, the TKK, by virtue of office as well in accordance with the provisions of Community law, shall carry out an analysis of the markets that have been defined by RTR-GmbH by means of this ordinance. This procedure aims at a detailed analysis of the relevant markets in order to determine if there exists effective competition or, in other terms, if one or several companies have significant market power on the respective relevant market ("comparison thesis"). A company shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.

The national legal framework imposes criteria on the regulatory authority that are to be considered in, particular, in assessing if a company has significant market power. As an example, the following criteria shall be mentioned: the size of the company, high barriers to entry, the extent of countervailing buying power, the market phase, the technological advantages, advantages in the distribution and sales network, the extent of vertical integration, access to financial resources, control of infrastructure not easily duplicated.

Figure 13: Market dominance and remedies

Competition intensity and competition problems are determined by applying a number of criteria.



Market analysis procedures

On 20.10.2003, the TKK initiated 15 procedures for analysis of the markets pursuant to the TKMVO 2003 – with the exception of the wholesale national market for international roaming on public mobile telephone networks; for this purpose, official experts were commissioned to prepare opinions and RTR-GmbH was asked to collect the data. At the end of the period under review, these procedures were still pending.

The market analysis procedures have already been instituted.

The procedure for the analysis of the wholesale market for international roaming will be initiated later, as the results of a "sector inquiry" have not yet been obtained from the European Commission and the independent national regulatory authorities will intensify their coordination activities to control transnational distortions of competition due to different approaches.

It shall be mentioned in this context that on the basis of transitional provisions the ex ante obligations imposed on companies with SMP ex lege by the TKG 1997 continue to apply until a notice pursuant to § 37 (2) TKG 2003 has been issued for the respective company or previous regulatory instruments have been abolished.

4.2.4.3 Imposition of ex ante obligations – "The regulatory instruments"

Despite the approximation towards general competition law, ex ante obligations will be required also in the future.

If the TKK concludes in a market analysis procedure that there is no effective competition on a specific market and, therefore, one or several companies have significant market power within the meaning of the TKG 2003, it shall impose on the company or companies appropriate specific obligations pursuant to §§ 38 to 46 or § 47 (1) TKG 2003, i.e. the so-called regulatory instruments, or maintain or modify such instruments. On the other hand, the TKK shall remove previous ex ante obligations if effective competition is determined on a specific market and thus no company has significant market power any more. In accordance with the European requirements, the TKG 2003 provides for the following potential "regulatory instruments":

- obligation of non-discrimination;
- obligation of transparency;
- obligation of accounting separation;
- obligation of access to and use of specific network facilities;
- price control and cost accounting obligations for the provision of access;
- regulatory measures with regard to services for end-users;
- obligations as to the provision of leased lines;
- obligations as to end-user tariffs; and
- Call-by-Call and Carrier Pre-Selection.

In case of "exceptional circumstances" the regulatory authority may impose obligations on companies with significant market power that are different from those specified in §§ 38 to 42 TKG 2003 with regard to access provision. Therefore, the above list of possible regulatory instruments is not to be considered exhaustive, even if the imposition of other ex ante obligations needs to be approved by the European Commission whose decision will serve as a basis for the decision by the TKK.

4.2.4.4 Consultation and coordination mechanisms

Internationally harmonised approach makes coordination procedures mandatory.

To harmonise the decisions of the national regulatory authorities, Articles 6 and 7 of the Framework Directive provide for a comprehensive consultation procedure. While Article 6 of the Framework Directive provides for national consultation of draft measures that have a significant impact on the relevant market, the European Commission may, in the last resort, even prevent decisions by the regulatory authority in procedures according to Article 7.

In Austria, these provisions have been transposed by §§ 128 and 129 TKG 2003.

Consultation procedures pursuant to § 128 TKG 2003

Important decisions are consulted on the RTR web site at the national level.

Under this provision, the respective competent authority, i.e. in addition to the TKK and RTR-GmbH also the Federal Minister of Transport, Innovation and Technology, as well as KommAustria in the broadcasting sector, shall give interested parties the opportunity to comment, within a reasonable period, on draft measures (e.g. ordinances or notices) that are expected to have a significant impact on the relevant market.

The consultations are carried out at the national level to discuss important draft measures of the authority on a wide basis before the final decision is taken.

Coordination procedures pursuant to § 129 TKG 2003

Now the regulatory authority must consult important decisions on an international basis.

This provision shall ensure a certain degree of harmonisation of the decisions of all national regulatory authorities by granting the European Commission and other national regulatory authorities the right to make comments on the intended measures set forth below.

If the draft measure refers to

- market definition (§ 36 TKG 2003),
- market analysis (§ 37 TKG 2003),
- interconnection (§ 49 TKG 2003) or
- obligations pursuant to §§ 38 to 42 TKG 2003

and if the intended measure has an effect on trade between Member States, it shall be communicated to the Commission and the other European national regulatory authorities, together with the reasoning on which the measure is based, in addition to and at the same time as the consultation pursuant to § 128 TKG 2003. The period for comments by the mentioned institutions is one month and usually runs in parallel to the consultation procedure pursuant to § 128.

In two particularly sensitive areas, i.e. market definition and the assessment of SMP, the European Commission may prevent a decision by the regulatory authorities in the last resort by exercising a veto.

International coordination procedures

These procedures refer to the consultation procedures of other national regulatory authorities (see above regarding § 129 TKG 2003). The European Commission shall keep and publish a list of all pending procedures as well as the comments thereon.

Comments on the procedures of other regulatory authorities are possible.

For a list of the international consultation procedures under Article 7 of the Framework Directive, see the Communication & Information Resource Centre (CIRCA) of the European Commission at http://forum.europa.eu.int:80/Public/irc/infso/Home/main.

In addition, RTR-GmbH, on behalf of the TKK and KommAustria but also on its own behalf, carries out consultations on important regulatory issues, which are not subject to the mandatory provisions of §§ 128 and 129 TKG 2003.

4.2.4.5 Frequency trading

In the field of UMTS, an essential decision was taken by the TKK:

Under the new legal framework frequency trading is allowed.

Proceedings: Approval to change in ownership

In the meeting of 15.12.2003, the TKK decided on the request by 3G Mobile Telecommunications GmbH for approval to a change in ownership and granted the requested approval.

In this respect, the regulatory authority already took a first key decision.

In the notice of 20.11.2000, 3G Mobile had been granted a licence by the TKK for the provision of mobile telephony service and other public mobile services by means of self-operated mobile communications networks, where standards of the IMT-2000 family concept were to be used for the radio interface (UMTS licence). Moreover, 3G had been granted frequency packages of 2x9.8 MHz from the frequency range dedicated to UMTS. Apart from 3G Mobile, UMTS licenses were granted to Mobilkom, T-Mobile, One, TRA 3G Mobilfunk GmbH and H3G.

§ 11 of the charters of all UMTS operators contains provisions on the change of ownership. Major changes require approval by the TKK, which shall be granted subject to conditions or obligations, as applicable, only if the competitive independence of other licence holders can be guaranteed also after the requested change in ownership has taken place.

In November 2003, 3G Mobile requested approval for the change in ownership resulting from the transfer of 100% of 3G Mobile's shares to Mobilkom. Until then, 3G Mobile had not become operative on the market and, in particular, had not carried out any activities concerning a possible network roll-out, while the other UMTS licence holders had started with network roll-out.

Given this request, the TKK had to review to what extent this change in ownership could be approved under the provisions of the charter.

The licence provisions are based on the TKG 1997. With the entry into force of the TKG 2003, provisions regarding the criteria for the approval of changes in ownership were created for the first time. Accordingly, approval shall be refused if the transfer is likely to affect competition, despite the imposition of collateral provisions. Taking into account the new statutory provisions which grant greater flexibility to the licence holders in this area, § 11 of the charter was not regarded as final provision but was instead interpreted within the meaning of the provisions now contained in the TKG 2003.

In the present case, the TKK has therefore examined the impact on competition, also by inviting the players operating on the relevant market to make comments.

Eventually, the TKK concluded that it was possible to give the approval, imposing specific obligations, as imposing these obligations could prevent a negative effect on competition.

Mobilkom was therefore obliged to return a frequency package of 2x5 MHz by 31.01.2005. If Mobilkom does not meet this obligation, the respective frequency package will go to the TKK. In addition, Mobilkom shall be excluded from participating in award procedures in the GSM frequency range as long the above obligation is not complied with. The TKK holds the view that by imposing these obligations a negative effect on competition will be prevented. Therefore, the change in ownership was approved.

4.2.4.6 General terms and conditions, tariffs and user rights

Major improvements in the field of user rights have taken place.

The introduction of the TKG 2003 brought about essential innovations in the field of user rights. In particular, the fact that most user rights have been extended to encompass all operators of a communications service shows that the TKG, to a certain degree, is also carried by the idea of strengthening the user rights.

While under the TKG 1997 the standards for the protection of the users were to apply mainly to providers of voice telephony, leased lines and ISPs, in the TKG 2003 they also cover resellers and broadcasters.

However, some of the user rights contained in the TKG 2003 do not apply consistently to all operators of communications services.

For example, deferred maturity in case of an objection or conciliation proceedings that is mentioned in § 71 TKG 2003 shall apply only to the provider of a telecommunications service; the same applies to the provision regarding blocking in case of default (§ 70 TKG 2003). Users of other communications services cannot claim these rights.

Call barring pursuant to § 29 (2) TKG 2003

Call barring for value-added services: for the first time mandatory and free of charge

It is possible to bar specific tariff zones (e.g. outgoing international calls) as well as specific call types (e.g. calls to value-added services). Call barring is recommended mainly to prevent undesired phone calls to value-added services. Call barring also provides effective protection against so-called dialer programs.

Pursuant to § 29 (2) TKG 2003, the activation of call barring for premium-rate services, i.e. numbers starting with 09, is free of charge once a year. The barring of other tariff zones, however, is still subject to charges.

Itemised billing pursuant to § 100 TKG 2003

Itemised billing: free of charge for the first time

Now, users are entitled to receive itemised bills free of charge. Under the old regime, the operators were entitled to charge a fee for the provision of itemised billing.

Itemised billing: data to be provided are laid down in an ordinance by RTR-GmbH.

The TKG 2003 also provides an innovation related to the shortening of the call data, which had been very strictly regulated in the TKG 1997. In the itemised bill, the "passive" subscriber numbers, i.e. the numbers called from a specific line, may be shown only in shortened form pursuant to § 100 (3) TKG 2003, unless the tariff applied to a connection can be derived only from the complete, i.e. non-shortened, subscriber number or the subscriber declares in writing that he/she has informed all other existing co-users of the line, and will inform future co-users, that the bills will be in non-shortened form. For reasons of data protection, the written declaration can apply only to future settlement periods, since co-users of the connection must be given the opportunity to adjust their phoning habits to the fact that the subscriber receives itemised bills in non-shortened form.

Furthermore, pursuant to § 100 (2) TKG 2003, the regulatory authority may specify, by means of ordinance, the level of detail and the form of provision of itemised bills. In this, it shall consider the type of subscriber relationship and the type of service, the technical options, the protection of personal data and shall take account of the fact that subscribers shall be able to control their expenses and that providers of value-added services have been identified.

Inquiries by several market players have shown that there is an increased demand for a more detailed determination of § 100 TKG 2003, which contains the provisions for itemised billing.

The draft ordinance was consulted pursuant to § 128 TKG 2003. The 16 comments that were received in total were taken into account in the ordinance which was issued on 01.12.2003.

The Itemised Billing Ordinance (EEN-V) specifies, inter alia, that, basically, it shall be up to the operator of a publicly available communications service to provide the itemised bill in electronic form, on paper or in a combined form. If the operator decides to provide the itemised bill in electronic form or in a combined form, the customers must be given one opportunity to choose itemised billing in paper form for future settlement periods. One itemised bill shall be provided in the form requested by the customer for each settlement period free of charge. If the itemised bill is provided several times for the same settlement period at the customer's request, a fee may be charged.

Furthermore, the ordinance contains provisions on the design of itemised bills for public telephony services and Internet access services. To give the operators of publicly available communications services sufficient time to implement the ordinance, it was to take effect on 01.05.2004.

The EEN-V is available for inspection at the premises of RTR-GmbH, Mariahilfer Straße 77-79, A-1060 Vienna, Monday to Thursday, 8.00-17.00, Friday 8.00-14.00, and also at http://www.rtr.at/een-v.

Deferred maturity

Deferred maturity in the event of an objection is now subject to a more differentiated provision.

The new regime imposes a certain restriction for so-called "deferred maturity". In the event that a bill is contested it is possible to pay only the amount not in dispute and make a request to RTR-GmbH for deferment of maturity of the remaining amount. For this purpose, copies of the objection letter and the contested bill shall be sent to RTR-GmbH. This notwithstanding, the operator may demand immediate payment of the amount that corresponds to the average amounts of the last three phone bills by means of a separate bill.

In case of deferred maturity the operator shall be entitled to demand the contested amount inclusive of legal default interest as from the maturity date set forth in the bill if the objection or conciliation proceedings have given no cause for new calculation of the bill (§ 71 (3) TKG 2003).

General terms and conditions and tariffs

Strengthened user rights by extended right of the TKK to review general terms and conditions

Now all providers of telecommunications services as well as resellers have to notify their general terms and conditions and their charges to the regulatory authority. Under the TKG 1997, this obligation was imposed only on holders of licences for the provision of voice telephony or leased lines that did not have significant market power. Furthermore, it was clarified that the services descriptions are part of the general terms and conditions.

The new regime also provides for an extended right to object to general terms and conditions that have been notified. Pursuant to § 25 (6) TKG 2003, within eight weeks, the TKK may object to the general terms and conditions notified if they violate the TKG 2003, the ordinances issued on the basis of the TKG 2003 or – and this is new – the consumer protection provisions of §§ 6 and 9 KSchG (Consumer Protection Act) and/or §§ 879 or 864a ABGB (General Civil Code). The TKG 2003 also specifies a minimum amount of information which the general terms and conditions has to contain:

- operator name and address;
- services description comprising, at least, the services offered, the quality of the services offered, the period until first connection or first activation as well as the types of maintenance services offered;
- term of the contract, conditions for renewal and termination of the provision of the services and the contractual relationship;
- provisions on compensation and reimbursement upon non-compliance with the contractually greed quality of the services;
- reference to the option of instituting dispute settlement proceedings pursuant to § 122 as well as a short description thereof;
- provisions on the settlement periods which must not exceed three months;
- information about the existence of the uniform European emergency number 112.

Especially the fact that this provision applies to all providers has led to a considerable increase in the number of proceedings. In 2003, 80 proceedings for review of the general terms and conditions were instituted by the TKK, 70 of which referring to the second half of 2003 alone, whereas only six proceedings were conducted in 2002 as a whole. In taking a service-oriented approach in the review, the TKK communicates any concerns about notified general terms and conditions informally in advance. This enables the operators to add the required provisions speedily. On average, the operators have to improve the notified general terms and conditions twice until their contents are approved by the TKK.

Contrary to the old regime, operators are now under the obligation to point out to their customers explicitly (e.g. on the bill) also changes in the tariffs or the general terms and conditions that are not exclusively favourable. Previously, such changes only had to be announced at least one month before they were to take effect (e.g. on the Internet). Users, then, often did not take notice of the changes and could not execute, in time, their right to give notice to which they were entitled. The explicit obligation to provide this information constitutes an essential improvement for users.

4.2.4.7 Communications parameters

Communications parameters: effective competition by objective and non-discriminatory allocation

Pursuant to the provisions of the TKG 2003 (as well as formerly of the TKG 1997), RTR-GmbH is responsible for the efficient administration of the Austrian telephone numbers.

The TKG 2003[7] now grants to RTR-GmbH the competence to issue ordinances in several areas. This also refers to the areas previously regulated by the Numbering Ordinance (NVO[8]) and the Charges Ordinance (EVO[9]) of the Federal Minister of Transport, Innovation and Technology. Special importance is attached to the provisions on value-added services that are also captured by the competence to issue ordinances under the TKG 2003. However, RTR's competence to issue ordinances goes beyond the area of numbers and covers all "communications parameters". Pursuant to the TKG 2003, communications parameters designate "any possible characters, letters, digits and signals in their entirety that serve directly for the network control of communications connections".

RTR-GmbH has been given the competence to issue ordinances.

Changes under the TKG 2003

With the entry into force of the TKG 2003, the licensing regime that had been in effect until then was replaced by the obligation to notify the (intended) provision of a public communications network or service ("general authorisation").

The two functions of communications network operator and communications service provider together make up the "licence holder" within the meaning of the TKG 1997. The communications network operator provides and operates the respective communications network and has no relations to end-users, in contrast to the communications service provider that concludes contracts with the subscribers. As a rule, the communications parameters are allocated to the communications service providers (except for numbers as well as special communications parameters that are used by a communications network operator for the operation of its communications network and are not visible to the subscribers).

The allocation rules had to be adjusted to the new framework.

For this purpose, RTR's allocation rules had to be adjusted correspondingly. In this respect, the field of mobile numbers shall be mentioned. Prior to the TKG 2003, the entire area code was allocated to the respective applicant on the condition that the applicant possessed a corresponding licence that was basically linked to a frequency usage right and a self-operated network. On the basis of the changed law, RTR-GmbH now allocates (only) blocks of 100,000 subscriber numbers each to operators of mobile telephony services. A maximum of ten such subscriber number blocks will be allocated to an applicant upon first application.

[7] TKG 2003 (BGBl. I No. 70/2003)
[8] NVO (BGBl. II No. 416/1997 as amended)
[9] EVO (BGBl. II No. 158/1999 as amended BGBl. II No. 380/2001)

The introduction of mobile number portability (MNP) is also part of the context of mobile subscriber number allocation. Number portability allows customers to keep their numbers when they change service providers. In the future, a mobile number cannot be automatically ascribed to a specific operator, since porting will cause a mix-up of the numbers of the different operators behind the area codes that were previously exclusively used by each operator.

RTR-GmbH publishes a directory of value-added services numbers for user protection purposes.

Pursuant to § 24 (3) TKG 2003, RTR-GmbH is obliged to keep a directory of value-added services numbers that also shows the name and the address of the provider of the value-added service. In this respect, the problem that phone numbers are passed on to third parties without permission has become a burning issue again. However, in this respect the legal bases have not changed: it was and is not permitted to pass on allocated phone numbers to third parties, except in the case specified in the last sentence of § 65 (1) TKG 2003; this aspect shall be considered to an even greater extent in the future.

The adjustments to number administration that had become necessary because of the TKG 2003 were performed quickly, partly, by adjusting the allocation rules of RTR-GmbH; as regards the EVO, the Charges Ordinance 2003 was issued. Furthermore, a corresponding ordinance (Special Communications Parameters Ordinance, SKP-V) was worked out for "special communications parameters" that had been allocated by the BMVIT until the TKG 2003 entered into force. Following public consultation, both ordinances took effect on 27.10.2003.

In 2003, preliminary work was also done on the Communications Parameters, Charges and Value-Added Services Ordinance (KEM-V) which is scheduled to take effect by the end of the first quarter 2004. This ordinance will capture all relevant number-related legal provisions, i.e. in addition to special provisions for value-added services, the KEM-V will also cover the regulatory area of the NVO and the EVO 2003. The preliminary work was characterised by intensive discussions with the market players to give them the chance to contribute their views and wishes on specific items already prior to the public consultation performed early in 2004. In addition to the KEM-V, the Special Communications Parameters Ordinance (SKP-V) shall remain in effect as a separate ordinance.

Charges Ordinance 2003 (EVO 2003)

EVO 2003: further details on number ranges for services with regulated fee limits

The TKG 2003 authorises the regulatory authority to determine, by way of ordinance, further details on the amount of the charges to be applied to number ranges for services with regulated fee limits and number ranges that are subject to event tariffing, as well as on the manner of communicating them to the users.

As the EVO 2003 of 27.10.2003 is to apply only until the KEM-V takes effect, it was structured in the same way as the previously effective EVO, the EVO was declared to be the subject matter of the new ordinance and it was modified and amended only in some places.

The EVO 2003 contains the following new provisions:

- it applies also to data services;
- it includes the (0)901 range for services subject to event tariffing and associated provisions on tariff transparency;
- it covers the implementation of a CEPT[10]/ECTRA[11] Recommendation on Universal International Freephone Numbers (00800). Following a transitional period, the latter provision took effect only on 01.02.2004.

901 number range for value-added services subject to event tariffing

For services subject to event tariffing the customer pays a single (i.e. time-independent) tariff that is determined in advance.

A special characteristic of the (0)901 range is that the tariff that applies to the respective service is already indicated in the number. The first two digits after the area code indicate the amount to be paid in units of EUR 0.10. For a service with the number (0)901 05xxxx, for example, EUR 0.50 per call or SMS will be charged to the customer.

Advice of Tariff in the number range (0)901: no special advice obligation

Contrary to the Advice of Tariff obligations that continue to exist unchanged for the (0)900 and (0)930 number ranges, regulating the tariff in the number has the major advantage that the tariff need not be separately announced after connection set-up[12]. For reasons of consumer protection, this provision applies only up to and including a tariff of EUR 0.70 per event. For event tariffing as from EUR 0.80 (up to a maximum of EUR 9.00) in the (0)901 range and regardless of the amount of the tariff in the (0)900 and (0)930 number ranges, the Advice of Tariff obligations continue to exist. This means that the customer must be

[10] European Conference of Postal and Telecommunications Administrations (CEPT)
[11] European Committee for Telecommunications Regulatory Affairs (ECTRA)
[12] Any obligations arising from other statutory provisions (e.g. KSchG/Distance contracts), however, shall remain unaffected.

"appropriately" advised of the tariff to be applied directly after connection set-up. This quality standard that is to be welcomed from the customer point of view determines that the customer shall be advised of the tariff every time he/she uses the service, irrespective of any price markings (e.g. in advertising a service) that may be required according to other provisions. While for voice services (e.g. weather report, horoscopes etc.) this feature can be usually implemented quite easily by means of a recorded announcement after the number is dialled, capacity problems in the announcement equipment at the telephone exchanges are likely to occur with services involving a large number of short calls within short time (e.g. with televoting).

With SMS services, a relatively complex exchange mechanism of offers/acknowledgements via SMS is required to obtain tariff information at the beginning of the "connection", i.e. before the service is actually used. The first response to a customer's SMS to the service number will be a so-called "offer SMS" in which he/she will be advised of the type of service and the applicable tariff. Only after confirmation of this SMS (acknowledgement SMS) may the service be provided and tariffing be performed. In many SMS services, the system of offer/acknowledgement SMS is annoying and, thus, implementation of the service is quite difficult. As examples, SMS voting or SMS chat services may be mentioned. With low-tariff services, the mechanisms would be moreover inefficient. By creating the (0)901 number range, together with the Advice of Tariff obligations described above, it is now possible to implement such services usefully without unreasonably limiting end-user protection.

(0)901 number range: useful implementation of SMS value-added services is possible.

Special Communications Parameters Ordinance (SKP-V)

The SKP-V specifies in greater detail the allocation provisions for specific communications parameters.

Pursuant to § 63 TKG 2003, the regulatory authority shall issue, by way of ordinance, a plan for communications parameters which is to contain also the requirements for the allocation of the communications parameters. Furthermore, RTR-GmbH has to administer the communications parameters and allocate them for usage, pursuant to § 65 TKG 2003. The law provides for transparent, objective and reproducible allocation. The SKP-V specifies in greater detail the statutory provisions for communications parameters other than numbers.

On the basis of the SKP-V, RTR-GmbH allocates the following special communications parameters:

- International Signalling Point Codes – ISPC
- National Signalling Point Codes – NSPC
- Data Network Identification Code – DNIC
- Mobile Network Code – MNC
- Tetra Mobile Network Code – T-MNC
- International Closed User Group Number – ICN

Number administration

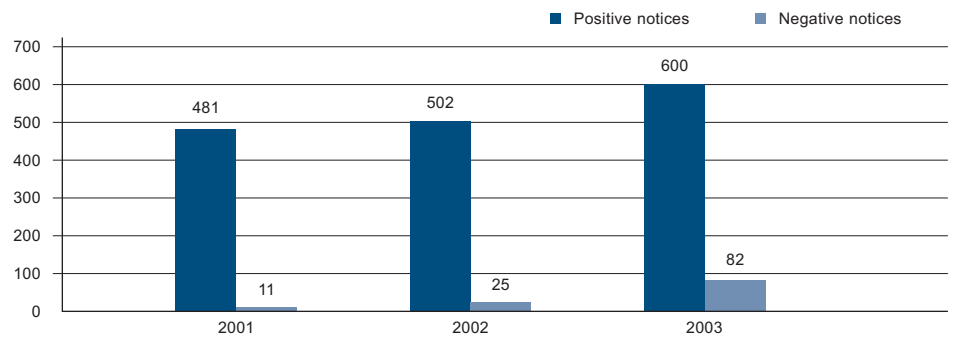
Special rules led to an increased number of negative notices.

Within the scope of number administration RTR-GmbH issued a total of 600 notices in 2003, which is an increase of about 20% as compared with 2002 (see also Table 4 and Figure 14). The strikingly high number of negative notices in 2003 against 2002 can be explained by the fact that in the process of introducing the new (0)901 number range in spring 2003 the numbers were allocated subject to special rules: all requests made within the first few weeks were considered as having been filed at the same time. Subsequently, identical requests for numbers were decided by lot, which meant that only one of these requests each was granted, while the others (often many requests) had to be rejected. This alone resulted in 55 negative notices.

Table 4: **Number of notices on telephone numbers 2001-2003**

Number of notices	2001	2002	2003
Number of positive notices	481	502	600
of these for geographical numbers	73	22	20
of these for non-geographical numbers	408	480	580
Number of negative notices	11	25	82

Figure 14: **Positive/negative notices on telephone numbers 2001-2003**



The average processing time of number requests was reduced to four days (see also Table 5). Also, the processing time of 50% of the notices was reduced by one day, as compared with 2002.

The processing times were significantly reduced.

Table 5: **Processing time of number requests 2001-2003**

Processing time of number requests	2001	2002	2003
Average	5.6	5	4
50% of all notices	4	4	3
90% of all notices	8	7	8

The following table gives an overview of all number ranges, including their usage, administered by RTR-GmbH as per 31.12.2003. The rate of usage shows the ratio between numbers actually in use (that can be actually reached) and the numbers assigned by RTR-GmbH.

Table 6: Numbers assigned and in use in Austria

	Range	Assigned	In use	Rage of usage*)
Geographical subscriber numbers Telekom Austria	(0)2xx, (0)3xx, (0)4xx, (0)5xx, (0)6xx, (0)7xx	27,082,500	17,992,495	67%
Geographical subscriber numbers Alternative network operators	(0)2xx, (0)3xx, (0)4xx, (0)5xx, (0)6xx, (0)7xx	4,455,800	453,830	11%
Access codes for private networks	(0)5	156	100	64%
Access codes for mobile networks	(0)6xx	9	6	67%
Personal services	(0)710, (0)720, (0730), (0)740	33,500	110	0.3%
Freephone services	(0)800	76,776	8,909	12%
Dial-up Internet access	(0)804 00	27	16	59%
Services with regulated fee limits	(0)810, (0)820	57,763	2,084	3.6%
Premium rate services	(0)900, (0)930	111,026	18,415	17%
Public carrier networks	10	39	28	72%
Fault reporting service centres	111	56	24	43%
Telephone directory inquiry services	118	58	26	45%
Routing numbers for number portability	86	33	11	33%
Routing numbers for services	89	31	7	23%

*) The figures are based on full-length numbers, i.e. a number shortened by one or two digits corresponds to ten or one hundred full-length numbers, respectively.

4.2.4.8 Value-added services

Pursuant to the last sentence of § 24 (2), the regulatory authority has to provide annual information on unfair practices and the corresponding measures taken (with regard to value-added services) in the report to be provided pursuant to § 34 (2) TKG 2003.

A new directory of value-added services numbers contributes to greater transparency on the market.

One of the major new tasks of RTR-GmbH under § 24 (3) TKG 2003 in this respect is to keep a directory of value-added services numbers that also gives the name and the address of the provider of the value-added service. Since December 2003, it has been possible to retrieve the data on individual value-added services numbers also directly from the RTR web site. In the period between August and December 2003, several inquiries were directed to RTR-GmbH for information about a specific value-added services number and the corresponding provider.

In the context of value-added services RTR-GmbH can draw mainly on the results gained in the field of numbering or during dispute settlement proceedings pursuant to § 122 (1) item 1 TKG 2003.

As in 2002, infringements in connection with value-added services comprised unsolicited messages, such as fax advertising messages, spam e-mails or spam SMS, as well as the unpermitted provision of erotic services in the (0)900 range, objections to the content of the provided service and problems related to appropriate tariff information.

Spam

Value-added services are often connected with spam e-mail.

In connection with the problem of unwanted messages, RTR-GmbH is given only a limited statutory task pursuant to § 7 E-Commerce Act (ECG). Under this provision, RTR-GmbH is obliged to keep a list where persons and companies may register if they do not want to receive commercial communication that is sent via electronic mail. Service providers that send unsolicited advertising e-mail have to observe this list. However, non-registration in this list does not automatically mean that unsolicited mail is permitted. In this regard, the limits of § 107 TKG 2003 as well as of sector-specific laws apply (for providers of financial services e.g. § 12 (3) Austrian Securities Supervision Act, WAG). Pursuant to § 107 TKG 2003, e-mail advertising to consumers is basically still permitted only with the recipient's prior consent, even though there are certain exceptions within the scope of existing business relations. Infringements of § 107 TKG 2003 will be punished under administrative law.

However, registration in this list does not protect against unsolicited advertisements. Spam mail is mainly sent by persons who do not comply with legal provisions and will not consider this list. Therefore, RTR-GmbH focuses on an active information policy for the users of communications services. A detailed information sheet available at http://www.rtr.at/ecg/ advises the interested users mainly of preventive measures and the correct conduct in the handling of spam mails.

If RTR-GmbH establishes a presumed violation of a legal provision by a provider of a value-added service, the competent authorities will be notified and corresponding procedures within RTR-GmbH will be initiated, depending on the violated provision.

Case study

One case is worth mentioning, in which a provider of a value-added services number apparently made fictitious inquiries for rooms to various hotels in Austria. Offers, if any, were to be faxed (only) to a value-added services number in the (0)930 range. The way the number was written made an inexperienced reader believe that it was a common number. This fact was reported to the competent public prosecutor's office, as criminal conduct was suspected. In addition, also the corresponding service network operator was informed of this incident, who subsequently blocked the number on his own initiative. Further course of action by RTR-GmbH was not required in this case. Eventually, the number might have been taken away, as tariff information pursuant to the provisions of the EVO 2003 was not implemented.

Number ranges are often not used as dedicated.

In addition, there were numerous violations as regards the unpermitted provision of erotic services in the (0)900 number range, which is permitted only in the (0)930 number range. At times, more than 100 numbers were affected almost at the same time. In most cases the competent service network operator was contacted who subsequently blocked the numbers or migrated the service to the (0)930 range. Moreover, such infringements were and are reported to the competent Telecommunications Office which may decide on the institution of administrative penal proceedings. Also, infringements of the EVO 2003 were reported.

Complaints about dialer programs are still a major topic.

In the same way as in 2001 and 2002, roughly 800 cases in 2003 demonstrate the strong increase in complaints in connection with dialer programs. A dialer program is software which is mostly offered on the Internet for download but also distributed by spam e-mails. There exist an immense number of such programs with various sub-types. Mostly. they are offered in connection with erotic pages on the Internet. Once downloaded and executed, such a program disrupts the existing low-cost Internet connection and sets up a new connection to an expensive number via the telephone line, in almost all cases to a national value-added services number. The required contents can then be retrieved via this more expensive number. In the field of dispute settlement proceedings pursuant to § 122 TKG 2003, cases referring to dialer programs are gaining more and more importance. Dialer programs may have various shortcomings: some programs offered disguise their actual functionality, others provide only

insufficient cost information. For the user, this will result in unjustifiably high phone bills. The most effective countermeasure, according to RTR-GmbH, is its authorisation to issue ordinances pursuant to § 24 (2) TKG 2003. Accordingly, by means of ordinance, the regulatory authority has to specify more detailed rules on the provision of value-added services in a transparent manner and in compliance with appropriate user protection. This may comprise, in particular, access controls in terms of specific user groups, provisions on advertisements, time limits for connections to value-added services, rules on dialer programs and tariff information. In this connection, special consideration shall be given, in particular, to the end-users' interests that are worth protecting, to technical capabilities as well as to the fact that end-users are able to control their expenses. RTR-GmbH complied with this statutory mandate directly after the TKG 2003 was adopted and drew up a corresponding ordinance which is expected to take effect in the first quarter of 2004. This ordinance will contain further provisions on dialer programs, which, combined with time and tariff limitations, shall improve the situation for the users.

One countermeasure is an ordinance which is to contain rules for the provision of value-added services.

Dispute settlement proceedings pursuant to § 122 (1) item 1 TKG 2003, repeatedly dealt with complaints, in substance, about the specific provision of a value-added service. Frequently, it was claimed that the callers had only limited legal capacity. Also, the providers of value-added services were often accused of unjustifiably prolonging a connection by giving wrong information. It these aspects turn out to be correct, RTR-GmbH will prepare a corresponding proposal for a solution in favour of the user.

Dispute settlement proceedings, as an instrument of legal protection, become more and more popular.

In addition, an increase in various value-added SMS services was noticed. In this respect, RTR-GmbH created a new number range ((0)901) which allows the provision of services that are subject to event tariffing (such as SMS services). With the entry into force of the EVO 2003, the requirements for the tariff information to be provided in this range have been simplified up to a specific upper limit. At the time of reporting, the communications network operators were in the process of implementing this new number range.

New provisions on services subject to event tariffing and on value-added SMS have been specified in the EVO 2003.

For 2004, the attention will focus increasingly on newly emerging data services (SMS/MMS). Priority shall be given to the fact that the users get corresponding tariff information even if this turns out to be partly difficult, especially in connection with data and fax services. This exactly is the reason why the application of the (0)901 number range shall be intensified.

4.2.4.9 Supervisory measures of the regulatory authority

The TKG 2003 strengthens the regulatory authority's supervisory options to ensure compliance with the statutory provisions.

In the TKG 1997, the regulatory authority's supervision rights[13] were basically limited to making arrangements regarding the exercise of the rights and obligations of RTR-GmbH under international regulations and the TKG 1997. A ruling by the VfGH[14] in 2001 further restricted this provision, being rather unspecific, in so far as these arrangements were to be made only within the framework of specific administrative proceedings. The option of imposing penalties was and is due to the telecommunications authorities also in the TKG 2003.

However, in Article 10 of the Framework Directive a new sanctioning mechanism was established, which provides for a multi-stage procedure. In the TKG 2003, this provision was transposed into national law by the introduction of § 91.

The regulatory authority can initiate supervisory measures only if it has reason to assume that a company violates the provisions of the TKG 2003, the provisions of an ordinance issued on the basis of the TKG 2003 or a notice issued on the basis of the TKG 2003. Such assumptions often result from reports by third parties. However, the regulatory authority must take action, by virtue of office, if it detects misbehaviour on the part of a market player (e.g. if proceedings before the TKK show that an operator does not comply with specific obligations).

First, the regulatory authority has to communicate the relevant facts to the respective company, giving the company an opportunity to state its views. At the same time, the company is instructed to establish a law-conforming state within reasonable time after receipt of the communication. Failing this, the regulatory authority shall, by means of ordinance, rule on appropriate measures and a reasonable period for implementation.

If, again, the measures ruled on in the notice again are not complied with, the regulatory authority can suspend or, ultimately, even withdraw the right to provide communications networks or communications services until the shortcomings are remedied or the state conforming to the law is restored.

For the same reasons, the regulatory authority may ultimately also revoke the allocated frequencies and communications parameters.

On the other hand, the regulatory authority may take immediate action, i.e. if violations of legal provisions represent an immediate and serious threat to public safety, public security or public health or will create serious economic or operational problems for other providers or users of communications networks or services. In this case the regulatory authority may issue a notice immediately, i.e. without first confronting the company with the breaches determined, in which the company is requested to remedy the breaches without further delay.

[13] § 83 (3) TKG 1997

[14] VfSlg. 16369/2001

Although it is not possible yet to draw a final conclusion for the short period the new regulatory framework has been in place it may be stated, in summary, that the supervisory measures given to the regulatory authority constitute an effective means to ensure compliance with the statutory provisions.

4.2.5 Supervisory authority for electronic signatures

Numerous proceedings according to the SigG were carried out also in 2003.

The Signature Act (SigG) assigned to the TKK also the competence to act as supervisory authority for electronic signatures, in addition to the existing responsibilities as regulatory authority. Again, RTR-GmbH acts as operative structure for the supervisory authority. In this capacity, RTR-GmbH is mainly responsible for keeping secure electronic directories of the providers of certification services. The tasks of RTR-GmbH under the SigG are kept separate within the company, both with regard to organisation and finances, in particular, in terms of cost accounting.

In 2003, the TKK conducted 17 proceedings according to the SigG. 15 of these (plus three additional cases from 2002 that had still been pending at the turn of the year 2002/2003) were completed in 2003.

The certification services provider A-Trust Gesellschaft für Sicherheitssysteme im elektronischen Datenverkehr GmbH has been the only Austrian provider of qualified certificates for electronic signatures since September 2002, when it took over the certification services of Datakom Austria GmbH. In 2003, A-Trust notified the start-up of new certification services in two cases, the modification of existing certification services in five cases and the termination of a certification service in one case. The major part of these changes was related to the takeover of the Datakom services; in addition, the product range was extended with regard to the technical requirements for the management of e-government applications.

Two providers of certification services were subjected to a regular review that is to be carried out every two years; in another case the supervisory authority looked into a communication by the national accredited certifications provider, A-SIT Zentrum für sichere Informationstechnologie Austria, concerning the registration procedure of A-Trust. The supervisory authority did not find any reason to perform supervisory measures in any of the cases.

In 2003, the Generali Group was restructured: in August 2003, Generali Office-Service und Consulting AG was transformed into a limited liability company, Generali VIS Informatik GmbH, and discontinued the provision of its certification services in December 2003. At the same time, Generali IT-Solutions GmbH took up a basically identical certification service.

In February 2003, a new provider of certification services, Web und Co – Webdesign, Multimedia und Consulting GmbH & Co KG, took up operation in Graz.

In relevant proceedings the TKK, as supervisory authority, dealt with the so-called “identity links” and examined if the issuing of these certificates was to fall under supervision according

to the SigG. "Identity links" are data structures that represent a link between a citizen's certificate and the central registration register and are used in e-government. Eventually, the TKK determined that these documents are not certificates within the meaning of the SigG and discontinued the proceedings. The E-Government Act (E-GovG) will create a legal basis for the issuing of identity links.

In 2003, there were no changes in the legal bases for electronic signatures, but two important regulations were considered. The Federal Ministry of Justice (BMJ) prepared an amendment to the Signature Ordinance and invited experts of RTR-GmbH and A-SIT to participate in a number of meetings, as the amendment is to reflect mainly practical experience. In August 2003, RTR-GmbH made detailed comments on the E-GovG in the process of the consultation procedure.

The operation of the secure directory of providers of certification services, which was launched in September 2002, is a major part of the activities of RTR-GmbH in complying with the statutory mandate of § 13 (3) SigG. The operation of the directory did not cause any problems, which is due not least to compliance with the high security standards.

The directory of the supervisory authority enables the users of electronic signatures to verify the authenticity of the certificates issued in Austria by means of access to a central directory. Thus, the directory is an important contribution to the security of electronic services in Austria. All certification services offered in Austria within the meaning of the SigG are included in the directory of the supervisory authority, not only those where qualified certificates are issued. Foreign providers can be included in the Austrian directory on a voluntary basis. The directory also shows the quality level of the respective certification service.

The directory is designed according to public key infrastructure. In the technical implementation RTR-GmbH paid attention to the utmost technology neutrality and compliance with all major technical standards, also coordinating the directory with the national accredited certifications provider A-SIT. The certificates and revocation lists issued by the supervisory authority are provided on the Internet by means of Hypertext Transfer Protocol (HTTP) and Lightweight Directory Access Protocol (LDAP; each with and without Secure Socket Layer – SSL).

In 2003, RTR-GmbH succeeded in achieving initial international interconnection of the directory. A cooperation agreement was concluded with the TeleTrusT Deutschland e. V. association which operates the European Bridge CA, a directory of European public key infrastructures. The Austrian supervisory authority issued a certificate to TeleTrusT; in response, the public key infrastructure of the Austrian supervisory authority was also included in the European Bridge CA. This cooperation facilitates secure communication between Austrian and other European (currently mainly German) users of electronic signatures. Since July 2003, the TKK certificate has been automatically recognised by more recent versions of Windows.

At an international level, the activities in the "Forum of European Supervisory Authorities for Electronic Signatures" (FESA), in existence since 2002, were continued; in the meantime, the forum has 20 member organisations and deals with the cooperation between the different European supervisory authorities and the harmonisation of their respective activities. In particular, the current process of reviewing the European signature directive was discussed.

The secure directory of the providers of certification services was interconnected internationally for the first time.

At the end of 2003, RTR-GmbH drew up the comprehensive report "Four years of the Signature Act", which describes the activities of the supervisory authority since the entry into force of the SigG and was published in the series of periodical publications of RTR-GmbH. The report gives an overview of the technical and legal bases of electronic signatures, the Austrian market, the major technical standards and an international comparison.

4.2.6 Proceedings before the Constitutional Court (VfGH) and the Administrative Court (VwGH)

Proceedings before the Constitutional Court (VfGH)

In the period under review, only one complaint against decisions by the TKK and RTR-GmbH was filed with the VfGH. The complaint referred to proceedings for the removal of abuse of significant market power pursuant to § 34 TKG. The activities by the regulatory authority in this connection consisted in preparing a comment on the request filed for granting suspensive effect and in preparing counter-pleadings. In its ruling of 11.06.2003, the VfGH refused to deal with the complaint.

Proceedings before the Administrative Court (VwGH)

The authorities concerned commented on the complaints to the VfGH and the VwGH.

In 2002, three complaints against decisions by the TKK and RTR-GmbH were filed with the VwGH. These complaints referred to one interconnection case, one case for removal of abuse of significant market power pursuant to § 34 TKG and a position paper of the TKK. In this connection, the activities of the regulatory authorities consisted in preparing pleadings against requests filed for suspensive effect and in preparing counter-pleadings. On 06.10.2001, the VwGH dismissed the complaint against the position paper for lack of the position paper to legally qualify as notice. The remaining cases are still pending with the VwGH.

4.3 Competence centre

The role as competence centre is part of RTR-GmbH's self-perception.

The function of RTR-GmbH as think tank and competence centre for telecommunications and media issues is not only reflected in the self-perception of its staff members but is also embodied in the law. Pursuant to § 5 (3) item 5 KOG, one of the tasks of RTR-GmbH is "the development and management of a competence centre, in particular with regard to issues of the convergence of media and telecommunications".

The implementation of this self-imposed mandate and the execution of the statutory mission constitute one priority in the work of RTR-GmbH. On the one hand, RTR-GmbH provides expert knowledge to an interested public comprising market players, political and scientific experts as well as interest groups and, on the other hand, it offers a platform for the exchange of technical information by organising events. As a competence centre, RTR-GmbH attaches great importance to customer orientation and close contact to the market players.

The work of RTR-GmbH as a competence centre is reflected not only in the specific activities, which are listed below, but is considered a fixed principle and an integral part of the self-perception of its staff.

The following activities are part of the competence centre:

- to advise and support the BKA and the BMVIT;
- to provide information to the expert audience;
- to hold major events on market relevant topics (broadband initiative, Digital Platform Austria);
- to organise information events for market players on a regular basis;
- to publish reports and publications (Communications Report, series of periodical publications, monthly newsletters); as well as
- close cooperation with relevant institutions (Federal Competition Authority, universities and research institutes) and participation in national and international conferences.

In the business year 2003, the following specific measures were taken:

Series of periodical publications of RTR-GmbH

By more intensive communication with the market RTR-GmbH has emphasised its function as competence centre.

In 2003, the RTR series of periodical publications appeared for the first time. Three to four times a year specific issues from both Departments of RTR-GmbH shall be addressed and processed in greater detail for the expert audience.

In 2003, the following issues were published:

Volume 1 "Five Years of Private Radio in Austria: Partial Successes were Achieved – Dual Market has not yet been Established"
Volume 2: "Broadband Status Report"
Volume 3: "Subsidising Strategies for Broadband Technologies and their Implications for the National Economy"
Volume 4: "Broadband Infrastructure in the Field of Tension with Applications, Content and Services"

Regular up-to-date information in the RTR newsletters

The monthly newsletters of the Broadcasting and Telecommunications Departments of RTR-GmbH provide periodic information on the latest developments in the communications markets, official decisions and other news from the two Departments.

Broadband initiative

In the framework of the "Austrian Broadband Initiative" major milestones were achieved in 2003.

As regards the information society, the European Commission started activities already in the mid-90s (eEurope 2002, extended by eEurope 2005) with a view to strengthening Europe as business location. The EU Member States are supposed to implement these action plans.

Against this background, RTR-GmbH launched the Austrian Broadband Initiative at the beginning of 2003, assuming topical leadership in this area. The Broadband Initiative is supposed to raise general awareness about broadband being an essential factor for the quality and the future prospects of Austria as a business location and to give examples of international and national "Best Practices" as well as introduce established subsidising models. It is the objective to significantly increase the broadband infrastructure in Austria and thus to create the prerequisites for a leading position in the European knowledge-based society.

The following activities were carried out in 2003:

1. raising public awareness by means of two broadband symposiums and intensive communication with the market;
2. survey and presentation of the broadband status in Austria in the framework of the RTR series of periodical publications;
3. analysis of international "Best Practices";
4. analysis and evaluation of subsidising models as well as publication in the framework of the RTR series of periodical publications; and
5. development of an indicator model for the calculation of subsidising rates to ensure that subsidies are granted in accordance with the provisions under telecommunications law.

Alternative Dispute Resolution

In the first half of 2003, the Telecommunications Department of RTR-GmbH carried out a pilot project regarding Alternative Dispute Resolution (ADR). Since the entry into force of the TKG 2003, RTR-GmbH has now been also under the express legal obligation to perform these procedures (§ 115 (3) TKG 2003).

In ADR, RTR-GmbH accompanies the process, trying to create conditions that support the successful resolution of conflicts. RTR-GmbH is not supposed to make comments in substance or solution proposals.

It has been demonstrated in many areas of the economy, and in the ADR cases so far handled by RTR-GmbH, that professionally moderated conflicts can be resolved in a manner that is much more satisfactory, future-oriented and faster than a formal procedure. The chief principle is that the conflict parties act along self-determined lines and come to a common solution that meets the interests of all in the best possible way ("win-win"). This quality cannot always be achieved in decisions by third parties (authorities or court). Finally, it shall be mentioned that the costs for the parties involved in ADR cases are much lower than in the formal cases under the General Administrative Procedures Act (AVG). Moreover, also the regulatory authority can save money, which will be of benefit to the market.

Working group "Digital Platform Austria"

First pilot operation of terrestrial digital television in the 2nd quarter 2004 in Graz

Section 6 of the PrTV-G imposes a special task on KommAustria and RTR-GmbH, i.e. the establishment of the working group "Digital Platform Austria" (which took place already in January 2002). According to the statutory mandate, it is the primary objective of this working group, "in cooperation with the regulatory authority, to facilitate commencement of the progressive introduction of digital terrestrial television by 2003". In compliance with this statutory mandate RTR-GmbH, as supporting body of KommAustria, arranged for a number of meetings of the expert panels in the fields of "Technology", "Market/Content" and "Law". Many of these events were dedicated to the preparation of a specific pilot operation of digital terrestrial television in the service area of Graz. Eventually, on 03.11.2003, at the invitation of Franz Morak, State Secretary for Media, a cooperation agreement was signed between the ORF, Siemens AG Österreich, Telekom Austria and RTR-GmbH on a DVB-T pilot operation to be performed in the 2nd quarter 2004 in the service area of Graz.

RTR-GmbH as platform for specialist events

As a competence centre RTR-GmbH also plays an important role in the exchange of technical information, in the form of events, between market players and other stakeholders. In 2003, such events were held also in cooperation with other institutions at the premises of RTR-GmbH. For example, a specialist event on "Dual Broadcasting" was organised by RTR-GmbH together with the Institute for European Media Law (Saarbrücken), the Federal Chancellery and the Association of Austrian Private Broadcasting Stations. As a result of this specialist event, in 2004, two expert opinions will be published in the framework of the RTR series of periodical publications.

Another example for cooperation with a scientific institution is the 4th Salzburg Telecom Forum that was organised together with the Institute for Constitutional and Administrative Law of the Faculty of Law at the University of Salzburg in September 2003. This event provided a platform for the exchange of opinions on the current topics "Transposition of the New European Legal Framework" and "Electronic Communications and its Interception". Among the lecturers were national experts and representatives of the European Commission.

5. The Austrian communications markets

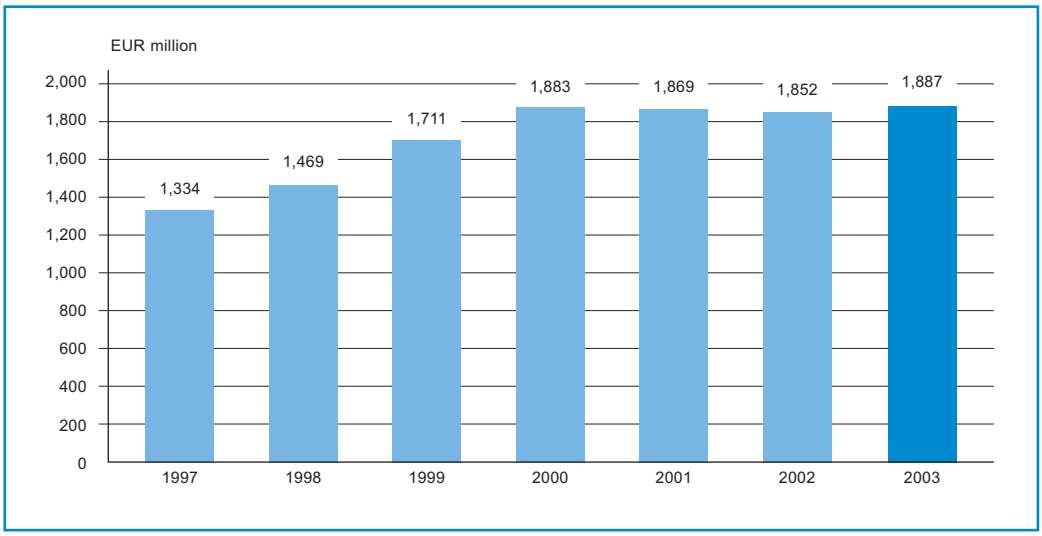
5.1 Development of the Austrian media markets

5.1.1 Introductory remarks

At EUR 1.887 billion, the advertising expenses in Austria reached a record level.

The Austrian media market seems to have bottomed out in 2003, the advertising sales in the classical media types raised hopes for new growth, which is also reflected in the data of the media sector in the first quarter 2004. After the figures had been declining in 2001 and 2002, the advertising expenses reached even a new high in the period under review, even though the amount of EUR 1.887 billion is only marginally above the former record amount of EUR 1.883 billion in 2000. Yet, the surplus of 1.9% compared with the previous year seems to herald a trend reversal. These figures, compiled annually by FOCUS Media Research, thus corroborate the subjective estimates of the media and communications sectors that the long expected cyclical upswing is likely to take place in the near future and that the media industry can expect further growth of the advertising market. To qualify this, however, the FOCUS advertising figures refer exclusively to gross advertising expenses and, therefore, do not reflect any discounts that may have been more generous than in the past.

Figure 15: Overall development of advertising expenses



Source: FOCUS Media Research

In June 2003, ATV+, the first terrestrial private television station, was launched.

In 2003, there were no major changes in the field of the media providers and the titles or programmes in Austria that might have affected the usual market structure profoundly. Due to the economic situation, almost all existing players on the media market adopted a wait-and-see policy or carried out structural reforms. As regards the diversity of opinion and the variety of offerings, the ORF is still dominating in the electronic sector, in the same way as the Kronen Zeitung in the field of daily papers and the Verlagsgruppe NEWS in the magazine sector.

Only the launch in June 2003 of the first nation-wide terrestrially broadcast private programme "ATV+", which developed from the station "ATV" that had been received in most Austrian cable networks, attracted great interest, not least because its "relaunch" took place while the advertising market was still stalling and, due to the size and specific characteristics of the country, some analysts gave a nation-wide private television project only a slim chance.

This has mainly to do with the fact that, by international comparison, the Austrian media market is considered a small market. Moreover, it is characterised by strong tendencies of concentration and dominant market positions. In television, the nation-wide TV programmes ORF1 and ORF2 are dominating by a wide margin. However, they are up against not only ATV+ and other private TV programmes that can be received only via local cable networks and, to a small extent, terrestrially, but more than ever a great number of foreign private and public-law programmes which compete fiercely with the ORF in the households supplied via cable networks or TV satellites. Of these programmes the majority of private German-language stations offer so-called "Austria windows" that constitute platforms for the Austrian advertising industry. In addition, the tendency to produce also independent programme parts in these windows, mostly limited to individual formats in weekly rotation, became stronger in 2003. For 2004, however, further expansions and projects like daily newscasts ("Austria Top News" on Pro7) were announced, despite the fact that, in legal terms, most providers of these windows are not "established broadcasters" in Austria yet.

The ORF's market dominance is unbroken.

In radio broadcasting, the ORF continued to hold its dominant position. With the four radio programmes Ö1, Ö3, FM4 as well as the regional programmes Ö2 it achieved a market share of 82% in 2003. In the target group aged 14 to 49 that is relevant to the marketing of private radio programmes it achieved 80%. According to the Radiotest, in this group all domestic private radio programmes together achieved only 18%, while the ORF's "drawing card" Ö3 alone attained 51%. Compared with 2002, this means that private radio programmes lost 3 percentage points in market shares in the 14-49 age group so that a balanced "dual broadcasting market" in radio broadcasting is far from being established.

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 sole and undisputed leader by a wide margin. The market position, unique in Europe, is best reflected in the fact that in 2003, on an annual average, 43.8% of all Austrians over 14 years of age

(Media Analysis 2003) read the Kronen Zeitung every day. Not even the arguments between the two owners that were carried on in public and attracted a lot of media attention had any influence on this situation. In the magazine sector, too, Austria is still characterised by significant market power of the Verlagsgruppe NEWS, which is also under the control of German owners (Gruner + Jahr, but also WAZ).

With regard to changes in ownership of domestic print media, it shall be mentioned that the Athesia Group (South Tyrol) acquired a share in the Tiroler Tageszeitung. At the beginning of 2003, the major German publishing group Springer had sold its 65% share in the "TT" to the Austrian community of heirs of the former owner, Mr. Moser. In September 2003, it was announced that 50% of the shares would be sold to Athesia Druck GmbH.

Both media sectors, daily papers and magazines, have in common – and this is also specific to Austria, apart from the media concentration, - that a considerable number of published and market relevant titles are under the control of owners that are not Austrian but established within the EU (especially Germany). This applies, for example, to the following companies:

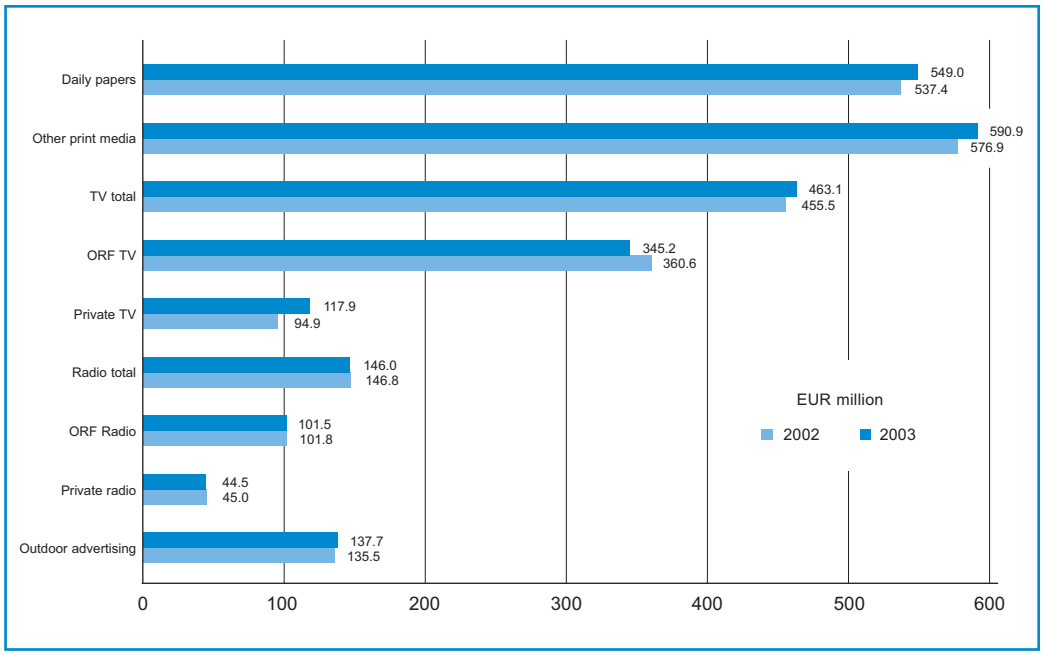
- the Kronen Zeitung (50% share of the German WAZ Group),
- the daily paper Kurier (share of WAZ 49.4%),
- the Tiroler Tageszeitung (50% share of Athesiadruck Bolzano in the 100% Moser Holding AG),
- the daily paper Der Standard (49% Süddeutscher Verlag),
- the daily paper WirtschaftsBlatt (50% Bonnier Group),
- the Verlagsgruppe NEWS (52.5% owned by the German publishing house "Gruner + Jahr" which is part of the Bertelsmann Group; 26.3% owned by ZVB AG, a 100% subsidiary of the Kurier publishing house in which WAZ holds 49.4%)

5.1.2 Development of advertising expenses

Gross advertising expenses in private TV grew by 24%.

The trend reversal in advertising expenses in 2003 was reflected in all media sectors equally, only the ORF posted a decline in television of 4.3%, from EUR 360.6 million to EUR 345.2 million. On the other hand, private television increased by 24%, which is not only due to ATV+ but mostly to the disproportionate growth of the "window programmes" of German providers. Compared with 2002, where the ORF's revenues had been almost four times higher than those of the private stations, the revenues were down to "only" three times in 2003.

Figure 16: Advertising expenses 2002 vs. 2003

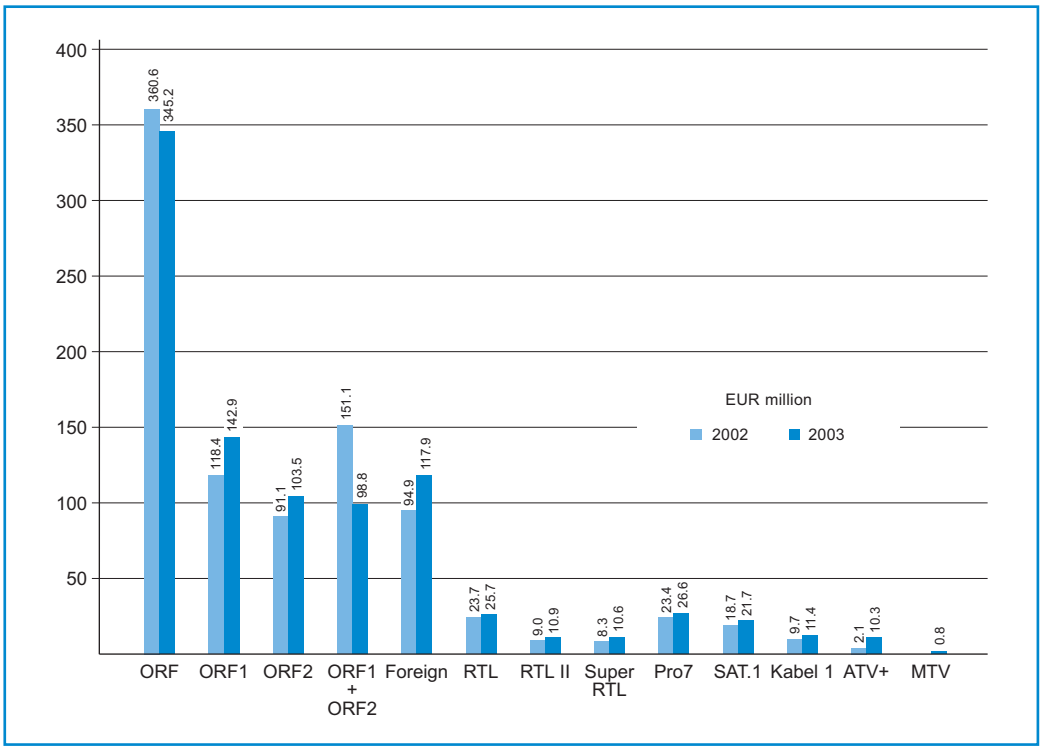


Source: FOCUS Media Research

If the rather small change in advertising expenses for "TV total" between 2002 and 2003 is compared with the loss of the ORF and the gains of the private TV sector, it is obvious that the mentioned increase of 24% in the private TV sector occurred at the expense of ORF television. In a detailed analysis of these advertising expenses, it can be seen that both ORF1 and ORF2 registered separate growth rates of 20% and 14%, respectively, while parallel broadcasts of commercials on ORF1 and ORF2 at the same time dropped by one third, from EUR 151.1 million to EUR 98.8 million, which was responsible for the ORF's overall decline of 4.3% mentioned above. However, the development of the TV advertising revenues of the ORF does not result not only from the changed framework conditions as to competition law in the ORF Act (ORF-G) but, in particular, from the economic activity in advertising and the ORF market shares in connection with advertising tariffs.

In private television, mainly the German stations with the highest daily reach figures achieved a considerable share in the national TV advertising volume. Pro7, with EUR 26.6 million, which outstripped RTL, with EUR 25.7, is number one for the first time. SAT.1 Österreich is third with EUR 21.7 million. The only purely Austria competitor, ATV+, jumped from EUR 2.1 million in 2002 to EUR 10.3 million, due to the changeover to terrestrial broadcasting. However, it has to be taken into account that the new programme with an increased technical transmission range was launched only in mid-2003.

Figure 17: Development of advertising expenses: TV



Source: FOCUS Media Research (March 2003: introduction of MTV; June 2003: relaunch of ATV on ATV+)

60% of all advertising expenses were attributable to the print media.

A breakdown of the advertising expenses by media types shows that the changes in the TV sector do not matter that much. As in 2003, also in 2003, the major part of the overall advertising expenses (classical advertising expenses: EUR 1.887 billion), i.e. 60%, accounted for the print media: 29% of the overall advertising expenses were attributable to daily papers, 8.7% to regional weekly papers, 17.7% to magazines and journals and additional 4.9% to technical journals.

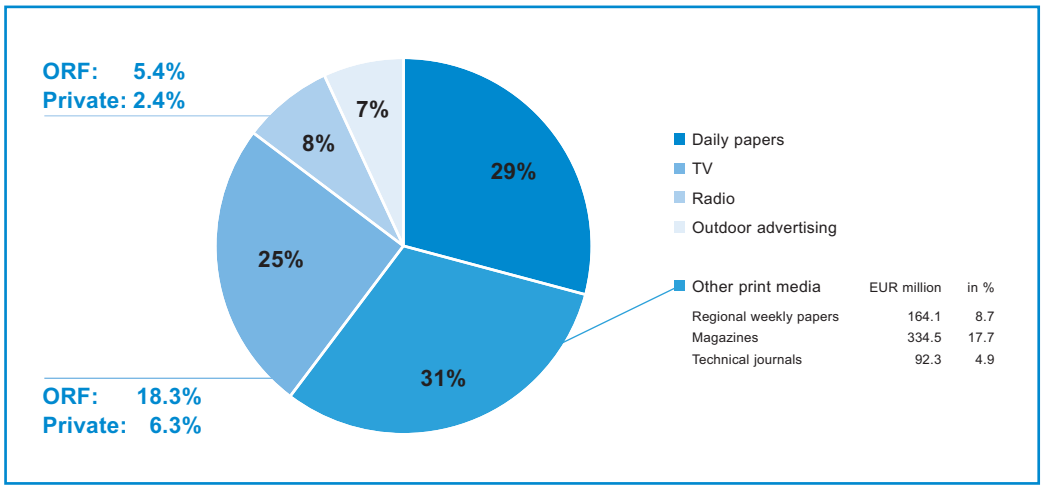
About one fourth (EUR 463.1 million) of all advertising expenses still accounted for the TV sector, even though the ratio of ORF to private broadcasters shifted from 19.5% to 5.1% in 2002 to a ratio of 18.3% to 6.3% in 2003.

8% (EUR 146.0 million) of the advertising expenses (ORF: 5.4%, private radio broadcasters: 2.4%) were attributable to the radio sector.

About 7% (EUR 137.7 million) of all advertising expenses were invested in outdoor advertising (billboards, electric signs, advertising on public transportation).

In 2002, the decline in advertising expenses in Germany had been by far more dramatic than in Austria. In 2003, the largest media market of Europe, which has a considerable impact on

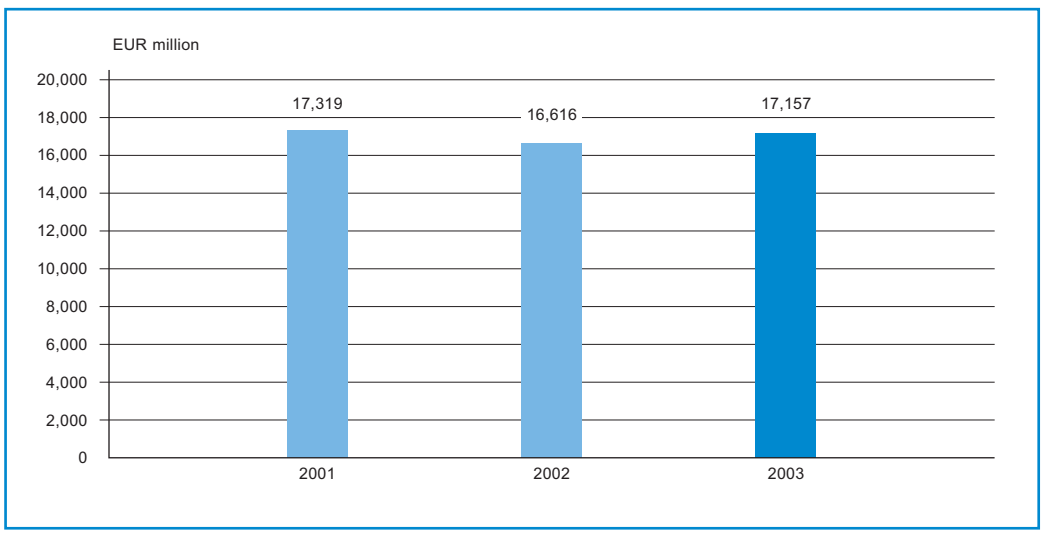
Figure 18: Share of advertising 2003 (total: EUR 1,887 million)



Source: FOCUS Media Research

the situation of the media in Austria due to its geographical and economic proximity and as part of the same language area, saw a growth in advertising expenses again. After the decrease of 4% in 2002, the advertising expenses went up 3.3%, to EUR 17.157 billion, in 2003. This is a pronounced increase, compared with the growth rate in Austria of 1.9%, even though the decline in Germany had been significantly greater than in Austria. Also, changes in discount practice were not taken into account either.

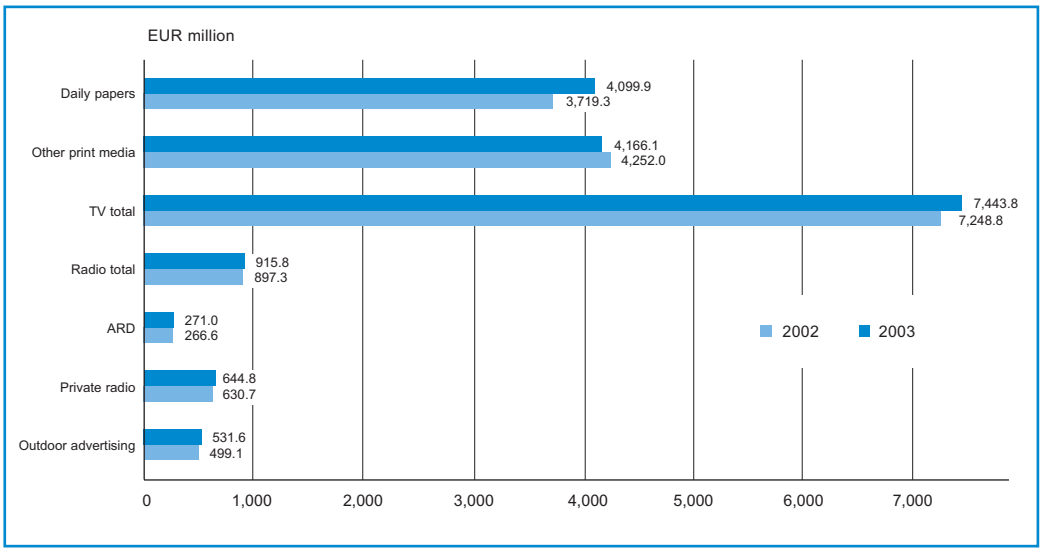
Figure 19: Development of total advertising expenses in Germany



Source: S+P Germany

Mainly, daily papers (+10.2%) but also television (+2.7%) benefited from this upswing, while the advertising expenses of the other media types remained almost unchanged. The situation in Germany seems to back up the view of many that the upward trend is not a local phenomenon in Austria but a general trend that is seen to emerge.

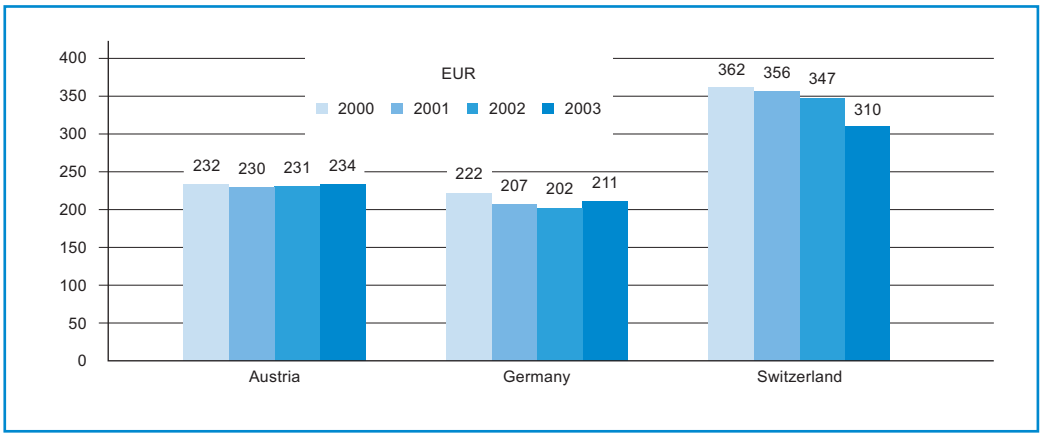
Figure 20: Advertising expenses in Germany 2002 vs. 2003



Source: S+P Germany

As regards per capita advertising expenses, the Austrian advertising industry reached, and even exceeded, the level of the Federal Republic of Germany in the course of the past decade.

Figure 21: Per capita advertising expenses



Source: FOCUS – Buch der Werbung 2003

Per capita advertising expenses in Austria were at EUR 234.

In 2003, the per capita advertising expenses in Austria were at EUR 234 (2002: EUR 231), as against EUR 211 (2002: EUR 202) in Germany. Also, Switzerland, an economically strong country by tradition, suffered declines in the advertising volumes in the past few years. Compared with Austria and Germany, Switzerland also experienced a decline in per capita advertising expenses in 2003 (10.7%), but, at EUR 310, the level is much higher than in Germany and Austria. The higher level is certainly attributable to higher advertising expenses to take account of the country's multilingualism.

The above figures do not include online advertising expenses. In Austria, they remained at almost the same level in 2003 as in 2002, at EUR 10,4 million (2002: EUR 10.6 million). The decline of 28% of 2002 (2001: EUR 14 million) was not made up for. While in Germany an opposite trend was already seen in online advertising in 2002 with a significant increase of 21%, which continued in 2003 with a surplus of 3.5%, the market in Austria is still reluctant to advertise in "new media" in more difficult times.

5.1.3 Television

On 01.06.2003, ATV+ started terrestrial broadcasting operation.

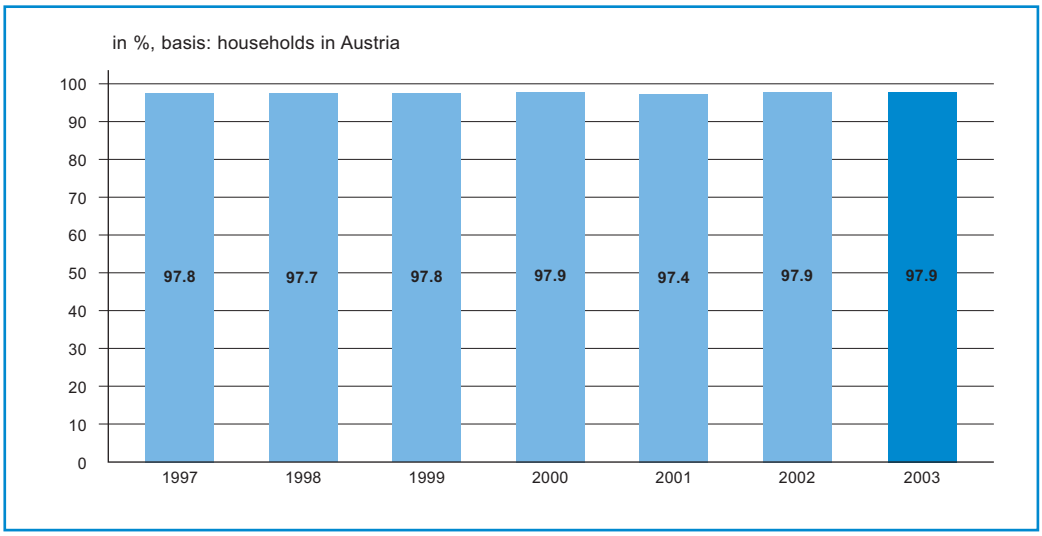
Since an important step towards a true dual broadcasting system had been taken also in Austria in 2002 by licensing terrestrial private television programmes, ATV+, the first nationwide private television programme receivable via house aerial, was launched on 01.06.2003. At that time, there were already several local terrestrial private TV programmes, such as city programmes in Linz and Salzburg. The conurbation TV station for Vienna, "Puls City TV", had originally planned to start operating in 2003, but the launch was postponed to June 2004.

Even though ATV+ was reasonably successful until the end of 2003, no major breakthrough took place, which had not been expected in this short time either. As there is no previous experience in Austria as to intra-Austrian competition, the Austrian television market is judged differently even among experts. In any case, a private domestic TV provider is faced with major competition from the ORF and German private and public-law stations.

With regard to the diversity of opinion and the viewers' usage habits, the medium of television is a highly sensitive area of media policy. The news broadcasts of the ORF, in particular, play an important role in, mainly political, opinion forming. After all, the ORF accounted for more than half of the market shares also in 2003. In the meantime, the television market is almost identical with the total population and can be regarded as saturated, which even enhances the impact of television on social and communications policies. In 2003, at least one TV set existed in 97.9% of all households.

In analogy to the penetration of the households with TV sets, the daily viewing time had also taken an upward course in the past. In 2003, however, this curve was slightly dampened. For all Austrians (over 12 years) and reception types (terrestrial, cable, satellite) daily viewing time was, on average, 161 minutes, while in 2002, after a steady upward movement, it had still been 162 minutes. This sluggishness may also suggest a certain degree of saturation. Some even

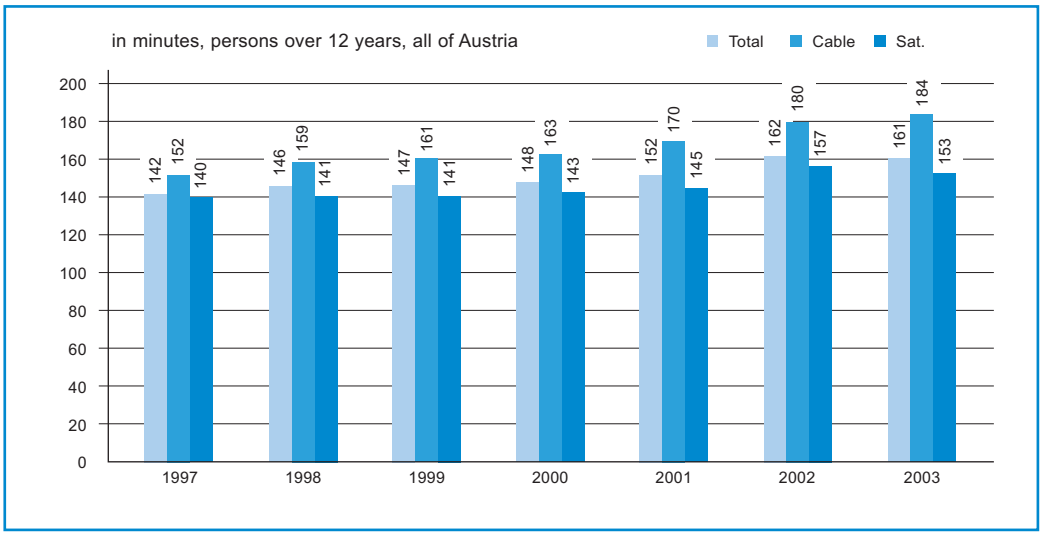
Figure 22: Development of TV households



Source: Media Analysis 2003

hold the extremely hot summer of 2003 responsible for this decline. This theory, however, is challenged by the fact that, even though the viewing time of consumers supplied with satellite programmes decreased, the viewing time of people supplied by cable networks increased further.

Figure 23: Development of viewing time



Source: Teletest

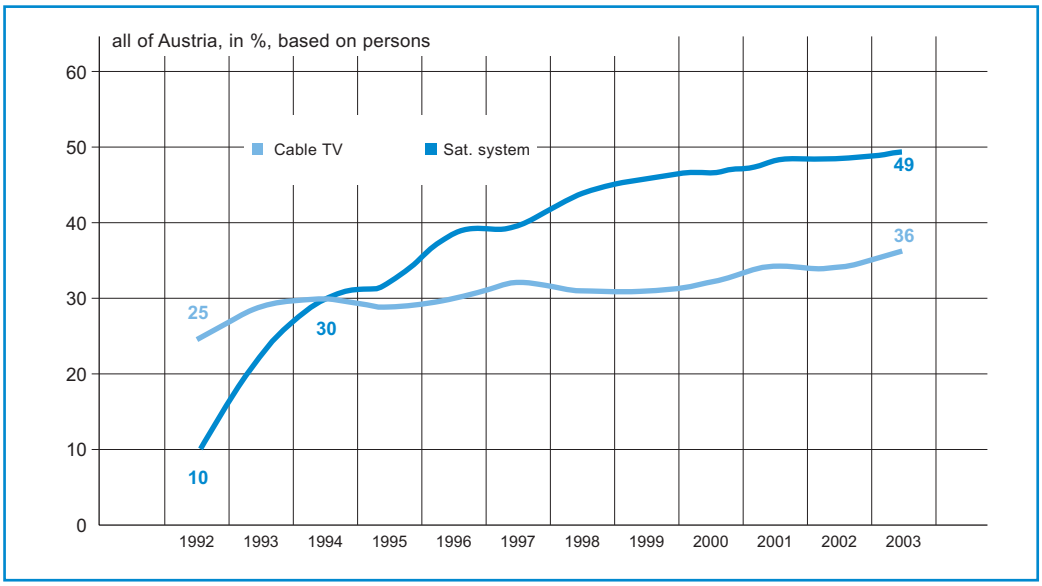
In the same way as the viewing habits, the reaches of the three transmission types terrestrial, cable and satellite are also different. In the 1960s and 1970s, the programmes were distributed almost exclusively via terrestrial transmitter systems; in the 1980s, especially in the cities, programmes were also distributed via cable TV networks to take account of the steadily increasing number of TV programmes available on the international and European markets. In the 1990s, TV programmes were more commonly received via broadcasting satellites, especially in areas not covered by cable TV networks, such as the outskirts of cities or outside cities.

About half of the Austrian TV consumers have satellite systems.

The number of Austrians who received their programmes via broadcasting satellites drew even with that supplied via cable networks only in 1994 (30% each). Since then, the number of persons supplied via satellite and via cable increased to 49% and 36%, respectively. Thus, every other Austrian viewer receives the programmes already via an analogue satellite system. As the television programmes of the ORF cannot be received by this satellite system (although this is possible with digital satellite broadcasting), these households mostly also have an additional house aerial for terrestrial reception.

Figure 24: Development of cable TV vs. satellite systems

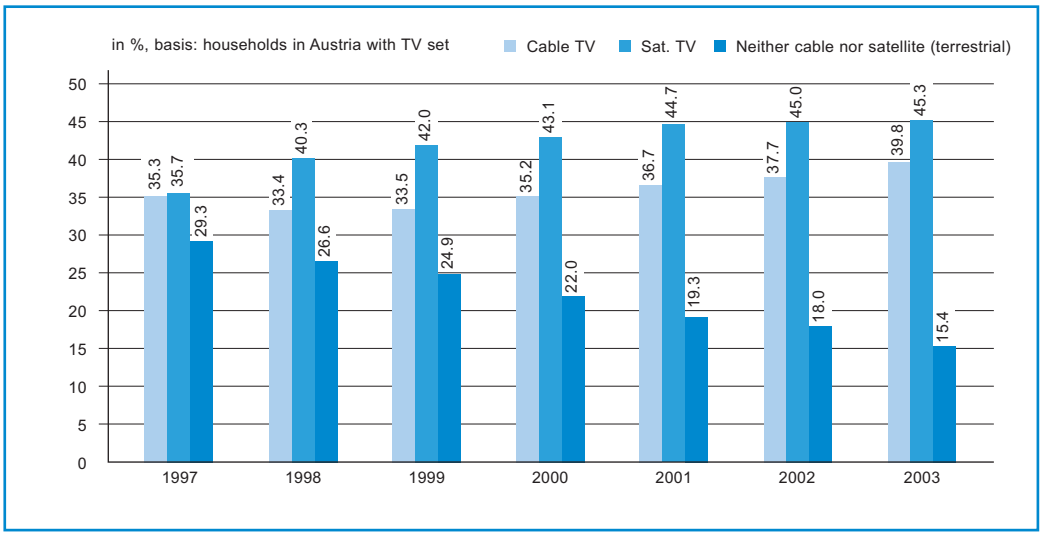
In 1994, the number of satellite TV households exceeded that of cable TV households.



Source: Media Analysis 2003

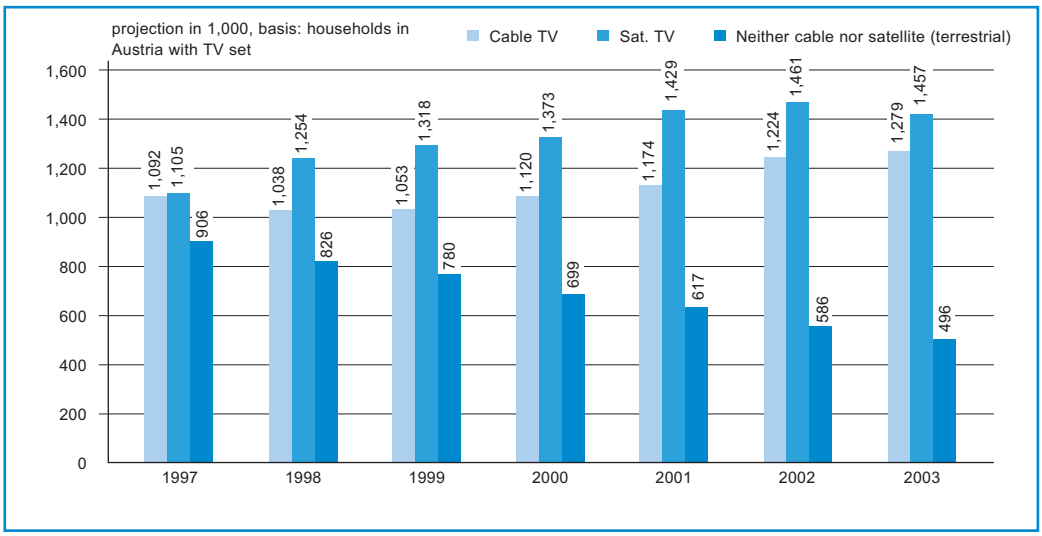
The number of households that are supplied exclusively via terrestrial transmission systems is decreasing rapidly. While in 1997 29.3% of the households still received TV programmes only via house aerials, this figure was down to only 15.4% in 2003. In other words, the number of households with terrestrial supply only decreased by half within six years.

Figure 25: Development of reception situation



Source: Media Analysis 2003

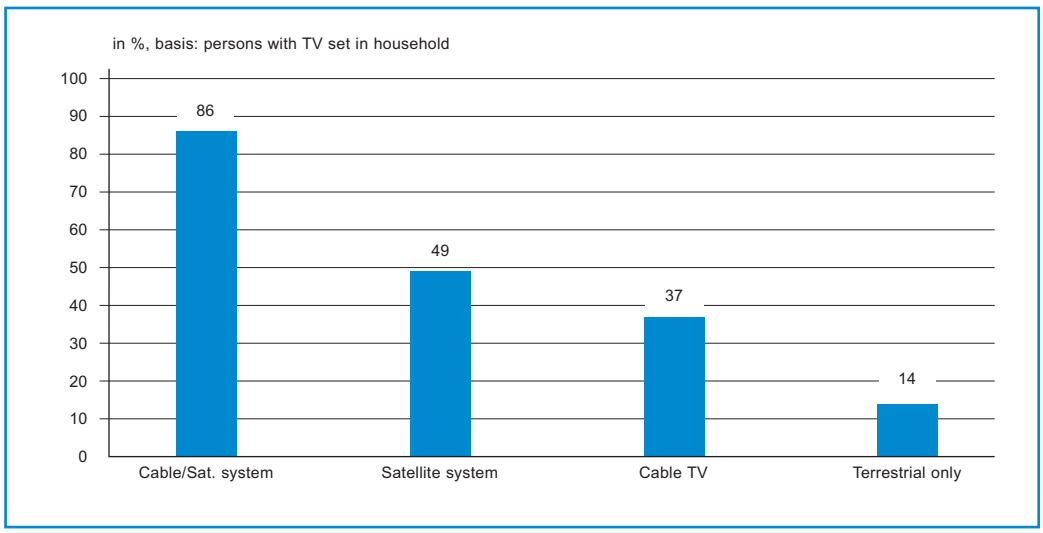
Figure 26: Development of reception situation



Source: Media Analysis 2003

If only the approximate figure of 98% of persons who own a TV set is taken as a basis, then only 14% were supplied exclusively terrestrially, while the share of cable/satellite viewers reached the new record level of 86%.

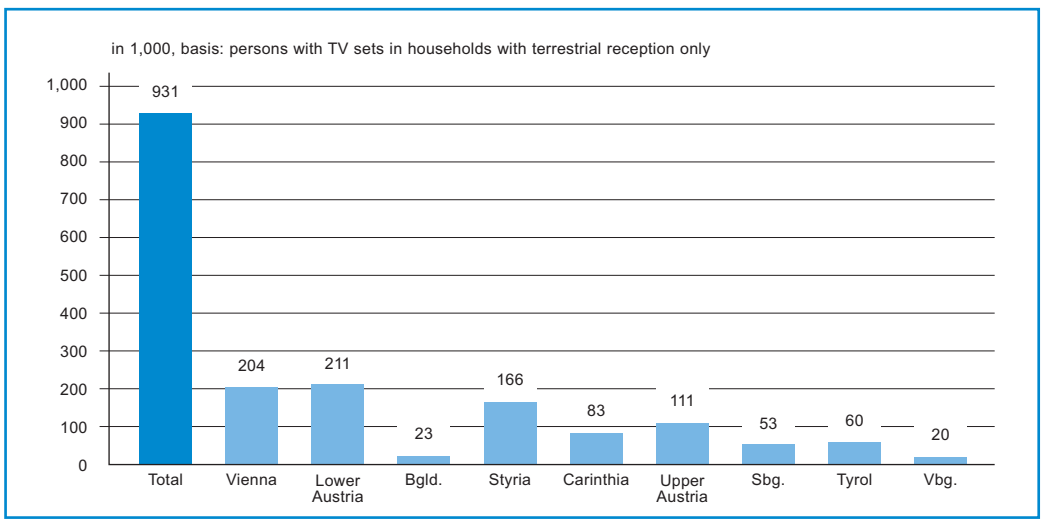
Figure 27: Reception situation 2003



Source: Media Analysis 2003

Converted into persons, 931,000 persons with at least one TV set in the household received only terrestrial programmes in 2003, the major part of them in Lower Austria with 211,000 persons, followed by Vienna with 204,000. These figures are quite significant because, contrary to the west of Austria where it has always been possible to receive also foreign German-language programmes via house aerials only, the people in the east of Austria were offered a first real alternative to the ORF programmes only in 2003 with the start of ATV+.

Figure 28: Reception situation 2003: terrestrial only



Source: Media Analysis 2003

Penetration of households with digital satellite receivers is skyrocketing.

In the future, digital satellite reception that will ultimately replace analogue reception in a few years will gain importance, as the transmission quality is better and a greater number of programmes can be broadcast. Austrian households that use a digital satellite receiver do not depend on terrestrial reception any more, as by now almost all relevant programmes are offered digitally, even those of the ORF, although for copyright reasons only in encrypted form. At the end of 2003, digital satellite receivers had a share of 24% of all households with satellite TV (FESSEL-GfK). Penetration of Austrian households with digital cable receivers, i.e. equipment for the reception of digital cable network programmes, is still lagging way behind and was only 4% of all cable TV households at the end of 2003 (FESSEL-GfK).

To facilitate the migration to the digital world for the Austrians, both the terminal equipment industry and the programme providers themselves offer incentives now and again, e.g. in 2003, a separate Austria programme was established within the bouquet of the "Premiere" pay TV station.

However, in 2003 the attention was also drawn to an important innovation in one of the techniques of bringing the signals to the consumer, i.e. in digital terrestrial reception. In a process driven by the regulatory authority KommAustria, full migration from analogue terrestrial to digital broadcasting shall be achieved by 2010. KommAustria laid down the basic strategy for this complex process in December 2003 in the "Digitisation Plan pursuant to § 21 (5) PrTV-G".

Without regard to the technical platform, Austrian viewing habits are surveyed by means of the "Teletest", a method for electronically determining the behaviour regarding programme selection and viewing times on the basis of 1,500 test households that are selected according to criteria of public opinion surveys.

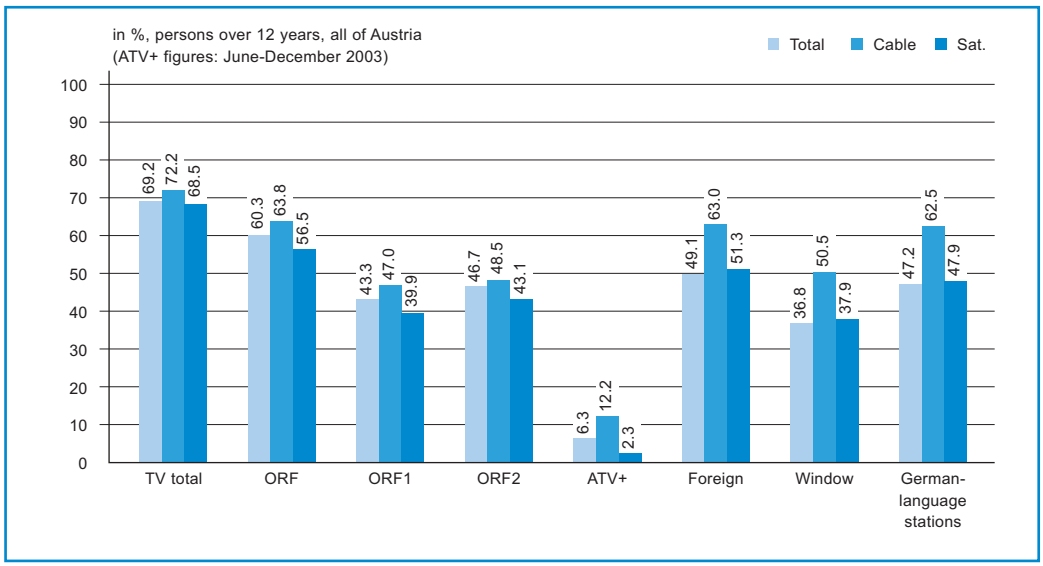
In 2003, ATV+ increased its daily reach to 6.3%.

In 2003, the daily reach which indicates how many persons over 12 years watched one of the television programmes on the market for at least one minute every day on an annual average was 69.2%, which is a slight decrease of 1.43% against 2002. This reversed the trend, as there had been a steady, albeit slight, increase in previous years, with a significant rise in 2002 (1997: 66.3%, 2001: 67.9%, 2002: 70.2%). The programmes of the Austrian Broadcasting Corporation, ORF1 and ORF2, achieved the highest daily reach figures with 43.3% (2002: 46.6%) and 46.7% (2002: 48.6%), respectively. This corresponds to a loss of 7.0% for ORF1 and 3.9% for ORF2, which constitutes a trend reversal also in this area.

The Austrian private station ATV+ expanded from 3.2% in 2002 (when it was receivable only via cable networks) to 6.3% in 2003, but it has to be taken into account that the greater technical transmission range was available only as from June 2003. The daily reach figures of the foreign TV stations in Austria, however, show a sustainable development. In total, they were not only slightly, but also clearly, ahead of ORF2, the programme whose reach is higher than that of ORF1. For the first time, also the segment of exclusively German-speaking foreign TV stations outstripped ORF2 by 0.5 percentage point as regards daily reach. In the cable TV households, the foreign programmes were catching up further with the ORF as a whole and,

with 63.0%, fell short by only 0.8 percentage point. On the other hand, the daily reach figures of the foreign stations that offer "Austria windows", however, fell slightly (2003: 47.2%, 2002: 47.6%), due to a greater decline in daily reach of the stations with "window programmes" in households with satellite TV in 2003.

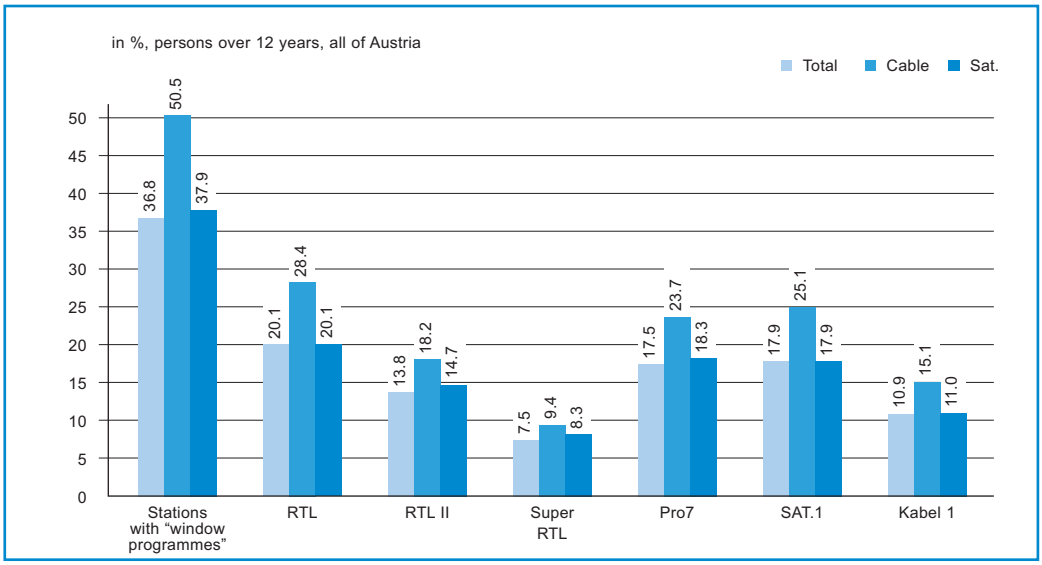
Figure 29: TV daily reach 2003



Source: Teletest

In the cable TV households, the foreign stations that offer "Austria windows" still achieved a daily reach of 50.5%, thus maintaining the level of 2002. In terms of all forms of supply, the "ranking" of the first three "window programmes", RTL (20.1%) followed by SAT.1 (17.9%) and Pro7 (17.5%), remained the same in 2003 and changes in daily reach took place only at the decimal level.

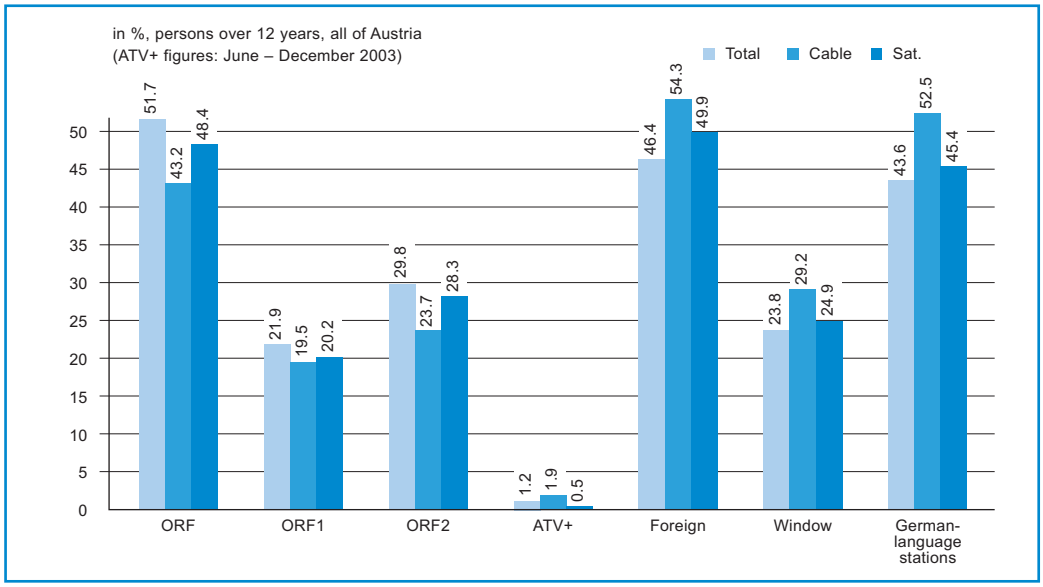
Figure 30: TV daily reach 2003: stations with "window programmes"



Source: Teletest

Of major importance for the advertising industry are, apart from the daily reach figures, the market shares, which are also surveyed by means of the Teletest and serve as an indicator of the market-relevant relationship among the individual stations. On the basis of all Austrians over 12 years of age, in 2003, the ORF, with a market share of 51.7%, was still clearly ahead of the foreign stations with 46.4%, even though the margin of 9.4 percentage points in 2002 fell sharply to 5.4 percentage points. This trend was observed equally for German-language TV stations and stations with "Austria windows". Whereas the foreign stations supplied via cable had reached a considerably higher market share in previous years than both ORF programmes together, in 2003, the foreign stations outstripped the two ORF programmes also in the field of satellite reception. On the other hand, with a market share of 51.7% attributable to the ORF and a share of 23.8% to the German programmes with "Austria windows", the comparison of the ORF and the "window programmes", which is of relevance to advertising, turned out to be clearly in favour of the ORF.

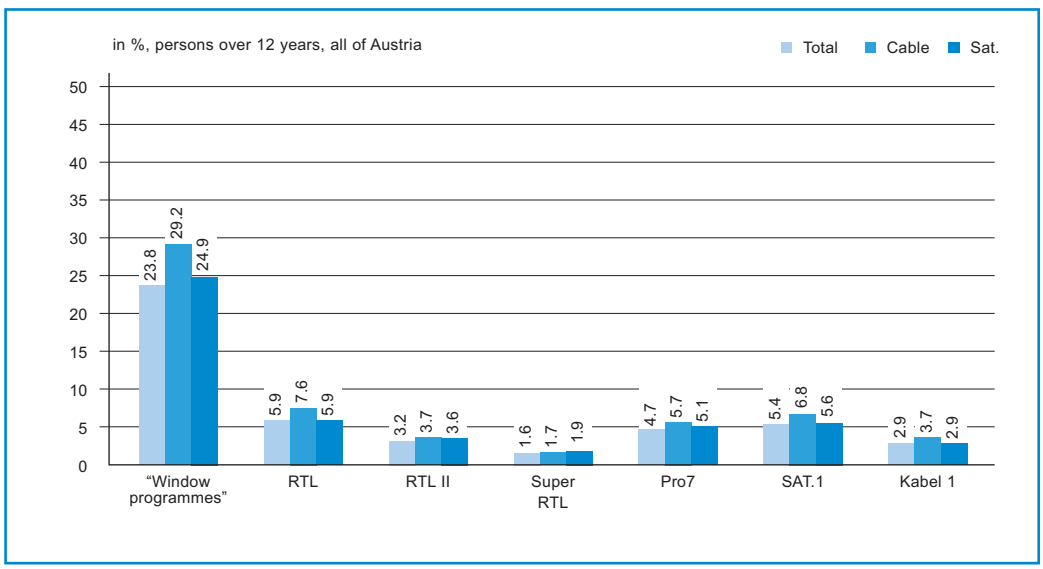
Figure 31: Market shares 2003



Source: Teletest

Among the "window programmes", RTL continued to hold the highest market share with 5.9%, followed by SAT.1 with 5.5% and Pro7 with 4.7% in 2003.

Figure 32: Market shares 2003: stations with "window programmes"



Source: Teletest

5.1.4 Radio broadcasting

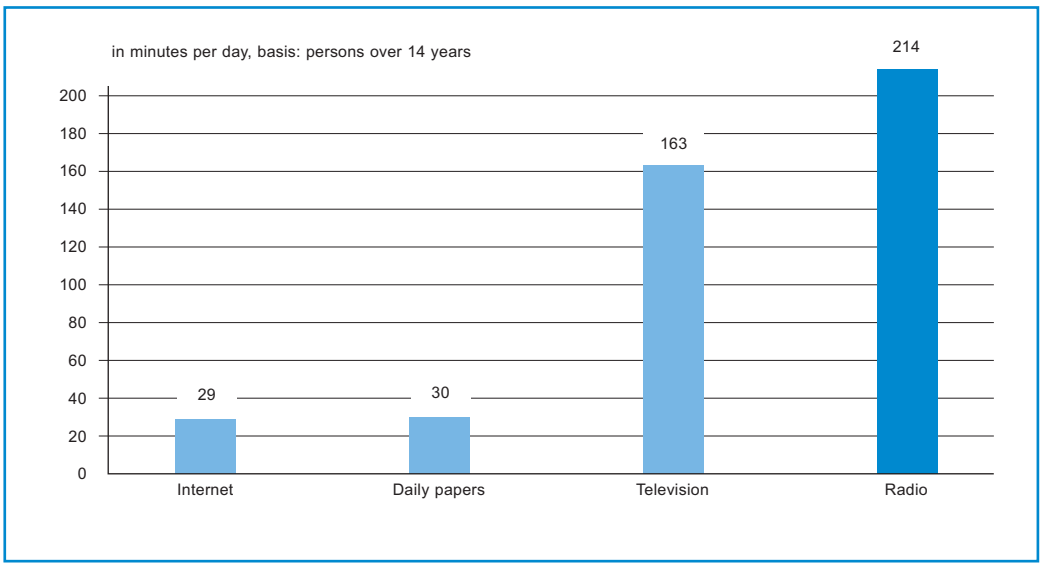
Five years after the large-scale introduction of private radio broadcasting still no digital radio broadcasting market was established.

In April 2003, the 5th anniversary of private radio broadcasting in Austria was celebrated. Even though two regional private radio stations in Salzburg and Styria had started operation already in 1996, near blanket coverage of all federal provinces in Austria with regional and local licences was achieved only in 1998, due to a ruling of the VfGH.

At an anniversary event in spring 2003, the question was raised why no sustainable dual broadcasting market had been established in Austria after half a decade of private radio broadcasting. Various subject areas were discussed, ranging from legal framework conditions and strategic failures to the fact that Austria is a small country. All results were captured in legislative and business-strategic considerations.

Yet, the main objective of most providers in 2003 was to consolidate and strengthen their positions on the market; no major changes occurred. The station network comprising Kronen Zeitung and Kurier was subjected to a further relaunch and started again as "Kronehit". Changes in ownership of various operating companies caused further streamlining in the respective structures, which, in turn, produced sole owners of important radio stations (e.g. Antenne Salzburg in summer 2003). In Austria, the tendency for networks to form continued, even though no major changes took place in 2003 compared with previous years.

Figure 33: Radio usage is highest



Source: Radiotest 2003, Teletest 2003, E&I 1997, AIM Spezial 2003

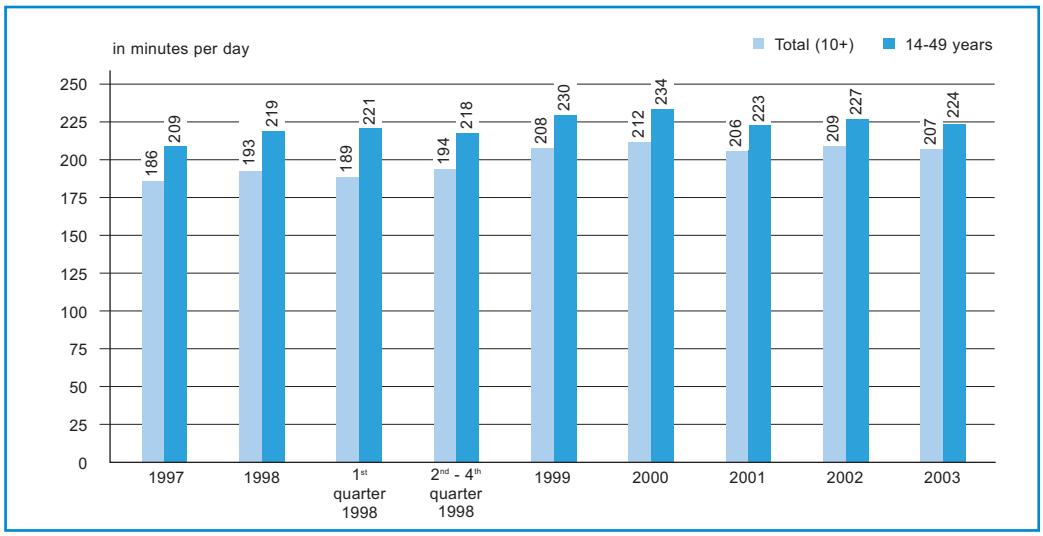
The dominance of the ORF radio programmes did not falter in 2003. This is impressively demonstrated by the data surveyed by means of the "Radiotest", a market research instrument that is recognised by the entire market. On behalf of the ORF and the private radio stations jointly, telephone interviews are conducted by the FESSEL-GfK market research institute every day and in all political districts of Austria. The results are published every six months and are the basis for the strategic decisions of the programme makers and of radio broadcasting media planning of the advertising industry.

Radio broadcasting offers the best preconditions for a competitive radio market, as radio is the medium with the highest usage by far, compared with all other media. In 2003 in Austria, radio usage of persons over 14 years of age was 214 minutes (2002: 217 minutes), followed by TV usage with 161 minutes (2002: 162 minutes). While the quantitative usage of the daily papers remained the same (30 minutes a day) against previous years, Internet usage, on average, increased to 29 minutes a day in 2003, even though this usage type certainly cannot qualify entirely as media usage in the classical sense (2002: 25).

The introduction of private radio led to an increase in radio usage.

In recent years, the listening time (= usage time) per day was first seen to fluctuate but finally sort of levelled off in the 10+ age group just below 210 minutes, i.e. at exactly 207 minutes a day in 2003. In the 14-49 target group radio usage was much higher than across the average of all age groups, with 224 minutes in this segment in 2003. These figures show what media research has long since maintained: the bigger the market, the greater the consumption. Directly after the introduction of private radio broadcasting in 1998, for example, the listening time per day increased significantly. This alone does not imply that, from the listeners' point of view, the quality of the providers has risen; relevant conclusions can be drawn rather from long-term fluctuations in listening time and, even more so, from daily reach figures. Basically, it has been established that media consumers are willing to accept additional programme offerings, i.e. greater diversity.

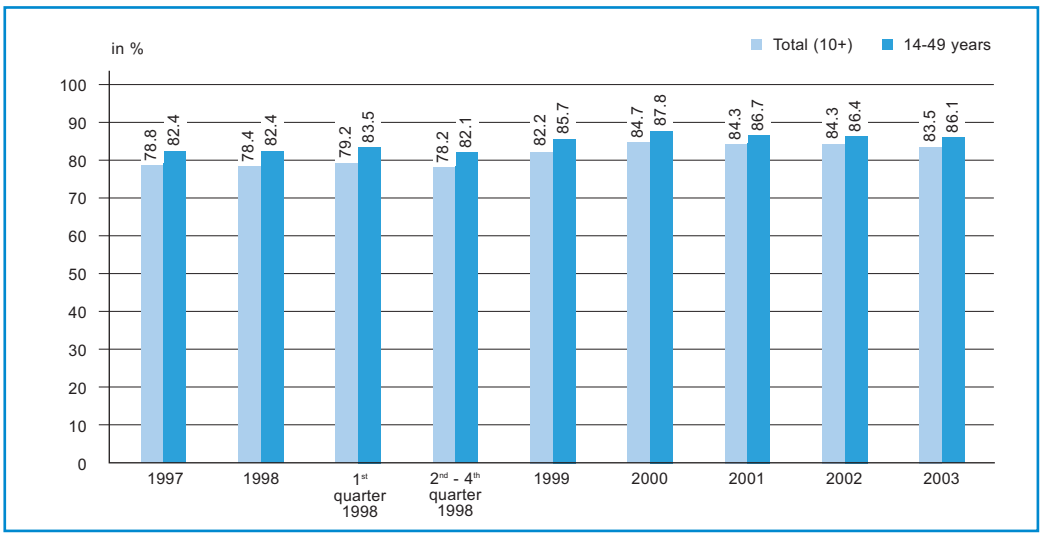
Figure 34: Development of listening time



Source: Radiotest

Furthermore, radio does not only attract people for very long time but of all media types reaches the largest number of people. In 2003, 83.5% of persons in the 10+ age group were reached by at least one station of the market for 15 minutes a day; in the 14-49 group this figure was 86.1%. After the all-time high of 2000 with 84.7% (10+ age group), daily reach of radio broadcasting in Austria decreased slightly every year. Even though these changes are only minimal, they may suggest that after the introduction of private radio broadcasting in 1998 and the subsequent sharp rise in reach figures innovativeness on the Austrian radio market has subsided again.

Figure 35: Development of radio: daily reach



Source: Radiotest

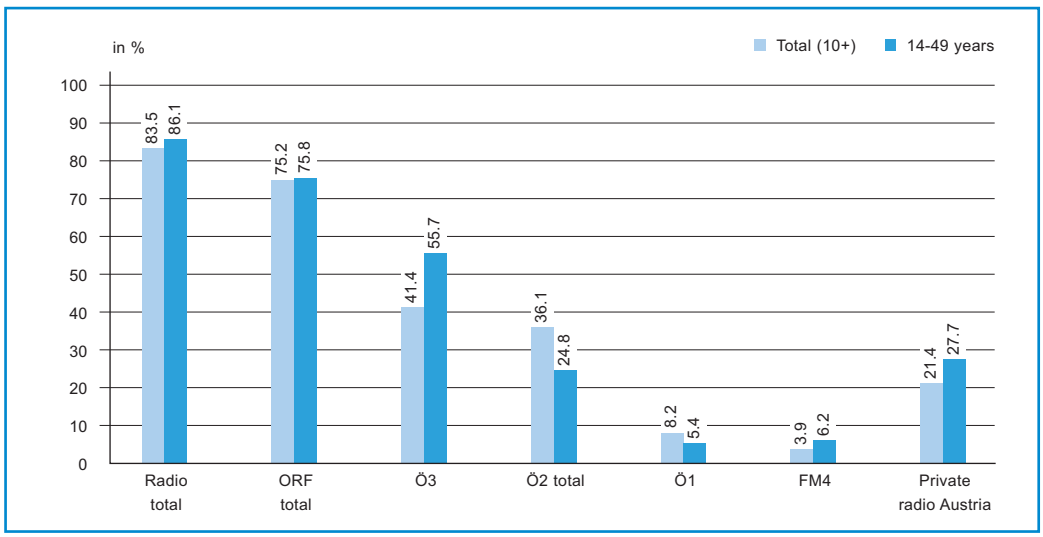
Contrary to the general trend of slightly decreasing daily reach in Austria, the radio programme with the highest daily reach, the ORF programme Ö3, further improved its performance. In 2003, it had a daily reach of 41.4% in the 10+ age group and of 55.7% in the 14-49 age group. Ö2, the regional ORF programmes organised by federal provinces, which broadcast a common programme only at specific times and aim to be the media organ at federal province level of the 35+ age group achieved a total of 36.1% (24.8% in the 14-49 age group). The proportion of the ORF programmes to the private competitors shows the imbalance between the two columns of the dual broadcasting system in Austria even more clearly. Compared with all persons over 10 years of age, the total daily reach of the ORF was 75.2% in 2003, while all private radio stations together reached only 21.4%. As the private radio stations focus on the target groups that are relevant to the advertising industry, in 2003 their results were better for the 14-49 age group with 27.7%, behind Ö3 with 55.7%, but ahead of the Ö2 programmes with a daily reach of 24.8%.

Private radio programmes had a total daily reach of 27.7% in the 14-49 age group.

In 2003, however, also the margin between the two major competitors for the 14-49 target group, Ö3 and private radio stations, increased, from 25.4 percentage points in 2002 to 28 percentage points in 2003. This was due to the decline in reach of the private radio stations from

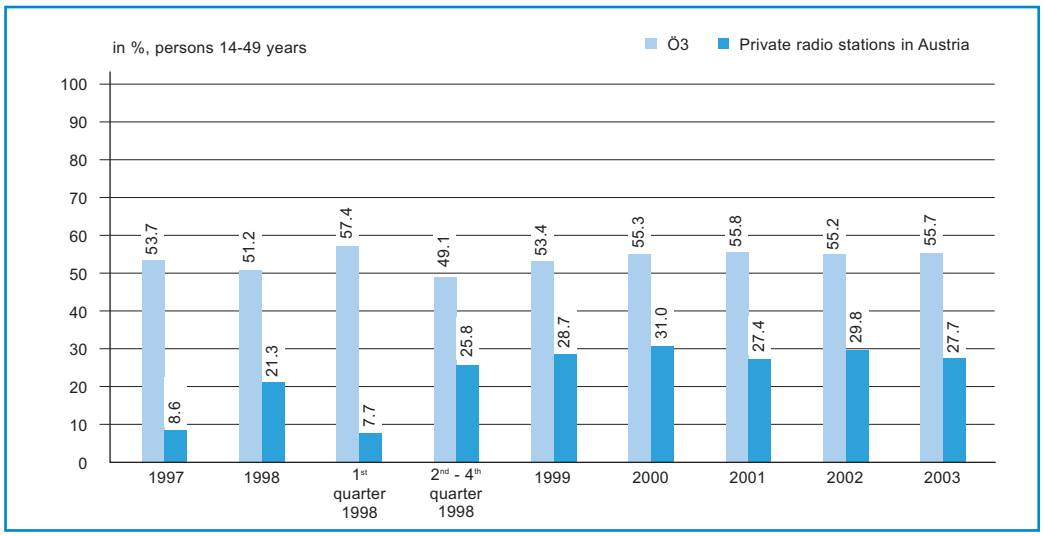
29.8% in 2002 to 27.7% in 2003, while Ö3 increased its reach slightly from 55.2% in 2002 to 55.7% in 2003. Thus, in 2003, Ö3 had exactly twice the reach of all private competitors taken together in the 14-49 age group. Despite the establishment of private radio stations in Austria, Ö3 was able to increase its reach to the level it had held prior to the introduction of private radio broadcasting.

Figure 36: Radio daily reach 2003



Source: Radiotest

Figure 37: Ö3 vs. private radio stations: daily reach, 14-49 age group



Source: Radiotest

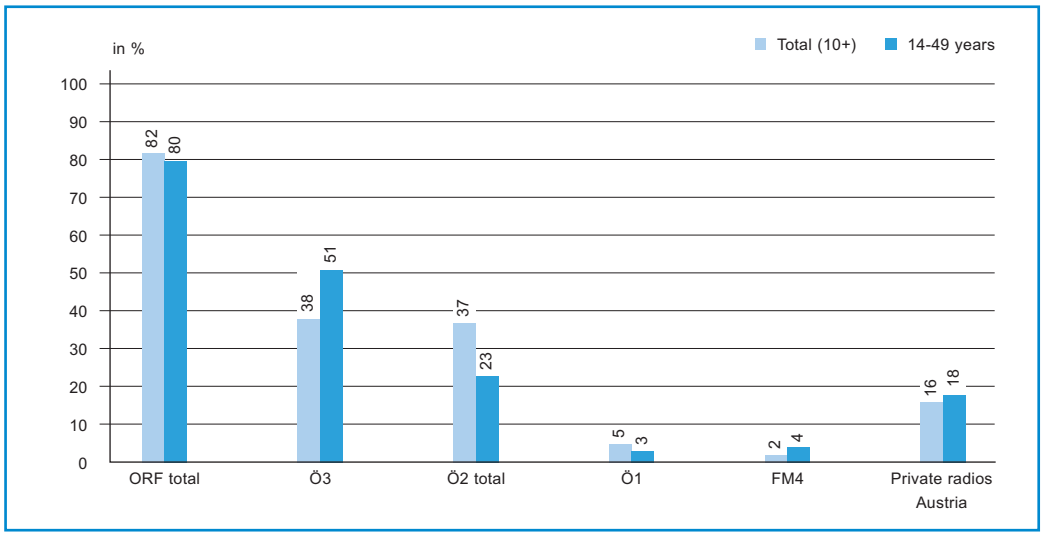
Table 7: Daily reach, persons over 10 years, in %

	Total	Vienna	Lower Austria	Burgenland	Styria	Carinthia	Upper Austria	Salzburg	Tyrol incl. East Tyrol	Vorarlberg
Total as number of cases (unw.)	**27,912**	**3,428**	**3,980**	**2,600**	**3,487**	**2,647**	**3,712**	**2,410**	**3,252**	**2,396**
Total daily reach										
Radio total	83.5	81.4	83.3	85.9	83.8	85.5	82.8	85.6	86.3	83.0
ORF total	75.2	67.4	76.7	79.6	76.9	81.5	75.4	77.0	77.4	75.7
Priv. stations Austria total	21.4	29.8	19.5	17.6	21.2	14.7	19.4	20.0	22.3	14.5
Other stations total	3.7	3.0	2.0	2.1	2.2	2.8	5.3	6.3	4.9	9.2
Daily reach ORF										
Ö1	8.2	12.2	7.2	5.3	7.8	7.3	6.9	7.8	7.6	6.2
Ö3	41.4	35.4	43.4	40.2	40.8	44.9	44.1	41.8	43.5	43.0
FM4	3.9	5.6	3.5	2.5	3.6	3.4	3.3	3.5	3.7	4.5
ORF regional radio total	36.1	27.1	37.2	47.2	39.7	42.9	34.4	37.8	39.0	38.1
Radio Wien	4.2	14.6	6.2	2.9	-	-	-	-	-	-
Radio Niederösterreich	8.2	10.3	29.6	2.8	0.4	-	2.0	-	-	-
Radio Burgenland	3.0	4.5	2.4	43.2	0.8	-	-	-	-	-
Radio Steiermark	6.0	-	0.4	2.4	38.4	0.6	0.2	0.5	-	-
Radio Kärnten	3.1	-	-	-	0.7	42.4	-	0.1	0.5	-
Radio Oberösterreich	5.6	-	1.2	-	0.2	-	31.1	0.9	-	-
Radio Salzburg	3.1	-	-	-	0.3	0.2	3.6	37.2	0.2	-
Radio Tirol	3.3	-	-	-	-	0.2	-	0.4	38.5	0.5
Radio Vorarlberg	1.6	-	-	-	-	-	-	-	0.1	37.9
Daily reach private radio stations										
Kronehit	4.3	3.8	7.8	8.4	2.5	1.8	6.1	3.5	0.8	-
88.6 Supermix	1.6	5.5	2.5	1.0	-	-	-	-	-	-
Antenne Wien 102.5	0.7	2.6	0.9	0.4	-	-	-	-	-	-
Radio Arabella 92,9	3.1	12.2	3.3	1.5	-	-	-	-	-	-
Radio Energy 104,2	1.9	7.3	2.2	0.8	-	-	-	-	-	-
Radio Stephansdom	0.4	1.7	0.3	0.1	-	-	-	-	-	-
106,7 Party FM	0.5	0.2	1.7	2.7	-	-	-	-	-	-
Hit FM Sender gesamt	0.8	0.1	3.5	1.9	0.0	-	0.2	-	-	-
Antenne Steiermark	2.6	-	0.2	3.4	16.0	0.5	0.1	0.2	-	-
A1 Radio	0.1	-	-	-	0.5	-	-	-	-	-
89,6 Das Musikradio	0.1	-	-	-	0.9	-	-	-	-	-
97,9 FM	0.1	-	-	-	1.0	-	-	-	-	-
Radio Grün-Weiß	0.1	-	-	-	1.0	-	-	-	-	-
Antenne Kärnten	0.7	-	-	-	0.2	9.6	-	0.1	0.1	-
Radio Harmonie	0.3	-	-	-	-	3.6	-	-	-	-
Life Radio	2.3	-	0.8	-	0.0	-	12.6	0.4	-	-
Antenne Salzburg	0.9	-	-	-	0.1	0.3	1.0	11.3	0.1	-
Welle 1 (Salzburg)	0.5	-	-	-	-	-	0.6	5.7	-	-
Antenne Tirol	0.9	-	-	-	-	0.0	-	0.2	10.1	0.0
Radio Arabella Tirol/U1	0.8	-	-	-	-	-	-	-	9.5	-
Radio Osttirol	0.2	-	-	-	-	0.2	-	-	1.7	-
Welle 1 (Tirol)	0.2	-	-	-	-	-	-	-	2.2	-
Antenne Vorarlberg	0.6	-	-	-	-	-	-	-	0.1	13.2
Radio Arabella Vorarlberg	0.1	-	-	-	-	-	-	-	-	1.5

Source: Radiotest, Vertical percentaging

In addition to the daily reach figures, the Radiotest also indicates the market shares. They give the percentage of the total of radio minutes listened to that is attributable to the respective radio station. In the 14-49 age group, Ö3 reached a market share of 51% in 2003 (2002: 49%), the private radio stations in Austria altogether reached 18% (2002: 21%) and the ORF Ö2 regional programmes 23% (2002: 23%).

Figure 38: Market shares 2003



Source: Radiotest

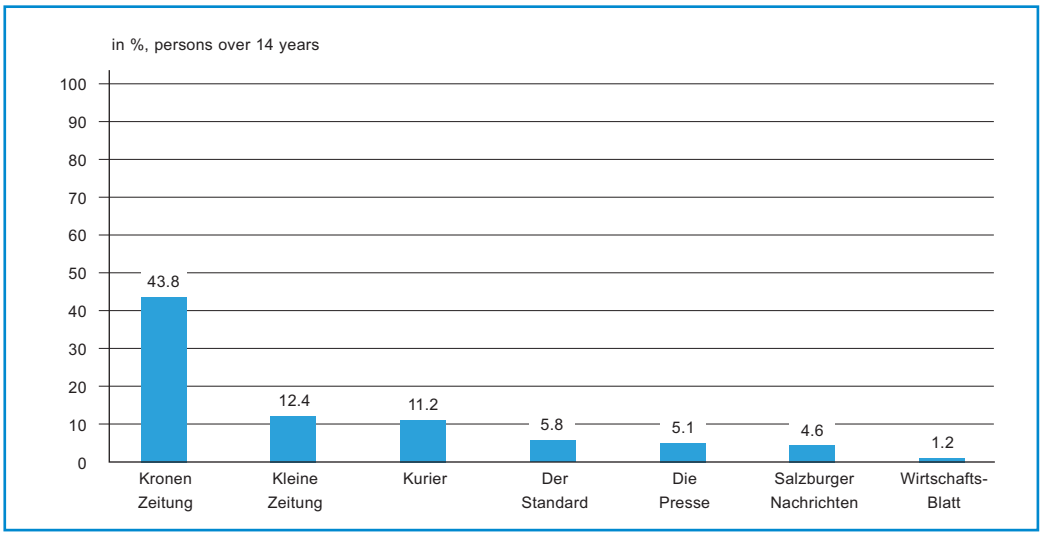
5.1.5 Print media

Since 01.01.2004 KommAustria has been responsible for press subsidies.

This report also presents the key data of the print media market to give a better overview of the electronic media in terms of the entire media market on the one hand and because, by tradition, the print media are of great importance in Austria on the other hand. Also, the new Press Subsidies Act (PresseFG) took effect on 01.01.2004, under which KommAustria was made responsible for the federal government's press subsidies.

As mentioned before, Austria has an extremely high market concentration, which has to do with the unique leading position of the Kronen Zeitung. In 2003, its daily reach among all Austrians over 14 years of age was 43.8%, which in an increase of 0.4 percentage point against 2002. There is no other daily paper in the world that reaches such a great number of readers of a country. As regards advertisement sales, marketing, administration, printing and distribution, the Kronen Zeitung is linked via Mediaprint to the Kurier (the Westdeutsche Allgemeine Zeitung (WAZ) holds interests both in the Kronen Zeitung (50%) and in the Kurier (49.4%) and thus, indirectly, in the Mediaprint distribution company). Among the daily papers with the country's largest reach figures, the Kurier ranked third with 11.2% (2002: 11.1%), while the Kleine Zeitung again took the second place with an unchanged reach of 12.4%.

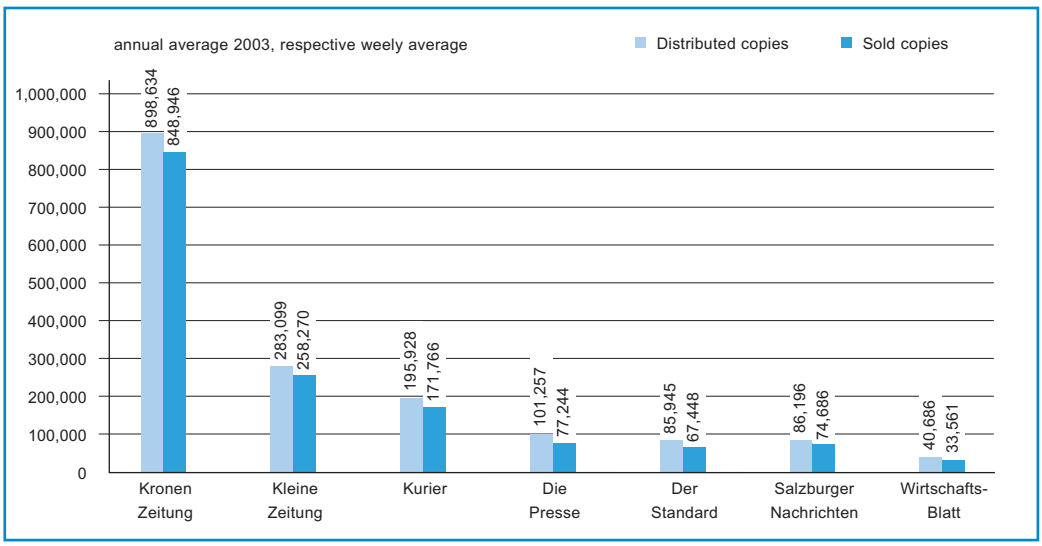
Figure 39: Reach of leading daily papers 2003



Source: Media Analysis 2003

In 2003, the Kleine Zeitung increased its number of copies sold daily, on a weekly average (Monday to Saturday), by 5,900 copies to 258,270 copies, while the Kronen Zeitung sold 4,059 copies less and the Kurier sold 2,724 copies less. Nevertheless, the Kronen Zeitung remained the sole and undisputed leader with 848,946 copies sold daily.

Figure 40: Circulation of selected daily papers 2003



Source: ÖAK

As regards the number of readers over 14 years per copy, in 2003 the Neue Vorarlberger Tageszeitung was leading with 6.3 persons per copy, followed by Der Standard with 4.5 and the Kurier with 3.8 readers. The daily papers with a high subscription rate were bound to rank at the bottom of the list, such as the Kleine Zeitung with 2.9 readers and the WirtschaftsBlatt with 2.0.

Table 8: Austrian daily papers – circulation and reach

Daily paper	Weekly average	Distributed copies	Sold copies	Reach in %	Readers in 1,000	Readers per copy
Der Standard	Mo-Sat	85,945	67,448	5.8	390	4.5
Die Presse	Mo-Sat	101,257	77,244	5.1	339	3.3
Kleine Zeitung	Mo-Sat	283,099	258,270	12.4	829	2.9
Kleine Zeitung (Graz)	Mo-Sat	187,722	170,367	8.2	547	2.9
Kleine Zeitung (Klagenfurt)	Mo-Sat	95,377	87,902	4.2	282	3.0
Kronen Zeitung	Mo-Sat	898,634	848,946	43.8	2,925	3.3
Kurier	Mo-Sat	195,928	171,766	11.2	745	3.8
Neue Vbg. Tageszeitung	Tue-Sat	10,880	6,628	1.0	69	6.3
Oberösterreichische Nachrichten	Mo-Sat	120,262	104,070	5.6	375	3.1
SN – Salzburger Nachrichten	Mo-Sat	86,196	74,686	4.6	304	3.5
TT – Tiroler Tageszeitung	Mo-Sat	113,665	92,223	5.3	351	3.1
VN – Vbg. Nachrichten	Mo-Sat	68,928	65,727	3.3	218	3.2
WirtschaftsBlatt	Tue-Sat	40,686	33,561	1.2	83	2.0

Source: ÖAK – Austrian Circulation Control 2003 and Media Analysis 2003 (persons over 14 years)

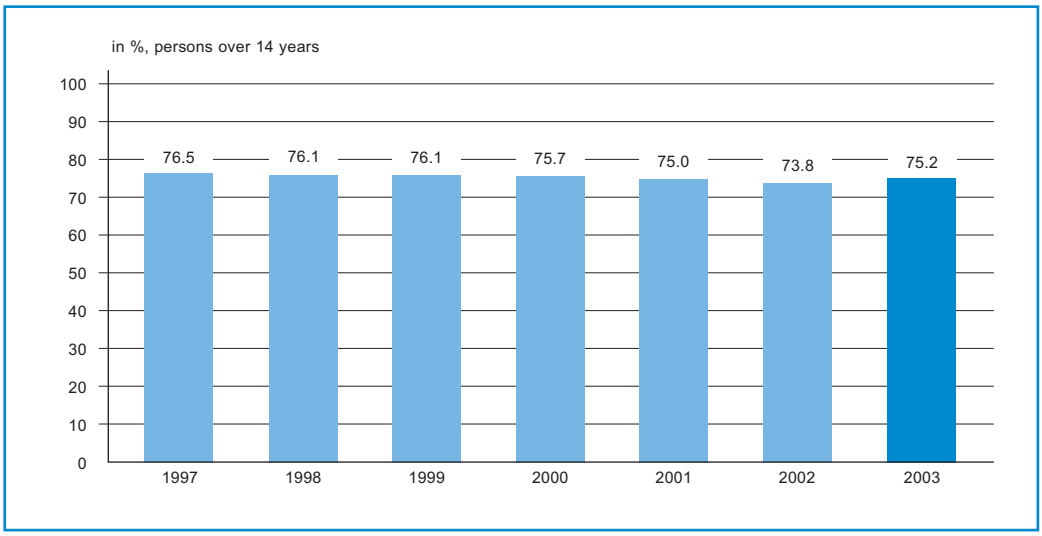
Apart from SMP of the Mediaprint Group in the segment of daily papers, the Verlagsgruppe NEWS holds a similar position in the magazine sector. In 2001, the two major magazine groups of the country, the Verlagsgruppe NEWS ("News", "Format", "tv media", "e-media") and ZVB, a subsidiary of Kurier ("trend", "profil", "Autorevue" and others), were merged.

In 2003, the entire Verlagsgruppe NEWS left the Austrian Circulation Control.

In 2001 and 2002, the reach figures of almost all titles in the magazine sector had dropped. In 2003, it became difficult, or nearly impossible, to compare the publications, as the entire Verlagsgruppe NEWS left the Austrian Circulation Control (ÖAK) and has published its own figures (certified by a renowned auditing company and under the name "Magazine Circulation Control of the Verlagsgruppe NEWS" M.A.K.). This is why it does not seem useful to describe the magazine sector further in this place. Information provided by the Verlagsgruppe NEWS suggests that the sales figures of their titles also took a downward trend in 2003, in the same way as most of the publications still captured by the Austrian Circulation Control.

Finally, the total reach of the Austrian daily papers shall be mentioned, which previously had been giving slightly, whereas in 2003 a reversal of the trend set in, with the curve pointing upward for the first time in a long time. According to the Media Analysis 2003, the total reach of the Austrian daily papers was 75.2%.

Figure 41: Total reach of daily papers

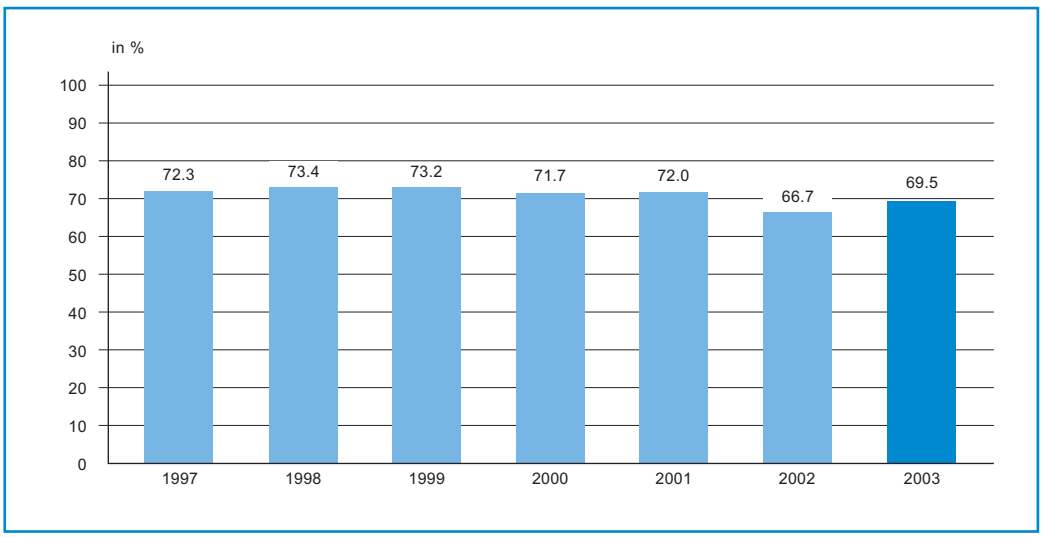


Source: Media Analysis 2003

In the 14-29 age group, daily reach of daily papers also increased.

In 2002, the daily reach had slumped badly in the 14-29 target group of readers of daily papers, while at the same time the Media Analysis 2002 had shown a substantial increase in Internet usage by the same target age group. However, the figures for 2003 do no longer suggest as strongly that there is a shift away from written daily papers to the online provision of information, especially by younger people. While Internet usage was still increasing, the total reach of daily papers also increased again, significantly also with persons of 14-29 target group.

Figure 42: Total reach of daily papers in the 14-29 age group



Source: Media Analysis

5.1.5.1 Press subsidies

Under the Press Subsidies Act 1985 (PresseFG 1985) daily papers, weekly papers, press clubs and institutions for journalist education received subsidies from the government. Pursuant to the PresseFG that was still in effect in 2003, the subsidies for the daily papers were divided into "General subsidies" and "Special subsidies". The total amount of the subsidies was EUR 10,992,149. Since 01.01.2004 a new statutory basis has applied to subsidies to the daily and weekly papers (Press Subsidies Act 2004). The table below shows the subsidies granted to the daily papers in 2003.

Table 9: Overview of daily paper subsidies

Daily paper	General subsidies (EUR)	Special subsidies (EUR)	Total subsidies 2003 (EUR)
KTZ – Kärntner Tageszeitung	248,306.50	2,197,242.90	2,445,549.40
Kleine Zeitung	262,146.80	–	262,146.80
Kurier	209,717.50	–	209,717.50
Neue Kronen Zeitung	262,146.80	–	262,146.80
Neue Vorarlberger Tageszeitung	143,007.90	1,295,186.90	1,438,194.80
Neues Volksblatt	230,705.70	1,360,782.80	1,591,488.50
Oberösterreichische Nachrichten	262,146.80	–	262,146.80
Die Presse	262,146.80	1,430,815.70	1,692,962.50
Salzburger Nachrichten	262,146.80	–	262,146.80
Der Standard	262,146.80	–	262,146.80
SVZ – Salzburger Volkszeitung	157,858.60	1,099,971.70	1,257,830.30
Tiroler Tageszeitung	262,146.80	–	262,146.80
Vorarlberger Nachrichten	262,146.80	–	262,146.80
Wiener Zeitung	259,232.50	–	259,232.50
WirtschaftsBlatt	262,146.80	–	262,146.80
Total	**3,608,149.90**	**7,384,000.00**	**10,992,149.90**

5.1.6 The markets for broadcasting transmission services: terrestrial, satellite and cable

Pursuant to § 34 (2) of the Telecommunications Act 2003 (TKG 2003) which took effect on 20.08.2003, the regulatory authority shall observe the accomplishment of the regulatory goals pursuant to § 1 (2) TKG 2003 and report about the goals that have been achieved and about changes that have taken place against the previous year.

The following section shall give an overview of the wholesale markets for broadcasting transmission services that provide broadcast content to the retail market (listeners and viewers). On these markets, the broadcasting providers demand the transmission service, while the infrastructure providers supply this service.

Furthermore, this section describes the activities of the regulatory authority within the framework of the regulation of competition as defined in section 5 of the TKG 2003.

Pursuant to the TKG 2003 (§§ 36 and 37 in connection with the recommendation of the European Commission on the relevant markets), after the market definition a market analysis of the wholesale markets shall be conducted to determine if one or several companies have significant market power or if, in fact, there is effective competition.

Basically, three platforms are available to television and radio broadcasters for the transmission of the signal to the end-user: transmission via terrestrial infrastructure, transmission via cable networks and transmission via satellites. As the transmission of television programmes is different technically and commercially from that of radio programmes, they are covered separately below.

5.1.6.1 Television

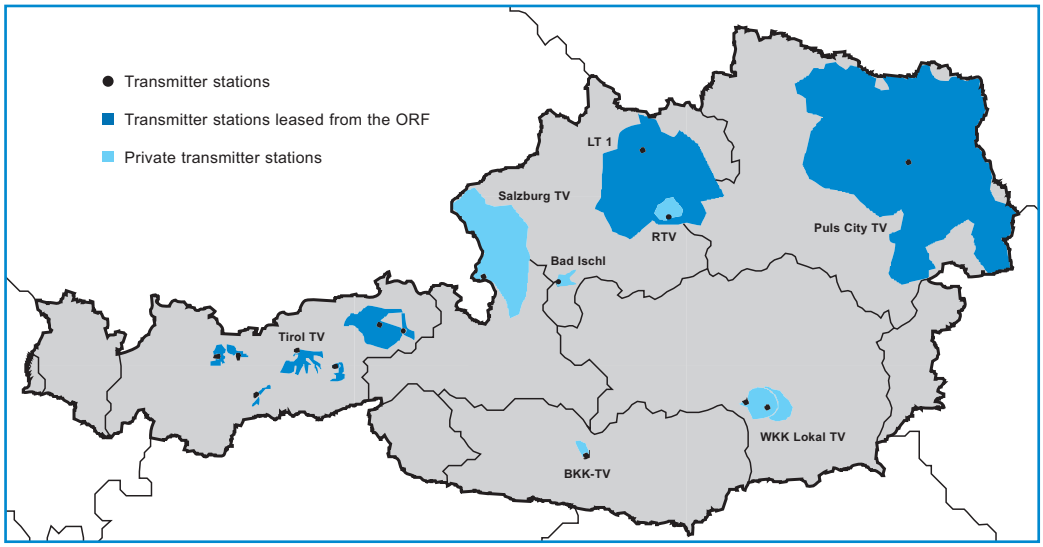
The terrestrial infrastructure is owned almost exclusively by the ORF.

For historical reasons, the terrestrial infrastructure is owned almost exclusively by the ORF. The ORF operates a network of about 1,000 TV transmitter stations (including the transmitter stations leased to private programme providers) at approximately 470 locations, reaching 95% coverage of the Austrian territory, as against only six transmitter stations that are not operated by the ORF but by private television providers. These transmitter stations are all small systems (comparably low ERP[1]) by means of which the television providers broadcast their own programmes. At present, transmission via the terrestrial infrastructure is only analogue.

In Austria, there exist a total of nine private television providers that broadcast their programmes via the terrestrial infrastructure. The only nation-wide terrestrial television provider ATV+ and three regional television providers use only the transmitter stations of the ORF to distribute their programmes. Five regional television providers have one transmitter each (in one case two systems) that, however, supplies only relatively small areas (see Figure 43).

[1] ERP stands for Equivalent Radiated Power.

Figure 43: Terrestrial service area of private regional or local broadcasters



Source: RTR-GmbH

Contrary to the terrestrial infrastructure which, in fact, is owned in full by a single company, there exist about 260 independent cable network operators of different sizes. The largest cable network operators – in terms of the number of TV subscribers – are the operators that are associated in Multimedia Austria: Burgenländisches Kabelfernsehen (BKF), cablecom Kabelkommunikation GmbH, Kabelsignal AG, LIWEST Kabelmedien GmbH, Salzburg AG für Energie, Verkehr und Telekommunikation, Telesystem Tirol Gesellschaft m.b.H. & Co KG and Telekabel Wien Gesellschaft m.b.H. Together these companies supply about 854,000 households with cable television, about 20,000 of them with digital TV[2]. On the other hand, the smallest cable network operators often have only a few hundred subscribers. The degree of digitisation of the cable network has so far been relatively small. Of about 1.2 million cable TV households only about 50,000 receive the programmes digitally[3].

There are no established operators of broadcasting satellites in Austria. Yet, programmes distributed via broadcasting satellites can be received in Austria. For this purpose, mainly satellite systems of the ASTRA and EUTELSAT companies are used. Approximately, 35%[4] of all satellite systems in use are suitable for digital reception; only about 24%[5] of all satellite TV households actually receive the programmes digitally via satellite.

The usage of the different transmission platforms by the television providers is shown in Table 10.

[2] See http://www.multimedia-austria.at/index.php?cccpage=mission_facts
[3] Source: ASTRA (www.ses-astra.com), press release of 15.03.2004.
[4] Source: ASTRA, 2003: "The Digital TV Market in Austria Year End 2002".
[5] Estimate of RTR-GmbH on the basis of the number of households that receive the ORF programmes digitally via satellite.

Table 10: Television programmes receivable in Austria

	Foreign	Austrian nation-wide	Austrian regional or local
Terrestrial	– (except for a few in border areas)	ORF1, ORF2, ATV+	LT1, Salzburg TV, RTV, Tirol TV**, WKK Lokal-TV, Puls City TV**, TV Bad Ischl, BKK-TV
Cable networks	ARD, ZDF, RTL, Pro7, etc. (30-40 analogue, more than 50 digital)	ORF1, ORF2, ATV+, TW1	LT1, Salzburg TV, RTV, Tirol TV, WKK Lokal-TV; approx. 50 cable broadcasters
Satellite*	ARD, ZDF, RTL, Pro7, etc. (approx. 40 analogue, several hundred digital*)	ORF1, ORF2, ATV+, Pro7, Fashion TV, K-TV, Premiere Austria, SAT.1 Österreich, TV6, Blue Movie	–

*) Encoded or unencoded
**) Terrestrially not yet on air

Sources: RTR-GmbH (www.rtr.at), ASTRA (www.astra.lu), UPC Telekabel (www.upc.at)

As can be seen in the table, many broadcasters use two platforms to distribute their programmes to the end-user. Many foreign television programmes, for example, are transmitted via cable networks and satellite. On the other hand, almost all broadcasters that distribute their programmes terrestrially can also be found in the respective cable networks. Thus, the different broadcasting types often form a complementary relationship because, among other things, cable networks are complementary to both terrestrial reception and satellite reception with regard to their range on the end-user market. Many cable broadcasters, for example. stated in their application for a terrestrial licence that, in addition to providing cable TV, they wanted to increase their range. Also, the holders of nation-wide terrestrial licences have to comply with the must-carry provision for cable network broadcasting.

5.1.6.2 Radio

Radio programmes are also transmitted to the end-user via terrestrial infrastructure as well as via cable networks and broadcasting satellites.

Similar to terrestrial transmission of television, the infrastructure for terrestrial radio transmission is predominantly owned by the ORF that has approx. 850 transmitter stations (including the transmitter stations leased to private radio broadcasters) at approx. 260 locations, reaching 98% coverage of the Austrian territory. In addition, there exist about 150 transmitter stations that are operated by a total of 58 regional and local private radio broadcasters. The transmitter stations of the private radio broadcasters are mostly small systems with comparatively

low ERP that, as a rule, were established for the distribution of their own programmes. No radio broadcaster owns more than 16 transmitter stations, most of them only one or two.

A total of 65 private radio broadcasters distribute their programmes in geographical areas of different sizes. A service area may be the size of an entire federal province or only a small region that is often supplied only by a single transmitter. Of the approx. 190 transmitter stations of private radio broadcasters about 150 (mainly small systems) are operated by the broadcasters themselves, while approx. 40 (mainly larger systems) are leased by the ORF.

For the transmission of radio programmes via cable networks and satellites the same infrastructure is used as for the transmission of television programmes (see above section). In the cable the frequency spectrum is divided, radio programmes are transmitted in one part and television programmes in the other. In general, only a small part of the spectrum is reserved for analogue and digital radio channels, while the major part is designed for analogue and digital television channels.

The usage of the different transmission platforms by the radio broadcasters is shown in Table 11.

Table 11: Radio programmes receivable in Austria

	Foreign	Austrian nation-wide	Austrian regional or local
Terrestrial	– (except for a few border areas)	Ö1, Ö3, FM4	Regional ORF programmes, approx. 65 regional and local broadcasters
Cable networks	Approx. 20 analogue; digital: approx. 50 additional music channels	Ö1, Ö3, FM4	Different, frequently terrestrial regional and local programmes
Satellite*	Approx. 30 analogue; several hundred digital*	Radio Maria, Radio Max	–

*) Encoded or unencoded

Sources: RTR-GmbH (www.rtr.at), ASTRA (www.astra.lu), UPC Telekabel (www.upc.at)

Even though programmes are transmitted via all three platforms only terrestrial transmission is relevant from a commercial point of view. Radio programmes that are not terrestrially transmitted have a very low share in the retail market.

5.1.6.3 Market analysis of KommAustria

Pursuant to § 37 TKG 2003, a market analysis shall be carried out for the markets defined in the Relevant Markets Recommendation of the European Commission periodically to determine if one or several companies have significant market power on the respective market or if there is, in fact, effective competition.

The market for "broadcasting transmission services to deliver broadcast content to end-users" defined by the European Commission was subdivided by KommAustria according to national circumstances into the following markets:

1. The market for terrestrial transmission of TV signals;
2. The market for transmission of TV signals via cable networks;
3. The market for transmission of TV signals via satellites;
4. The market for terrestrial transmission of VHS radio;
5. The market for terrestrial transmission of AM radio;
6. The market for transmission of radio via cable networks and satellites if the signals are transmitted to end-users.

For each of these markets a market analysis shall be conducted if the three criteria specified in the Relevant Markets Recommendation of the European Commission applied cumulatively are fulfilled. These criteria are:

1. There exist high and permanent barriers to market entry.
2. The market does not tend towards effective competition.
3. The provisions of competition law alone are not sufficient to create or ensure effective competition.

In the ordinance of 14.01.2004, KommAustria identified the markets for terrestrial transmission of TV signals and for terrestrial transmission of radio (to end-users each) to meet the three criteria and therefore a market analysis was to be carried out for these markets.
KommAustria currently conducts the market analysis procedures of these two identified markets.

[6] Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services.

5.2 The Austrian telecommunications markets

This section describes the development of the telecommunications markets. First, a general overview is given and, subsequently, the markets are presented in greater detail.

5.2.1 General market development

In 2003, the Austrian telecommunications market was characterised by an increasing total volume, growing sales rates in mobile communications and data communications and further declining tariffs in the fixed and mobile network sectors.

The end-user net sales on the Austrian telecommunications market increased by approx. 5.1% from EUR 4.13 billion in 2002 to EUR 4.34 billion in 2003 and were attributable to the services as follows:

Table 12: Overall development of telecommunications sales 2002 and 2003

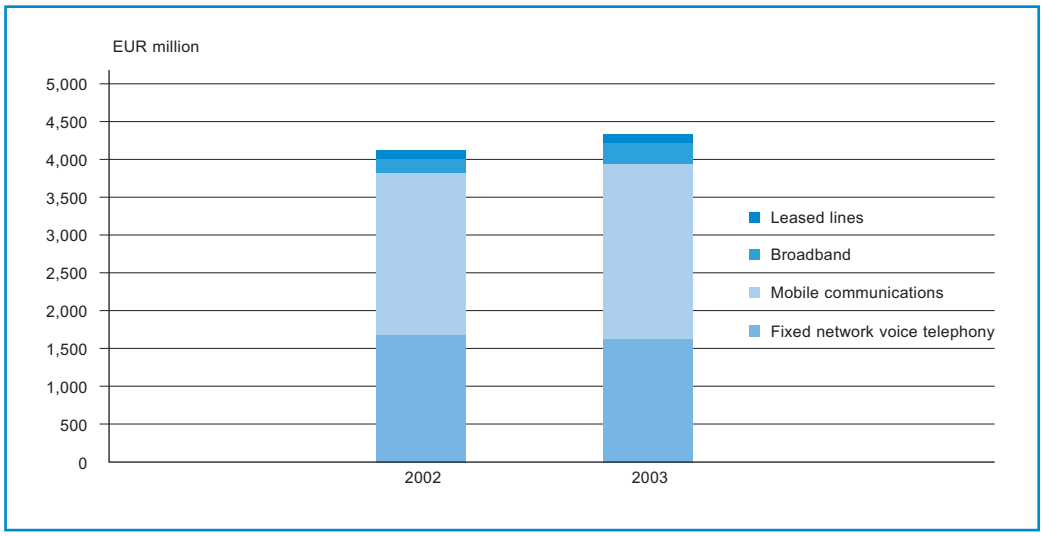
	EUR million 2002	EUR million 2003	Change 2002-2003, relative in %	Share in total sales in % 2002	Share in total sales in % 2003
Fixed network voice telephony	1,683.0	1,627.0	-3.3	40.7	37.5
Mobile communications	2,140.0	2,319.0	8.4	51.8	53.4
Broadband	185.6	278.6	50.1	4.5	6.4
Leased lines	123.8	117.3	-4.5	3.0	2.7
Total	**4,132.4**	**4,341.9**	**5.1**		

Source: RTR survey

The figures for 2003 were extrapolated on the basis of the data of the first three quarters of 2003.

More than half of the sales – the share increased from 51.8% (2002) to 53.4% (2003) – is attributable to mobile communications. With a growth rate of 8.4%, it also provides the greatest absolute contribution to the overall growth of the telecommunications sector.

Figure 44: Distribution of sales 2002 and 2003



Source: RTR-GmbH

Due to the increasing broadband penetration, the broadband sales rose from EUR 186 million in 2002 to EUR 279 million in 2003. This corresponds to an increase of about 50.1%.

For years, the prices in mobile communications have been falling so dramatically that mobile communications has become the toughest competitor of fixed network telephony. The resulting decline in fixed network sales could not be offset by the increase in the broadband business.

The following table gives a qualitative summary of the essential factors that influence the market development and a reference to the section in the report that contains a more detailed description:

Table 13: Market tendency

Service	Volume	Tariffs	Notes	Reference section
Fixed network voice telephony	Declining slightly	Declining/ stalling	Substitution by mobile telephony	5.2.2.1
Mobile communications	Increasing	Declining	Share of data services increasing	5.2.2.2
Broadband	Increasing	Declining		5.2.2.3
Leased lines	Declining	Declining	Major part of the sales is not achieved at the retail level but at the wholesale level	5.2.2.4

After this general survey, the development of the individual markets shall now be described in greater detail.

5.2.2 Market development in detail

The new regulatory framework for electronic communications markets, which is laid down essentially in five directives of the European Union and was transposed also into national law in summer 2003, aims at a harmonised regulatory policy that promotes competition within the Member States. The Articles 14 to 16 of the Framework Directive are of central importance for current market observation since they give the clear mandate to the national regulatory authorities to carry out extensive market analyses at regular intervals. The analysis perspective of these periodic market evaluations differs substantially, in particular, in its (potential) scope from the conception within the old legal framework where the analysis of competition was, in fact, confined to the survey of structural characteristics, such as, in particular, market shares. Another significant change seen in the new regulatory framework regards issues of market delineation. In this respect, the recommendation on the relevant product and service markets published by the European Union serves as a basis. Contrary to the old legal framework, the underlying methodology of market delineation was to be based on economic principles. The purpose of placing the central competence for market definition with the European Commission was to have, to the greatest possible extent, the same relevant product and service markets in all Member States and, by this, to create a basic precondition for the standardisation of European regulation of communications. Besides, the national regulatory authorities may define additional or other relevant product and service markets to take account of the specific circumstances on the communications markets of the respective Member State (see the Telecommunications Markets Ordinance 2003 (TKMVO 2003)). Under the old legal framework, however, market delineation was normatively predefined by markets that were identified in the directives. Of course, such market delineation usually did not reflect the economic circumstances. On the whole, the new regulatory framework is designed as to ensure the transition to general competition law.

The following sections give an overview of the market developments and selected indicators, without claiming to be exhaustive. On the contrary, the complexity of the market relations shall be illustrated in descriptive form and the key figures of common interest shall be provided.

Structurally, the descriptions correspond to the relevant markets according to the TKMVO 2003, where the markets contained therein are taken together to form different "market clusters". This cluster approach, which is the basis of the market analysis of RTR-GmbH, can be explained, apart from considerations of feasibility, mainly by the existing (horizontal and vertical) interdependence of the individual markets, which can be adequately depicted only in an overall context. Yet, the discussion is not confined exclusively to the relevant markets pursuant to TKVMO 2003. As mentioned before, the priorities were also chosen to capture the potential interests of the readers.

5.2.2.1 Fixed network voice telephony

5.2.2.1.1 Introduction

To ensure equal opportunity and operative competition, the regulatory authority has to keep the barriers to market entry for new providers of telecommunications services low and create and, subsequently, maintain the prerequisites for fair competition. In the meantime, after about six years of liberalisation and a number of market entries, and in accordance with the common discussion of the market phases, consolidation processes are seen to occur in some sub-markets.

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

- Telekom Austria, the former monopolist, plays a special role because it is the only telecommunications company to have a nation-wide infrastructure and to hold the largest market share by far in the field of fixed network voice telephony. As it would be in the position, on account of its market power, to deny alternative providers access to their customers and, thus, largely restrict competition, Telekom Austria was determined as a company having significant market power. As such, it is subject to special controls regarding tariffs and business conditions and is also obliged to grant other competitors non-discriminatory access to parts of its network.

- Some of the alternative telecommunications providers have their own carrier networks and/or regionally limited access networks. To be able to reach subscribers of other networks, they must resort to the interconnection services of Telekom Austria. As a separate infrastructure provides greater independence from the wholesale services of the SMP operator on the one hand and also offers the opportunity to provide a more comprehensive range of services with greater flexibility than mere carrier network operators on the other hand, the communications network operators are encouraged to build up new networks or

expand existing ones. Even though the economic importance of investments in telecommunications infrastructure is undisputed, the conclusion – the more investments, the better – would be wrong, because, from an economic point of view, the extent of investments in infrastructure can be both too high or too low. Increasing investment expenditures in the telecommunications industry cannot be regarded as positive at every given point of liberalisation and in every geographical dimension. The local access networks, for example, still have a sub-additive cost structure, i.e. one provider of infrastructure can handle the entire demand in the local loop area more cost-efficiently than two or more. As long as alternative access technologies, such as e.g. energy supply networks and Wireless Local Loop (WLL), still lack technological sophistication to reach the state of marketability and cable TV networks have substitution potential only in conurbation areas, the natural monopoly in the local network will largely prevail. Of course, the mobile communications sector as a whole has to be regarded as substituting the fixed network to a certain extent. However, at the moment, no sufficiently large substitution effects can be noticed, even though this issue will be further observed and more closely examined in future market analyses. At least from the perspective of static efficiency, it would be economically inefficient in this case to multiply local infrastructure.

- In the past few years, the so-called carrier network operation has proved to be a very effective instrument to promote competition on the fixed network market. Carrier network operators accept incoming calls from the originating network and deliver them to the terminating network, where origination and termination may also take place in the same network. As the existing infrastructure is used, there is no need to have one's own originating and terminating access network all the way to the customer – instead, one's own carrier network is usually interconnected with the telecommunications network of the incumbent and preselected by the end-user by means of a four-digit selection code. The operator collects the charges directly from the end-user and must compensate the other operator(s) for their origination, transit and termination services. In the case of carrier network selection, Call-by-Call (CbC) and Carrier Pre-Selection (CPS) must be distinguished. Call-by-Call means that the caller will select a specific carrier network operator for every single call by pre-dialling a specific network operator code. Whenever the subscriber does not dial a network operator code, the call is handled and billed by Telekom Austria. In case of Carrier Pre-Selection, a subscriber's entire traffic (with the exception of calls to value-added services and services in the public interest) is routed via the carrier network selected by him, on the basis of a permanent pre-setting of the network operator code. This means that, as a rule, he will use one specific carrier network without having to dial a network operator code. Apart from alternative operators that have their own network infrastructure or their own access network(s), the access types implemented by means of CPS and CbC are essential, in particular, for the group of "resellers" that do not have their own infrastructure elements.

As monopolistic structures continue to prevail in the local loop area, carrier network operation is still of great significance.

Since the beginning of liberalisation, the fixed network market was opened mainly via the carrier network operators. This development was due to the fact that the relatively easy market entry, on account of the low investment input, resulted in a large number of applications for

licences. The stimulated competition, due to the emergence of new providers, caused pressure on Telekom Austria to lower prices and led to a reduction of tariffs throughout the entire industry, which resulted in significant savings of telephone costs on the part of the customers (see section 5.2.2.1.2.2). As a whole, the overall trend suggests that the major providers are increasingly developing, or have already developed, into full-service providers. Apart from speech, data and Internet, also services, such as Server Hosting, Application Service Providing or mobile services are offered to the customers. Only the providers that can offer the full range of products and services ("one-stop shopping") have good chances of surviving on the market in the long term. Smaller providers, on the other hand, have to get established in niches. To reduce the competitive pressure, the operators are anxious to differentiate their tariffs by consumer groups, to extend and further develop their product ranges towards data communications, value-added services, services etc. By means of product differentiation individual operators may succeed in increasing their price margins and achieve higher profits.

Fundamental change in the delineation of the markets under the new legal framework

While, previously, the fixed network markets were treated as a whole, subsequently, according to the method of market delineation in the TKMVO 2003 and the Commission Recommendation on relevant product and service markets, the retail and wholesale markets are described separately, even though not independently of each other. Specifically, the following retail markets are distinguished:

- 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 national telephone calls provided at a fixed location for residential customers;
- Publicly available international telephone calls provided at a fixed location for residential customers;
- Publicly available national telephone calls provided at a fixed location for non-residential customers;
- Publicly available international telephone calls provided at a fixed location for non-residential customers.

At the wholesale level, three relevant markets were identified:

- 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 already mentioned in the introduction, the individual relevant markets are not treated point by point but, rather, they are discussed according to their substantial affiliation.

5.2.2.1.2 Retail market

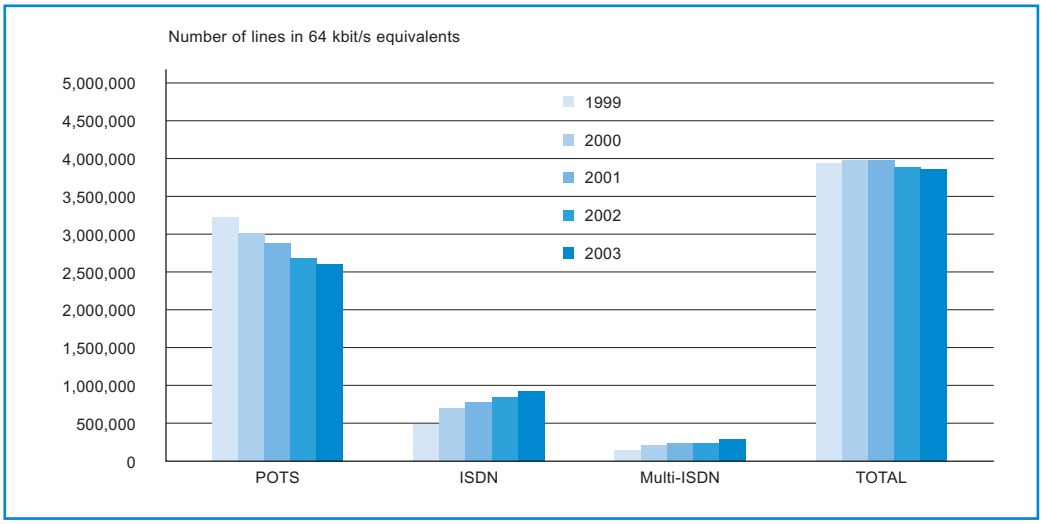
5.2.2.1.2.1 Market data

In the past, the expansive subscriber development on the mobile communications market caused a moderate, yet steady decrease in total sales which, measured in 64 kbit/s equivalents, is significantly less pronounced in the period under review (1999 to 2003). On closer examination, it is revealed that the change differs considerably, depending on the line technology. The

decrease in analogue POTS (Plain Old Telephone System) lines was largely compensated by the sharp increase in ISDN lines and the relatively stable development of multi-ISDN lines, each measured in 64 kbit/s equivalents (see Figure 45). Substitution of the fixed network by mobile telephony at the end-user level is therefore taking place, as expected, rather in the field of residential users with analogue lines.

While the sales figures on the entire fixed network retail market still showed an upward trend in 1998 (+3.6%), there was a steady decline over the remaining period (1999 to 2003), which is, however, moderated by an emerging consolidation in the last two years (see Figure 46).

Figure 45: Development of line types in 64 kbit/s equivalents from 31.12.1999 to 31.12.2002 and as per 30.09.2003



Source: RTR-GmbH

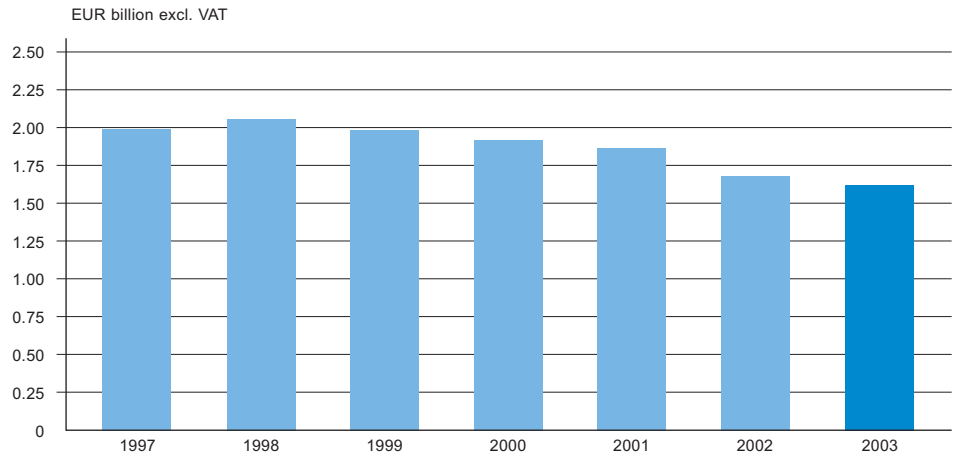
Info Box 1: Calculation of sales on the fixed network retail market

On the fixed network market, sales figures refer to:

- connection charges Austria regional zone;
- connection charges Austria long-distance zone;
- connection charges Austria mobile network;
- connection charges international;
- connection charges from public telephones;
- connection charges directory inquiry services;
- connection charges services numbers;
- connection charges online services;
- sales from selling cards and minutes to resellers;
- fixed charges;
- charges for special tasks of service provision;
- charges for the installation of lines.

Figure 46: Development of sales on the fixed network voice telephony market 1997 to 2002, estimate for 2003

Fixed network: after declining until 2002, sales and lines are now stalling.



Source: RTR-GmbH

The access of new providers and their gains in market shares is also reflected in a decreasing concentration on the fixed network voice telephony market. The concept of high concentration on a market is used, when, at a certain point in time, almost the entire reference amount (such as sales, subscriber figures, traffic values) is concentrated with few operators or distributed unevenly among the individual operators.

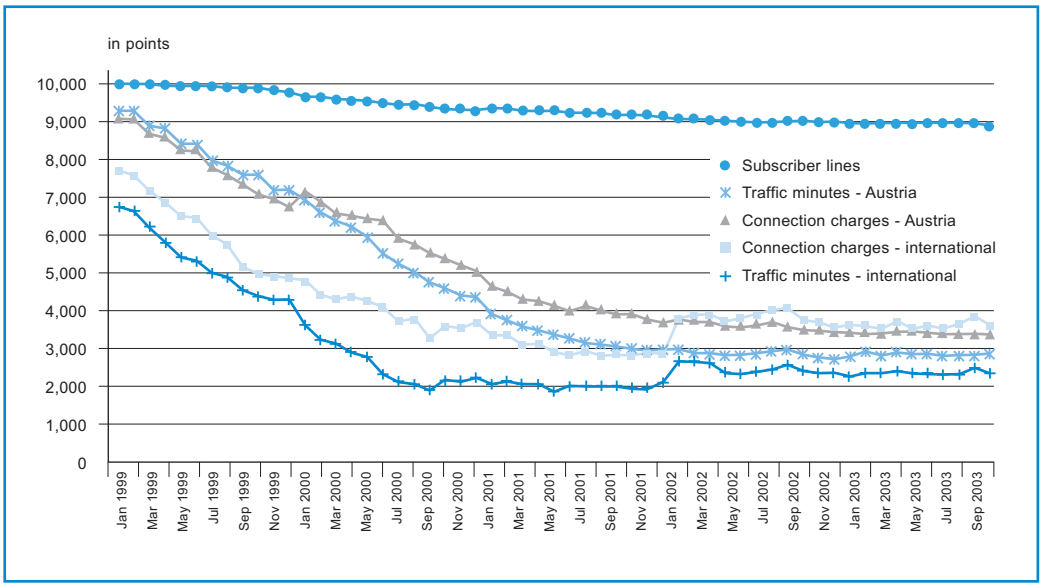
Info Box 2: Hirschman-Herfindahl Index (HHI)

One of the most common measures for concentration is the Hirschman-Herfindahl Index (HHI), which is calculated as the sum total of the squares of the reference parameters (here, specifically, the market shares in %). The value of this index is between 0 and 10,000. A value near 0 stands for a low concentration and will appear if there is a large number of market players who are all more or less of the same size. The highest value of the index is near 10,000, which means that there is a monopolist operator and therefore complete concentration of the reference amount.

The HHI, shown in Figure 47, indicates decreasing concentration rates varying in extent for the individual reference parameters, i.e. tariffs, traffic minutes and subscribers, over time. The high concentration regarding subscribers is not surprising, as the overwhelming majority of subscriber lines is concentrated at Telekom Austria and as only few alternative network operators have their own access network which allows them to connect subscribers directly. This shows that the monopolistic market structure is, in fact, still intact. The significantly lower concentration rates in the tariffs and the traffic minutes are primarily due to the carrier network operators whose customers do not count as subscribers (of their networks), but which carry large volumes of traffic via their networks. The concentration rate for sales decreases more or

less to the level at which traffic services are also provided by other operators. The sales from monthly fixed charges and installation fees, however, continue to remain with the access network operator. The fact that the concentration rate for sales is steadily higher than that for traffic minutes also illustrates the price differential that exists in favour of the incumbent. The relatively higher difference for international calls suggests more significant price differences within this call type.[1]

Figure 47: HHI according to destinations and subscriber lines



Source: RTR-GmbH

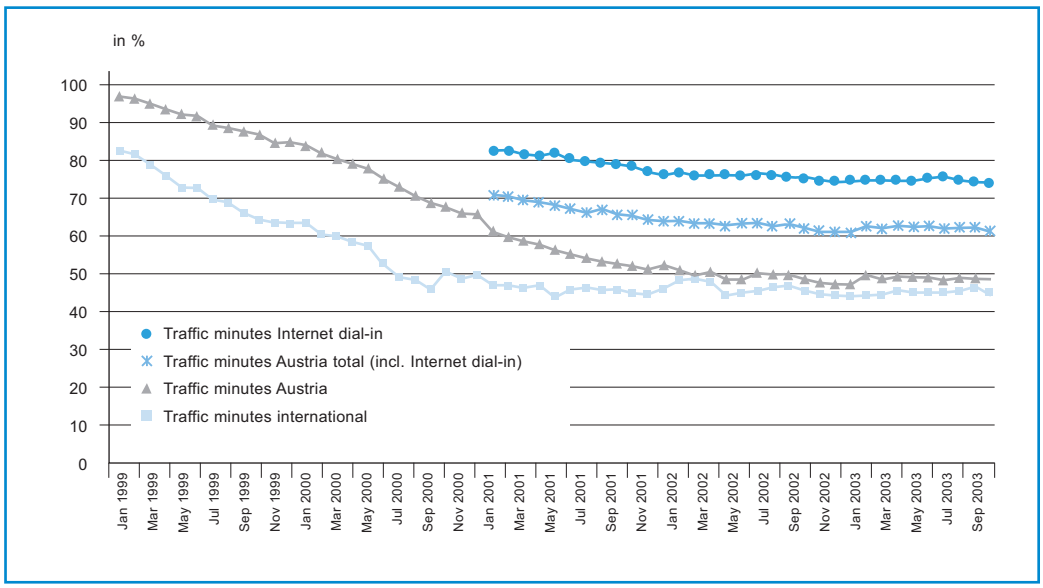
The extent to which alternative network operators (carrier network operators and access network operators) were successful between 1999 and 2003 in the individual call segments of fixed network telephony is indirectly reflected also in the market shares of Telekom Austria (in terms of billed traffic minutes, see Figure 48). Roughly, the alternative network operators achieved about 50% of the market shares in the segments for national and international voice telephony. According to Figure 47, the gains in the international telephony segment were higher by a few percentage points, while the market share of Telekom Austria, taking into account the Internet dial-in minutes, increased significantly by approx. 10%, which is due to

[1] The leaps in this business segment at the beginning of 2002 can be explained by structural changes in the data model and in the circumstances on the market. In the past, a number of company take-overs and withdrawals from the market took place and the associated volumes – in particular in the field of international voice telephony – were not surveyed retroactively within the framework of the last operator query. This reduction on the part of the alternative operators explains the increase in market concentration.

the relatively high proportion of dial-in minutes in the total of traffic minutes as well as the strong position of Telekom Austria in Internet dial-in traffic. It shall be also mentioned in this place that the market shares in terms of sales would, in general, be higher than the market shares in terms of minutes (see again Figure 47 as well as section 5.2.2.1.2.2).

In the field of subscriber lines, however, Telekom Austria continues to hold very high and stable market shares (see Figure 47).

Figure 48: Market shares of Telekom Austria according to fixed network segments in traffic minutes



Source: RTR-GmbH

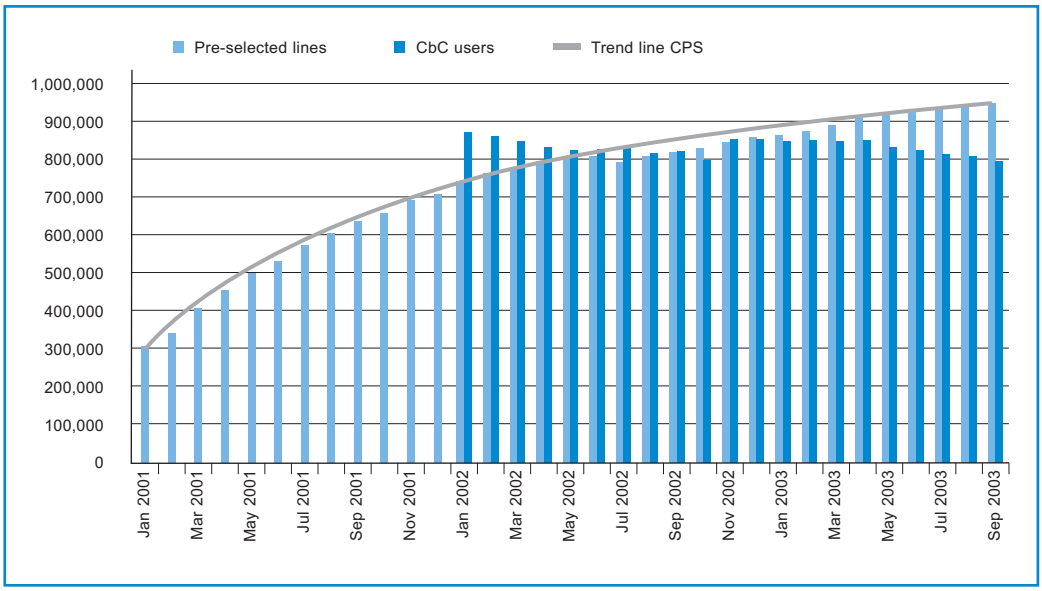
Different effects of liberalisation (which began in 1998); high concentration in the local loop continues, while alternative network operators gain significantly in market shares in terms of connection charges and traffic minutes.

The gains in market shares of the alternative network operators also reflected in Figure 47 are closely connected to the market development of Call-by-Call (CbC) and Carrier Pre-Selection (CPS). As can be seen in Figure 49, CPS was widely accepted. Until September 2003, more than 900,000 subscribers decided to use an alternative network operator to carry all their calls. Even if the growth rates were slightly declining, as the logarithmic trend line suggests, it seems that soon there will be one million subscribers that make their calls using this option, i.e. roughly one third of all fixed network subscribers. Figures on CbC have been available only as from January 2002. About 800,000 customers use CbC and CPS partly side by side. Therefore, no sum total shall be calculated, as CPS and CbC do not rule out each other but are (or can be) used additionally. In any case, these figures prove that the special access obligations were among the major instruments of liberalisation in the fixed network sector; they still constitute an essential basic regulatory measure at the wholesale level because they enable(d) competi-

tion fast and allow(ed) alternative network operators that did (do) not have their own infrastructure in the local loop to enter the market. By resorting to the existing infrastructure of Telekom Austria they can provide their services quickly on a nation-wide basis without first having to undergo the cumbersome process of building their own nation-wide network.

The fact that CPS still shows positive growth rates, against CbC that is slightly declining, implies certain substitution effects between these two access types and suggests an increasing attachment of customers to alternative network operators. As Figure 49 indicates, CbC seemed to have been relatively more important, in particular, at the beginning of liberalisation.

Figure 49: Development of CbC (available as from 01/2002) and CPS users



CPS and CbC were and are essential success factors in fixed network liberalisation.

Source: RTR-GmbH

5.2.2.1.2.2 Tariffs

Since the onset of liberalisation (beginning of 1998) the fixed network markets for telephony services under review have seen massive price reductions. The fierce price competition of the past years has brought about tariff convergence between the providers. Also, Telekom Austria, still the major provider by far, was repeatedly forced to adjust its tariffs downward. In recent years, however, the dramatic price reductions appeared to have come almost to a standstill; previous competition seemed to have make alternative network operators reach a bottom price limit as well, in so far as their margins depend considerably on given wholesale costs.

The following price discussion refers mainly to the residential user segments. Since an accurate assignment of the tariff models offered on the market is possible only at the "edges" of the tariff structure offered, the comparative presentations are based on the respective standard

tariff package that is used by the majority of telephony customers. While it is possible and reasonable to show price developments in the "transparent" residential user segment, this can be done only to a limited extent in the business customer segment which is rather "intransparent" in terms of prices. For business customer markets, it may be assumed that, due to their high traffic volumes, business customers often obtained substantial tariff discounts/rebates in the past and still do.

Info Box 3: Price differentiation

The instrument of price differentiation is used very frequently on the markets for fixed network voice telephony, not least because of the complementary character of the access and services areas. The existing tariff structure of Telekom Austria corresponds to a product bundling of access and carrier services in the form of two-part tariffs, which, in turn, is a specific form of price differentiation (of second degree). With second-degree price differentiation, tariff design is optional in so far as the consumers themselves select the tariff models offered according to their preferences ("self-selection"), thus revealing information about their demand behaviour. The basic principle is therefore to orient prices to customers' readiness to pay for their calls. In contrast to non-differentiated prices, this allows, as a rule, for an increase in sold quantities and the opening of new markets. This helps to accommodate groups of customers that would have no or only little demand if prices were non-differentiated, i.e. the various tariff options address the requirements specific to the customer segments. With this in mind and with a view to efficiently handling the problem of peak loads, the complex, historically grown price differentiation models shall be rated positive from a welfare economic perspective.

First of all, the connection charges[2] of the most important national fixed network calls that are charged to the end-users shall be presented and discussed in a representative form. For this purpose, calls to the national fixed network broken down into "fixed network local" and "fixed network long distance over 50 km" (or "Austria") as well as their respective subdivision into peak and off-peak times were taken into account.[3]

Figure 50 and Figure 51 show the connection charges for the above mentioned call distances on the basis of the "minimum tariff" and, after abolishment of the minimum tariff (in the course of the proceedings G07/03), for the subsequent tariff "Tik Tak Privat" of Telekom Austria. The approach to examining these tariff options can be explained on the basis of two plausibility points: on the one hand, it would be reasonable for the customers of the carrier network operator competing with the incumbent to choose the tariff with the lowest fixed charge, on the other hand, these tariff options address the typical mass segment of residential users. In this connection, the tariffs of Telekom Austria are compared with those of the largest alternative network operators in this field, Tele2 and UTA.

[2] All charges shown are gross charges (inclusive of VAT).

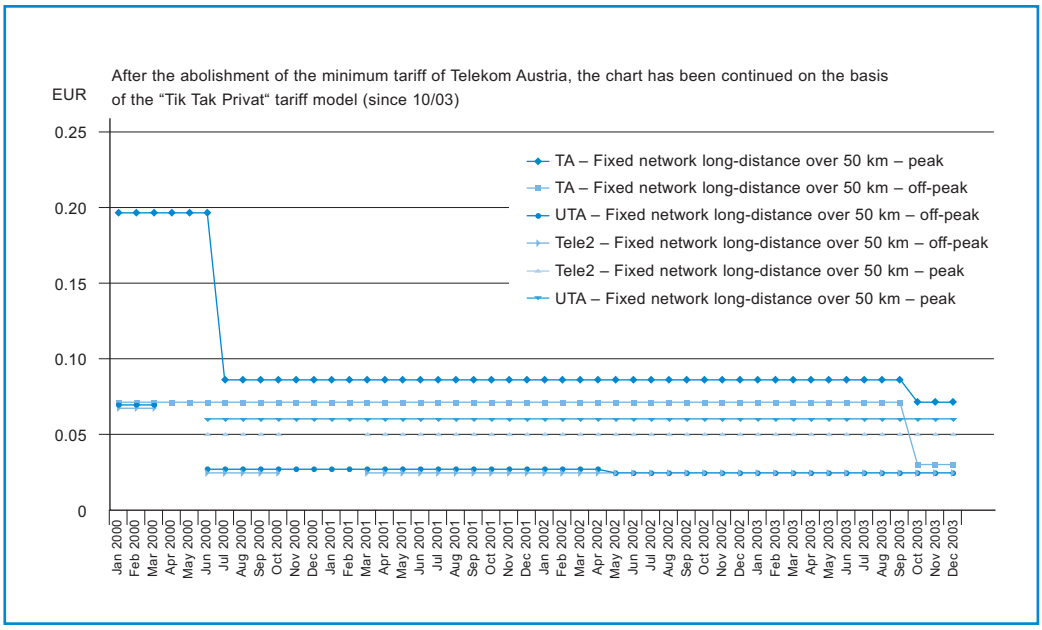
[3] Even though this segmentation is depicted for all operators for reasons of comparability, it is not necessarily used to the same extent by all providers that are operative on the market.

As can be seen in Figure 50 and Figure 51, apart from the significant price reductions in 2000, there were almost no further price changes regarding the "minimum tariff" in the respective comparisons of calls to national fixed networks during the remaining period under review until 09/2003. Equally, the figures also reflect the direct and indirect price reductions in the connection charges due to the abolishment of the minimum tariff and the establishment of "Tik Tak Privat", virtually, as subsequent tariff on which all figures are based for the last part of the period under review (10/2003 to 12/2003).

Tariff development 2000 to 2003: phase of price consolidation in national calls

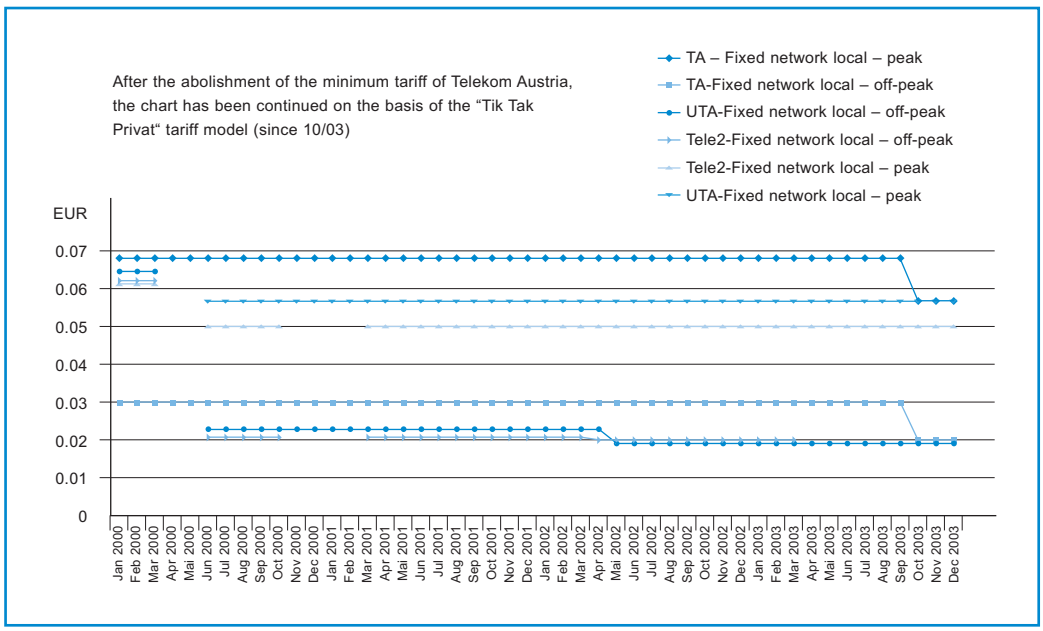
As a whole, it can be seen that from 2001 to 2003, apart from the abolishment of the minimum tariff, there were hardly any considerable movements in prices any more. Basically, this also applies to the charges for calls to national mobile networks, which are covered here. Apart from the massive price reductions observed in 2000 in general, the most dramatic price reductions took place already in the first years of liberalisation (1998 to 2000, not indicated).

Figure 50: Comparison of connection charges for national fixed network calls



Source: RTR-GmbH

Figure 51: Comparison of connection charges for local fixed network calls



Source: RTR-GmbH

Higher intransparency due to the diversity of call destinations and price differences in international calls

To describe the prices for international fixed network voice telephony, statistics were used to account for the diversity of international destinations and zones. The tariffs were selected for comparison according to the significance of the traffic minutes that are terminated abroad. Even if this does not directly reflect the weighting that is relevant to the retail markets, it is nevertheless a useful approach, as the international destinations in Table 14 that have been identified as such and have been ranked according to their volumes also constitute the major tariff zones in various comparisons of tariffs provided on the Internet[4], as well as in the relevant international comparisons (OECD, EU Implementation Report etc.).

Table 14: Comparison of charges of the most important international connections (as per February 2004)

	Telekom Austria ("Tik Tak Privat")	Tele2	UTA ("Green Apple")	Priority Telecom ("Standard")
	Connection charges in EUR for peak/off-peak			
Germany	0.247/0.188	0.099/0.099	0.138/0.138	0.1744/0.1744
Switzerland	0.247/0.188	0.099/0.099	0.138/0.138	0.1744/0.1744
Italy	0.247/0.188	0.099/0.099	0.138/0.138	0.1744/0.1744
Turkey	0.377/0.319	0.436/0.436	0.349/0.349	0.3096/0.3096
Hungary	0.247/0.188	0.254/0.254	0.218/0.218	0.19/0.19
USA	0.377/0.319	0.099/0.099	0.138/0.138	0.1744/0.1744
Poland	0.377/0.319	0.436/0.436	0.349/0.349	0.3096/0.3096
United Kingdom	0.305/0.247	0.138/0.138	0.138/0.138	0.1744/0.1744

[4] For example, http://www.tarifecheck.at/rtr/

Table 14 shows that Telekom Austria charges rather higher prices, compared with the major alternative providers in the residential user segment[5]. For better illustration, the respective most expensive offers are shown against a light blue background, whereas the least expensive tariffs show the figures darkly shaded.[6]

5.2.2.1.2.3 International comparison of tariffs

An international comparison shall serve as a benchmark against which the market result on the Austrian market for fixed network voice telephony shall be measured. Important indicators in this respect are, above all, tariffs and tariff developments but also structural characteristics, especially market shares.

A problem inherent in international comparisons is the heterogeneity of tariff models, accounting structures, market structures etc. Therefore, the indicated figures should be interpreted with caution. Due to the numerous problems and inaccuracies inevitably involved in an international comparison, it is advisable to more or less ignore the actual rank.

The 9th Implementation Report (Annex I)[7] published by the European Commission serves as basis for the data. Unless otherwise indicated, the comparative values refer to August 2003.

Market structure

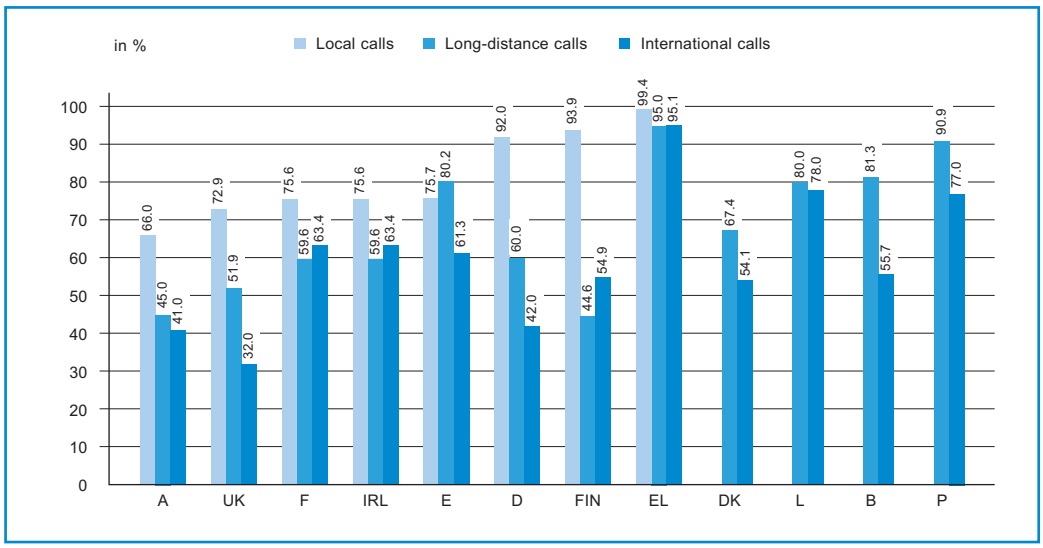
Two important characteristics of the market structure are the number of market players and their market shares. Figure 52 shows the market shares of the incumbents in terms of outgoing minutes. Telekom Austria's market share is at the bottom end of the European scale in all three categories, with 66% for local calls, 45% for long-distance calls and 41% for international calls. In the field of local calls, Austria is the country where the incumbent has the lowest market share. This should be taken into consideration when studying the international tariff comparisons, as they refer only to the tariffs of the incumbent operator and do not take alternative operators into account at all. This simplification causes distortions that will be greater when the incumbent's market share is lower and that of the often cheaper competitors is higher. As to the number of actually operative operators in the period covered, the Implementation Report gives an average value for Austria. The like is true for the market concentration, measured by the number of operators which together have a concentration of more than 90% of the total market share (comprising all call distances, i.e. national, international and Internet dial-in traffic; not indicated in the diagram).

[5] With "Tik Tak Privat" as comparative category, Table 14 again refers to the residential user segment. The selection of alternative operators, in turn, depends on the relative importance for the overall market.

[6] It has to be added that within the group of resellers, in particular, there are a number of providers who specialise as discounters that massively undercut prices on the international markets. Therefore, it can be concluded that, in fact, there exist much cheaper tariff offers for all relevant international destinations in the group of alternative competitors.

[7] Communication from the Commission to the Council, the European Parlament, the European Economic and Social Committee and the Committee of the Regions, European Electronic Communications Regulation and Markets 2003, Report on the Implementation of the EU Electronic Communications Regulatory Package.

Figure 52: Market shares in minutes of the incumbent operators (December 2002)



Note: national calls include voice telephony and Internet connections; Source: 9th Implementation Report of the European Commission

Tariffs

Here, too, only the standard tariffs of the respective incumbent are used for all calculations, which leads to the constraints mentioned above.

Residential users

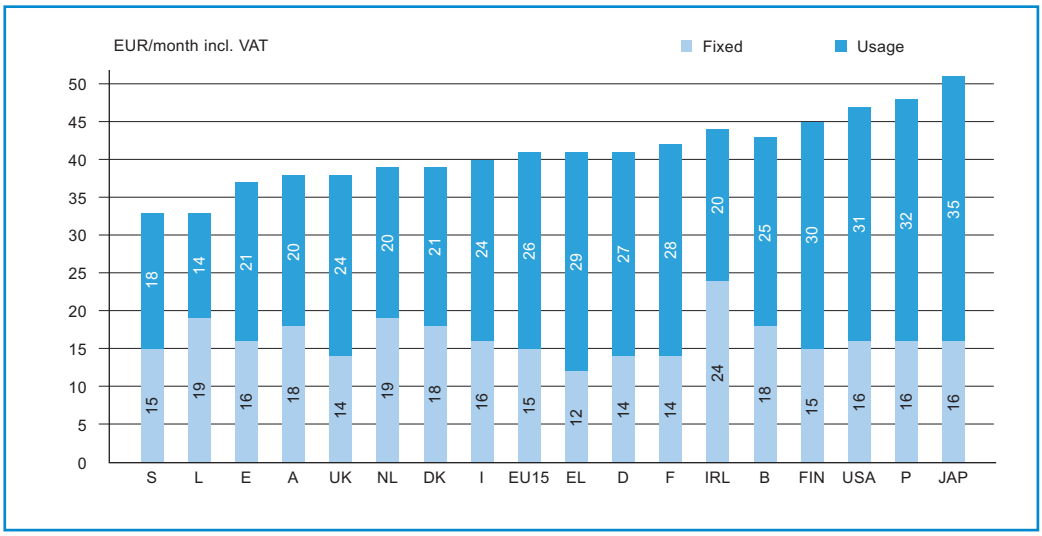
Austria, or Telekom Austria, basically has a low-profile position by international comparison (as per August 2003).

In respect of the fixed charge, Telekom Austria with the "Tik Tak Privat" tariff model used in the comparison is slightly above the EU average.[8] The relatively high fixed charge, however, is compensated by low call charges, which makes Telekom Austria one of the "cheapest" incumbents, in terms of a basket (Figure 53). The indicated basket captures not only the fixed charge but also the activation charge, national calls over different distances, international calls and calls to mobile networks. Demand behaviour and weighting factors are to correspond to a "European standard residential user[9].

[8] The indicated EU average figures are each based on the population distribution within the EU Member States as weighting factor.

[9] Details on the composition of the basket are contained in section 10, Annex I of the 9th Implementation Report. In a comparison of the individual countries as to their ranking, it shall be taken into account that different VAT rates are applied in the Member States of the European Union. With 20%, Austria ranks in the middle, see European Commission, 2002: "VAT rates applied in the Member States of the European Community".

Figure 53: Average monthly expenditure of residential users, August 2003



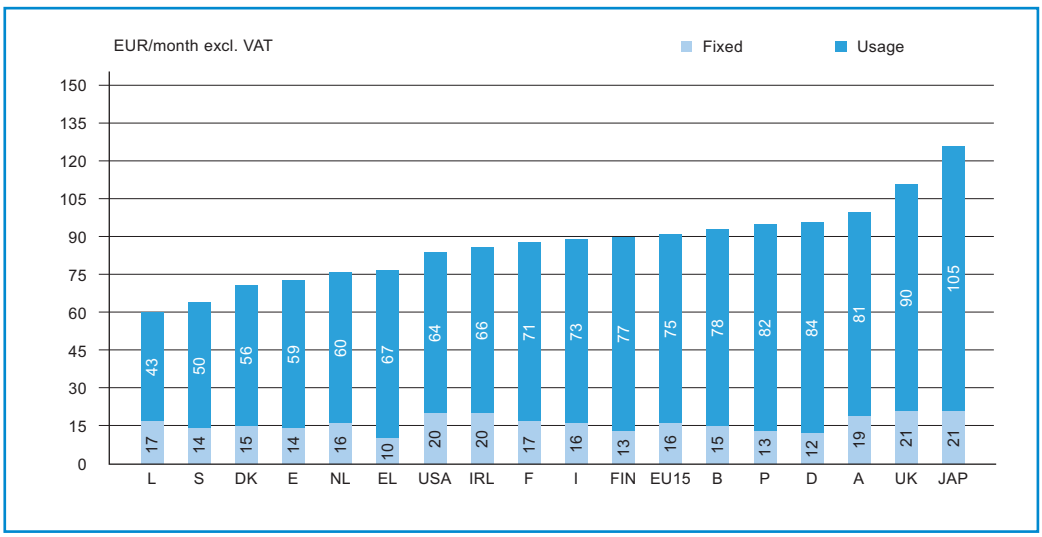
Source: 9th Implementation Report of the European Commission

Business users

Figure 54 shows the incumbents' monthly fixed charges and connection charges in August 2003. Contrary to the residential users, Telekom Austria is among the most expensive operators in terms of a basket. To reflect a representative "European business user", the basket captures not only the fixed charge and the activation charge but also national calls over different distances, international calls and calls to mobile networks.

For business users, the comparable product of Telekom Austria ranks in the upper third.

Figure 54: Average monthly expenditure of business users, August 2003



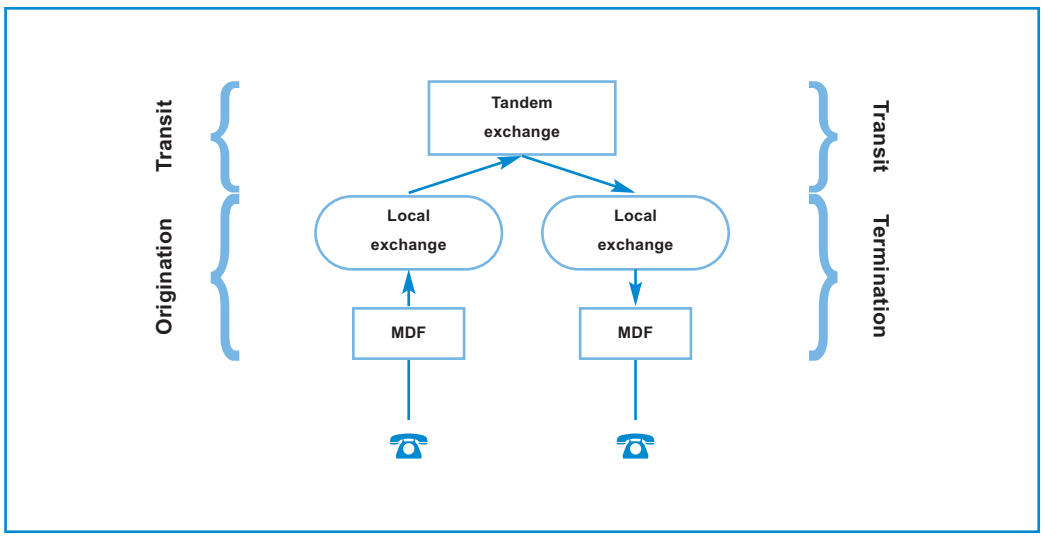
Source: 9th Implementation Report of the European Commission

5.2.2.1.3 Wholesale market

On the wholesale markets operators obtain wholesale services from other operators so that they can provide their retail products. These markets are closely linked in size and development to the retail markets, as the demand for wholesale services depends on the demand for retail services. Therefore, the interactions between the retail and the wholesale levels need to be taken into account in an overall analysis. Without operational wholesale markets it would not be possible to liberalise the markets, as, in particular, the alternative network operators depend on the services of the other operators, specifically, of Telekom Austria. By imposing the obligation of interoperability, the legislator ensures that every subscriber can reach any other subscriber, thus even enabling liberalisation and competition.

Figure 55 gives one of several examples of how a call from one subscriber might be carried to the other subscriber. Every call consists of one origination, one termination and, where applicable, a transit portion.

Figure 55: Origination – termination – transit



Source: RTR-GmbH

In fixed network voice telephony three types of wholesale markets can be distinguished:

1. **Origination**
   Origination is a wholesale service provided by the access network operators, where traffic that is initiated by the users at the network termination points of their own communications network is carried to the nearest exchange. The origination charge is due to the network operator to whose network the subscriber is connected. The origination charge arises in two types of calls:

a. Carrier network operator
A carrier network operator that receives a call from network A and delivers it to network B, will pay an origination charge to network operator A (and a termination charge to network operator B, whereas it, in turn, will get the entire end-user charge).

b. Numbers subject to tariffing in the target network
If a subscriber of network A dials a number that is subject to tariffing in the target network (such as 08xx or 09xx) in network B, network B will have to pay an origination charge to A.

The definition of the origination market has changed by the Telecommunications Markets Ordinance 2003 (TKMVO 2003) that is based on the recommendation of the EU Commission in that only the local origination portion is attributable to the market and bundle products like "Single Tandem" are to be split into origination and transit portions. In addition, origination services that cannot be expressed in terms of sales are regarded as self-provided services in this market.

2. Termination

Termination is the service of call delivery in the network of the called subscriber. If a subscriber of network A calls a subscriber of network B, the network operator A will have to pay a termination charge to the operator of network B.

The termination market is defined individually per operator, i.e. every access network operator creates its own termination market; therefore, market entries are not possible. This market delineation is due to the fact that termination in one network cannot be substituted by another network, as the called subscriber's line is confined only to one network and the call has to be delivered to that network.

3. Transit

If two networks are not directly interconnected, the call is carried via a transit network operator that accepts the call from one network and hands it over to the other network. For this service it is entitled to a transit charge. In addition, this market also comprises the transit portion of the origination and termination bundle products and the joining links between two networks.

Origination and termination are linked closely to subscriber lines, as an increase in the number of lines is expected to produce growth in origination and termination minutes. The number of access network operators had declined from 17 to 13 in 2002 and remained stable in 2003. The development on the origination and termination markets in terms of minutes also remained stable.

Origination

While all access network operators provide origination to numbers subject to target network tariffing, Telekom Austria is the only one to provide origination to carrier network operators, due to its SMP on the fixed network market. Telekom Austria delivers just under one third of its origination traffic to carrier network operators, origination to services numbers, at less than two percent, constitutes only a marginal part of the traffic handled. The overwhelming part, i.e.

two thirds, is handled by the operators themselves and sold on the retail market. Origination in terms of traffic minutes shows a slight decline which is consistent with the development of the lines on the retail market. Similar to the development of the subscriber lines (see Figure 47), the HHI is consistently at over 9,000 points, which suggests a high concentration rate.

The prices for origination in the Telekom Austria network were determined by the regulatory authority and distinguish between peak and off-peak. Moreover, bundle packages, i.e. origination and transit in the Telekom Austria network ("Single Tandem" and "Double Tandem"), have been regulated to enable carrier network operators to provide their services by means of only few interconnections. The price of "Single Tandem" for origination in alternative networks was determined on the basis of the reciprocity obligation[10].

Table 15: Origination charges of Telekom Austria as per 01.07.2002

Origination	Peak	Off-peak
Local	0.85	0.5
Single Tandem	1.3	0.72
Double Tandem	2.9	1.1

While the origination and termination markets developed steadily in 2002 and 2003, a slight upward trend was registered on the transit market. The substitution of external transit by self-provided transit services sustainably strengthens infrastructure set-up.

Termination

Termination to the Telekom Austria network continues to be the most important service, as the greatest number of subscribers are directly connected to its network. All alternative operators with customers connected provide termination of calls to these customers. Priority (Telekabel), which operates in specific regions of Austria, terminates the greatest number of minutes of all alternative operators due to the large proportion of connected subscribers. The development of the termination minutes shows a similar tendency as origination, i.e. it is stable to slightly declining.

Similar to origination, Telekom Austria's termination and bundle product charges ("Single Tandem" and "Double Tandem") were determined by the regulatory authority, due to Telekom Austria's SMP on the fixed network market. Different charges were determined, depending on the use of the network elements, to take account of Telekom Austria's hierarchical network structure. As the alternative networks are not structured hierarchically, on account of the principle of reciprocity, the charges for "Single Tandem" were determined to correspond to the price of termination in alternative networks.

[10] The principle of reciprocity means that interconnection charges between network operators must be applied on a reciprocal basis.

Table 16: Termination charges of Telekom Austria as per 01.07.2002

Termination	Peak	Off-peak
Local	0.85	0.5
Single Tandem	1.3	0.72
Double Tandem	2.25	0.87

Transit

The transit market comprises all network operators that are interconnected with another network operator. Therefore, access network and transit network operators as well as carrier network operators provide services on this market. While the access network operator provides transit services predominantly in terms of bundle products in connection with origination and termination, the transit network operator ensures that the networks can be reached even if they are not directly interconnected. The carrier network operators as well as all other companies that provide interconnection services offer transit services as part of direct interconnection in terms of traffic via joining links. Of course, a company can be the one and the other type of network operator at the same time, thus offering different types of transit.

Telekom Austria's transit charges were determined by the regulatory authority.

Table 17: Transit charges of Telekom Austria as per 01.07.2002

Transit	Peak	Off-peak
Regional	0.29	0.15
National	0.62	0.32

The traffic minutes for transit as bundle product increased from 2002 to 2003, while the minutes of Telekom Austria declined. The services of the transit network operators also increased both in minutes as well as in sales. The joining links in terms of traffic minutes also picked up.

In the past three years, supported by corresponding regulatory decisions, local origination and local termination posted significant growth, whereas the bundle products were declining. The transit portion that is contained in the bundle products was increasingly replaced by self-provided transit so that, gradually, the traffic is delivered and terminated closer to the subscriber.

Local termination already has a share of over 80%. To be able to implement such self-provided services, the network operator has to invest in its infrastructure to set up a sustainable communications network that corresponds to its traffic volume.

5.2.2.2 Mobile communications

5.2.2.2.1 Providers on the Austrian mobile communications market

5.2.2.2.1.1 Mobile network operators

Due to the shortage of frequencies, the mobile communications market, which has been liberalised since 1996, has much fewer players than the fixed network. The market entry of a company is possible only if it is granted or, since summer 2003, transferred frequency usage rights. The following table gives an overview of the frequency allocations relevant in this context.

Table 18: Licensing in mobile communications

Licence holder	System	Licence award	Award procedure	Start of operation	End of operation
Mobilkom (D network)	TACS		Predesignation	1990	2/2002
Mobilkom (A1)	GSM		Predesignation	1994	
Ö-Call (now T-Mobile)	GSM	1/1996	Hybrid procedure[a]	10/1996	
Connect (now One)	GSM	8/1997	Hybrid procedure[a]	10/1998	
tele.ring	GSM	5/1999	Auction	4/2000	
Mobilkom	UMTS	11/2000	Auction	4/2003	
max.mobil. (now T-Mobile)	UMTS	11/2000	Auction	12/2003	
Connect (now One)	UMTS	11/2000	Auction	12/2003	
Mannesmann (now TRA 3 G Mobilfunk)	UMTS	11/2000	Auction	12/2003	
3G Mobile	UMTS	11/2000	Auction	-	
Hutchison 3G (H3G)	UMTS	11/2000	Auction	5/2003	

[a] A beauty contest was used which, in the case of the award of the 3rd GSM licence, had strong auction-specific elements.

Since EKOM (100% subsidiary of Western Wireless) holds 100% of the shares of tele.ring as well as 100% of the shares of Mannesmann (now TRA 3 G Mobilfunk), tele.ring and TRA 3 G Mobilfunk are to be regarded as an economic unity. In December 2003, Mobilkom took over 100% of the shares of 3G Mobile (the sixth UMTS operator) so that the number of economi-

cally independent 3G operators was reduced from six to five[11]. For this reason, Mobilkom and 3G Mobile shall be also regarded as an economic unity.

Therefore, at present, there exist five economically independent mobile operators whose respective frequency packages and time of market entry are summarised once again in Table 19.

Table 19: Operative mobile operators – technology and frequency spectrum

		GSM		UMTS
Mobile operator	**Market entry**	**Spectrum[a] (share in %)**	**Price (EUR million)**	**Spectrum (share in %)**
Mobilkom/3 G Mobile	1994	2x25.4 MHz	332.3	2x15+10 MHz
T-Mobile	10/1996	2x20.8 MHz	311.91	2x15+10 MHz
One	10/1998	2x29 MHz	189.02	2x10 MHz
tele.ring	4/2000	2x14.6 MHz	98.11	2x10 MHz
H3G	5/2003	–	–	2x10+5 MHz

As per June 2004

[a] Technically usable spectrum

5.2.2.2.1.2 Service providers

In Austria, one service provider – without its own radio communications network – is currently operative. In spring 2003, Tele2 entered the Austrian retail mobile market as "Enhanced Service Provider" (or "Airtime Reseller"), as its market entry as "Mobile Virtual Network Operator" (MVNO) – still under the old regulatory regime – had not been possible for legal reasons. The cooperation with the airtime provider is based on a private law agreement without any regulatory intervention. From today's level of knowledge it can be assumed that the company will change its business model in the near future to that of an MVNO.

[11] In the process of obtaining approval for the take-over, the obligation was imposed on Mobilkom to sell one of the four paired packages until 31.01.2005. The sale already took place and the package was sold to T-Mobile at a price not revealed to the regulatory authority.

Info Box 4: Service providers in mobile communications

At present, five mobile network operators and one service provider (reseller) are operative on the Austrian market.

In addition to vertically integrated mobile network operators, the following business models of so-called service providers without their own radio communications network are currently relevant in mobile communications:

- **Airtime Reseller and Enhanced Service Provider (ESP):** the main function of airtime resellers is the separate marketing of mobile communications service in their own name and for their own accounts, however, without being involved in any way in the production process of these services. From an added-value perspective, primarily, retail level activities (customer care, billing and acquisition) are performed. Resellers do not operate telecommunications infrastructure (e.g. switch) themselves, they do not administer SIM cards in the technical sense (HLR), they do not have access to the network intelligence and they do not interconnect with communications network operators. Instead, they purchase the corresponding wholesale services ("airtime") from a mobile network operator. More advanced resellers are referred to as ESPs. In contrast to airtime resellers, ESPs also provide additional (network-independent) value-added services, apart from the services of a mobile communications operator. However, ESPs do not administer their own SIM cards (in the technical sense) and do not operate telecommunications infrastructure.
- **Mobile Virtual Network Operator (MVNO):** MVNOs are communications network operators[12] that although they do not operate a radio communications network (or have the corresponding frequency usage rights), they operate essential network elements in the field of the core network (HLR, MSC etc.), they possess corresponding addressing elements (e.g. Mobile Network Code) and they administer SIM cards. Thus, MVNOs basically act as providers also at the wholesale level.[13] Since an MVNO does not operate a radio communications network, it has to depend on the respective wholesale service of a mobile communications network operator. This wholesale service is referred to as MVNO access, which is a type of roaming agreement.
- **Carrier network operator:** The third type of service providers is the carrier network operator that is sufficiently known from the fixed network sector (see section 5.2.2.1).

[12] See the rulings of the TKK on Z 18/01 and Z 25/01 of 28.01.2002 and Z 6/02.

[13] In practice, however, there may exist a variety of different variants with different degrees of functional control over network elements.

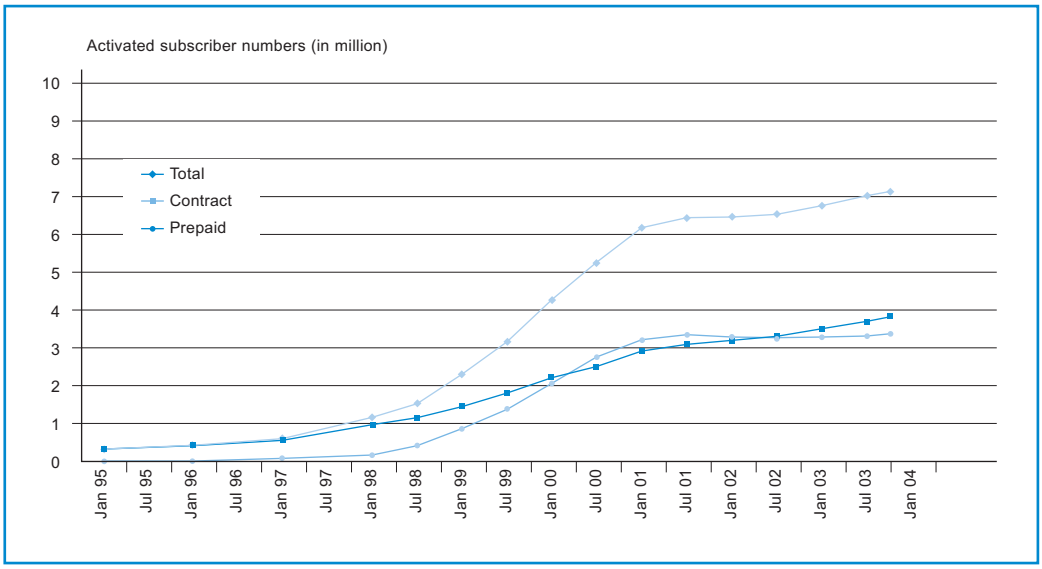
5.2.2.2.2 Market data

5.2.2.2.2.1 Market development

In September 2003, there were about 7 million activated subscriber numbers, which corresponds to a penetration rate of approx. 87%.[14] The following figure shows the development of market penetration over time. It takes the shape of an S curve that is typical of telecommunications services: after a phase that was characterised by a low adoption rate following the introduction of GSM in the early 1990s, around 1998 a phase of strong market growth began which lasted until the beginning of 2001. In 2001, the adoption rate contracted and stalled completely in 2002. Since the end of 2002, a slight growth, in particular in the contract customer segment can be noticed. The proportion of prepaid customers is currently 47% and is slightly declining.

At present, the penetration rate is almost 90%. The high growth rates of previous years contracted significantly in 2003. Voice services are still the "killer application" in mobile communications, even though the share of data services (especially SMS) is rising steadily.

Figure 56: Development of activated subscriber numbers

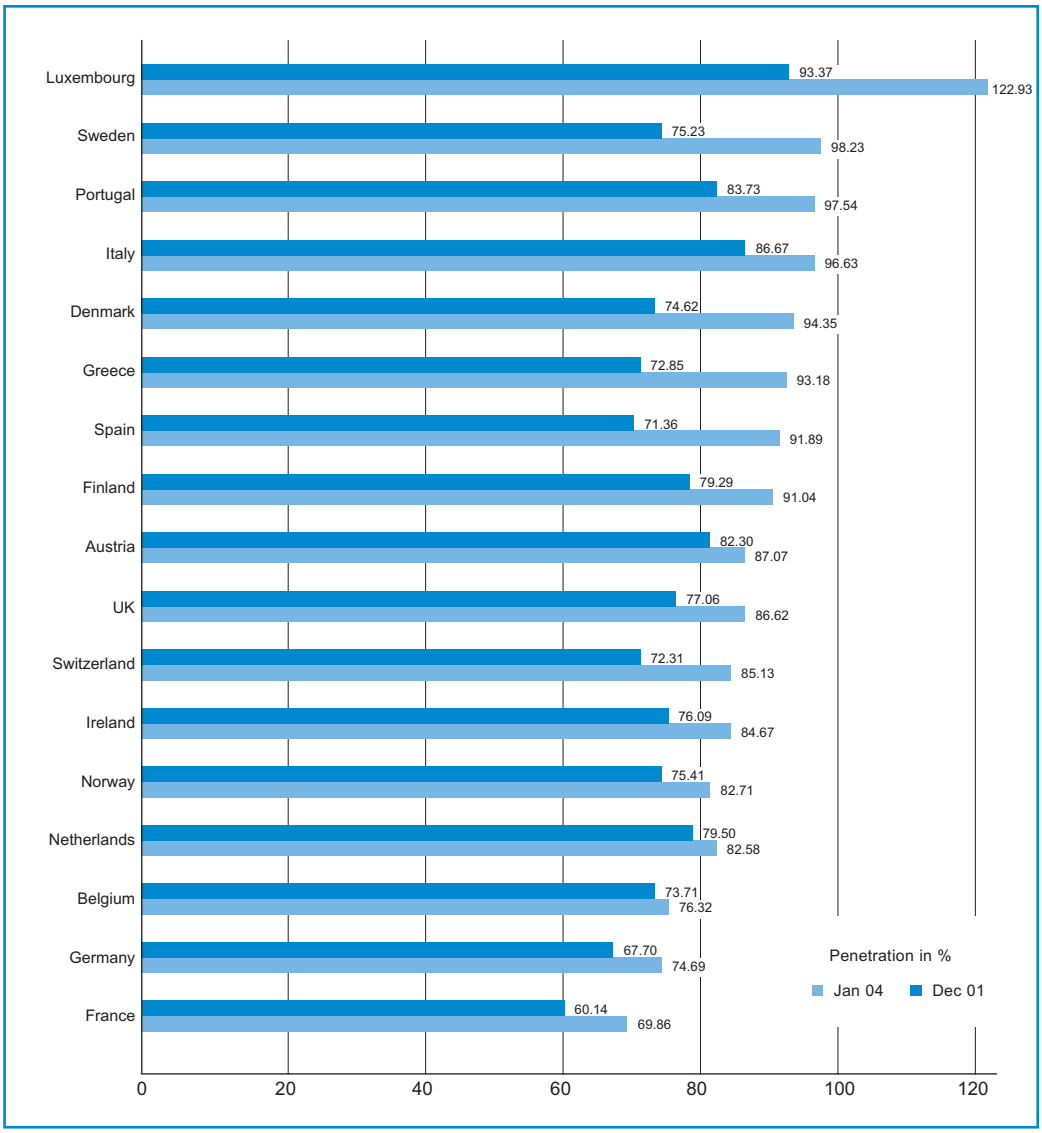


Source: RTR-GmbH, ITU

In terms of penetration, Austria was Western European average (see the following figure). However, it is noteworthy that market penetration occurred faster in Austria than in most other countries, as can be seen in a comparison of penetration rates of 2001.

[14] Measured in activated subscriber numbers.

Figure 57: Penetration rate by Western European comparison (selected countries)

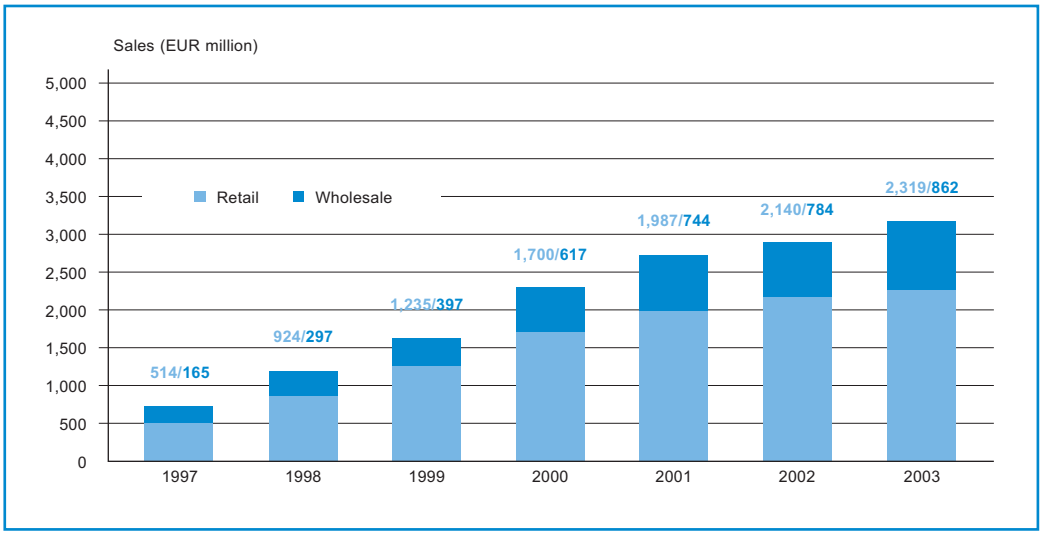


Source: Mobile Communications

The development of sales was equally dynamic (see Figure 58): the overall sales of mobile services increased from approx. EUR 700 million in 1997 to more than EUR 3.1 billion in 2003. Also, the growth rates of sales experienced a notable decline (from annually 80% in 1998 to approx. 9% in 2003). About 25% of the sales are attributable to wholesale services (interconnection, visitor roaming, resale of airtime). The underlying wholesale markets are currently subject to market analyses according to the new legal framework. Roughly 75% of the sales are generated on the retail market.

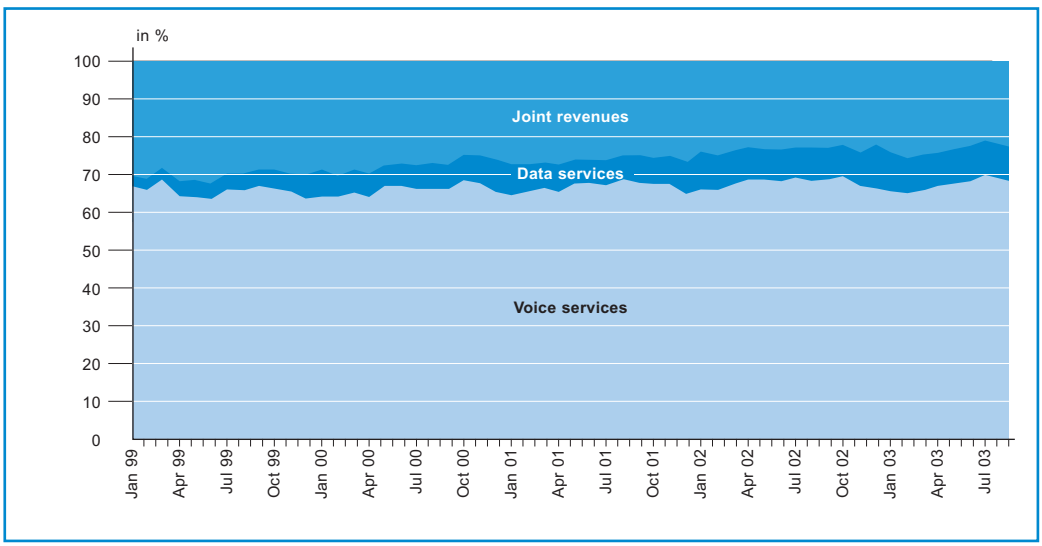
Mobile voice services are still considered the "killer application". Even though the sales in data services (in terms of the retail market) increased dramatically since 1999, the major part of the sales is still generated by voice services. Figure 59 shows the relative shares of sales in voice services, sales in data services as well as sales that cannot be definitely attributed to one of these services (e.g. fixed charges). As can be seen in Figure 59, the ratio of sales in data services to sales in voice services rose from about 4% to approx. 13%, with SMS accounting for the overwhelming part of the revenues from data services.

Figure 58: Development of sales in mobile communications



Note: figures partly based on estimates, Source: RTR-GmbH

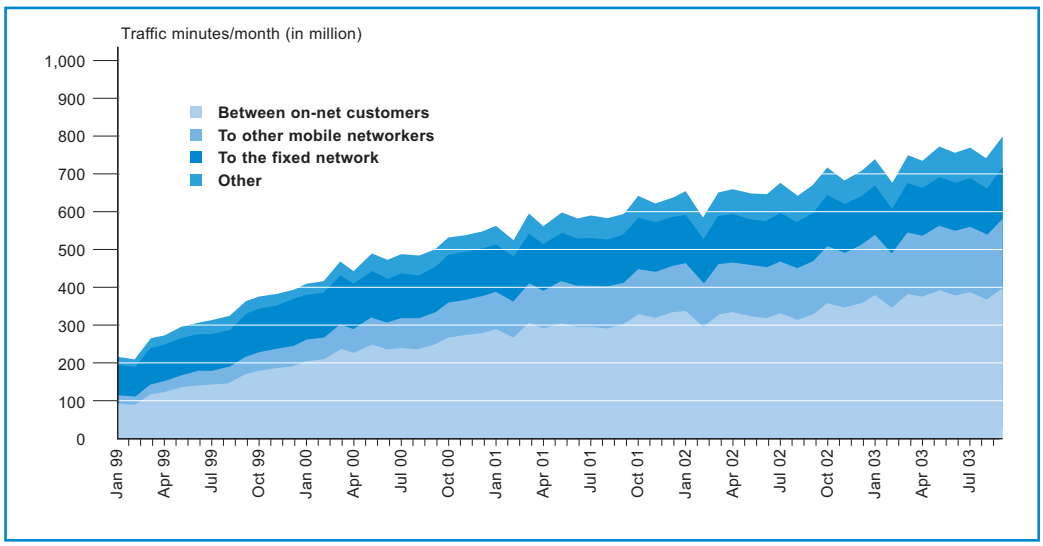
Figure 59: Shares of voice and data services in retail sales



Source: RTR-GmbH

As from 1999, the traffic minutes (measured technically[15]) on the retail market rose almost fourfold (see the following figure). In this respect, the call destinations "Mobile on-net telephony" (probably due to the low on-net call tariffs) and "Mobile telephony to other mobile networks" (in Austria) posted above average growth, whereas the share of calls to the fixed network slumped dramatically. While the share of calls to the fixed network had still been around 40% early in 1999, it has dropped to below 20%. In the like period, the share of calls to mobile networks (on-net and off-net calls) increased from 50% to over 70%.

Figure 60: Traffic minutes (technically measured) on the retail market by destinations

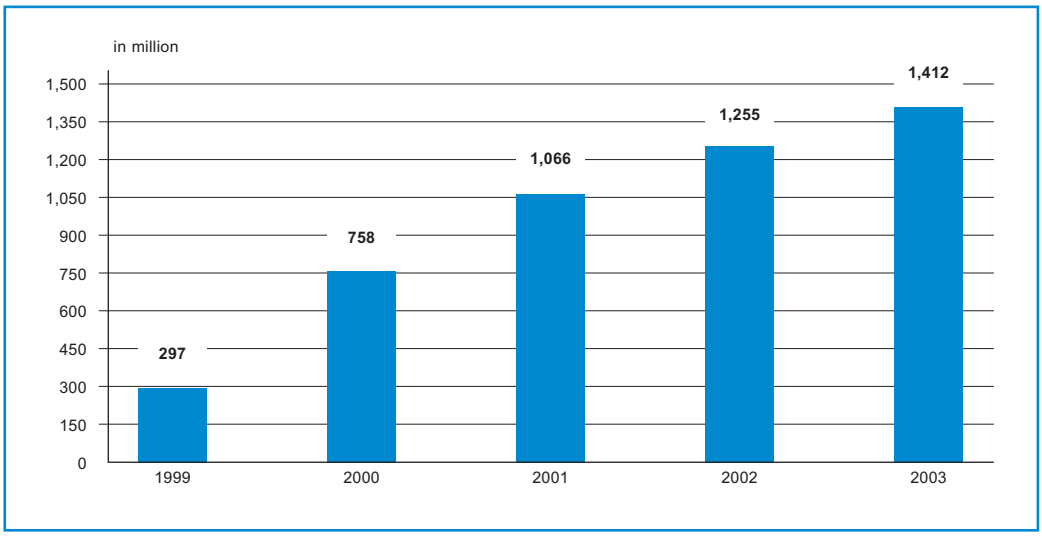


Source: RTR-GmbH

SMS is the (mobile) communications service that posted the highest growth rates in the past few years. As from 1999, the annual number of SMS (originating from Austrian mobile network operators) rose more than fourfold.

[15] Actual duration of calls (including free minutes and regardless of the billing intervals).

Figure 61: Number of SMS (technically measured) on the retail market

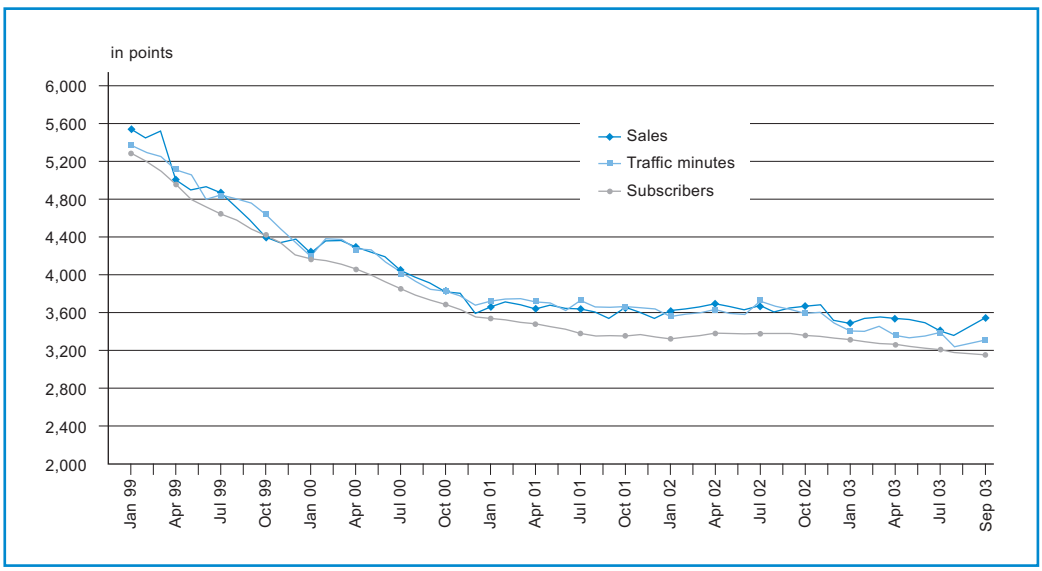


Note: data for 2003 based on estimates, Source: RTR-GmbH

5.2.2.2.2.2 Concentration and market shares

Also in 2003, the market concentration was seen to retreat, if only very slightly. The Hirschman-Herfindahl Index (HHI) for the reference parameter of subscribers dropped from 3,330 to 3,160 points in the period under review (01/2002 to 09/2003), the HHI for (retail) sales from 3,600 to 3,430 and the HHI for traffic minutes (measured technically) from 3,550 to 3,280 points. It is

Figure 62: HHI for the retail mobile market



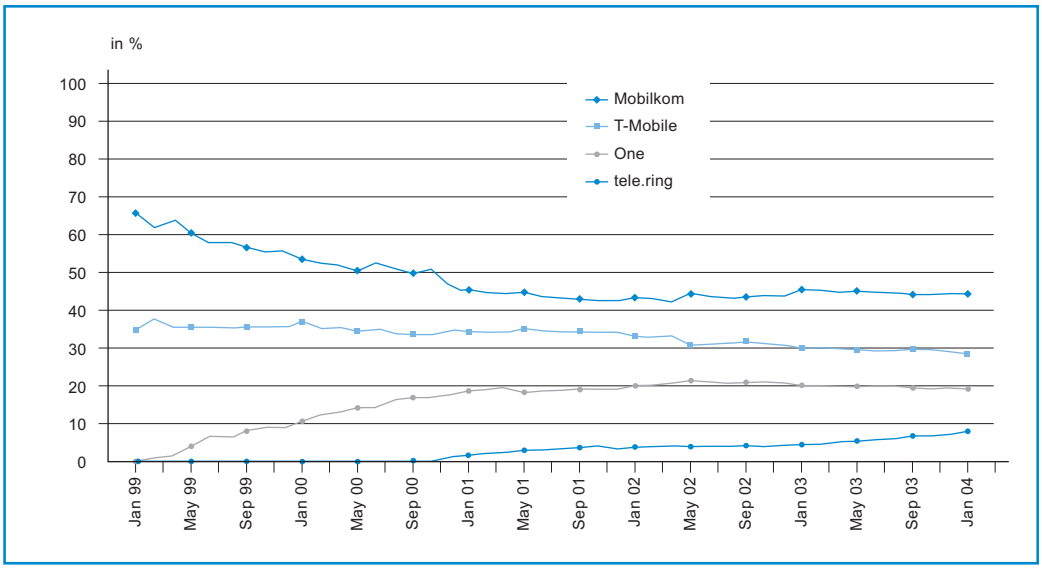
Source: RTR-GmbH

noteworthy that the concentration is lower for subscribers than for sales and traffic minutes. This suggests that the market leader(s) has (have) a disproportionately high share of business customers.

In terms of subscribers, Mobilkom had a market share of 43.7% (3.13 million subscribers), T-Mobile of 28.53% (2 million subscribers), One of 19.37% (1.39 million subscribers) and tele.ring of 8.04% (0.58 million subscribers) at the end of 2003. The market shares of H3G and Tele2 are at present below 1%. tele.ring almost doubled its market share in 2003, whereas all other operators lost market share slightly (see the following figure).

Figure 63: Development of market shares in subscribers

tele.ring increased its market share in subscribers in 2003 from 4.5% to 8%, while the competitors' market shares declined slightly. The HHI, the measure of concentration, also dropped slightly.

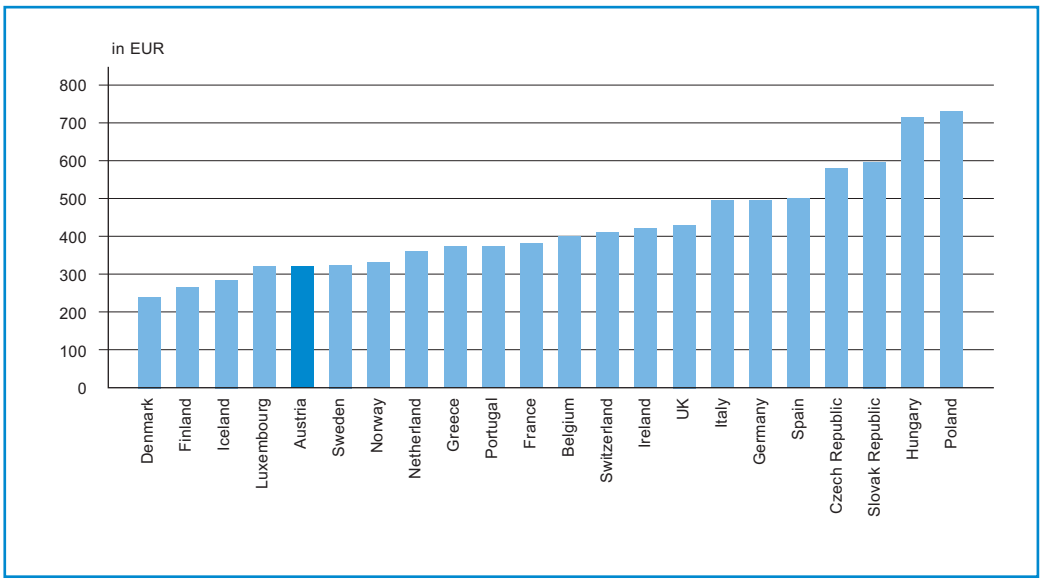


Source: Mobile Communications

5.2.2.2.3 International comparison of tariffs

By international comparison, the tariffs for mobile voice services were among the lowest, as can be seen in the following comparison of prices between selected European countries, which was made on the basis of the Teligen OECD basket in November 2003. The prices of the market baskets were converted into purchasing power parities to ensure better international comparability. The annual communications costs of an average user (medium usage) are shown. Austria is seen to rank fifth (see the following figure). In the field of post-paid tariffs for low users Austria is even shown as the country with the lowest tariffs. In the field of business tariffs, Austria ranks in the middle. The Austrian pre-paid tariffs are rather expensive by international comparison, which is, however, offset by the very low post-paid tariffs for low usage.

Figure 64: International comparison of tariffs – OECD basket (medium user – postpaid, EUR/PPP)



The tariffs for mobile voice services in Austria are among the lowest by international comparison.

Source: Teligen, November 2003

5.2.2.3 Broadband

5.2.2.3.1 Introduction

An alternative operator or Internet Service Provider (ISP) can implement broadband access to end-users either by using self-operated access technologies such as optical fibre (Fibre to the Home – FTTH), Powerline (via powerline networks – PLC), radio networks (W-LAN) and cable television networks (CATV) or by resorting to the unbundled (copper) access network of Telekom Austria and purchasing bitstreaming as wholesale service.

Unbundling and bit-streaming are wholesale services that are offered at different stages of the value chain.

Bitstreaming, in general, refers to a wholesale product that enables, for example, an ISP to provide broadband access services (e.g. to the Internet) without having its own access network. Bitstreaming is usually mentioned in connection with xDSL. As an example, the xDSL wholesale offer ("ISPA Offer") of Telekom Austria shall be mentioned.

Unbundling means that alternative network operators and other "unbundling partners", such as ISPs or leased line operators, need not set up their own infrastructure to connect end-users directly but instead use the copper access network (local loops) of Telekom Austria. The local loop is the physical/electrical connection from the end-user to the switching equipment of the telecommunications network operator. This line, usually a copper pair, connects the network termination point at the subscriber's premises to the main distribution frame (MDF) of the network operator.

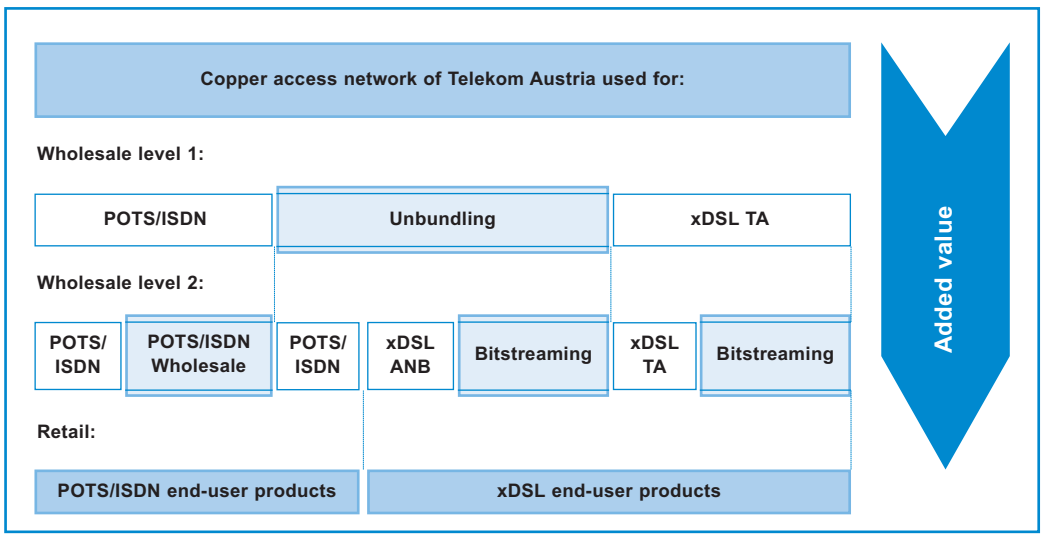
The major part of unbundled local loops is used for broadband access (xDSL). Voice telephony lines via unbundled local loops increasingly play a subordinate role. The vertical relationship between unbundling and bitstreaming is described below.

5.2.2.3.1.1 Description of the vertical integration of unbundling and bitstreaming

To effect unbundling, the respective subscriber's local loop is (electrically) connected to the network of the unbundling partner in a separate room (co-location room) at the MDF[16]. For this purpose the unbundling partner has to make considerable investments in the adaptation of the collocation room, in backhaul[17] as well as in separate switching equipment. These investments can only pay off if a sufficiently great number (critical amount) of subscribers want to be unbundled by the unbundling partner at the location of the respective MDF (local loop area).

Alternatively, it is therefore possible to resort to the wholesale product of bitstreaming (broadband xDSL access) at the next stage of the value chain. The investments that the alternative operator or the ISP has to make for bitstreaming are basically limited to erecting one's own network infrastructure[18] to at least one of nine ATM access points (POP). Depending on the link, national or regional charges of different amounts are incurred.

Figure 65: Stages of the value chain in the access network



[16] The MDF is located either at a remote concentrator or a switching exchange of Telekom Austria.

[17] Can be implemented also via leased lines.

[18] Can be implemented also via leased lines.

[19] 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.

Finally, at the retail level broadband xDSL access (e.g. to the Internet) is offered. The following figure illustrates the stages of the value chain described.[19]

At the wholesale level 1, Telekom Austria either uses the copper pairs of the access network for the provision of its own end-user products or the local loop is leased to unbundling partners. At the 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 provide these services as wholesale product to its competitors.

5.2.2.3.1.2 Broadband Internet

At the retail level, at present (mainly) three types of Internet access are implemented:

- dial-in access (dial-in modem via PSTN/ISDN);
- broadband access by means of digital subscriber connection technologies (xDSL via own or unbundled local loops) or cable modem (cable TV networks/HFC);
- leased lines.

These types of Internet access differ according to bandwidth, prices, pricing categories (e.g. depending on the data transmission volume) and quality.

The typical characteristics of broadband Internet access that set it apart from narrowband Internet access are that broadband Internet access

- provides for a downstream capacity greater than 144 kbit/s (corresponds to 2x ISDN B-channel + D channel) and
- enables Always-On Service.

In terms of the data rate, there exists no (international) standard definition for broadband. Voice telephony is to be definitely rated as narrowband. A conventional voice channel has 64 kbit/s. An ISDN access has 144 kbit/s (corresponds to 2xISDN B channel + D channel). The regulatory authority identified this figure as upper limit for narrowband. Therefore, transmission rates beyond that shall be rated as broadband.

5.2.2.3.1.3 Transmission technology

Digital Subscriber Line (DSL)
DSL is a technical option 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" refers to the different transmission rates 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 conducted via an existing POTS or ISDN basic access together with the existing subscriber line, since voice telephony (POTS, ISDN-BA) and the ADSL data service use disjunctive frequency bands (ADSL works in the higher frequency band). The associated signals are divided at the customer's location by means of frequency filters ("splitters") and at the local switching exchange. On the end-user side, each subscriber has an ADSL modem, while on the side of the switching exchange, the modems are implemented techni-

cally in the so-called DSLAM (Digital Subscriber Line Access Multiplexer), where the data packets of the individual subscriber lines are compiled for further transmission (or where the packages are distributed in the direction of the subscribers). For the transport of the data packages from the DSLAM at the MDF of the local exchange to the service provider (typically an Internet Service Provider) a separate data network is used (e.g. on the basis of ATM).

Apart from asymmetric transmission methods, there also exist symmetric techniques (e.g. SDSL), where the entire frequency spectrum on the subscriber line is used for high bit-rate data transmission.

Leased lines

Even though broadband access (also to the Internet) can be implemented via leased lines, depending on their capacity, their characteristics differ from those of DSL services and Internet access via cable modem. In contrast to DSL services, leased lines provide transmission capacity for exclusive use by the customer ("dedicated capacity"). As a consequence, consistent transmission quality over time is guaranteed. With DSL services such dedicated capacity is only available in the local loop area, whereas in the backbone (e.g. ATM) simultaneous shared use of transmission capacity (shared capacity) may affect the usage options due to transmission bottlenecks that may occur (depending on the dimensioning of the overbooking factors). Broadband Internet access via leased lines is in greater demand by larger companies.

Cable modem (CATV / HFC network)

Broadband access via cable modem takes an approach that is similar to DSL (shared capacity as opposed to dedicated capacity with leased lines). Here, the infrastructure (or bandwidth) - also on the last section of the line contrary to DLS - is not dedicated exclusively to each customer. Advertising, pricing, response behaviour in the case of product changes/expansions as well as bandwidths suggest that xDSL and cable modem are equivalents at the retail level both in technical and economic respects.

Other access technologies for the provision of broadband Internet access:

In Austria, other access technologies were not as common as xDSL and CATV in 2003:

- PLC (Powerline): this technology has basically not proceeded beyond the experimental stage. Pilot operations were partly discontinued after several years. In this respect, problems occurred in connection with frequency emission that might cause interference, for example, in the frequency band used by radio amateurs.
- W-LAN: at present, W-LAN is spreading fast, for one, as quasi-mobile broadband access at hot spots (airports, train stations, cafés) but also as an alternative to line-based broadband Internet access in rural areas where this is not available. Even if W-LAN is spreading fast, the absolute number of end-users is still comparatively low (estimated 7,500 connections at the end of 2003).

[20] Not meeting all mobility requirements, such as blanket coverage, hand-over etc.

- 3G: since the beginning of 2004, all mobile operators that are operative in Austria have been operating their UMTS networks in compliance with the licence obligations. At present, this technology is not (yet) a substitute for line-based Internet access. On the one hand, from a technical point of view, the transmission rates reached do not yet match those of an end-user's conventional ASDL line, on the other hand, above all the mobile aspect is in the foreground.

Other access technologies, e.g. via satellite, FTTH etc., still play a subordinate role in Austria.

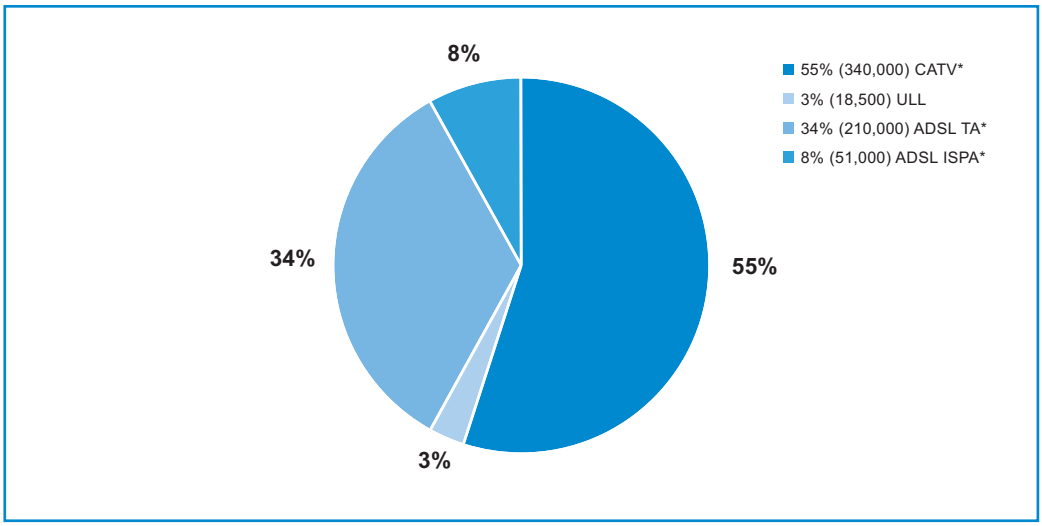
5.2.2.3.2 Retail market for broadband Internet

More than half of all broadband Internet access services are provided via cable TV networks.

The first company to provide broadband Internet access for the retail market was Telekabel (now UPC) that, in 1996, put the product "teleweb" on the market via the cable TV network (HFC), which was renamed "chello" in June 1999. Three years later, in November 1999, Telekom Austria followed with ADSL. Since then, the prices of the two competing products were seen to take similar developments.

According to Telekom Austria, in 2003 the potential supply of about 80% of the Austrian households with ADSL was possible.

Figure 66: Types of broadband access

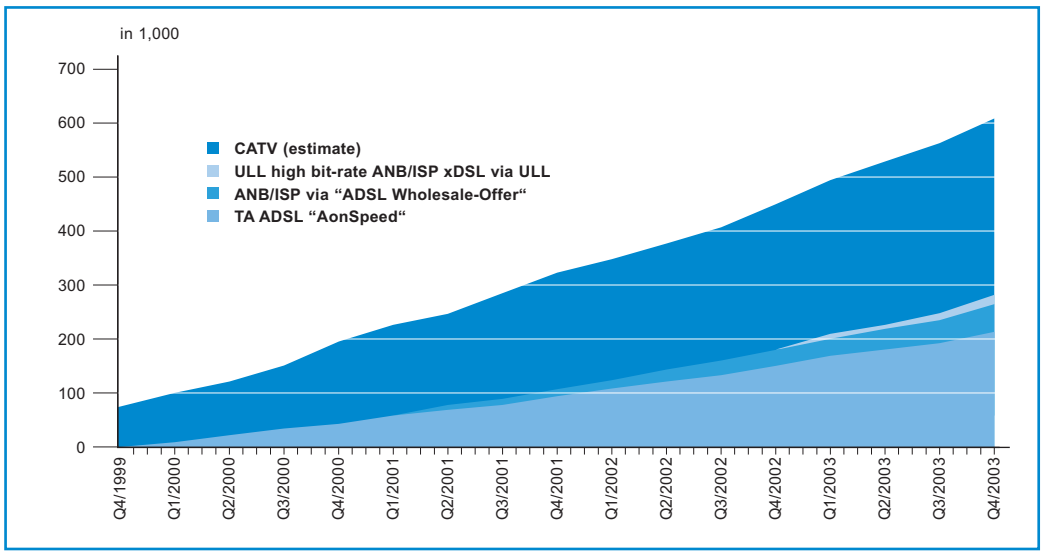


Source: RTR-GmbH (figures with * are partly forecasts), approx. 19% of households at the end of Q4/2003

As can be seen in the chart, at the end of 2003, the cable TV operators had a share of about 55% in the retail market, about 60% of which were attributable to UPC-Telekabel and its product "chello" (thus more than 30% of the retail broadband market). This falls slightly short of Telekom Austria's market share. While Telekom Austria reached this market share in throughout Austria, Telekabel focuses mainly on Vienna, Graz and Klagenfurt. Thus, at two thirds, the market shares reached in Vienna are very much in favour of Telekabel.

The development of broadband access over time is presented in the following figure:

Figure 67: Broadband connections over time



Source: RTR-GmbH

5.2.2.3.3 Wholesale market for bitstreaming

In November 1999, Telekom Austria put an offering for an ADSL based Internet service for its own customers on the market. After intervention of the present RTR-GmbH and negotiations between the Association of the Austrian Internet Service Providers (ISPA) and Telekom Austria an agreement on a standard wholesale offer ("ISPA Offer") was reached in March 2000. Telekom Austria was to offer the prices of the ISPA Offer to all ISPs on a non-discriminatory basis and, in particular, was not to give preference to the ISP of Telekom Austria Group.

In addition to the standard wholesale offer ("ISPA Offer") of Telekom Austria, there exist a bitstreaming product of UTA, as well as numerous wholesale products of cable TV operators that are either not vertically integrated in terms of broadband and thus do not provide ISP services (including Internet connectivity) themselves or, apart from their own broadband access, enable users to obtain services from other ISPs.

The wholesale product called "bitstreaming" that is based on xDSL technology is predominantly provided by Telekom Austria (more than 90%). To a small degree, unbundling partners also offer bitstreaming to other ISPs via local loops that were unbundled by them. For the market shares of broadband access via cable networks, to be regarded as equivalent, see Figure 66.

5.2.2.3.4 Wholesale market for unbundling

The wholesale market for unbundling depends considerably on rulings of the TKK.

5.2.2.3.4.1 Rulings on unbundling

Full unbundling
The TKK gave the first ruling on unbundling on 02.07.1999, which enabled the providers of fixed network voice telephony services to access the entire local loop. The monthly rental charge of EUR 12.35 was based on a mixed calculation of top-down costs (historical full costs of Telekom Austria) and bottom-up costs (replacement costs on the basis of an Austrian nation-wide survey on behalf of the Association of Alternative Telecom Network Operators - VAT); in particular, the monthly rental charge did not differentiate as to the type of usage of the unbundled local loop (high/low bit-rate).

In spring and summer 2000, rulings on unbundling were issued that, basically, provided that the above mentioned unbundling rulings for alternative operators of fixed network voice telephony services issued in July 1999 were to apply also to ISPs and leased line operators at the same conditions.

After expiry of the unbundling rulings (for voice telephony operators, ISPs and leased line operators) the TKK decided on 12.03.2001 to adopt standardised follow-up provisions in the form of new unbundling rulings of indefinite duration (not applicable to charges). The monthly rental charge for access to the entire local loop was lowered to EUR 11.60 (as from 01.01.2001: EUR 10.90) by determining the costs of the local loop on the basis of the analytical bottom-up costing model, developed in cooperation with the "Wissenschaftliches Institut für Kommunikationsdienste" (WIK) (Scientific Institute for Communications Services); at the same time, the possibility was provided, for the first time, to have access to parts of the local loop (In January 2003, the charges of EUR 10.90 were last ruled to apply until 30.09.2004).

These provisions created major incentives for a cost-efficient range of innovative broadband services, mainly in the Internet sector.

Sub-loop unbundling
The rulings by the TKK on unbundling issued in spring 2001, for the first time, provided for so-called "sub-loop unbundling" at the relevant switching units (in-house distribution points, remote concentrators) at correspondingly lower charges. For access to the distribution frames in buildings a fee of EUR 0.— was fixed, since the installation fee paid by the subscriber would cover these costs. So far, the sub-loop unbundling option has not been used. However, it may be assumed that in the process of the ongoing evaluation as to the possibilities of using VDSL on unbundled lines sub-loop unbundling might become more attractive.

Shared use of the unbundled copper pair

In the framework of the standard unbundling offer that companies with SMP are obliged to provide also provisions on the shared use of the unbundled local loop (also referred to as "frequency unbundling" or "shared use") were created. The monthly rental charge for shared use was determined to be 50% of the monthly charge of full unbundling, the installation fee was fixed at the double amount of the installation fee applicable to full unbundling, due to the extra costs involved in returning the voice telephony portion to Telekom Austria.

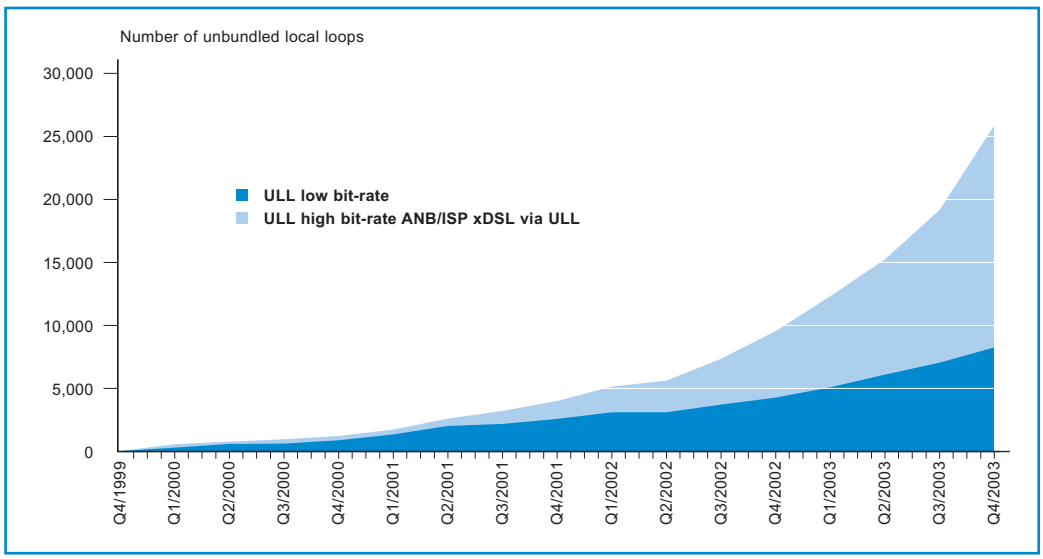
Unbundling and X.25 access

In January 2003, the TKK decided to rule again, until 30.09.2004, on the charges that had applied till 30.09.2002 (i.e. EUR 10.90 for the full local loop and EUR 8.43 for the sub-loop). The request for a ruling on provisions regarding unbundling of a local loop with automatic teller machine function (X.25 terminal) was rejected as these provisions were neither covered by unbundling nor by the concept of network access.

5.2.2.3.4.2 Market data

The following figure shows the development of unbundling over time:

Figure 68: Development of local loop unbundling in Austria



Source: RTR-GmbH

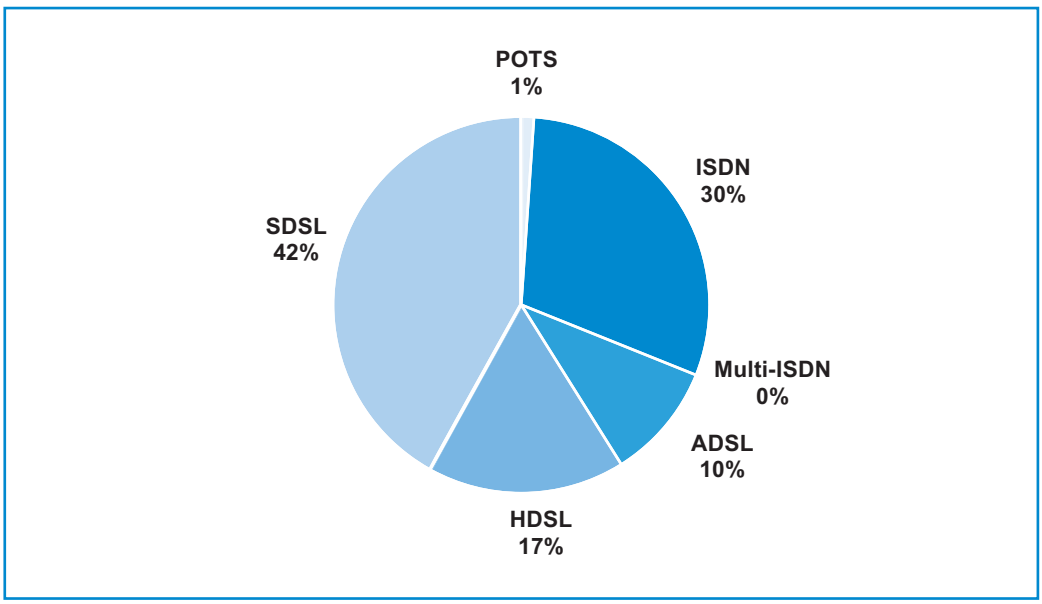
With currently less than 1% of all lines, unbundling is still not widely distributed in Austria. The focus is placed on xDSL access services.

The annual growth rate was approx. 179% at the end of 2003, i.e. growth is very high even though it takes place at a low level. By the end of 2003, only about 0.85% of all lines of Telekom Austria were unbundled. The share of ULLs (unbundled local loops) used for broadband is increasing steadily and was about 70% at the end of 2003. There is no demand for shared use and sub-loop unbundling.

At 161 of a total of 1,400 Main Distribution Frames (MDF) there are 340 co-locations of 14 unbundling partners (including CyberTron[21] with 65 co-location rooms, as per end 2003).

Only about 30% of the unbundled local loops are not used for broadband but for ISDN (mainly for business customers). The major share takes SDSL with 42%.

Figure 69: Usage of unbundled local loops in Austria (Q4/2003)



Source: RTR-GmbH

In the meantime (end 2003), potentially, 47% of the households can be supplied via ULL with telecommunications services, while, potentially, 1.4% of the households can choose from among six and 30%, after all, from at least two unbundling partners.

The supply in the individual federal provinces varies: while the potential coverage of households with ULL was approx. 47% at the end of 2003 (this corresponds to about 41% of the population and about 6% of the area), 93% of the Viennese households have the option of selecting another unbundling partner, in addition to Telekom Austria and UPC (23% of the households related to all of Austria). In Burgenland only 11% of the households can be supplied with ULL.

If the theoretical potential of the "unbundling operators" that are currently operative is examined, even the unbundling operator ranking third is still able to reach more than 15% of all households.

With a basic supply potential of households with ULL of almost 50% (as per end 2003), there exists an enormous still unused potential for opening the market, in particular with innovative

[21] CyberTron has gone bankrupt.

technologies and products. However, it takes time and major marketing expenditure to address these persons and attract them as customers.

Due to significant investments in the network infrastructure, unbundling does not only mean infrastructure competition (to the last mile) but also requires a longer-term strategy as well as good marketing and sale.

Some practical aspects of the unbundling process still require improvement, such as the transparency of the orders, the organisational structures and the provision of the unbundled lines.

It will be of critical importance for further overall development how fast the demanders will reach a critical mass of customers and thus achieve significant fixed cost degression.

5.2.2.4 Leased lines

5.2.2.4.1 Introduction

Whereas the previous RTR reports discussed the market for leased lines, in analogy to the other communications markets, this market is now broken down in retail and wholesale markets, according to the system of market delineation in the TKMVO 2003 and the recommendation of the European Commission on the relevant product and service markets Specifically, in the TKMVO 2003 the following three relevant leased line markets are distinguished:

In the leased line sector, a retail segment and two wholesale segments were defined as relevant markets. Retail leased lines with bandwidths greater than 2 Mbit/s are not relevant.

At the retail level, the relevant market refers to the minimum set of leased lines which comprises the specified types of leased lines up to and including 2 Mbit/s; at the wholesale level, there is one relevant market for trunk segments of leased lines and another for terminating segments of leased lines; both wholesale markets are relevant without any capacity limits. Leased lines greater than 2 Mbit/s were not considered as relevant and were therefore not further defined as market.

Leased lines can be used for different applications: on the one hand, network operators or service providers use them as basic transport infrastructure for the provision of their services, as they can set up or expand their networks by using leased lines as long as they do not have their own infrastructure. On the other hand, business customers use leased lines to interconnect company locations for the exchange of voice and data communications, which are available to them exclusively and throughout (24 hours/365 days) in the specified bandwidth. Accordingly, the differentiation between retail and wholesale markets is based on the status of the demander for the leased line. If it is to be used for the provision of communications services (e.g. by linking up base stations for mobile communications to the network or connecting a subscriber to another operator's network node), the leased line shall be attributable to the wholesale market. Accordingly, the provision of leased lines to holders of general authorisations shall be regarded as wholesale service, whereas the provision of leased line services to other customers (e.g. an international bank) shall be attributable to the retail market.

Due to the new definition of the markets, a comparison with the data collected previously is possible only to a limited extent. It has to be noted that the data applies only to national leased lines, comprising now also transactions between affiliated companies, and that connections to user-end X.25, ATM, IP and Frame Relay interfaces at the network termination points are not part of the markets.

As described in the introductory section, rather than to discuss the individual markets, an overall view of leased lines in Austria will be given.

5.2.2.4.2 Market data

The activities of a large number of providers lead to increasing competition, in particular on the wholesale markets. On the whole, sales were seen to stall, while the demand for bandwidth was increasing.

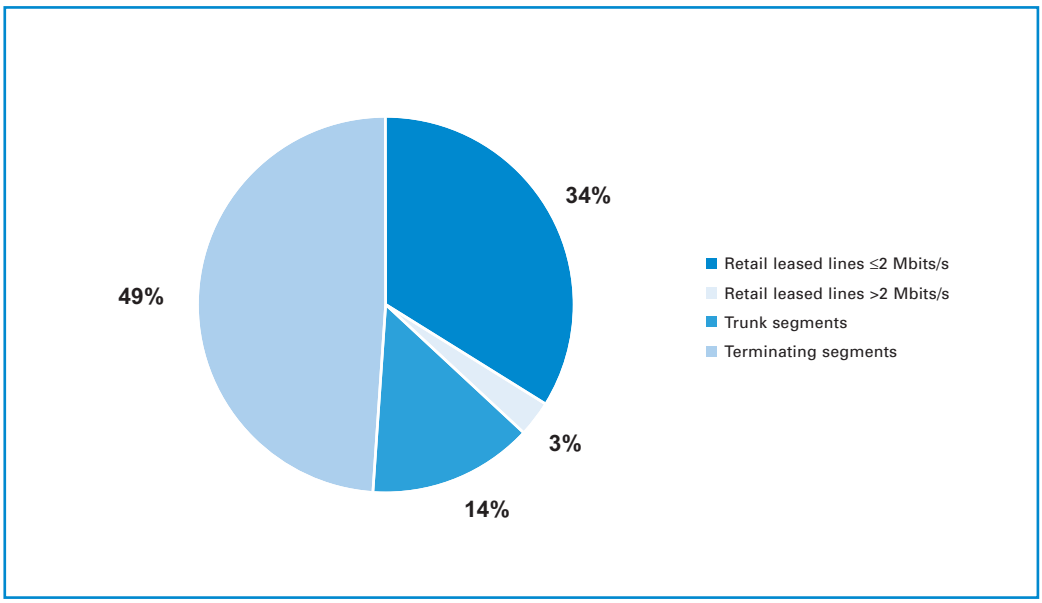
Under the new legal framework leased line operators need no longer obtain a licence for the provision of leased lines but, instead, a general authorisation for the business field "provision of leased line services" is sufficient. For leasing and the sale of optical fibre without electro-optical infrastructure, so-called Dark Fibre, no communications-specific licence is required.

At present, there are about 40 companies that offer their services on the Austrian leased line markets. The majority of the companies are operative only at the regional level. They are usually infrastructure providers from other industry sectors (e.g. the energy sector) that consider telecommunications as a secondary business segment and use existing lines, or they are regional network providers. At the national level, lines are offered by international groups of companies that expand their global networks also to Austria on the one hand and by voice telephony providers on the other. Some providers are seen to specialise on retail leased lines or international leased lines. There are, however, only few operators with nation-wide coverage.

For the most part, sales are generated on the wholesale markets, especially in the terminating segments, whereas the minor part is attributable to the retail market. This means that the demand for leased lines depends considerably on communications infrastructure being set up, in particular at the local level.

The following figure shows the distribution of sales on the individual markets from January 2002 until September 2003:

Figure 70: Distribution of sales on the markets in % in 2002/2003



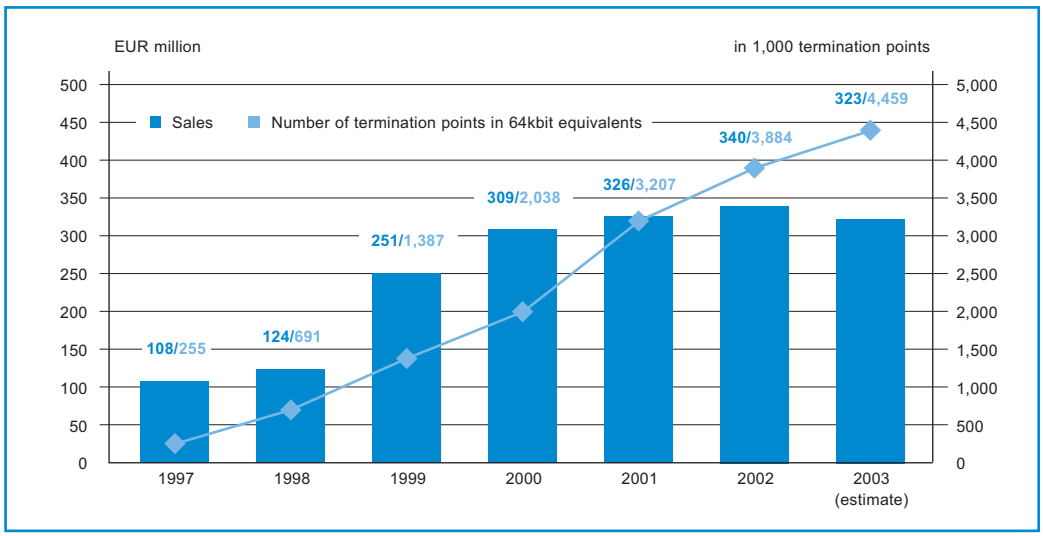
Source: RTR-GmbH

The degree of concentration, in terms of sales on the markets observed, varies greatly. Whereas Telekom Austria's market share was still very high on the retail market up to 2 Mbit/s, resulting in an HHI of 8,208 for 2003 (January to September), competition of the alternative providers was clearly seen to take place on the wholesale markets, which is indicated by a significantly lower HHI. In 2003 (January to September), the HHI was 4,910 on the market for terminating segments and 3,799 on the market for trunk segments. This development is due to the fact that on the wholesale markets own infrastructure is increasingly available.

A comparison of the sales achieved in the period under review against previous years shows that in 2002 there was still moderate growth, followed by a slight decline in sales in 2003, with the demand for capacities increasing in both years. This is due, in particular, to the marked increase in the demand for international leased lines. The decrease in the total number of leased lines in the period under review suggests that low bit-rate leased lines were replaced by higher-bandwidth leased lines. The growth in capacities with declining sales shows that, in particular in 2003, the leased line market was affected by drastic price reductions.

The following figure shows the development of sales and capacities since 1997:

Figure 71: Development of sales and capacities



Source: RTR-GmbH

The sales and capacity figures comprise national and international leased lines, with the exception of dark fibre and copper pairs. The figures for 2002 and 2003 are slightly below the actual development, as one international provider that specialises on high bandwidths did not provide data on sales and capacities for its international leased lines.

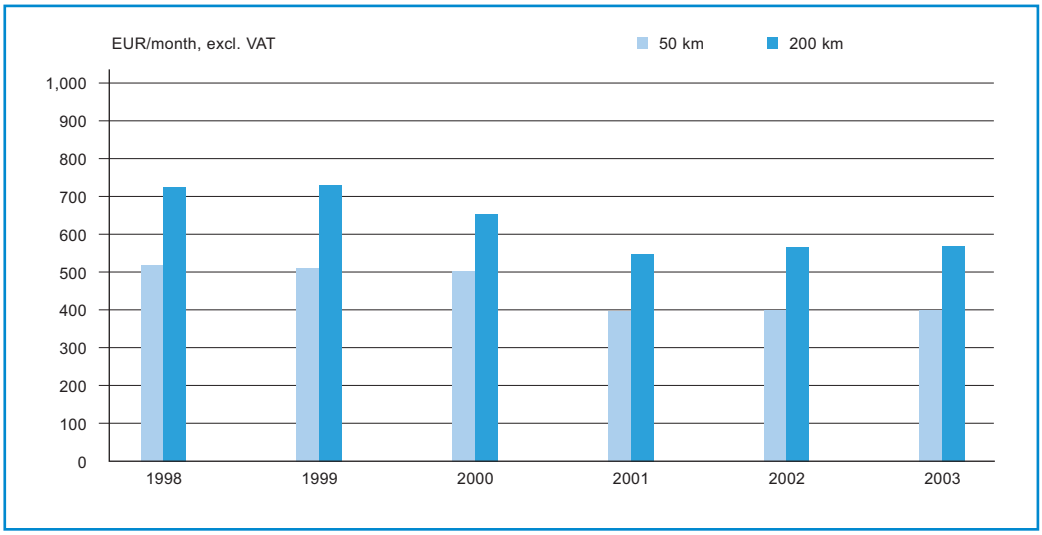
5.2.2.4.3 Tariffs

The price structure of the individual leased providers is highly heterogeneous. In 2003, the tariffs of Telekom Austria were markedly below the ones of 1998.

Usually, leased line operators use individualised tariff sheets that are very difficult to compare. The price of a leased line depends primarily on the demanded bandwidth, the distance, the technical characteristics as well as the geographical position of the termination points; additional components, such as special service qualities or supplementary services, also affect the price. Especially, in the case of major customers or with wholesale leased lines project prices are often agreed, where the customer leases an entire line system at corresponding framework conditions.

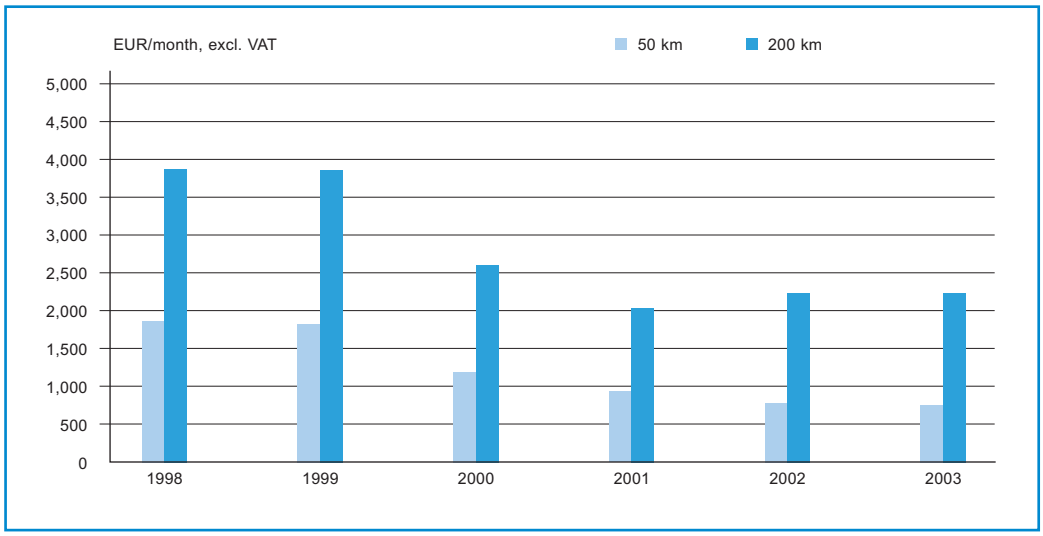
In recent years, the prices were falling due to the increasing number of providers and associated with idle capacities. The only company subject to price regulation because of its SMP, Telekom Austria, made a tariff request regarding digital leased lines with a capacity of nx64k, S0 lines and digital data lines DDL-LHS, which was granted. Since the liberalisation of the telecommunications markets Telekom Austria's tariff structure for distances of 50 km and 200 km has developed as follows:

Figure 72: Tariff development Telekom Austria 64 kbit/s



Source: Teligen, Report on Telecoms Price Developments from 1998 to 2003 (produced for DG INFSO), Sept. 2003

Figure 73: Tariff development Telekom Austria 2 Mbit/s



Source: Teligen, Report on Telecoms Price Developments from 1998 to 2003 (produced for DG INFSO), Sept. 2003

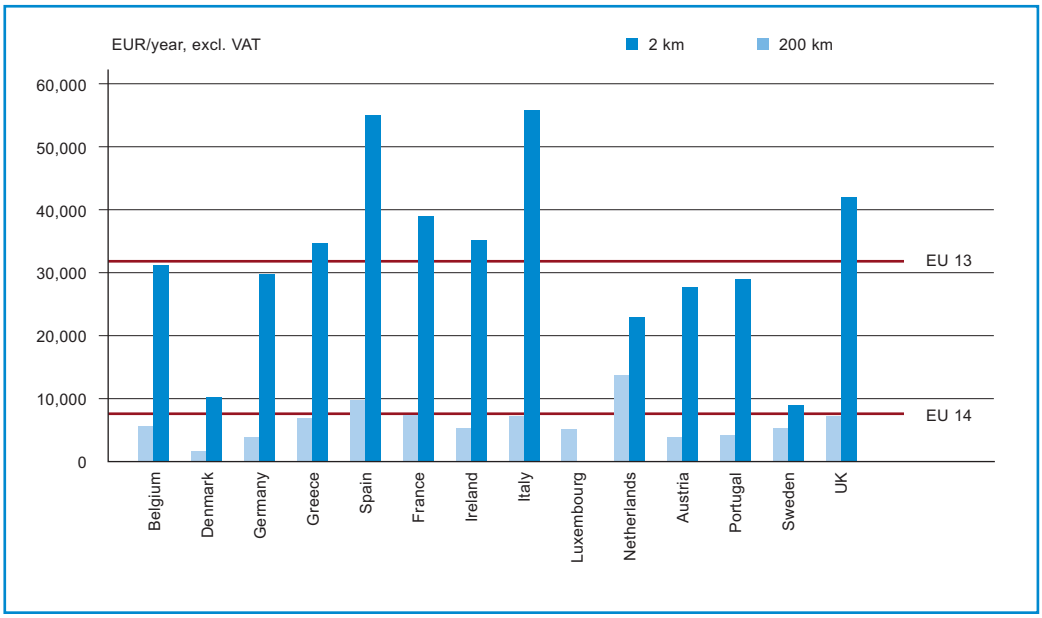
The bandwidths selected for the comparison represent the leased lines that are in greatest demand on the retail market. It is apparent that the prices are declining across all distances and bandwidths.

5.2.2.4.4 International comparison of tariffs

For high bit-rate products the Austrian leased line prices are below the European average.

International comparisons for leased line prices are regularly published in the Implementation Reports of the European Commission. A comparison of 2 Mbit/s retail leased lines from the most recent publication that reflects the tariffs as per 01.08.2003 shall be given as an example. The prices of Telekom Austria that were used for Austria were seen to be below the EU average for both short (2 km) and longer (200 km) distances.

Figure 74: International comparison of tariffs, 2 Mbit/s, 2003



Source: 9th Implementation Report, Annex 1, (EU 13 = without Finland and Luxembourg; EU 14 = without Finland)

But also for 34 Mbit/s and 155 Mbit/s leased lines the tariffs of Telekom Austria are lower than the European average.

5.2.2.5 The markets for electronic signatures

From the range of services involving electronic signatures, the certification providers shall be mentioned first. In 2003, five providers of certification services were operative in Austria:

- Verein Arge Daten – Österreichische Gesellschaft für Datenschutz,
- A-Trust Gesellschaft für Sicherheitssysteme im elektronischen Datenverkehr GmbH,
- Generali group (in 2003 several structural transformations took place within the group, since December 2003 certification services have been offered by Generali IT-Solutions GmbH),
- Institut für Angewandte Informationsverarbeitung und Kommunikationstechnologie (IAIK) and
- Web und Co – Webdesign, Multimedia und Consulting GmbH & Co KG.

The five providers of certification services offered a total of 23 certification services (at the end of 2003, 21 of them were operative). The certification services cover the entire usage range of such services. Basically, the services offered can be grouped as follows:

Qualified certificates for secure electronic signatures: these certificates are issued only after an identity check by means of an official identity card with photograph and only for keys that are stored on a secure signature generation unit. Secure electronic signatures are legally equivalent to a personal signature. Therefore, these certificates are mainly used for legal business transactions. Secure electronic signatures have been offered in Austria since the beginning of 2002. In 2003, A-Trust was the only company to provide such certificates.

Simple certificates for keys stored on chip cards: these certificates are used for authentication, for signatures (e.g. of e-mails) and for encryption. In this field, too, A-Trust was the only provider in 2003.

Other simple certificates involving an identity check by means of an official identity card with photograph are offered by Arge Daten, by A-Trust, by Generali and by IAIK.

The last group to be mentioned are certificates that are not necessarily subject to an identity check by means of an official ID with photograph.

Since the SigG entered into force on 01.01.2000, the number of certificates issued in Austria increased threefold every year. As per 01.11.2003, there were about 10,000 qualified certificates and about 22,000 non-qualified certificates in Austria, i.e. roughly 30,000 had made use of electronic signatures.

In addition to the providers of certification services that are supervised by the TKK, there are companies that produce products for secure electronic signatures: chip cards, chip card readers and secure viewers.

A-SIT, the Austrian accredited certifications provider tested and certified a total of five chip cards until the end of 2003. Mainly, Philips smart card controllers with the STARCOS operating system of Giesecke & Devrient were used in practical application. In the case of chip card readers, a considerable number of products were used. A-SIT issued certifications for products from Kobil, Reiner and Siemens, the Siemens Sign@tor is an Austrian development. As secure viewers, i.e. programmes that ensure the security of the process of signature production and, in particular, display the document to be signed in an unalterable manner, so far only Austrian products have been used in Austria: MBS-Sign and hot:Sign from BDC EDV Consulting GmbH and trustview from IT Solution GmbH.

For further information on the development of the market, see section 3 of the report “Four years of the Signature Act” published in the series of periodical publications of RTR-GmbH.

6. The company

6.1 Staff development

Additional statutory missions were tackled with slightly higher staff resources.

To be able to perform the tasks pursuant to the KOG and the TKG, an average number of 84 full-time jobs were planned for the business year 2003.

The additional functions (see section 4.1.12 and 4.1.13) arising from the amendment of the KommAustria Act (KOG) BGBl. I No. 71/2003 § 9a to § 9h had an impact on the staff figures in November and December 2003, when the number of staff members climbed to 87 full-time employees. As per 31.12.02, 46 of them worked in the Telecommunications Department, 20 in the Broadcasting Department and 21 in the service departments (see Figure 75).

Figure 75: Staff development of RTR-GmbH in 2003

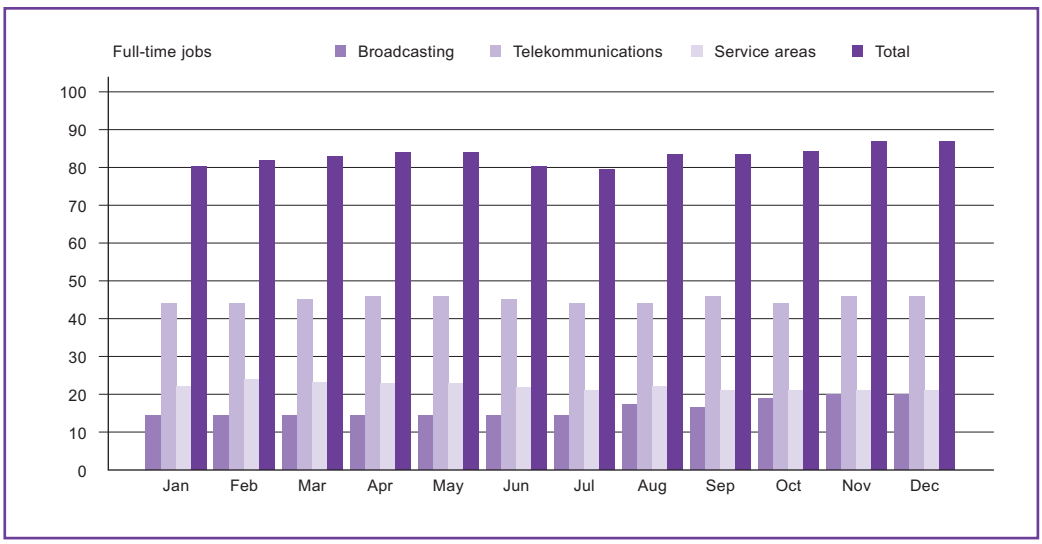
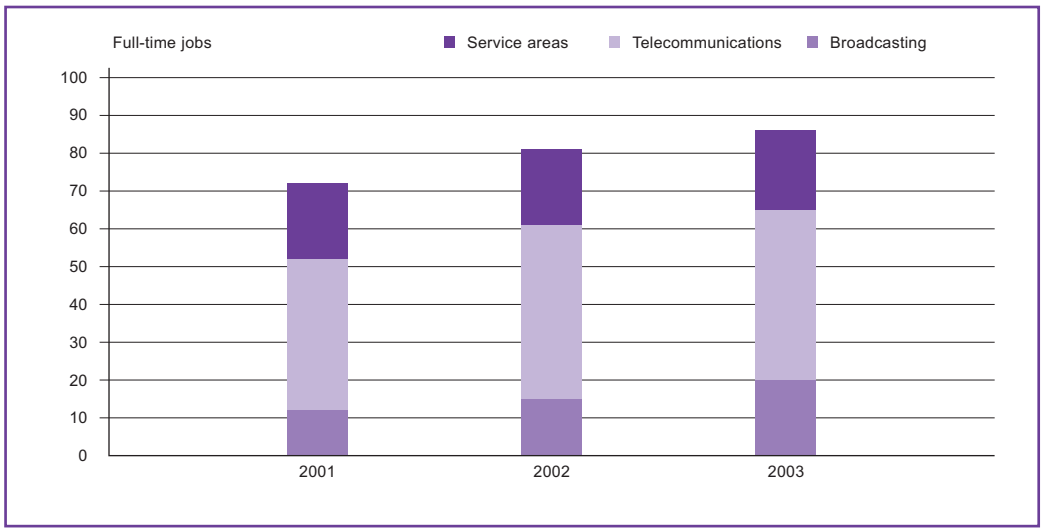


Figure 76 illustrates the staff development of RTR-GmbH of the past three years.

Figure 76: Number of staff members 2001 – 2003 (as per 31.12.)



6.2 Annual accounts

For the annual accounts of the business year (01.01.2003 to 31.12.2003) an unqualified audit report of the auditing company Deloitte & Touche is available.

From the annual accounts 2003, the income statement and the balance sheet of RTR-GmbH are presented.

The major part of the sales revenues of RTR-GmbH in 2003 came from the financing contributions according to § 10 KOG (EUR 8.47 million). The annual loss of EUR 393,000 resulted mainly from expenditures incurred in executing the tasks according to the SigG. The operating result from the execution of the tasks according to the KOG is balanced, the net loss of EUR 1.55 million is also due to the execution of the tasks under the SigG and is covered by the capital increase of EUR 2.11 million performed in 2000.

Income statement for 2003

		2003		2002	
		in EUR		in thousand EUR	
1.	Sales revenue		8,567,043.37		8,498
2.	Other operating income				
	a) Income from the retransfer of provisions	83,479,96		150	
	b) Other	145,453,76	228,933.72	205	355
3.	Personnel expenses				
	a) Salaries	-4,528,116.70		-4,240	
	b) Cost of severance payments	-92,981.91		-108	
	c) Cost of statutory social insurance contributions, as well as remuneration-dependent charges and mandatory contributions	-913,850.71		-834	
	d) Voluntary social expenditure	-103,658.59	-5,638,607.91	-60	-5,242
4.	Depreciation of intangible fixed assets and tangible assets		-516,038.22		-648
5.	Other operating expenses		-3,126,520.34		-3,448
6.	**Sub-total of items 1 to 5, operating income**		**-485,189.38**		**-485**
7.	Income from other investments held as financial assets		80,471.72		67
8.	Other interest and similar income		31,276.54		64
9.	Expenses from financial assets		-19,491.40		-77
10.	Interest and similar expenses		-0.87		0
11.	**Sub-total of items 7 to 10, financial result**		**92,255.99**		**54**
12.	**Profit on ordinary activities = net loss**		**-392,933.39**		**-431**
13.	Retransfer of untaxed reserves		28,956.27		51
14.	Loss carryforward from previous year		-1,187,658.25		-808
15.	**Net loss**		**-1,551,635.37**		**-1,188**

Balance sheet as per 31.12.2003

Assets

		31.12.2003	31.12.02
		in EUR	in thousand EUR
A.	**Fixed assets**		
I.	Intangible assets		
	1. Industrial property rights and similar rights	128,803.84	302
		128,803.84	302
II.	Tangible assets		
	1. Leasehold improvements	387,214.40	488
	2. Other fixtures and fittings, tools and equipment	236,953.52	263
		624,167.92	751
III.	Financial assets		
	1. Investments held as fixed assets	2,830,703.63	2,845
		2,830,703.63	2,845
		3,583,675.39	3,898
B.	**Current assets**		
I.	Accounts receivable		
	1. Accounts receivable (trade debtors)	2,740,388.64	3,252
	2. Other receivables	1,702.86	28
		2,742,091.50	3,280
II.	Cash on hand and cash in banking accounts	1,560,964.07	1,116
		4,303,055.57	4,396
C.	**Prepayment and accrued income**	404,110.24	104
		8,290,841.20	8,398

Liabilities

		31.12.2003	31.12.02
		in EUR	in thousand EUR
A.	**Capital stock**		
I.	Nominal capital	5,741,153.90	5,741
II.	Net loss for the year, of which carry-forward EUR 1,187,658.25	-1,551,635.37	-1,188
		4,189,518.53	4,553
B.	**Untaxed reserves**		
I.	Other untaxed reserves Investment allowance acc. to § 10 Income Tax Act	5,038.04	34
		5,038.04	34
C.	**Provisions**		
	1. Provisions for severance payments	277,700.00	219
	2. Other provisions	1,024,700.00	999
		1,302,400.00	1,218
D.	**Liabilities**		
	1. Accounts payable	159,416.08	428
	2. Other liabilities, of which for taxes EUR 508,366.10, for social security EUR 97,949.78	2,634,468.55	2,165
		2,793,884.63	2,593
		8,290,841.20	8,398

6.3 Explanation of the annual accounts

The funding of the execution of the tasks of RTR-GmbH (§ 5 KOG (3)) is laid down in § 10 KOG and is made by the providers who are under the notification obligation pursuant to § 15 TKG 2003 as well as by the broadcasting providers that are established in Austria (contributories). They have to make annual financial contributions to cover the expenditure of the regulatory authority for the respective sector.

With the entry into force of the SigG, BGBl. I No. 1999/190, the TKK was set up as the supervisory authority pursuant to § 13 SigG. Pursuant to § 13 (7) and § 15 (5) SigG, the activities of the supervisory authority and RTR-GmbH under the Signature Act shall be kept separate from the activities under other federal acts (TKG, KOG etc.) in all organisational and financial aspects.

Pursuant to § 13 (4) SigG, the supervisory authority must require the providers of certification services to pay cost covering fees for its activities and for consultation of RTR-GmbH for the tasks to be performed under the SigG. This fee is determined by means of an ordinance.

In the period 01.01.-31.12.2003, RTR-GmbH incurred costs in the total amount of EUR 402,191.89 in complying with the tasks under the SigG. Revenues in the amount of EUR 38,196.50 can be found on the other side of the accounts. The only revenue of the supervisory authority for electronic signatures is generated from the fees paid by the providers of certification services, which, in turn, depend on the number of qualified certificates issued (§ 1 (1) and (2) SigV). Even though the number of certificates issued in Austria tripled annually since the SigG took effect, it did not live up to the expectations. Therefore, the supervisory authority did not earn sufficient revenues to cover the costs of the supervisory activities. The excess expenses have to be covered by the funds raised by the capital increase.

By the amendment of the KOG, a Digitisation Fund and a Television Film Fund were established as per the beginning of 2004, pursuant to §§ 9a to 9e KOG (Digitisation Fund) and §§ 9f to 9g in connection with §§ 9c to 9e KOG (Television Film Fund).

In addition to general preparatory work (pilot operation for digital television, DVB-T), in 2003 mainly the guidelines for the award of grants from the funds and the application documents were drawn up. The total costs of EUR 338,536.62 incurred (EUR 271,732.49 for the Digitisation Fund – DF, EUR 66,804.13 for the Television Film Fund – FFFF) will be refunded to RTR-GmbH from the resources of the funds in 2004 and were therefore included under item "Prepayment and accrued income" in the balance sheet as per 31.12.2003.

The funding of RTR-GmbH by the telecom operators and the broadcasters is laid down in § 10 KOG. The ORF, by far the largest broadcasting company in Austria, whose contribution to the financing of the Broadcasting Department is high, however, disputes in part the lawfulness of the financial contribution made to RTR-GmbH. The VfGH used a complaint by the ORF as an opportunity to review the lawfulness of § 10 KOG (basis for financing of RTR-GmbH). A ruling by the VfGH is not expected to be given before June 2004. Depending on the result of this review, a reform of the financing system of RTR-GmbH on a statutory basis cannot be ruled out.

RTR-GmbH draws up annual accounts which do not show a breakdown of the funds into sectors. Therefore, major expense items are shown for the Telecommunications and Broadcasting Departments in Table 20 and Table 21. Also, the expenses attributable to electronic signatures (ELSI) and to the Telekom-Control-Commission (TKK) are given separately for the Telecommunications Department. On the other hand, the expenses for the funds and KommAustria are also presented separately for the Broadcasting Department. For the business year 2003, the breakdown of expenses gave the following picture:

Table 20: Expenses of the Telecommunications Department in 2003

Telecommunications Department (in thousand EUR)	Telecommunications Department total	Attributable to the TKK	ELSI
Personnel expenses	4,259	69	149
Rent and administrative expenses	1,036	5	138
Other expenses	911	24	16
Depreciation	321	-	108
Total expenses	6,527	98	411

The expenses were assigned according to internal accounting guidelines and may deviate from the values according to the Commercial Code.

Table 21: Expenses of the Broadcasting Department in 2003

Broadcasting Department (in thousand EUR)	Broadcasting Department total without Funds*)	Attributable to KommAustria	DF	FFFF
Personnel expenses	1,711	210	61	46
Rent and administrative expenses	492	58	-	-
Other expenses	368	18	210	21
Depreciation	215	-	-	-
Total expenses	2,786	286	271	67

*) In 2003, the two funds had an effect only on the cash flow or the liquidity of RTR-GmbH. The expenses caused by the two funds in 2003 will flow back to RTR-GmbH in 2004, inclusive of interest, by way of the income statement.

The expenses were assigned according to internal accounting guidelines and may deviate from the values according to the Commercial Code.

6.4 The supervisory board of RTR-GmbH

In 2003, the supervisory board of RTR-GmbH comprised the following persons:

- Dr. Wilfried Stadler
  (CEO, Investkredit AG)
  Chairman of the supervisory board
- Dr. Franz Semmernegg
  (board member, Kapsch Aktiengesellschaft)
  Deputy chairman of the supervisory board
- Dr. Matthias Traimer
  (head of Department V/4 , Constitutional Service, Federal Chancellery)
  Member of the supervisory board
- Werner Weidlinger
  (telecommunications expert, cabinet of the Federal Minister, BMVIT)
  Member of the supervisory board

Mag. Ina Sabitzer (telecommunications expert, cabinet of the Federal Minister, BMVIT) succeeded Mr. Werner Weidlinger following his resignation from the supervisory board in July 2003.

The staff was represented in the supervisory board by:

- Dr. Dieter Staudacher, LLM (member of the works council, RTR-GmbH),
- Mag. Sabine Joham (member of the works council, RTR-GmbH).

Mrs. Brigitte Hohenecker succeeded Mrs. Sabine Joham following her resignation from the works council of RTR-GmbH in June 2003.

7. Annex

7.1 Tables, Info Boxes and Figures

Tables

Info Boxes

Figures

7.2 Abbreviations

3G	3rd Generation

A

ADR	Alternative Dispute Resolution
ADSL	Asymmetric Digital Subscriber Line
AK-TK	Working Group Technical Coordination
ANB	Alternative network operator(s)
ATM	Asynchronous Transfer Mode
AVG	General Administrative Procedures Act

B

BGBl.	Federal Legal Gazette
BKA	Federal Chancellery
BKS	Federal Communications Senate
BMJ	Federal Ministry of Justice
BMVIT	Federal Ministry of Transport, Innovation and Technology
B-VG	Federal Constitutional Act

C

CATV	Cable TV
CbC	Call-by-Call
CDR	Call Data Records
CEPT	Conférence Européenne des Administrations des Postes et des Télécommunications
CIRCA	Communication & Information Resource Centre
CoCom	Communications Committee
CPS	Carrier Pre-Selection
CUG	Closed User Group

D

DDL-LHS	Digital Dataline Local High Speed
DNIC	Data Network Identification Code
DSL	Digital Subscriber Line
DVB	Digital Video Broadcasting
DVB-T	Digital Video Broadcasting – Terrestrial

E

ECG	E-Commerce Act
ECP	European Common Proposal
ECTRA	European Committee for Telecommunications Regulatory Affairs
EEN-V	Itemised Billing Ordinance
E-GovG	E-Government Act
EPRA	European Platform of Regulatory Authorities

ERG	European Regulators Group
ERP	Equivalent Radiated Power
ESP	Enhanced Service Provider
EU	European Union
EuGH	European Court of Justice
EVO	Charges Ordinance

F

FESA	Forum of European Supervisory Authorities for Electronic Signatures
FL-LRAIC	Forward Looking-Long Run Average Incremental Costs
FMWG	Frequency Management Working Group
FTTH	Fibre to the Home

G

GSM	Global System for Mobile Communication

H

HDSL	High Data Rate Digital Subscriber Line
HF	Radio broadcasting
HFC	Hybrid Fiber Coax
HFCC	High Frequency Co-ordination Conference
HH	Household(s)
HHI	Hirschman-Herfindahl-Index
HLR	Home Location Register
HTTP	Hypertext Transfer Protocol

I

IC	Interconnection
ICN	International Closed User Group Number
IRG	Independent Regulators Group
ISDN	Integrated Services Digital Network
ISP	Internet Service Provider
ISPA	Internet Service Provider Austria
ISPC	International Signalling Point Code
ITU	International Telecommunication Union

K

kbit	Kilobit
kbit/s	Kilobit per second
KEM-V	Communications Parameters, Charges and Value-Added Services Ordinance
KOG	Communications Authority Act
KommAustria	Austrian Communications Authority

L

LDAP	Lightweight Directory Access Protocol

M

Mbit/s	Meagbit per second
MDF	Main Distribution Frame
MHP	Multimedia Home Platform
MMA	Multimedia Austria
MNC	Mobile Network Code
MNP	Mobile Number Portability
MSC	Mobile Switching Center
MVNO	Mobile Virtual Network Operator
MW	Medium wave

N

NAP	Network termination point
NSPC	National Signalling Point Codes
NVO	Numbering Ordinance

O

ÖAK	Austrian Circulation Control
OES	Austrian electronic telephone system
OFB	National Telecommunications Authority
ONP	Open Network Provision
ORF	Austrian Broadcasting Corporation

P

PIB	Principles of Implementation and Best Practice
PLC	Powerline Communication
POTS	Plain Old Telephone Service
PresseFG	Press Subsidies Act
PrR-G	Private Radio Act
PrTV-G	Private Television Act
PSTN	Public Switched Telephone Network
PTT	Postal, Telegraph and Telephone Administration
PubFG	Promotion of Journalism Act

R

RF	Broadcasting
RGG	Regional Radio Act
RRC	Regional Radio Conference
RTR-GmbH	Rundfunk und Telekom Regulierungs-GmbH

S

SDSL	Symmetric Digital Subscriber Line
SFG	Styrian Business Promotion Agency
SFN	Single Network Frequency
SigG	Signature Act

SigV	Signature Ordinance
SKP-V	Special Communications Parameters Ordinance
SMP	Significant Market Power
SMS	Short Message Service
SSL	Secure Socket Layer

T

TACS	Technical Assistance for Community Services
TASL	Local Loop
T-DAB	Terrestrial Digital Audio Broadcasting
TG 6/8	Task Group 6/8
TK	Telecommunikations
TKK	Telekom-Control-Commisson
TKMVO	Telecommunications Markets Ordinance
T-MNC	Tetra Mobile Network Code

U

UKW	Very High Frequency (VHF)
ULL	Unbundled Local Loop
UMTS	Universal Mobile Telecommunications System

V

VAT	Value-added tax
VAT	Verband alternativer Telekom-Netzbetreiber (Association of Alternative Telecom Network Operators)
VfGH	Constitutional Court
VNB	Carrier network operator
VwGH	Administrative Court

W

WACC	Weighted Average Costs of Capital
WAG	Wertpapieraufsichtsgesetz
WARC	World Administrative Radio Conference
WIK	Wissenschaftliches Institut für Kommunikationsdienste (Scientific Institute for Communications Services)
W-LAN	Wireless-Local Area Network
WLL	Wireless Local Loop

X

xDSL	x Digital Subscriber Line

Z

ZF	Intermediate frequency
ZuKG	Access Control Act
ZVO	Interconnection Ordinance

7.3 Relevant legal sources

7.3.1 EU law

Access Directive	Directive 2002/19/EC of the European Parliament and of the Council of 07.03.2002 on access to, and interconnection of, electronic communications networks and associated facilities (OJ L108, 24.04.2002, p. 7).
Authorisation Directive	Directive 2002/20/EC of the European Parliament and of the Council of 07.03.2002 on the authorisation of electronic communications networks and services (OJ L108, 24.04.2002, p. 21).
Data Protection Directive	Directive 2002/58/EC of the European Parliament and of the Council of 12.07.2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (OJ L201, 31.07.2002, p. 37).
Framework Directive	Directive 2002/21/EC of the European Parliament and of the Council of 07.03.2002 on a common regulatory framework for electronic communications networks and services (OJ L108, 24.04.2002, p. 33).
Interconnection Directive	Directive 97/33/EC of the European Parliament and of the Council of 30.06.1997 on interconnection in telecommunications with regard to ensuring universal service and interoperability through application of the principles of open network provision (OJ L199, 26.07.1997, p. 32), as amended by Directive 98/61/EC of the European Parliament and of the Council of 24.09.1998 amending Directive 97/33/EC with regard to number portability and carrier pre-selection (OJ L268, 03.10.1998, p. 37). The Directive was repealed by Article 26 of the Framework Directive 2002/21/EC.
Signature Directive	Directive 1999/93/EC of the European Parliament and of the Council of 13.12.1999 on a Community framework for electronic signatures (OJ L13, 19.01.2000, p. 12).
Television Directive	Council Directive 89/552/EEC of 03.10.1989 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities (OJ L 331, 16.11.1989, p.1, as amended by Directive 97/36/EC (OJ L202, 30.07.1997, p. 60).

Universal Service Directive	Directive 2002/22/EC of the European Parliament and of the Council of 07.03.2002 on universal service and users' rights relating to electronic communications networks and services (OJ L108, 24.04.2002, p. 51).
Voice Telephony Directive	Directive 98/10/EC of the European Parliament and of the Council of 26.02.1998 on the application of open network provision (ONP) to voice telephony and on universal service for telecommunications in a competitive environment (OJ L101, 01.04.1998, p. 24). The Directive was repealed by Article 26 of the Framework Directive 2002/21/EC.

7.3.2 Austrian law

7.3.2.1 Acts

Access Control Act (ZuKG)	Federal act on the protection of services subject to access control, BGBl. I No. 32/2001.
Austrian Broadcasting Corporation Act (ORF-G)	Federal act on the Austrian Broadcasting Corporation, BGBl. No. 379/1984, as amended by BGBl. I No. 100/2002.
Broadcasting Fees Act (RGG)	Federal act on the collection of broadcasting fees, BGBl. I No. 159/1991, as amended by BGBl. I No. 71/2003.
Competition Act	Federal act on the establishment of a Federal Competition Authority, BGBl. No. 753/1996, as amended by BGBl. I No. 62/2002 Article I.
Consumer Protection Act (KSchG)	Federal act of 08.03.1979 enacting provisions for the protection of consumers, BGBl. 1979/140 as amended by BGBl. 91/2003.
E-Commerce Act (ECG)	Federal act on the regulation of specific legal aspects of electronic commerce, amending the Signature Act and the Code of Civil Procedure, BGBl. I No. 152/2001.
E-Government Act (E-GovG)	Federal act on regulations for the facilitation of electronic communication with public bodies, government bill 252 252 BlgNR. 22 GP.

Federal Constitutional Act (B-VG)	BGBl. No. 1930/1, as amended by BGBl. I No. 99/2002.
General Administrative Procedures Act (AVG)	BGBl. No. 51/1991, as amended by BGBl. I No. 117/2002.
KommAustria Act (KOG)	Federal act on the creation of an Austrian Communications Authority ("KommAustria") and a Federal Communications Senate, BGBl. I No. 32/2001 as amended by BGBl. I No. 136/2003.
Press Subsidies Act 2004 (PresseFG 2004)	Federal act on enacting a federal law on subsidising of the press, which amends the KommAustria Act, the Promotion of Journalism Act and the Federal Finance Act 2004, BGBl. I No. 136/2003.
Private Radio Act (PrR-G)	Federal act enacting provisions on private radio broadcasting, BGBl. I No. 20/2001, as amended by BGBl. I No. 136/2001.
Private Television Act (PrTV-G)	Federal act enacting provisions on private television, BGBl. I No. 84/2001, as amended by BGBl. I No. 71/2003.
Securities Supervision Act (WAG)	Federal act on the supervision of securities services, BGBl. No. 80/2003.
Signature Act (SigG)	Federal act on electronic signatures, BGBl. I No. 190/1999, as amended by BGBl. I No. 152/2001.
Telecommunications Act 1997 (TKG 1997)	Federal act enacting a federal law on telecommunications, as well as 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, BGBl. I No. 100/1997, as amended by BGBl. I No. 16/2003.
Telecommunications Act 2003 (TKG 2003)	Federal act enacting a federal law on telecommunications and amending the federal law on traffic and work inspection and the KommAustria Act, BGBl. I No. 70/2003.

7.3.2.2 Ordinances

Charges Ordinance (EVO)	Ordinance of the Federal Minister of Science and Transport determining the maximum charges for telecommunications connections, BGBl. II No. 158/1999, as amended by BGBl. II No. 380/2001. On 27.10.2003, the EVO 2003 took effect, replacing the EVO that had been valid until then (http://www.rtr.at/evo).
Itemised Billing Ordinance (EEN-V)	4th Ordinance of Rundfunk und Telekom Regulierungs-GmbH, specifying the level of detail and the form of provision of the itemised bill (http://www.rtr.at/een-v).
Charges Ordinance 2003 (EVO 2003)	3rd Ordinance of Rundfunk und Telekom Regulierungs-GmbH, determining the maximum charges for telecommunications connections, (http://www.rtr.at/evo2003).
Special Communications Parameters Ordinance (SKP-V)	2nd Ordinance of Rundfunk und Telekom Regulierungs-GmbH, determining a sub-plan for communications parameters.
Communications Parameters, Charges and Value-Added Services Ordinance (KEM-V)	Draft ordinance of Rundfunk und Telekom Regulierungs-GmbH, specifying an ordinance on communications parameters, charges and value-added services.
Numbering Ordinance (NVO)	Ordinance of the Federal Minister of Science and Transport concerning numbering, BGBl. II No. 416/1997, as amended by BGBl. II No. 100/2001 (http://www.rtr.at/nvo).
Number Portability Ordinance (NÜV)	Ordinance of the Federal Minister of Transport, Innovation and Technology concerning the portability of numbers between mobile radio networks, BGBl. II No. 513/2003.
Signature Ordinance (SigV)	Ordinance of the Federal Chancellor on electronic signatures, BGBl. II No. 30/2000.
Telecommunications Markets Ordinance (TKMVO 2003)	1st Ordinance of Rundfunk und Telekom Regulierungs-GmbH, defining the relevant national markets for the telecommunications sector that are susceptible to ex ante regulation.

7.4 Abbreviated company names

3G Mobile	3G Mobile Telecommunications GmbH
Arge Daten	Arge Daten – Österreichische Gesellschaft für Datenschutz
A-SIT	A-SIT Zentrum für sichere Informationstechnologie – Austria
A-Trust	A-Trust Gesellschaft für Sicherheitssysteme im elektronischen Datenverkehr GmbH
ATV	ATV Privatfernseh-GmbH
Connect	Connect Austria Gesellschaft für Telekommunikation GmbH (nunmehr One-GmbH)
CyberTron	CyberTron Telekom AG
Datakom	Datakom Austria GmbH
EKOM	EKOM 3G Mobilfunk GmbH
eTel	eTel Austria AG
FESSEL-GfK	FESSEL-GfK Institut für Marktforschung Ges.m.b.H.
FOCUS Media Research	FOCUS Marketing Research Ges.m.b.H.
Gruner + Jahr	Gruner + Jahr AG & Co KG
H3G	Hutchison 3G Austria GmbH
IAIK	Institut für Angewandte Informationsverarbeitung und Kommunikationstechnologie
Mannesmann	Mannesmann 3 G Mobilfunk GmbH (nunmehr TRA 3 G Mobilfunk GmbH)
Mobilkom	Mobilkom Austria AG & Co KG
Multimedia Austria	MMA – Multimedia Austria Interessensvertretung österreichischer Multimedianetzbetreiber
One	One-GmbH
ORF	Österreichischer Rundfunk
Premiere	Premiere Fernsehen GmbH
Priority Telecom	Priority Telecom GmbH
Pro7	SevenOne Intermedia GmbH
RTL	RTL Newmedia GmbH
RTL II	RTL Newmedia GmbH
SAT.1	SevenOne Intermedia GmbH
Super RTL	RTL Disney Fernsehen GmbH & Co KG
tele.ring	tele.ring Telekom Service GmbH
Tele2	Tele2 Telecommunication Services GmbH
telegate	telegate GmbH
Telekabel	Telekabel Wien Gesellschaft m.b.H.
Telekom Austria	Telekom Austria AG
TeleTrusT	TeleTrusT Deutschland e.V.
T-Mobile	T-Mobile Austria GmbH
TRA 3G Mobilfunk	TRA 3 G Mobilfunk GmbH
UTA	UTA Telekom AG
Web und Co	Web und Co – Webdesign, Multimedia und Consulting GmbH & Co KG

Imprint

Owner, editor and publisher: Rundfunk und Telekom Regulierungs-GmbH, Mariahilfer Straße 77-79, A-1060 Vienna,
Phone: +43 1 580 58-0, Fax: +43 1 580 58-9191, E-mail: rtr@rtr.at, Internet: http://www.rtr.at
Editorial responsibility: Dr. Alfred Grinschgl (Managing Director Broadcasting) and Dr. Georg Serentschy
(Managing Director Telecommunications), Rundfunk und Telekom Regulierungs-GmbH
Design and text: Rundfunk und Telekom Regulierungs-GmbH
Editorial work and coordination: MMag. Daniela Andreasch, Anita Haspl
Graphics and layout: Mag. Johannes Bulgarini Werbeagentur, Gföhl 8, A-3053 Laaben, Phone: +43 2774 8725, E-mail: jo@bulgarini.at
Translation: Mag. Christine Pehofer, Wasagasse 31, A-1090 Vienna, E-mail: pehofer@nextra.at

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