- 42 Organization
- 44 Network communications
- 48 Mobile communications
- 51 Data communications, information and communications systems
- **56** Carrier services
- 58 International business
- 65 Value-added services
- 67 Broadcasting and broadband cable
- 72 Terminal equipment
- 73 Multimedia
- 77 Sales and Service
- 80 Network infrastructure
- **82** Information Technology
- 84 Environmental protection



Organization. Unwavering focus on the market.

The changes taking place in the dynamic telecommunications market also require changes within the organization of Deutsche Telekom. The continuous reinforcement of our operational skills and the focus on headquarters' responsibilities have further honed the competitiveness of our company. These organizational measures enable us to create the conditions in which we successfully focus on our customer and analyze the new growth areas in the market.

The Deutsche Telekom organization relies on a range of powerful instruments. Integrated data processing is the basis for efficient operational processes. With our global intranet we ensure that information within Deutsche Telekom moves fast and securely and that employees throughout the company can communicate with each other. Our modern information systems guarantee companywide management with a state-of-the-art reporting system.

Reorganization of the Customer branch offices. In the 1999 financial year, we launched a series of projects to boost the efficiency of the Deutsche Telekom organization. Already in 1998 the Board of Management opted in favor of an organizational and strategic realignment of the customer branch offices; this reorganization was implemented in the year under review. During this process, we reduced the number of customer branch offices from 79 to 39 by merging the branch offices for business customers and residential customers. We also streamlined operational flows and bundled skills in Sales and Service. Reorganization of the Customer branch offices enabled us to further optimize our customer focus and the quality of these units, thereby speeding up our reactions to the market.

Realignment of central functions and headquarters. The project to reposition Deutsche Telekom headquarters and to realign the central functions within our company was launched in September 1998. The goal was to implement a structural and an organizational platform on which Group units are positioned to act as guarantors of Deutsche Telekom's success. At the same time, functions at Deutsche Telekom headquarters were to focus on the responsibilities portfolio required by the Board of Management for the purpose of strategic corporate management. These measures were implemented during the financial year, with the successful completion of the project on November 1,1999.

"A small step for man, a large step for mankind". This is one of the most well-known sentences of the 20th century. In the third millennium, mankind will take many more large steps. That is for certain. But what will these steps mean for us? Even in a world of global communication we want to feel at home. No matter what the future brings us, it is up to us to create a humane world.



The Deutsche Telekom Group has been divided into business areas with external market responsibility, central units with internal service responsibility and central units performing value-generating and value-securing functions. Each of these units acts on the basis of a clearly formulated mission. From these missions we derive the service processes, the work approach and the structure of each unit in the Group. The branch offices are integrative parts of the "Sales and Service" and "Networks" units, with the result that management in these two areas is also responsible for its operational units at all levels. The new Deutsche Telekom headquarters now concentrates on its core support functions for the Board of Management on such issues as designing the corporate portfolio, managing critical resources, financial performance and representing the Group externally. Instead of its previous 6,500 employees, Deutsche Telekom headquarters now has a workforce of some 420.

Further optimization of organization in the Networks unit. In order to increase our efficiency furthermore, we laid the cornerstone for a far leaner, more efficient organization throughout the Networks unit during the year under review; implementation of the approved measures will continue in the current year.

The six former regional directorates and 39 Networks branch offices will merge to form 13 Networks branch offices. This involves far flatter hierarchies, more direct reporting and rationalized workflows between the central and decentralized Networks units, bringing with it considerable cost savings. This bundling allows management to be streamlined, giving innovation capability and flexibility a distinct boost – all to the benefit of our customers.

Against the backdrop of tough competition in the national and international telecommunications arenas, Deutsche Telekom will continue to avail itself of every opportunity to gear its organization to the current needs of its customers and the market. Strict customer focus will enable us to secure our position among competition and, in the interest of our customers, accelerate innovation processes and the development of new application areas in modern telecommunications.



Network communications. Individual achievements in the face of tough competition.

Competition in the area of fixed network communications was even fiercer in 1999. In this context Deutsche Telekom pursues a clear strategy: We offer our customers individual telecommunications services in conjunction with innovative rates.

With a share of 47 percent in Group revenue, fixed network communications represents Deutsche Telekom's core business. This business area posted revenue of EUR 16.7 billion with income before taxes of EUR 2.3 billion in 1999. By comparison: In the 1998 financial year, revenue totaled EUR 20.5 billion and income before taxes amounted to EUR 4.8 billion. The decrease in revenue resulted primarily from loss of market share to our competitors but also to extensive cuts in rates, which benefited our customers to the tune of around EUR 3 billion in the area of fixed network communications, calculated over the whole year.

Call charges accounted for 62 percent of revenue from telephony services in the year under review; the largest share – 69 percent – was earned in residential customer business, while 31 percent resulted from our business customers' lines. 39 percent of the charges for customers' calls stem from City calls, 29 percent from long-distance calls. International calls made by Deutsche Telekom customers contributed a share of 14 percent to call charge revenue. There was a distinct rise in the number of calls made to mobile telephony networks: These calls accounted for 17 percent of revenue in 1999 compared with 10 percent the previous year. As per the end of 1999 our customers were using 47.7 million telephone lines (including ISDN channels).

In the second year following the complete liberalization of Germany's telecommunications market, competition in the area of telephony continued, characterized by a fierce price war. This led to falling margins in this segment of the telecommunications market and to first consolidation trends among providers. With customer-focused tariff campaigns, Deutsche Telekom was able to slow down the market share gains made by our competitors in several key sectors in the course of 1999. In the year under review, competition still concentrated on long-distance and international calls, both areas in which our competitors have, in the meantime, made considerable inroads into the market.





1999 price campaign. On January 1, 1999 we reduced the charges for calls in the Regional/Germany zones by up to 62 percent. Above all, we introduced particularly favorable call charges for Deutsche Telekom customers with T-ISDN lines, thereby promoting the success of T-ISDN sales. A key component of the price campaign at the beginning of the year under review involved simplifying the tariff structure and introducing attractive minute prices. For T-ISDN lines, the minute price for longdistance calls outside the City zone was reduced to 24 pfennigs at peak hours (between 9:00 a.m. and 6:00 p.m.) and 12 pfennigs during off-peak hours (between 6:00 p.m. and 2:00 a.m. and between 5:00 a.m. and 9:00 a.m.) as of January 1, 1999. For T-Net subscribers with a T-NetBox, our answering machine in the net, these prices applied from March 1, 1999. On weekends, all national phone calls made between 5:00 a.m. and 2:00 a.m. outside the City zone cost 12 pfennigs per minute; between 2:00 a.m. and 5:00 a.m. a price of 12 pfennigs for 2 minutes applies.

Right across Germany - for six pfennigs.

Deutsche Telekom introduced an attractive evening rate in the Regional and Germany zones, which took effect as of April 1, 1999. Between 9:00 p.m. and 6:00 a.m. our customers make phone calls for six pfennigs per minute. This means that the cost of a five-minute phone call made at 9:00 p.m. has dropped from the previous 60 to only 30 pfennigs. The evening rate applies both to standard T-Net lines and to the more powerful T-ISDN lines. On March 1, 2000, Deutsche Telekom once again drastically cut the rates for domestic calls, especially for regional and Germany calls.

Rates for international calls lowered once again.

A further key component of our 1999 price campaign was to reduce the charges for international calls to many countries in Europe and North America. The standard rate was reduced as of June 1, 1999, cutting the minute price for calls to 22 countries worldwide to 48 pfennigs round the clock. Thus, the price of a ten-minute phone call to the U.S. dropped from its previous DM 8.40 under the standard rate to only DM 4.80. In the border areas to our neighboring countries we actually reduced the minute price for calls to 12 and 36 pfennigs. In February 2000, Deutsche Telekom introduced significant rate cuts for international calls to more than 50 countries.

Innovative rates – optional rates for improved customer loyalty. In order to boost customer loyalty in the face of tough competition, we introduced a bundle of optional rates for our customers in the first quarter of 1999.

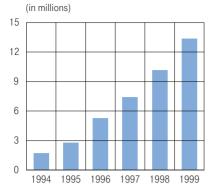
AktivPlus. Our new top AktivPlus offer lowered the price of calls for analog telephone lines and for Euro-ISDN multiple access in the Regional/Germany zones by up to 66 percent and for City calls by up to 75 percent. Deutsche Telekom customers pay a monthly charge of DM 9.90 to benefit from the low AktivPlus rates. Since this offer was introduced in the first quarter of 1999 the new rate has proved extremely popular with our customers.

Select 5/30. A further optional rate offered by Deutsche Telekom is Select 5/30. This offer, also introduced in the first quarter of the year under review, involves a monthly charge of DM 5. With Select 5/30, the customer can choose five fixed network destination numbers in Germany and abroad. A discount of 30 percent is granted round the clock on all calls dialed to these numbers in the City zone and between 6:00 a.m. and 9:00 p.m. in the Regional/Germany zones. The numbers can be changed once per billing period at a charge of DM 5.

Select 5/10. With our Select 5/10 offer we reduced the monthly price from DM 5 to DM 2 as of July 1, 1999. Under the terms of this rate, customers can select five fixed network numbers in Germany and abroad. One of the numbers may be in the D1 or C network of Deutsche Telekom's subsidiary T-Mobil. A discount of 10 percent is granted round the clock on fixed network lines in the City zone and between 6:00 a.m. and 9:00 p.m. in the Regional/Germany zones. Dialing the defined D1 or C network mobile phone number will even make the call up to 29 percent cheaper.

New optional rates for business customers – BusinessCall 500 and BusinessCall 700. As of the first quarter of 1999, we introduced two optional rates tailored to the high communications needs of our small and midsized business customers. The two offers comprise a basic rate along with to-the-second billing – with a minimum charge of 10 pfennigs made per call (excluding VAT). The basic price includes granting volume discounts and improved service. The net minute prices between 8:00 a.m. and 6:00 p.m. Monday to Friday in the City zone amount to seven pfennigs, with four pfennigs charged during the rest of the day. In the Regional/Germany zones we reduced the minute price excluding VAT from 20 to 15 pfennigs. At all other times the price remains a reasonable ten pfennigs. BusinessCall 500 and 700 have cut the prices of international calls to many countries in Europe and North America from 73/63 to a standard 40 pfennigs (excluding VAT).

ISDN channels in operation



1994 17 1995: 2.7 5.2 1996: 1997: 7.3 1998: 10.1

Services 1999: 13.3

Line packages including optional AktivPlus rate.

As of August 1, 1999, we introduced two attractive packages - T-Net 300 and T-ISDN 300 - in conjunction with the optional AktivPlus rate. These offer our customers a reasonable minute price of six pfennigs between 9:00 a.m. and 6:00 p.m. in the City zone, and a minute price of three pfennigs during off-peak hours as well as at weekends and on public holidays. A minute rate also applies at peak hours (9:00 a.m. to 8:00 p.m.) in the Regional/ Germany zones, priced at 12 pfennigs. During the rest of the day we charge a mere six pfennigs. For calls to 19 European countries and to North America the charge per minute is now only 39 instead of 48 pfennigs. In addition, the package includes use of the T-NetBox and a number of extra features.

Unabated growth of T-ISDN continues. The T-ISDN success story continued in the 1999 financial year. As per the year end, Deutsche Telekom customers were using 5.5 million ISDN lines with more than 13.3 million channels. This corresponds to an increase in the number of lines by 35.8 percent compared with the previous year. While T-ISDN has long been a telecommunications standard for many business users in Germany, in the last few years we have consistently focused on opening up the residential customer market for ISDN communications. Now private households account for 54.8 percent of our T-ISDN lines.

Deutsche Telekom currently has an ISDN penetration rate of 28 percent of its telephone channels, a figure which is unequaled anywhere else in the world. Deutsche Telekom remains the world's leading ISDN network carrier by a wide margin.



T-ISDN goes mobile. With its T-ISDN mobil service, Deutsche Telekom was one of the first providers worldwide to introduce a "genuine" product package in the year under review. T-ISDN mobil, integrating T-ISDN and T-D1, removes all restrictions on the customer's accessibility. Customer figures grew at an average of over 20 percent per month following the introduction in March 1999. In August 1999, we presented the first dualmode mobile phone at Berlin's Internationale Funkausstellung: Depending on where you are, it switches automatically into the fixed or mobile network. The "Ericsson TH 688" super wireless phone was developed for T-ISDN mobil by Swedish manufacturer Ericsson cooperating closely with Deutsche Telekom.

Bundled benefit - T-ISDN with T-Online. Since December 1, 1999 we have offered our customers T-ISDN in conjunction with access to T-Online. Every T-ISDN customer can opt for the T-Online "by-call" rate. Under the terms of this rate the only costs incurred are use-related costs of six pfennigs per minute, three pfennigs each for the online and Deutsche Telekom charges. No basic price is charged for the T-Online access. T-Online access makes T-ISDN even more attractive for our customers; at the same time it enables us to attract new customer groups with our online service.

T-VPN - individual customer networks for voice communications. In the year under review, we pushed the marketing of T-VPN solutions for our business customers, an offer which we had launched in 1998 (VPN = Virtual Private Network). The T-VPN services package comprises various solution modules which enable T-VPN applications to be tailored more precisely to customer needs. One of these solution modules is CENTREX. With CENTREX solutions, T-VPN customers are able to integrate flexible lines into their voice network via a multi-site private numbering plan (PNP). This makes it possible to extend existing telecommunications facilities flexibly and at an affordable price or, in the case of smaller locations, even to substitute them altogether. One of the trendsetting T-VPN solutions that we set up with CENTREX in the 1999 financial year was for LVM-Versicherungen in Münster. The insurance group uses CENTREX to connect more than 500 teleworkstations at home to its corporate network.

GVPN - international solutions for global players. With its GVPN (Global Virtual Private Network), the international component in T-VPN, Deutsche Telekom offers solutions tailored to the international needs of its key accounts. GVPN sales release was approved in May of the year under review. GVPN enables customers to carry out their entire international communications with Deutsche Telekom within a closed user group. Despite the changes in Global One ownership, Deutsche Telekom's customers are guaranteed continuing services on the basis of a transition agreement. Furthermore, Deutsche Telekom offers its international customers the Global Call Center product. Customers can locate Call Centers in various countries, and Global Call Center Services ensure that callers from all countries always reach their destination.





Mobile communications. Booming mobile phone market heads for the Internet.

The 1999 financial year was another record year in terms of customer growth. T-Mobil (DeTe Mobil Deutsche Telekom MobilNet GmbH), a whollyowned subsidiary of Deutsche Telekom and operator of the digital T-D1 network, gained more than sixty percent T-D1 customers in 1999 in comparison to the previous year. As per the end of 1999, T-D1 held around a 39 percent share of the German GSM market. In addition, T-Mobil has begun a new era in mobile communications with new products and services such as the City, Local and Weekend options or the new WAP services, in clear affirmation of its position as an innovative leader in the German GSM market.

As the number of customers rose, so did revenue. In the past financial year, Deutsche Telekom generated revenue of EUR 3.9 billion in the mobile communications group business area (11 percent of group revenue), with income before taxes of EUR 1.0 billion.

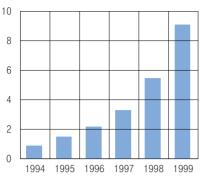
T-Mobil – key figures. In its annual financial statements, T-Mobil reports revenue of around EUR 5 billion. The difference between this figure and that of the group business area results is due to the utilization of T-Mobil networks for calls from Deutsche Telekom's fixed network.

Despite several price cuts, the return on sales in the core T-D1 business in 1999 was maintained at the previous year's level of approximately 28 percent. In this context, the introduction of national roaming with VIAG Interkom in the T-D1 network in mid-1999 has had a positive impact. Due to falling customer numbers at T-C-Tel resulting from successful migration into the T-D1 network, T-C-Tel made a negative contribution to earnings as a whole. Overall earnings were also adversely affected by preventive action for the ICO shareholding in the year under review, which was placed under creditor protection in accordance with Chapter 11 of the US Bankruptcy Act.

Mobile telephony. With 9.2 million mobile phone customers in the T-D1 and T-C-Tel networks, T-Mobil held an estimated 39.4 percent share of the German mobile phone market as per the end of 1999. As per T-Mobil estimates, it outperformed competitors in terms of the growth in T-D1 contracts. Various customer loyalty and marketing campaigns begun in 1998 and stepped up in the year under review have been effective. T-D1 also benefited from T-C-Tel customers switching to T-D1.

Deutsche Telekom's mobile phone subscribers in the T-D1 network

(at year-end)



1994: 887,000 1995: 1,482,000 1996: 2,156,000 1997: 3,276,000 1998: 5,474,000 1999: 9.067,000

T-D1: a digital success story. 1999 was the best year in the history of the T-D1 network. Throughout the entire year, the network boasted record increases in subscriber numbers. In December alone, more than 800,000 customers signed up for the T-D1 network.

As per the end of 1999, the T-D1 network numbered some 9.1 million customers, representing a year-on-year increase of approximately 3.6 million, or 66 percent. In Germany, the rapid growth rates are attributable to heavy demand for mobile phone products in general. T-Mobil has tapped into this market with new products and services, coupled with a customer-oriented pricing structure.

Campaigns to promote customer loyalty and win back customers were successful in reducing the so-called churn rate (i.e., the number of subscribers who switch to other network operators once their contract with T-Mobil has elapsed) from 15 percent to 13 percent. This in turn has had a sustained beneficial impact on development of the customer base.

In 1999, T-Mobil once again lent momentum to the German GSM market with a number of pricing campaigns. In March, we were the first network operator to introduce the City and Weekend options, offering T-D1 customers special rates around the clock. In addition to the existing 10-second timing, 60/1 timing was introduced for ProTel and Telly customers in 1999. Under this scheme, the first minute of a call is charged in full, while the remainder of the call is charged by the second. The basic monthly charge for this option was reduced by DM 5 per month.

In 1999, there was an exceptionally sharp upturn in the demand for prepaid cards for mobile phones. This was due in no small part to T-D1's pricing campaigns. The XtraCard is the only prepaid card in Germany to offer reduced rates on a favorite number (Xtra NummerEins). Since August 1999, customers have enjoyed special reductions on all calls to this number around the clock. In September, the rates for all other calls into the fixed network were also reduced.



Growing demand for data services. In the year under review, T-D1 kept pace with the escalating demand for data services. In December 1999, for example, some 300 million SMS messages (Short Message Service) were sent in Deutsche Telekom's digital mobile phone network.

The mobile phone has evolved, and is no longer simply a tool for the transmission of speech. Increasingly, it is also being used as a multifunctional terminal. CeBIT 1999 marked the launch of T-D1 News, giving T-D1 customers access to information from over 90 programs. For example, users can call up the latest stock market prices or soccer results directly on the display of their mobile, even from abroad. As per the end of 1999, T-Mobil had concluded roaming agreements with over 165 network operators in 92 countries.

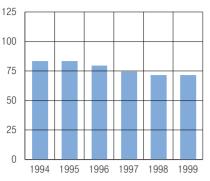
Since the summer, T-D1 customers who manage their accounts via T-Online have also been able to call up their account balance from their mobile, both within Germany and abroad.

WAP – Internet access for mobile phones. There is growing convergence between the Internet and mobile communications. The introduction of WAP services represents an important intermediate step in this direction. The Wireless Application Protocol allows our customers to call up information from the Internet on their mobile phone display. T-D1 has also acquired a number of well-known information suppliers for this service. Whether the customers require news on politics, finance, sports or entertainment, WAP helps them to stay up to date, even while travelling. For example, customers can inquire about current cinema listings or airline timetables while on the move, or even play the lottery.

Excellent network quality with T-D1. In addition to attractive prices and services, customer service and network quality are also key considerations. Rising customer numbers are a clear affirmation of T-D1's forwardthinking network plans. Deutsche Telekom's digital mobile network has managed to absorb large numbers of new customers with its customary excellent network and speech quality. In 1999, T-Mobil continued its network expansion plans with investments to the tune of EUR 0.7 billion. In the year under review, 11,500 new base stations began operation, creating a total of around 25,000 stations in the T-D1 network by the end of 1999. The excellent network quality was also confirmed by a long-term study on the quality of the four German GSM networks, commissioned by T-Mobil and conducted in conjunction with the TÜV subsidiary CETECOM (TÜV = German technical inspection service). The study analyzed more than 200,000 test calls, about 50,000 from each of the four network operators. The examiners covered some 150,000 kilometers conducting the tests. The end results showed conclusively that T-D1 offers its customers top network quality. The study focused on the quality criteria rated by customers as the most important: call quality, unsuccessful call rate, and call disconnection rate. The measurement techniques and results were tested and confirmed by the Rheinisch Westfälischer TÜV as part of the TÜV ServiceCheck procedure.

Call minutes in the T-D1 network on average, per subscriber

(in minutes per month)



1994: 83 1995: 83 1996: 79 1997: 74 1998: 71

1999: 71

Services

without roaming; outgoing traffic only

Extra frequencies clear the way for data applications. The increase in additional frequencies in the 1800 MHz range in October 1999 was highly significant to the future of the T-D1 network. T-Mobil now has adequate frequency resources to enable it to offer modern data applications to its customers. In total, it invested around EUR100 million in the new frequency packages.

As the T-D1 network continues to expand, use of the new frequencies will commence as early as the year 2000. Initially, the 1800 MHz frequencies will primarily be used in metropolitan areas. Customers with dual band mobile phones will be able to utilize both frequencies, with handover taking place automatically.

More Call Centers for optimum service. T-Mobil has also upgraded its service in response to the latest developments. In the year under review, the company opened Call Centers and back offices in Erfurt, Hamburg, Dortmund, Berlin, Leipzig and Kamp-Lintfort. In total, some 1,500 new jobs were created in the field of customer care.

Market orientation. The portfolio optimization process begun in the previous year, was largely completed during the year under review.

T-C-Tel. T-Mobil has resolved to deactivate its analog network as of December 31, 2000. On December 31, 1999, some 165,000 customers were still using T-C-Tel to make calls. In the year under review, a large number of customers were attracted by a variety of attractive offers and thus switched from T-C-Tel to T-D1. These campaigns will be stepped up in the year 2000, making it easier for all customers to switch to the T-D1 network.

Paging. T-Mobil has spun off its paging activities to an independent company, Q-bic (Q Business Information Counter GmbH). This company will continue the full range of paging services. Q-bic was sold as of December 31, 1999; the new owner has undertaken to maintain the paging services.



Modacom. Modacom, T-Mobil's radio data transmission service, will continue unchanged and is due to be converted to the new GPRS platform (General Packet Radio Service) during the course of the year 2000.

Inmarsat. Within the context of portfolio optimization, T-Mobil has transferred its mobile satellite communications activities to its sister company De TeSat Deutsche Telekom Gesellschaft für Satellitenkommunikation

New technology, new standards - GPRS and UMTS. The year 2000 will be a landmark in the future development of mobile communications. As well as voice communication, mobile data transfer will play an increasingly important role. In the summer, T-D1 aims to become the first German network operator to introduce nationwide GPRS (General Packet Radio Service). In the initial phase, data transmission rates of up to 50 Kbit will be possible. GPRS will open up in this respect unknown possibilities for mobile communications, since GSM networks in the past were restricted to a transfer rate of 9,600 bits per second.

T-Mobil will also play a pivotal role in the introduction of the next mobile communications generation, UMTS (Universal Mobile Telecommunications System). The company will be participating in an auction to obtain the required frequencies, the auction is expected in the summer of 2000.

Tegaron - modern traffic telematics. Since 1997, T-Mobil has cooperated with Daimler-Chrysler-Services (debis) in the joint venture Tegaron to develop pioneering traffic telematics concepts. Tegaron services are used in vehicles from Mercedes Benz, Volkswagen, Audi and Renault.

The recently developed WAP service from Tegaron allows drivers to retrieve traffic information and route recommendations based on the current traffic situation. The traffic information service Tegaron Info (call 2211 on the mobile) has been extended and now reports on the delays anticipated from traffic jams.

At the end of 1999, shares in the joint venture Tegaron were transferred from T-Mobil to Deutsche Telekom AG.





Data communications, information and communications systems. Strategic pillar and growth engine.

Demand for tailor-made solutions amongst business customers in the telecommunications market is rising and data communications is one of the principal driving forces behind this development. One of the ways in which Deutsche Telekom is responding to customer requirements is by expanding its network platforms for data transmission to provide a basis for individual customer solutions. Furthermore, our problem-solving expertise is increasingly geared

towards implementing pioneering systems solutions and combining information and communications solutions for our customers. Data communications and systems solutions represent one of our four strategic pillars for growth.

Growth in a fiercely competitive market. The data communications market is one of the fastest-growing segments in the telecommunications industry. In particular, the rapid growth in Internet traffic and increased interconnection within and between companies is generating high growth rates in the volume of data traffic. As one of the leading suppliers, Deutsche Telekom is benefiting from the rise in data business. In the year under review, we consistently optimized our range of products and services in the data communications business area. As a result, revenue in this business area was up 12 percent, from EUR 2.5 billion the prior year to EUR 2.8 billion in 1999, despite severe price pressure. In the year under review, we stepped up our marketing activities with the successful introduction of easier ordering via the Internet, with the Deutsche Telekom homepage as a new distribution channel.



T-InterConnect - one of Deutsche Telekom's key products. T-InterConnect is a combination of professional, network-related products, providing comprehensive Internet solutions for business customers. In addition to conventional Internet connections, T-InterConnect also enables the creation of virtual private networks (VPN). In the year under review, T-InterConnect forged ahead to become one of our company's key products. Thanks to the rapid growth of T-InterConnect, Deutsche Telekom has quickly become one of Germany's leading Internet service providers for business customers. During the year under review, we cut T-InterConnect rates by up to 50 percent, in the interest of our customers. By offering a lower entry price and T-DSL technology, we have also made professional Internet applications accessible to smaller companies.

During the year under review, the volume of data transmitted by our customers via the T-InterConnect backbone network doubled. In order to ensure the complete international integration of T-InterConnect in the interest of our customers, we quadrupled peering capacities from 497 Mbit/s to 1.95 Gbit/s in 1999. We have peering agreements with all of the world's major Internet providers.

T-ATM – broadband communications for a rapid information flow. T-ATM (Asynchronous Transfer Mode) is Deutsche Telekom's broadband network platform, specifically tailored to the requirements of voice, data and video communications. T-ATM is ideal for powerful corporate networks, thanks to its high transmission bandwidth and flexible use of this bandwidth. 1999 saw a significant rise in the number of T-ATM connections.

In the year under review, we increased the number of T-ATM access locations from 42 to over 50, thus improving the availability of this full-coverage network still further. In conjunction with Global One, Deutsche Telekom also expanded its global ATM service. Despite the changes in Global One's ownership structure, Deutsche Telekom's customers will be able to use these services based on a transition agreement also in the future. The global ATM service is currently provided in over 40 countries. Broadband links to other countries will be gradually set up as per market demand.

T-DSL – marketing launch for broadband line technology. ADSL technology (Asymmetric Digital Subscriber Line) allows for the transmission of very high data rates using conventional telephone lines. Deutsche Telekom makes use of the opportunities of T-DSL (the general brand name for xDSL technology from Deutsche Telekom) to give business and residential customers access to broadband communications. Our T-DSL technology is based on the existing infrastructure of our telephone copper lines and uses existing resources. (See also Network Infrastructure, page 81) We have combined the capacity of T-DSL for rapid data communications and high-speed Internet access with the capabilities of T-ISDN for convenient voice communication, and began marketing T-ISDN dsl in the year under review.

This year also saw the marketing launch of T-InterConnect and T-ATM via T-DSL. These services connect business customers to our high-speed platforms T-InterConnect and T-ATM via T-DSL. Cost-effective access technology means that new customer groups, such as small and medium sized enterprises, are now able to utilize the applications of multimedia communications. In other words, T-DSL has opened up broadband communications to the mass market.

In the year under review, we implemented pioneering applications for customers in a variety of industries based on T-InterConnect via T-DSL. A few examples of such customers are Westdeutsches Werbefernsehen, a subsidiary of the German broadcasting company Westdeutscher Rundfunk, and the JENOPTIK shareholding Life Sciences Meissner + Wurst, a leading service provider in the planning and construction of plants for the chemical and pharmaceutical industries.

T-LAN – spotlight on local networks. Deutsche Telekom's data communications business area configures local area networks (LAN) for its customers with T-LAN. These networks are implemented by the Deutsche Telekom subsidiary DeTeLine. In the year under review, DeTeLine stepped up its marketing activities for T-LAN solutions. At the same time, the T-LAN product portfolio was also extended, including specific solutions for medium-sized businesses to enable voice transmission via local computer networks (Voice over IP).





Intranet Solutions reports sharp growth. We supply our national and international customers with customized intranet solutions based on our IP, Frame Relay and ATM platforms, under the general brand name of Intranet Solutions. Our intranet services were the fastest growing product segment of T-InterConnect in 1999, with growth in excess of 400 percent. In the year under review, we configured customized intranet solutions for a number of customers, including a nationwide extranet for the automobile group Renault in Germany, linking the company's 660 dealers.

Our LAN to LAN service is the ideal basis for customized national and international solutions to interconnect local area networks. Our subsidiary T-Data is responsible for implementing LAN to LAN solutions. In the 1999 financial year, we set up ENX® (European Network Exchange) together with the German automobile association VDA. ENX® is a sector-specific network for the automobile industry that meets maximum requirements with regard to encryption. ENX® Solution connections have been marketed since December 1999, which means that a number of companies in the automobile industry were already able to enjoy the benefits of ENX® Solution in the year under review.

In 1999, we began marketing Global Intranet solutions. This service, a pioneering innovation by Deutsche Telekom in the international growth market of IP transport services, provides global access to corporate networks based on IP technology (IP=Internet Protocol).

FrameLink Plus - extended product portfolio.

The FrameLink Plus service from Deutsche Telekom is based on Frame Relay technology and is especially designed to handle data that includes high-volume bursts. FrameLink Plus is equally well-suited both for linking LANs and as a basis for corporate networks. In the year under review, we significantly extended our FrameLink Plus portfolio, including a broader range of transmission speeds. We also introduced substantial rate cuts for FrameLink Plus.

In the 1999 financial year, T-Data acquired a 51 percent stake in Datus GmbH. Datus is an engineering firm in the data communications business. It has been operating successfully on the German market for 25 years, planning and building data networks for clients, and supplying its own network components and network management systems. The acquisition will allow Deutsche Telekom to respond even more effectively to individual customer requirements and offer an extended range of customized solutions.

Fixed connections show a clear trend towards digital transmission. Deutsche Telekom offers its customers fixed data connections in the form of leased lines, leased lines for data communications and "City-Netz" networks under the product name LeasedLink. In the year under review, the trend in favor of digital data lines continued. Whereas revenue for analog leased lines showed a further decline, revenue for digital leased lines for data communications increased significantly. Overall, revenue in the external LeasedLink business showed a significant increase, despite various cuts in rates.

Combined know-how and systems solutions expertise – customized telecommunications applications for our clients. Increasingly, our network platforms and our range of services in the field of data communications are being combined to create customized telecommunications applications. In the 1999 financial year, we successfully completed a large number of customer projects. One outstanding example was the Info-Highway Landesverwaltung Sachsen (IHL). In August 1999, the German state of Saxony requested Deutsche Telekom to build a high-performance network for its local government administration. The IHL links 70,000 users at 800 administrative offices; all voice and data communication between these users is integrated into a uniform network. Deutsche Telekom has been contracted to build and operate the IHL over a 7-year period.

DeTeSystem – experts in systems solutions. Deutsche Telekom's systems solutions business is managed by its subsidiary, Deutsche Telekom Systemlösungen GmbH (DeTeSystem). Thanks to its expertise in project management and innovative power, DeTeSystem is a strong supplier in the growing systems solutions market. In the year under review, the employees at DeTeSystem increased by 168 to 1,816.

In the year under review, the entire international sales team of the Deutsche Telekom Group was combined under DeTeSystem, further strengthening our position in the implementation of international customer solutions and international projects. This will enable us to tap even more effectively the revenue potential with business customers operating worldwide. With this in mind, the sales force at DeTeSystem continues to expand. In the current year, we will recruit over 50 new sales experts.





Information and communications systems from standardized modules to customized solutions for telecommunications and information technology. Integrated solutions which combine telecommunications and information technology (IT) for complex PC and server infrastructures are becoming increasingly important for companies in most industries. In the 1999 financial year, Deutsche Telekom created a new business area, information and communications systems, which combines the Group's information technology and telecommunications services - particularly those of specialist subsidiaries DeTeCSM, T-Nova and DeTeLine along with external suppliers - to create customized, integrated solutions. The Group business area formerly known as systems solutions was divided between the data communications area and the newly founded information and communications systems area. Deutsche Telekom aims to become one of Germany's leading information technology suppliers over the next few years.

In the IT services segment, Deutsche Telekom offers a product called Global Desktop Services, which is designed to provide holistic systems solutions for key accounts. It includes solutions and services which will optimize networked PC workstation structures and ensure global end-to-end accessibility. The service portfolio ranges from consulting, roll-out and on-site service, to the creation of user help desks and the operation of workstation systems. In this respect, Deutsche Telekom's cooperation with the American IT group Unisys of Global Desktop Services, agreed in December 1999, plays a key role. Together, we are able to meet customers' requirements for systems solutions in information and communications technology in almost 100 countries.

Deutsche Telekom markets not only customized IT applications for supply chain management, i.e., for the integration of suppliers and subcontractors into a company's purchasing and logistics processes, but also solutions for customer relationship management, which respond to business customers' demands for optimum customer relations with innovative services. In this way, we support our customers in the optimization of their service and distribution processes, as well as help them become more competitive.



Carrier services. Full service for our competitors who are our customers.

The carrier services business area offers a full range of services to Deutsche Telekom's competitors in the end-user market. In the year under review, we optimized all success-critical functions to ensure maximum usage of the carriers' carrier market. In the course of the year, carrier services generated revenue totaling EUR 2.9 billion, 79 percent up on last year's figures.

Regulatory practice in the 1999 financial year. In the second year following the complete liberalization of Germany's telecommunications market, the virtually unlimited number of licenses granted and the extremely low-priced interconnection terms were drivers of greater competition also in the market for carrier products. With effect from December 31, 1999, the Regulatory Authority for Telecommunications and Posts granted 365 Class 3 licenses – operation of transmission paths for the general public (211 licenses on December 31, 1998) – and 262 Class 4 licenses – operation of voice telephony services for the general public (164 licenses on December 31, 1998).

The growing number of providers and lower prices bear witness to the keener competition, especially in the markets for

- transmission paths for carriers,
- interconnection for long-distance calls and
- -interconnection for international calls.



7.5
5.0
2.5

Inbound traffic

0.0

1997

Europe	■ USA/Canada	Others
1997: 4.609	0.834	0.175
1998: 4.763	0.912	0.361
1999: 4.861	0.962	0.425

1990

1998



As the company that dominates some sub-markets, Deutsche Telekom and, above all carrier services were again subject to far-reaching asymmetric regulation in the year under review. Regulation has a major impact on the range of services that the carrier services business area provides in Germany. Interconnection, subscriber lines and carrier-fixed connections are governed by ex ante price regulation. Against the backdrop of tougher competition, we maintained an ongoing dialog with the Regulatory Authority for Telecommunications and Posts during the year under review on the subject of shaping regulatory practice and the intensity with which it is applied. As no proof of market dominance could be delivered, the Regulatory Authority for Telecommunications and Posts released Deutsche Telekom from ex ante regulation with regard to worldwide termination of other carriers' traffic outgoing from Germany.

Furthermore, the 1999 financial year saw exhaustive negotiations on the subject of interconnection with our interconnection partners. This was due, on the one hand, to the continuing number of carriers who seek initial interconnection with Deutsche Telekom. On the other hand, the existing contracts were renegotiated for the period commencing in 2000. Under the terms of these contracts, agreement was reached with the carriers to minimize risky investments in the Deutsche Telekom network. On December 23, 1999, the Regulatory Authority defined new interconnection rates for terminating and originating services to be valid for the period from January 1, 2000 to January 31, 2001. The result of this decision is that interconnection rates have been reduced by approximately 24 percent compared with the rates that applied in 1999.

Enhanced carrier-specific services in the national market. The call from new licensees for pre-services from Deutsche Telekom continues unabated. As per December 31, 1999, Deutsche Telekom had concluded a total of 95 interconnection contracts, 61 contracts granting the right to use the subscriber line and 90 contracts relating to carrier-fixed connections. In order to respond suitably to the growing demand from our carrier customers for further innovative carrier-specific solutions and to the growing competition in the carrier pre-services market, the range of services was extended, in particular by offering carrier network solutions. Contracts for the first pilot projects have already been signed. In extending our services, our goal is again to attain maximum customer loyalty in the future and to serve the carrier customer segment with a maximum level of added value.

Favorable position in international competition. In the past financial year, we continued to expand our international carriers' carrier business, with a particular focus on a successful range of switched services and international transport capacity. Reductions in the settlement rates (termination costs) by an average of 25 percent enabled us to maintain stability in telecommunications traffic terminated in Germany as well as minimize market share losses. In return, we succeeded in negotiating considerable cuts in the settlement rates for outgoing international calls. This was the basis for a reduction in our international rates during the year under review as well as in February 2000.

Our international offer was enhanced by city-to-city transport routes within Europe. In addition, Deutsche Telekom's participation in AC-1 transatlantic cable made it possible to offer greater capacity on the key north Atlantic route, which the market greeted with applause.

Customer-focused organization. In the year under review, Deutsche Telekom's carrier services business area continued to improve the conditions for servicing other carrier customers of Deutsche Telekom. This included introducing efficient carrier management and providing every carrier with a single contact person for all Deutsche Telekom products required. This means that carriers obtain all Deutsche Telekom services from a single source. In geographical terms, carriers in Germany are served by six regional offices which provide local support to carriers operating regionally. Lastly, we encouraged the establishment of an international carrier support organization. In Tokyo, Singapore, London, Budapest, Moscow, Paris and Red Bank (New Jersey), experts from carrier services are now available as contacts for customers in their home country.



International business. Strategic focus on acquisitions and majority shareholdings.

In 1999, Deutsche Telekom focused its internationalization activities on acquisitions and majority stakes in the company's four strategic business areas: mobile telephony, online services, data communications/systems solutions and network access.

Strong dynamic growth and tough competition were characteristic of the telecommunications sector in 1999. Providers set about bundling their skills in the market, above all in the strong growth segments of mobile telephony, Internet communications and systems solutions for key accounts. These developments had a sustained impact on the structures of global telecommunications markets. Against this backdrop, the strategic alliances that once dominated the global telecommunications market are now increasingly being replaced by acquisitions and majority shareholdings.

In 1999, Deutsche Telekom consistently focussed on its internationalization strategy: it planned, through acquisitions and majority holdings in associated companies, to increase its added value and become a European company which delivers global services to the world telecommunications market. In doing so, our strategy focuses on the four dominant growth segments of the telecommunications market: mobile telephony, online services, data communications/systems solutions and network access.

T-Mobile International AG – Milestone on the way to becoming a European mobile communications provider. In order to expand its strategic pillar in mobile telephony within the international arena, Deutsche Telekom is bundling its mobile telephony subsidiaries and associated companies into a new holding, T-Mobile International AG. In the current financial year, T-Mobil, Britain's One 2 One and the Austrian company max.mobil. are to be incorporated in addition to some minority held subsidiaries. Our objective is to gradually integrate all of the Group's mobile telephony interests into this holding.







Setting up T-Mobile International AG represents a major step towards providing cross-border mobile telephony services in Europe. By the end of the year, we served approximately 15 million mobile telephony customers in Europe through T-Mobil (Germany), One 2 One (Great Britain) and max.mobil. (Austria).

One 2 One – Moving into Britain's mobile telephony market. With the purchase of the British telecommunications provider One 2 One in 1999, we continued our internationalization strategy in the mobile telephony segment in Great Britain, one of the key telecommunications markets in the European Union. Acquiring One 2 One marks a milestone on Deutsche Telekom's way to becoming a leading provider of mobile telephony services in Europe. The purchase price for One 2 One totaled 6.7 billion pounds sterling. With a market share of 17 percent, the company is the fourth largest mobile communications carrier in the United Kingdom and has an above-average share of market growth.

At the end of 1999, One 2 One had 4.2 million customers compared with 1.9 million one year before. In the fourth quarter of 1999, our British mobile subsidiary generated revenue of EUR 544 million. One of the successes of One 2 One has been the introduction of prepaid cards into the mass market. Setting up the Virgin Mobile joint venture, in which One 2 One has a 50 percent stake, will make it possible to market One 2 One's products at over 200 outlets under the attractive Virgin Mobile brand.

max.mobil. - Mobile success story in Austria.

In the year under review, we raised our stake in Austria's mobile telephony provider max.mobil. from 25 to 91 percent. This majority interest is held by our mobile telephony subsidiary DeTeMobil. With a GSM market share of around 38 percent, max.mobil. was no. 2 in Austria's mobile telephony market as per year end. 1.5 million customers were using the company's services by the end of 1999. max.mobil. has a workforce of around 2,419 and increased its revenue in the last financial year by approximately 150 percent from 4.5 billion Austrian shillings to 11.1 billion shillings (EUR 811 million).

SIRIS - Positioning Deutsche Telekom in strategic business areas of the French market. By purchasing the telecommunications company SIRIS S.A.S. in November 1999, we established a strong presence in the strategic growth areas of data communications/systems solutions and network access in the French market in the year under review. The purchase price totaled EUR 700 million. Following the liberalization of the telecommunications market in France in 1998, SIRIS is, measured in terms of revenue, the second largest alternative provider in the fixed network segment and generated revenue of Francs 740 million or EUR 113 million in the 1999 financial year. SIRIS has mainly established itself in the lucrative business customer market: Every third company listed in the CAC-40 index of France's stock exchange is a customer of our French subsidiary. As a full-service provider, SIRIS operates a nationwide optical fiber network for voice and data communications. With a length of 2,000 kilometers, the network links all major business centers in France.

Wind - Mobile communications and fixed network services in Italy. In 1999, Wind, the joint venture set up by Deutsche Telekom, France Telecom and Enel, expanded its position in Italy's competitive telecommunications market. This has very successfully established Wind in Italy's telecommunications market. By the end of the year, Wind attracted about 1.5 million customers. Nonetheless, despite the termination of merger negotiations between Deutsche Telekom and Telecom Italia, Enel and France Telecom instituted arbitration proceedings against Deutsche Telekom with regard to existing claims for alleged damages.

MetroHoldings – MAN infrastructure in Great Britain. Deutsche Telekom has been active in Britain's fixed networks market since April 1998 through its infrastructure joint venture MetroHoldings with the British partner Energis and France Telecom. MetroHoldings builds and operates high-speed optical fiber networks based on the latest Synchronous Digital Hierarchy (SDH) technology.

Activities concentrated on the business centers of London, Manchester and Birmingham. At the end of 1999, new metropolitan area networks (MAN) in Bristol and Leeds were added. On the basis of these networks and as a result of the direct link to Deutsche Telekom's global infrastructure, the sophisticated needs of business customers who are active in the national and international arenas can be met with products in the areas of data, voice and IP services.







■ Bonn (Group headquarters)

Foreign subsidiaries and representative offices

Europe

- London

 Brussels

 Paris

 Moscow

 Kiev

America

- America

 New York with offices in

 Atlanta
 Chicago
 San Francisco
 Washington
 Toronto

Asia

- Tokyo
 Singapore with offices in
 Peking
 Hong Kong
 New Delhi

Selected subsidiaries and associated companies of Deutsche Telekkom

Europe

- Borehamwood, Great Britain
- London, Great Britain
- Vienna, Austria Paris, France

- Rome, Italy Geneva, Switzerland
- Luxembourg
 Budapest, Hungary
- Prague, Czech Republic Zagreb, Croatia
- Warsaw, Poland
- Moscow, Russia Kiev, Ukraine

Middle East

Herzeliya, Israel

Asia

- Kuala Lumpur, Malaysia Cebu City, Philippines Jakarta, Indonesia
- Chirchik, Usbekistan

One 2 One MetroHoldings

max.mobil. SIRIS Club Internet

Wind Multilink

Société Européenne des Satellites S.A. MATÁV

Westel Radiotelefon (Westel 450) Westel 900 RADIOMOBIL

Hrvatske Telekomunikacije PTC Polska Telefonia Cyfrowa MTS Mobile Telesystems UMC JV (Ukrainian Mobile Com-

munications)

VocalTec Communications

TRI/Celcom Islacom PT Satelindo Chirkom





MATÁV – Continuing strong growth in Hungary. Our stake in Hungary's largest telecommunications company MATÁV was one of the first building blocks of our internationalization strategy. In the year under review, the company continued on its strong growth course. Net revenue at MATÁV increased from EUR1.3 billion marks in 1998 to EUR 1.5 billion in the year under review.

MATÁV remains the leading company in developing and marketing innovative services and products in the Hungarian telecommunications market. At the beginning of 1999, LAN-Flex – an ATM-based LAN-to-LAN connection with transmission rates of up to 155 Mbit/s – was introduced in the market on a nation-wide scale. Together with Westel 900, the convergence product Voice Mail was introduced for residential and small and medium-sized business customers in 1999. Voice Mail has features such as Family Mail Box and Box-to-Box messaging.

MediaOne International – Acquisition of mobile communications stakes in Hungary and Poland. In October 1999, Deutsche Telekom initiated the purchase of stakes held by MediaOne International in mobile telephony companies located in central Europe. Deutsche Telekom's goal is to substantially expand its presence in Europe's mobile communications market. The price for the mobile telephony stakes amounts to 2 billion US dollars.

From MediaOne International we have acquired a 49 percent holding in Westel Radiotelefon (Westel 450), the operator of the analog mobile communications network in Hungary, as well as 49 percent in Westel 900; this company operates a digital mobile communications network in Hungary which complies with the GSM standard. With 750,000 customers, Westel 900 has a 53.6 percent market share. Another stakeholder in both Westel 450 and Westel 900 is Hungary's MATÁV, in which Deutsche Telekom and Ameritech together hold a 59.58 percent interest.

Deutsche Telekom holds a 22.5 percent share in Poland's mobile communications company Polska Telefonia Cyfrowa (PTC). In addition, we have taken over the 22.5 percent share of MediaOne International and increased our stake in the company to 45 percent. With 1.75 million customers and a 44.7 percent market share, PTC is the mobile communications market leader in Poland. The company generated revenue of EUR 614 billion in 1999, which represents growth of 48 percent over 1998.

MTS – Dynamics within Russian mobile communications. The German-Russian joint venture MTS, in which we hold 44 percent directly, continues to generate dynamic, positive business growth. The company generated revenue of over EUR 338 million in 1999 and had reached customer figures of 386,000 at the end of the year. Thus, Deutsche Telekom continues to focus on regionalizing its business activities in Russia's mobile communications market.







RADIOMOBIL – Successful development in the Czech Republic. RADIOMOBIL, one of our associated companies, also reported successful development in the year under review; Deutsche Telekom has a 41 percent stake in the mobile communications network operator in the Czech Republic. In 1999, the company generated revenue of EUR 297 million. This corresponds to a rise of 64 percent compared with EUR 181 million in the previous year. With 875,000 customers at the end of 1999, RADIOMOBIL generated growth of 134 percent compared with customer figures of 373,000 the year before. Deutsche Telekom is now researching the possibilities of increasing its share in the mobile communications company.

Interests in Southeast Asia. Through its stakes in Satelindo (Indonesia, 25 percent); Islacom (Philippines, totaling 40 percent) and TRI/Celcom (Malaysia, 21 percent), Deutsche Telekom served a total of 2.13 million customers in the fixed and mobile networks in 1999, compared with 1.51 million customers in the previous financial year.

Satelindo is Indonesia's largest GSM network carrier. In addition, Satelindo is in possession of licenses for international telephony business and satellite communications.

The telecommunications provider TRI/Celcom is, among other things, the leading mobile communications network operator in the country.

In the Philippines, Isla Communications (Islacom) possesses not only licenses for voice and data communications but also a range of radio and mobile communications licenses.

Sale of Sprint shares. Since the foundation of Global One, Deutsche Telekom has held a 10 percent stake in Sprint. On the day when MCI WorldCom made its bid to take over Sprint, the Deutsche Telekom stake was worth approximately EUR 8.6 billion. In the year under review, Deutsche Telekom decided to divest itself of its Sprint holding within the framework of the planned merger of Sprint and MCI WorldCom. Parallel to this, Sprint sold its share in the Global One joint venture to Deutsche Telekom and France Telecom.

Sale of Global One shares. Deutsche Telekom has sold its stake in Global One to France Telecom and will invest the proceeds totaling 2.8 billion US dollars in pursuing its internationalization strategy. In addition, Deutsche Telekom will be reimbursed for its shareholder loan in the amount of 0.2 billion US dollars.

Deutsche Telekom will continue to pursue its internationalization strategy and will, through acquisitions and majority-owned subsidiaries, offer integrated telecommunications solutions together with strong partners. Despite the changes in the Global One ownership, Deutsche Telekom's customers are guaranteed the full range of international services as before. A transition agreement will secure the continued availability of services over the next two years for Deutsche Telekom customers, who are provided with international services through Global One.

In addition to the existing infrastructure, Deutsche Telekom recently applied for and was granted licenses to provide communications services in the U.S. and Japan. We already have our own broadband network infrastructure in both the national and international arenas. The European capitals of London, Paris, Amsterdam and Brussels were connected to our powerful network via state-of-the-art optical fiber technology in 1999. Geneva, Zurich and Milan are to follow. In five locations in Europe outside Germany, in six in the U.S. and in four locations in Japan, Deutsche Telekom's ATM and/or IP technology, sometimes including City network technology, was set up and connected to our national network via broadband links. With further network expansion during the current year, we will be able to provide all business centers in the nine major countries in Europe as well as the U.S. and Japan with IP and ATM-based services via a state-of-the-art, homogeneous network.



Value-added services. A direct line for customer service.

Flawless customer service is considered a vital competitive advantage. Here the most important service tool is the telephone. Deutsche Telekom - experienced specialist in customer dialog - offers a comprehensive range of products in the field of value added services. which are designed to optimize telephone customer care. Together with our subsidiaries DeTeCard and DeTeMedien, we added numerous innovative services to our portfolio in the year under review and thus further enhanced the benefits of our value-added services for our customers.

Service numbers - Prices cut, spectrum enlarged. In 1999, professional and private users benefited from significant price cuts for service numbers. In March and April, Deutsche Telekom cut its prices for toll-free numbers (i. e., freecall) with an 0800 prefix, as well as 0180 numbers. August also saw price cuts for personal telephone numbers with an 0700 prefix, which were introduced in April of the year under review. Thanks in part to our competitive pricing, we became market leaders in this product segment in 1999. Another new product amongst value-added services is freecall Online, which was launched in July 1999. This service combines the telephone with the Internet to create a powerful service tool for customer acquisition. The television company ProSieben was one of the first companies to use freecall Online to boost the efficiency of its website.

In 1999, Deutsche Telekom was the first company worldwide to introduce a feature called CallGuard. This service makes it possible for the first time to put an end to unwanted calls made to toll-free hotlines – so-called junk calls. The owner of a toll-free hotline defines a timeframe during which unwanted calls are disconnected. The intelligent network "remembers" the caller and any further calls are rejected by the network.

Operator services in competition. In 1999, as in previous years, our operator-assisted services were the company's calling card, and made a major contribution to customer loyalty and customer satisfaction. In May 1999, the range of telephone directory services was extended to include an English-speaking and a Turkish-speaking service under the numbers 11837 and 11836. Under these numbers and 11885 Deutsche Telekom offers the option of call forwarding.

In 1999, our telephone directory service once again outperformed its competitors in terms of the number of calls received, despite declining market volume. The telephone directory services are divided into operator services and Internet-based services. Our subsidiary DeTeMedien profited from the increasing number of inquiries made via the Internet.



In the year under review, we created the basis for sustained improvements in the results of Deutsche Telekom's telephone directory service. We expect that in the future, organizational measures will lead to marked cost reductions in the telephone information service.

Deutsche Telekom's experienced Call Center staff from the directory service will be assigned to the company's new, future-oriented Call Center divisions. This will allow our subsidiaries T-Online and T-Mobil, as well as our sales support for business customers to step up their customer care activities significantly by the year 2002 and set up new Call Centers within the framework of the "Focus Future" initiative.

T-NetBox shows a significant upturn. The popularity of T-NetBox, the digital answering machine on the network, continued to rise during the past financial year. At the end of 1999, there were around 800,000 T-NetBoxes in use, an increase of 330,000 against the previous year. With the growing convergence of the fixed network and mobile network, we are also aiming for joining the voice mail systems in mobile and fixed networks to create a combined TelekomBox. For the year 2000, we plan to extend the features of T-NetBox to include the storage and processing of e-mails, thus providing a "unified messaging product". Customers will have access to a universal message box covering a wide range of communication services (unified messaging). They will then be reachable for important messages at any time, and from any location.

New approaches to public telecommunications. In the past financial year, we have pushed ahead with consolidation in the field of public telecommunications and achieved significantly improved results compared with the previous year. The consolidation entailed comprehensive reorganization measures, including the shedding of inefficient public telephone locations in the course of site optimization.

In the year under review, we also paved the way for a market-oriented realignment of public communications to accommodate future requirements. This included a broad-based pilot project with public telephones which accept both coins and cards. In 1999, we also began preparations for the launch of multifunctional terminals (telekiosks) at public locations, scheduled to take place during the year 2000. They support not only telephony, fax and data communications, but also videotelephony and Internet services.

DeTeMedien - Partners for complex communications solutions. Our subsidiary DeTeMedien markets data-based products and complex communications solutions. The services include customer care applications ranging from the initial concept and consultancy to the provision of customized full-service packages. The company also edits and publishes telecommunications directories. Telephone directories, yellow pages and e-mail directories can be accessed around the clock at www.teleauskunft.de. The website guarantees up-to-date information and also features trilingual user guidance. The company's 1999 CD-ROMbased "fall collection" includes the German telephone directory ("Telefonbuch für Deutschland"), yellow pages ("Gelbe Seiten für Deutschland") and "Map & Route", as well as two new CD-ROM products: the "Route-Navigator", an electronic route-finder system, and the "OfficeManager Professional", which combines the functions of RouteNavigator with a number of other features such as address management, time manager, word processing and telephone directory.

DeTeCardServices founded. In 1999, Deutsche Telekom's card business underwent a complete reorganization. A new subsidiary, DeTeCardServices GmbH, based in Nuremberg, was created in 1999 to assume responsibility for this business segment. The aim is to make our card products even more competitive and significantly reduce the misuse of telephone cards. DeTeCardServices also serves the collector market.

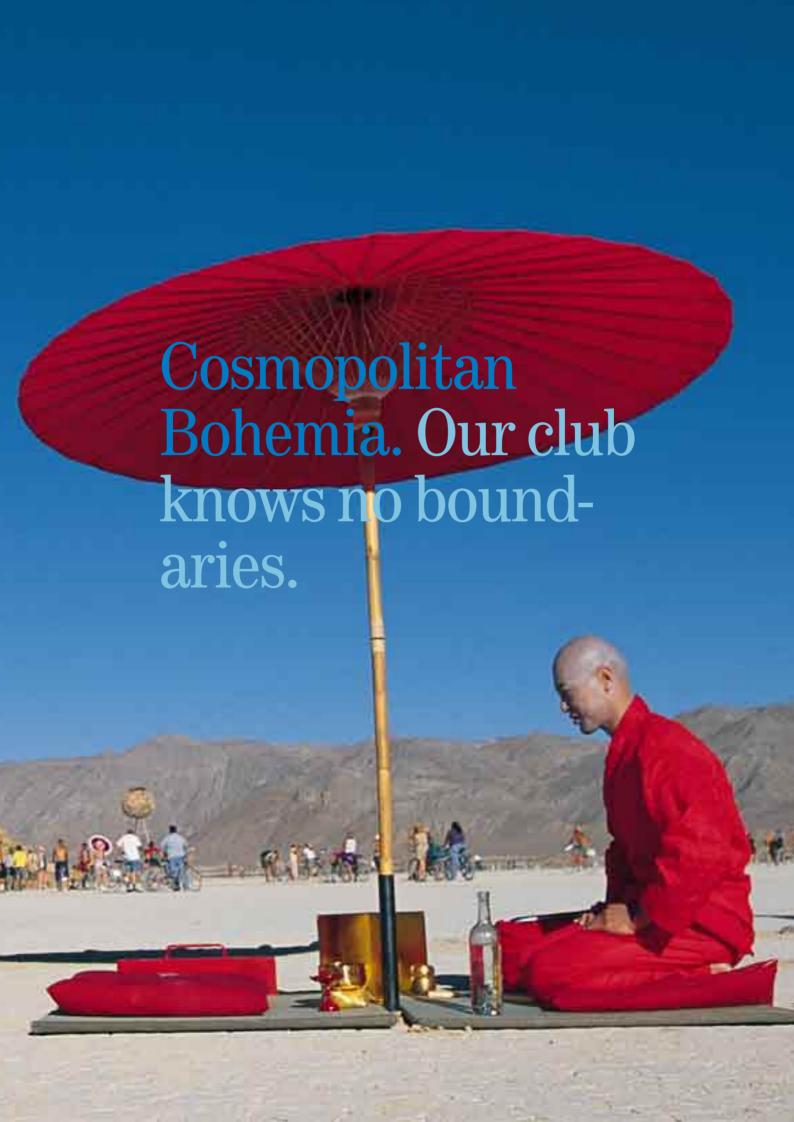


Broadcasting and broadband cable. Decisive steps into the multimedia future.

Deutsche Telekom's broadband cable network is transforming itself from a genuine distribution network for radio and TV broadcasting into a network infrastructure for multimedia communications. In 1999, we made significant further progress in this area. At the same time, we prepared for the sale of parts of the broadband cable network in order to be able, together with investors, to exploit the potential of the broadband cable network in the interests of our customers. Moreover, we want to ensure that in the future the broadband cable network will remain one of the best platforms in the telecommunications and media landscape worldwide. As to traditional, terrestrial broadcasting, we are influencing the digitization of radio and TV broadcasting to a great extent.

Refocus on the broadband cable business essentially complete. 1999 was a key year in reorientation of the broadband cable business. We decided back in 1998 to divide up the business into two subsidiaries in order to improve its financial situation: MSG MediaServices GmbH (MSG) and Kabel Deutschland GmbH (KDG). Both businesses were formed at the beginning of 1999. MSG provides KDG as well as other network operators and program providers with services and is a neutral platform operator for digital services, with the main focus on TV in the Deutsche Telekom cable network. In the year under review, MSG, as Deutsche Telekom service provider for the multimedia sector, also started to market digital television and radio programs in the broadband cable network under the MediaVision trademark. KDG is responsible for operating the cable network.







MediaVision marketing platform launched. In

1999, we made an important contribution towards making digital television a success in Germany by launching MediaVision, our new marketing platform for the digital cable network. MediaVision offers a broad range of digital TV and radio programs, from which each subscriber can put together his or her own program package.

- VisionBasic, a package of digital free TV and radio programs, plus the electronic program guide (EPG), which is available to all MediaVision customers free of charge and which every subscriber automatically has access to. The future VisionProgram Manager will take viewers through the whole range of programs on offer. All programs will also be presented sorted by broadcasters, genre, favorites and time.

VisionSelect, a Pay TV service, enables customers to put together their own personal TV package from a range of programs. VisionSelect currently comprises Bloomberg TV, Fashion TV, Bet on Jazz, Landscape and Extreme Sports. Other programs are to be added to the service.

VisionGlobe, a foreign-language program package that is free of charge, currently boasts six TV programs for foreign citizens living in Germany.

 VisionSpecial offers individual Pay TV programs for special target groups; programs on offer include the Indian broadcasting station Zee TV or the Russian program from NTVi.

 VisionProfi, selected programs such as Fashion TV and Bloomberg TV used for business purposes

Since October 1, 1999, the digital programs of the Pay TV broadcasting station Premiere World – the super package with the MOVIE WORLD, SPORTS WORLD and FAMILY WORLD programs, along with the EXTRAS that are available for subscription – have been co-marketed. The MediaVision services as well as the equipment needed to receive the programs – smart card and decoder – are sold nationwide in our T-Punkt shops and Call Centers as well as via the MediaVision homepage (www.mediavision.de). Interested customers can also buy the digital Premiere World service in these locations. Deutsche Telekom also plans to further expand the existing MediaVision service in the future.

Pilot project in Berlin opens up multimedia world for residential customers. As part of a pilot project in Berlin, for approximately 680,000 homes we have begun to expand the broadband cable network to 862 MHz. In addition to expanding the frequency, we are also implementing broadband back channel capability in the capital. With this increase in capacity, we will be able to offer up to 49 additional 8 MHz channels for digital program packages or multimedia services and temporarily feed in 13 additional analog television programs. The cable will become interactive and is opening up the entire multimedia world to users via fast Internet access. Deutsche Telekom's partners in this innovative project are the Berlin Senate, private cable network operators and housing companies.

Regionalization and sale of the broadband cable network started.

KDG was established at the end of 1998 and the national property, plant & equipment of the broadband distribution networks were transferred to KDG. In the year under review, KDG took over operations. For this purpose some 2,900 Deutsche Telekom employees were transferred to KDG by the end of 1999. This way, KDG is now able to manage its operational business activities independently.

Regional cable companies in which external investors with capital and expertise can participate are to be established to complete the intended partial sale. To this end, we divided Germany into nine regions at the beginning of 1999. In these regions the new companies are to independently shape the cable business activities, expand networks and offer new services.

The first legally independent regional companies are to be established by June 30, 2000. With the establishment of these business units, the respective regional companies will maintain their own customer contacts and accounting and be headed by their own management. The first, initially non-binding offers were submitted by potential investors for all regions in August 1999.

It is planned that the purchasers will acquire 35 percent or more of the shares in the future regional companies and take over the operational management. The remaining shares are to remain with Deutsche Telekom until the proposed listing of the regional companies. Deutsche Telekom plans to reduce its stake to 25 percent plus one share. The minority rights linked to Deutsche Telekom's shares would not have any influence on the strategy, services and pricing policy of the new regional companies.

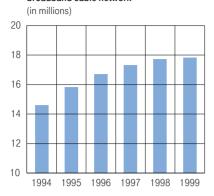
In February 2000, Deutsche Telekom signed the first contract on the partial sale of its cable networks. The new majority shareholder of the North-Rhine Westphalia regional company is to be Callahan Associates International LLC, a global communication development and operating company located in Denver, USA and London. The company is to acquire 55 percent of the cable network and 45 percent are to remain with Deutsche Telekom.

Contracts on the sale of further regional companies are also to be concluded in the coming months.





Homes in Germany connected to the broadband cable network



1994: 14.6 1995: 15.8 1996: 16.7 1997: 17.3 1998: 17.7 1999: 17.8



Co-operation in digital broadcasting. In broadcasting we look consistently to digital technology. This way we are making a considerable contribution towards realizing the aims set out in the Federal Government's Digital Broadcasting Initiative, which seeks to digitize broadcasting in the Federal Republic of Germany by the year 2010. In this regard, we take part in projects that aim to digitize terrestrial TV in the DVB-T standard (Digital Video Broadcasting via terrestrial broadcasting stations) in northern and eastern Germany.

In the year under review, we have also continued to set up a digital audio broadcasting network in the DAB standard (Digital Audio Broadcasting) and have worked with other broadcasting companies to achieve this. After the "Bayern Digital Radio GmbH" was successfully formed in 1998, further DAB companies were set up in 1999: "Digital Radio Südwest GmbH" for Baden-Württemberg and Rhineland-Palatinate, "Digital Radio Saar GmbH" for the Saarland and "Digital Radio West GmbH" for North-Rhine Westphalia. A DAB company for Bremen, Hamburg, Lower-Saxony, Mecklenburg-West Pomerania and Schleswig-Holstein ("DRN Digitalradio Nord GmbH") will be formed in early 2000. The establishment of a DAB company for Hesse ("Hessen Digital Radio GmbH") is still open. All of these companies will be applying for the licenses that are necessary for building and operating the DAB infrastructure. "Bayern Digital Radio GmbH" as well as "Digital Radio Südwest GmbH" have already obtained this license.

In the other eastern German states, we are the only DAB broadcasting network operator and already have the frequency assignments for building and operating a DAB infrastructure in the regional states of Brandenburg, Saxony, Saxony-Anhalt und Thuringia. We took part in the second bidding round for Berlin and obtained frequency assignments for the so-called L-band.

Broadcasting customer networks with multimedia capability. We also made considerable efforts in 1999 to further develop the broadcasting networks. In the year under review, we began to provide broadcasting customers with a new network based on ATM technology (ATM = Asynchronous Transfer Mode). This ATM network will cope even better with the special demands of broadcasting customers in terms of flexibility, availability and future requirements than the current switched broadband network.





Terminal equipment. Making its mark.

For Deutsche Telekom, telephones, fax machines, PABXs and network solutions are important instruments for winning new business and enhancing customer loyalty. In the 1999 financial year, we further streamlined our terminal equipment portfolio focussing even more on the requirements of the market. As a result, we managed to turn our business around, and recorded a positive operating result again in this business area.

Terminal equipment in the black again. In 1999, our terminal equipment group business area generated net revenue of EUR 1.2 billion and income before taxes of EUR 19 million, after making a loss in 1998. The main reasons for the turn-around were the continued streamlining of our product portfolio by cutting down on the number of model variants and the launching of innovative terminals such as the Sinus 45 product family.

Siemens AG was again our biggest supplier in 1999, accounting for 48 percent of our purchasing volume in the terminal equipment segment. At the same time, Siemens was also our biggest competitor in the terminal equipment market. Where key products are involved, Deutsche Telekom draws on models from at least two manufacturers.

Strong position in the ISDN growth market. In the year under review, we supported our company's fast growing T-ISDN business by marketing an attractive range of ISDN terminals. Inexpensive, user-friendly ISDN products were added to the T-Easy and T-Concept product lines introduced in 1998. With the launch of the T-Concept PC in mid 1999, we introduced a solution that enables a personal computer to be upgraded to an ISDN feature phone.

Deutsche Telekom terminals voted number one. We are the only telecommunications company on the German market thus far to offer the full range of telecommunications services and a complete line of terminal equipment under the same brand name. In September 1999, consumers acknowledged our position as a future-oriented, competitive, full-service provider when readers of the well-known magazine, "connect", voted Deutsche Telekom the most popular provider of terminal equipment. Our products performed extremely well – especially in the category of ISDN systems, where the first three places went to Deutsche Telekom.



Multimedia. Two paths to success: With T-Online and T-Mart into the Internet.

Deutsche Telekom meets the different Internet requirements of its residential and business customers with two impressive brands: T-Online and T-Mart. With T-Online, we offer cost-effective, yet powerful Internet access primarily for residential users. Under the brand name T-Mart, our business customers find a broad spectrum of products and services for commercial utilization of the Internet.

T-Online – another sizeable increase in online business. Measured in terms of its customer base, T-Online, the Deutsche Telekom online service operated by our wholly-owned subsidiary T-Online International AG, was once again the undisputed leader in the German market and the largest Internet access provider in Europe in the year under review. The transformation of the former DeTeOnline Service GmbH into a new stock corporation took place on January 1, 2000. In 1999, T-Online recorded growth averaging more than 100,000 new customers per month. By the close of the year, the total number of T-Online customers had risen to about 4.2 million. That is equivalent to more than 50 percent growth over the previous year.

With the new customer-oriented rates, we gave the online market a decisive push. For example, in October 1999, we reduced our T-Online eco rate from three to two pfennigs per minute and did away with the six-pfennigs dial-in charge that had been charged previously. Since November 1, 1999, we have also been offering T-Online pro, a cost-effective package for frequent users: For a monthly price of DM 19.90, T-Online customers can surf the Internet for as long as they like, paying only three pfennigs per minute for network access via Deutsche Telekom.



Consistent portal site strategy. To make T-Online even more attractive for our customers, we significantly expanded our portal site activities in the year under review and developed T-Online further, making it the "gateway" to a wide range of information and entertainment services. Apart from its access service, i. e., providing access to the Net, T-Online's strong second pillar is its consistent portal site strategy. In May 1999, we launched the Shopping Portal, our network shopping mall, where meanwhile about 200 vendors present products and services from all kinds of industries. The Fun & Action portal set up on T-Online's homepage in September is addressed primarily to relatively young T-Online customers. Interested users can find the latest information about the music scene, movies and much more. The Fun & Action portal also focuses on the community idea offering specific target groups chat rooms, forums and online games. At CeBIT 2000, T-Online introduced 10 regional portal sites for metropolitan areas. In the current year, we also plan to set up portal sites with offers for business customers.

Broadband access to T-Online. In the year under review, we began marketing T-Online speed 50 and T-Online speed 100. Both products use Deutsche Telekom's T-DSL to provide broadband access to the Internet. T-Online speed 50 provides 50 hours of high-speed access to the Internet for a monthly price of DM 99, while T-Online speed 100 includes 100 hours for a monthly price of DM 149, in each case plus line charges.

Internationalization initiated. In mid-December, T-Online launched the Internet portal www.t-online.at in cooperation with the Austrian mobile network operator max.mobil., which is a Deutsche Telekom subsidiary. On January 1, 2000 T-Online.at GmbH, a subsidiary of T-Online (51 percent) and max.mobil. (49 percent), assumed responsibility for operating and marketing the portal. Similar activities in other European countries are planned for the year 2000. T-Online International AG – the name says it all – will make use of Deutsche Telekom's existing subsidiaries and associated companies in the respective countries to facilitate successful market entry.

In February 2000, Deutsche Telekom and the French Lagadère group entered an online partnership on the basis of a share swap between their online subsidiaries Club Internet and T-Online International AG. T-Online International AG will take a 99.9 percent stake in the Internet company Club Internet. In return, the Lagadère group will receive a 6.5 percent stake in the T-Online capital from a further capital increase. The agreement with the Lagadère group also stipulates that the French media sector of the Lagadère group will provide content for the Club Internet on a large scale in the future. As per February 2000, Club Internet is one of the largest online service providers in France and currently has some 320,000 customers and 80,000 e-mail accounts. After the launch of T-Online.at GmbH in Austria, the partnership with this company is another step towards implementing the internationalization strategy of both T-Online International and the Deutsche Telekom Group in the online growth market.

T-Mart – customized multimedia services for individual requirements. Under the brand name of T-Mart, Deutsche Telekom offers a comprehensive portfolio of multimedia applications and services for business customers. These include applications for electronic business and electronic commerce in the Internet, as well as solutions for presenting a company profile and for handling business processes via the Internet and/or extranet. Our customers receive all these services from a single source, ranging from consulting, conception and design through installation and network access and extending even to server operation.

Opening up vertical and horizontal electronic markets by cooperating with competent partners. The spectrum of services offered by T-Mart is focused on opening up vertical and horizontal markets for business customers. In the year under review, we intensified implementation of this strategy by cooperating with a greater number of strong partners, thus laying the foundation for electronic commerce to achieve a breakthrough in Germany. In November, we acquired a 34-percent stake in Estate.Net Internet Marketing GmbH of Hamburg. The objectives of this cooperation are the operation and further development of one of the leading Internet platforms for real estate business. The platform is intended to make it easier for brokers, agents, contractors, developers and residential property companies to start doing business in the Internet.

In December 1999, we concluded a cooperation agreement with Mosaic Software AG. Together with this partner we are developing and marketing solutions for Electronic Data Interchange (EDI). Deutsche Telekom and Mosaic Software are also cooperating closely on realizing customer projects in the EDI segment.

Together with Bundesdruckerei GmbH, we will develop Internet-based products and services for public administrations. This cooperation is aimed at designing and operating a communications and services platform for public administrations. The platform is to be used to make Bundesdruckerei's range of product and services – such as the production of passports and identification cards – available to local administrations. Pilot projects were started in Cologne and Siegburg in late 1999.





Secure payment transactions as the basis for growing Internet commerce. Further development of electronic commerce in the Internet is closely linked with the availability of secure payment methods. As an independent service provider, Deutsche Telekom offers its customers user-friendly solutions guaranteeing maximum security in payment transactions and data interchange in the Internet. In the year under review, we concentrated these solutions under the umbrella of our wholly-owned subsidiary TeleCash Kommunikations-Services GmbH. Our range of products includes, for example, Secure Pay Services. This solution supports the use of credit cards complying with the SET (Secure Electronic Transaction) standard, an internationally recognized method of handling credit card transactions in the Internet. Secure Pay Services complement our online shops (T-Mart Shop Complete) ideally, thus providing Internet dealers with complete, customized solutions for doing business in the World Wide Web.

Digital signature and ServerPass. In January 1999, we were the first German company to issue chipcards for digital signatures, offering our customers the possibility of affixing a legally binding signature to electronic data on the computer. Digital signatures provide a basis for secure data interchange in computer communications and via the Internet. Its areas of application include, for example, electronic tax returns, online banking, telemedicine, data archiving, the transfer of contracts and other legal documents and the electronic processing of public authority transactions.

With ServerPass, an electronic ID for web servers, we have made available another effective solution for reliable and trustworthy communications between vendors and users in the Internet since October 1999. ServerPass ensures that a content provider in the Web can be uniquely identified, thus providing online customers of department stores, travel agents or banks with the certainty that they are, in fact, connected with the desired vendor.

In order to strengthen our position in the segment of network security products, we acquired a 34 percent stake in secured Security Networks GmbH, a subsidiary of the TÜV Mitte group, in September. The spectrum of services offered by the Essen-based company covers the entire value-added chain in information security, ranging from security analysis and consulting through implementation to maintenance and customer care. For both companies, this venture opens up possibilities for new business and synergies in international business. In November, secunet, which had meanwhile been transformed into a stock corporation, was successfully floated on the stock exchange.

Together with the US company Commerce One we plan to further develop e-commerce in the Internet. Deutsche Telekom's goal is to set up an open business-to-business (B-to-B) marketplace , i.e., a virtual marketplace for companies with a commercial portal in the Internet. Deutsche Telekom will build this marketplace, operate it and integrate Commerce One's technology. Deutsche Telekom's marketplace will simplify and accelerate the companies' transactions when trading goods and services electronically. The contract was signed in January 2000.



Sales and Service. Customer-friendly, geared to service and high quality.

In the fiercely contested telecommunications market, the achievements of Sales and Service have a key impact on Deutsche Telekom's success. In the 1999 financial year, we continued to optimize the efficiency of our sales organization. In a market in which the rate of change is continually accelerating, we focus our activities on developing products which are geared to the needs and wishes of our customers as well as increasing the quality of our services. Quality and service campaigns were launched in Customer branch offices to ensure that our processes and employee qualifications are aligned more precisely to our customers' needs.

New T-Punkt shops get ready for business. In 1999, we started implementing our new concept for Deutsche Telekom's T-Punkt shops. This includes optimizing our direct sales locations. In the future our shops will be located in busy city centers in areas covering at least 80,000 inhabitants.

A key point of our new T-Punkt shop concept is to focus on the three core brands T-ISDN, T-D1 and T-Online. The focus is above all on younger target groups and high-end users in the areas of mobile communications, the Internet and state-of-the-art fixed network communications.

In 1999, over 60 new T-Punkt shops opened for our customers. In 1999, we will push expansion of the new T-Punkt shops to other locations. In 2001, we expect the T-Punkt network to be complete.

In the year under review, we also took initial steps towards introducing our T-Punkt Business shops to the market. These will concentrate on serving medium-sized businesses. The first T-Punkt Business shop opened in Minden at the beginning of January 2000.



Indirect sales channels gain momentum. Marketing via indirect sales continues to make great progress, with some 10,000 Deutsche Telekom sales partners as of the end of the year. During the course of the year 2000 we plan to enhance our product portfolio and to expand our distribution channels in order to give a further boost to our marketing activities.

Customer segment management and specialized sales units set up in various areas. Setting up our customer segment management has enabled us to establish links between the product units and the sales units within our company. In a market in which change is continually gaining momentum, this measure allows us to develop products that focus on our customers and their needs.

The areas of multimedia, mobile and data communications are among the strongest growing segments in the telecommunications market. Specialized sales know-how is required to market customerfocused solutions in these areas. Following a concept we developed in 1998, we established specialized sales units in 1999 to open up and develop these business areas. With their specialist know-how these sales units support the business customer sales units in serving individual customers and support the placement of new products and solutions on the market.

New focus in international sales force. The new focus of our international sales force under the direction of the Sales and Service Division was a key element in optimizing our sales organization. It will enable us to provide our multinational customers with marked improvements. We have combined all our sales support for international projects within our subsidiary DeTeSystem, thereby further improving the processes involved in international bids and operations. One example is the BASF Corporate Network BCN for the BASF Group for which DeTeSystem, as full-service provider, has set up a worldwide standard communications infrastructure for 70 national and 140 European sites. For its work the project management team received the "Project Management Award 1999".

Classic mail-order and new solutions. T-Versand, our classic mail-order business, has developed new solutions tailored to meet various customer needs. One joint sales promotion was launched by Commerzbank, Siemens and Deutsche Telekom and offered product bundles consisting of PCs, T-Online access and online banking.

Expanding the Internet sales channel. In addition to our mail-order business, during the year under review we increased our sales activities in the Internet to a considerable degree. Our homepage at "www.telekom.de" provides customers with information about our products and services around the clock, enabling them to order the articles they require straight from our online catalog. Continuous changing offers on the start pages and special online promotions round off our Internet sales activities. Since October 1999 T-Versand operates an Internet Call Center, which supports Deutsche Telekom's online sales.

T-Service – focus on customer satisfaction. With over 32,000 employees, Deutsche Telekom's T-Service is one of the largest service organizations in the European telecommunications sector. T-Service is responsible for installation, repairs and maintenance of our customers' lines and terminal equipment. It is also expanding its activities in the IT market. In the year under review, our T-Service was strategically and organizationally realigned. The service organizations for residential and business customers – separate until that point – were merged and existing processes and organizational structures saw improvement.

The quality of T-Service performance was reflected in its customer satisfaction figures: In the middle of the year, the quality of assembly and installation services for business customers achieved the Tri:M value 7.0, a figure which we estimate to be above average for this segment. Tri:M is a value that is used internationally to measure customer satisfaction on a scale of 0 to 10.

Since mid-1999, we have been processing customer orders automatically. Faster order processing enables us to achieve greater productivity in T-Service. The year 1999 saw greater application of alternative service methods such as remote configuration and remote maintenance.

TelekomForum – direct dialog with our customers. Again in the 1999 financial year we made extensive use of the opportunity provided by TelekomForum e.V. for direct dialog with our customers. Well over 300 of Deutsche Telekom's largest business customers have joined forces in TelekomForum, our business customer council which was founded in 1996. The suggestions made by our customers are channeled directly into our product development activities. About every two weeks, customers and product management meet to discuss potential product improvements.





Network infrastructure. Laying the foundation for the broadband future.

In the future, telecommunications will be multimedia communications through broadband networks. Deutsche Telekom is driving the expansion of these networks forward at a rapid pace both within Germany and internationally. In doing this, we are not merely meeting our customers' present requirements for modern, high-performance telecommunications networks – we are also paving our customers' way to the broadband multimedia applications of tomorrow.

In 1999, Deutsche Telekom invested about EUR 2 billion (adjusted by the investments in particular in broadband cable, mobile communications and broadcasting) in the expansion of its telecommunications networks. In comparison to the likewise adjusted value for the previous year, the network investments remained almost the same. Due to the reduction in investments, especially in the access network and due to the further optimization of network component purchasing it was possible to offset the increasing investments particularly in the Internet, T-DSL and the expansion of the transmission network. For the year 2000, an increase in investments over the 1999 level is planned because we are pushing forward the expanding of the network platform for Internet communications, the broadband connection and the transmission network.

Broad pipelines for growing Internet volume. Deutsche Telekom provides a high-performance network infrastructure capable of handling the growing volume of Internet traffic. We have set up an extremely powerful Internet backbone network covering all of Germany. In the 1999 financial year, we completed the restructuring of this network, in the course of which the IP (Internet Protocol) infrastructure had been divided into ten network regions. This increased the stability of the network. We also began to increase the transmission capacity in the core area of our IP network from 155 Mbit/s to 622 Mbit/s. According to our plans the capacity is to be further increased to 2.5 Gbit/s in order to provide for the explosive growth in traffic. To optimize the quality of our network platform for Internet communications even further – in the interest of our customers - we established our own Service Management Center in Stuttgart, which continuously monitors the Internet network components. Deutsche Telekom also collaborated with leading manufacturers of Internet servers and firewall software on the development of security solutions capable of fulfilling the most demanding requirements, for example, the banking sector.

Increased transmission capacity. To increase the transmission capacity of our network so that it can continue to handle the enormous expansion of traffic volume, we rely on the use of modern wavelength division multiplex (WDM) systems. These systems increase the potential transmission capacity of our optical fiber networks many times over. Early in the year 2000, we began to set up a completely new optical transport network in Germany which can be enhanced in stages to provide the predicted high transmission capacities.

T-DSL - broadband communications in the local loop. Along with the broadband expansion of our long-distance networks, we are also driving forward the use of broadband technology in the local loop, thus providing our customers with a broadband entry to the Global Infohighway. In the year under review, we began to install asymmetric digital subscriber line (ADSL) technology in our network. Depending on the distances to be covered in the local loop, this technology - which we have given the umbrella brand name T-DSL - makes it possible to provide bandwidths of several Mbit/s over the copper wire pair of normal telephone lines. In the course of 1999, we made T-DSL available to our customers in 58 major local networks. For the year 2000, we have planned to expand T-DSL to 2000 exchange areas in about 220 local networks. If we succeed in this ambitious plan, we will make direct access to broadband T-DSL telecommunications services available to half of all German households by the end of the year 2000.

Accelerated expansion of the international networks. Parallel to our work on our national network infrastructure, we continued the systematic expansion of our international networks in the 1999 financial year. Our goal is to establish our own worldspanning infrastructure with 93 locations in 38 countries. In the year under review, we connected the European cities of Amsterdam, Brussels, London and Paris with high-performance transmission technology. In the meantime, we have installed Deutsche Telekom's own ATM or IP technology and, in some cases city network technology as well, at one location in Amsterdam, Geneva, London, Prague and Vienna, at six locations in the United States and at four locations in Japan. This makes it possible for us to offer, for example, T-ATM services in those countries as well. In the course of the year 2000, Deutsche Telekom is planning to connect further cities in Europe, North America and southeast Asia via Deutsche Telekom's own broadband infrastructure. At all of these locations, we will install our own ATM and IP technology so that we will be in a position to offer our customers international seamless Internet and broadband communications services.

One of the world's longest submarine cables put into operation. Submarine cables play an important role in Deutsche Telekom's international networks. We own shares in a number of major submarine cable projects. One of the world's longest submarine cables, SEA-ME-WE3 (South-East-Asia/-Middle-East/Western-Europe), was put into operation in August 1999. This cable, which provides a transmission capacity of 20 Gbit/s over a total length of 38,000 kilometers, connects Europe, the Middle East and Australia. With its investment volume of EUR 51 million, Deutsche Telekom is the biggest investor in the submarine cable project, which has a total volume of EUR1 billion. The inauguration of further projects is planned for the coming year: in the Atlantic, TAT 14, a Terabit cable system, is to be put into operation. Here, too, Deutsche Telekom is a major shareholder. These network resources are one of the bases for our Company's world-spanning Internet platform.

Further optimization of the organization. Intensifying competition makes it imperative to optimize organizational structures. In the year under review, we laid the foundation for a substantially leaner and more effective organization of the Networks Division. The six Networks regional directorates and 39 Networks branch offices that have so far existed are being reorganized as 13 Networks branch offices. This measure is intended to bring about a significant increase in efficiency, innovative capability and flexibility - in the interest of our customers.





Information Technology. Bundled IT expertise for internal and external customers.

On its way to becoming a comprehensive telematics service provider, Deutsche Telekom places great importance on expanding its IT expertise. Our subsidiaries DeTeCSM and T-Nova work closely together for the Group and push the further devlopment of Deutsche Telekom's IT infrastructure and IT applications forward. Deutsche Telekom increasingly provides comprehensive telematics solutions to its customers, using as a base the company's IT competencies.

DeTeCSM - IT service provider for the Group.

Deutsche Telekom Computer Service Management GmbH (DeTeCSM), a wholly-owned Deutsche Telekom subsidiary, is charged with expanding and operating our IT infrastructure and IT applications. In 1999, Deutsche Telekom continued the consolidation process which was started a few years ago. This led to the entire Deutsche Telekom IT service organization being bundled into DeTeCSM. The IT service provider has also taken on important tasks in the area of information technology for T-Mobil since September 1, 1999. DeTeCSM is likewise responsible for supporting T-Online and T-Mart systems engineering. The IT service provider employed approximately 5,200 employees in the Deutsche Telekom Group at the end of 1999.



Combined high-performance – further expansion of the Deutsche Telekom intranet. The combination of DeTeCSM Computer Centers is one of the most powerful in the world with a capacity of 25,000 MIPS and a data storage capacity of more than 70 terabytes. Compass, a leading consulting firm specializing in information technology, carried out a benchmark study for DeTeCSM in July 1999. The study, which compared a selection of European and American IT service providers from the telecommunications industry, revealed that DeTeCSM had an efficiency factor which was 18 percent better than the average.

HITNET, the Deutsche Telekom Group-wide intranet, underwent further expansion in 1999; in the year under review, we doubled the monthly network transport volume from approximately 15 terabytes in January to 30 terabytes in December. The network that DeTeCSM is in charge of contains approximately 180,000 IP connections in more than 6,000 buildings. Over 3,200 Unix and NT servers are integrated in this network. There are also more than 150,000 computer-aided workstations. By making consistent use of automatic software distribution, we were able to greatly speed up and complete an extensive project in 1999 that involved equipping 100,000 PCs with modern office communications software. According to Microsoft, the e-mail system operated by DeTeCSM, which is based on the Microsoft Exchange Server and has 120,000 users (as per December 31, 1999), is one of the largest of its kind.

Security for large applications. DeTeCSM is smoothing the way for future innovative IT applications by using trend-setting technologies. In the year under review, the company linked up with EMC Computer Systems to complete a successful technology test for so-called Business Recovery Services. Large data volumes were mirrored on a remote computer over a distance of 700 kilometers based on optical telecommunications links. A "Data Safe" concept like this plays a significant role in securing data files belonging to banks and insurance companies, for instance, in the event of a catastrophe or an IT malfunction. DeTeCSM and T-Nova are also working together to implement customer-oriented solutions in the application areas that have a promising future, namely Data Warehousing and Web Services.

Complex IT projects successfully completed. In July 1999, our IT subsidiary put the largest-ever installation of an SAP R/3 application worldwide

into operation with the Human Resources Management module. The system, which used the project name SAPHIR, was developed with the support of T-Nova. SAPHIR is responsible for the management of the 174,000 people employed in the Deutsche Telekom Group.

In the year under review, an important Call Center project was successfully completed. DeTeCSM has provided an ultra-modern technology platform for more than 70 Deutsche Telekom Call Centers at over 100 locations nationwide, with 18,000 agents ready to take calls. In the year 2000, our company will acquire an extensive communications center based on this platform.

Internal expertise as the basis for external success - tailor-made IT services for Deutsche Telekom customers. DeTeCSM generated the majority of its revenue in 1999 within the Group. On the basis of its proven competence and performance, the clear goal is to significantly increase the share of revenue generated with IT services for third parties. In the year under review, DeTeCSM worked on a number of demanding customer projects on behalf of the Group sales units. By the end of the year, DeTeCSM had recast 57,780 computer workstations for the Federal Employment Office (BA) as well as installed 930 servers and 15,906 printers. DeTeCSM is responsible for the overall management of a large-scale roll-out project in over 180 employment offices in Germany. With our customer Lufthansa Passage Airline, DeTeCSM helped to recast 4.000 IT workstations. It integrated among other things more than 130 different software applications into a uniform user interface and a nationwide network environment. In the Lufthansa project CAMPUS, DeTeCSM is in charge of user support for the local servers and the active elements in the local network aside from the installation of desktop computers.

T-Nova – focus on application development. T-Nova Deutsche Telekom Innovationsgesellschaft mbH (T-Nova) commenced business operations as service provider within the Group on July 1, 1999. T-Nova is also responsible for developing products, services, networks as well as IT systems within the Deutsche Telekom Group in order to support business processes. (see Management Report, page 25)

The five Software Development Centers, the Technology Center and the operations of T-Berkom GmbH were brought together to form T-Nova. In its first year, T-Nova has already driven forward a number of crucial Deutsche Telekom development projects. T-Nova is not only responsible for the technical analysis, conception and piloting but also for managing the technical development of our T-DSL products for broadband access to the Internet based on ADSL technology. T-Nova also supports the operational and market launch of T-DSL.

For the Deutsche Telekom product "Virtual Calling Card" (VCC), which enables our customers to make cashless telephone calls from any phone on their own accounts, T-Nova developed the software, which also offers improved speech control for the service.

In the future, we will intensify our use of DeTeCSM's and T-Nova's expertise in order to strengthen our position in the growing IT services market and to turn Deutsche Telekom into a comprehensive telematics service provider.





Environmental protection. Securing a global future.

Environmental protection is a vital issue to us and is contained in our corporate principles. Effective environmental management systems ensure that we use resources in a more eco-friendly way, curtail the production of waste and reduce harmful emissions. Acting in this way, we gear our activities to the principle of sustainable development in order to secure a basis for life in future generations. For us protecting our environment is a key element in securing a global future.

In the 1999 financial year, the eco-friendly use of resources was a major objective of Deutsche Telekom. Great importance is especially attached to reducing waste. Our environmental protection activities in this area are geared to avoiding waste to an ever greater extent or at least to recycling waste instead of merely disposing of it. In pursuit of these objectives we have continuously expanded our Waste Management Information System (ISAT). ISAT is integrated into our SAP R/3 landscape and is thus the cornerstone for a standard waste management system throughout the company. Alongside the actual costs and quantities of waste, each individual disposal activity is recorded in minute detail, subsequently enabling it to be traced precisely according to various criteria. During the 1999 financial year Deutsche Telekom AG and its subsidiaries T-Mobil and DeTeCSM successfully applied the Deutsche Telekom Waste Management System. The beginning of this year saw ISAT being used to control all relevant quantities of waste and to manage disposal throughout the Deutsche Telekom Group.







Environmental controlling system introduced.

Alongside operation of ISAT, we completed our launch of a comprehensive environmental controlling system in 1999. It is now possible to keep track not only of the quantities of waste produced but also of the amount of electricity consumption. This enables us, for example, to define waste quantities per producer and to determine electricity consumption per building for each unit within the Group. In the future, we will use monthly internal benchmarks to check the degree to which targets have been reached. We launched target monitoring in our Networks branch offices in January 2000 in order to reduce our electricity consumption by a further three percent. We plan to extend the environmental controlling system to cover the areas of fleet management, water/waste water, heating and material/ products step by step over the next few years.

Even fewer harmful substances used. In order to further reduce emissions which have a negative effect on our climate such as carbon dioxide, the performance figures and parameter settings for a total of 2,150 air-conditioning systems in Deutsche Telekom buildings were optimized during the year under review. This resulted in energy savings of some 48 million kilowatt hours in 1999, the equivalent of a reduction of CO₂ emission by almost 31,000 tonnes and energy costs were slashed by EUR 2.6 million.

Another step towards consistent use of environmentally friendly technologies was taken when an additional company combined heat and power station went into service on one of the Deutsche Telekom sites. From natural gas or diesel fuel, combined heat and power stations create up to 50 percent more usable energy in the form of electricity and heat than conventional coal-fired power stations, thereby contributing to a resources saving of 120 cubic meters of gas each year. At the end of 1999, Deutsche Telekom's own small plant commenced operations, providing the Düsseldorf Customer branch office with electricity and heating. This is expected to result in saving some EUR 25,000 per year for fuel.

Global leader in commitment to the environment.

Deutsche Telekom's total commitment to the efficient use of resources and sustainable environmental protection qualified it for inclusion in the new Dow Jones Sustainability Group Indexes (DJSGI). The indexes make it easier for investors to select companies for capital investment which are geared to sustained long-term value enhancement and which, at the same time, take into consideration social factors and the effects on the environment both within the company and within society as a whole. This index lists Deutsche Telekom as a global leader in the telecommunications sector. We have also been assigned leading positions in other ecological ratings such as that issued by the environmental research agency ökom.