

### RTR Telecom Monitor 4<sup>th</sup> Quarter 2008

SECTION 1	
Fixed-link network	2
SECTION 2	
Leased lines	13
Mobile communications	17
	17
SECTION 4	
Comparisons of fixed-link	
and mobile networks	27
SECTION 5	
Broadband	30
SECTION 6	
Business indicators	38
SECTION 7	
Appendix	41

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## Section 1 | Fixed-link network



### Fixed-link penetration

#### FIXED-LINK PENETRATION ON THE DECLINE



The chart above shows fixed-link penetration rates among private households and businesses. The higher penetration rate among businesses is explained by the fact that companies each generally have a larger number of fixed-link lines, meaning that this figure is not directly comparable to the penetration rate for households.

- In Q2 2008, the penetration rate among residential customers remained at approximately the same level as in the previous quarter.
- In the business customer segment, the penetration rate likewise changed only slightly compared to the previous quarter: In Q2 2008, this figure edged down to approximately 221%, the lowest level recorded in the reporting period. The reason for the substantial decline between Q4 2007 and Q1 2008 was a sharp decrease in POTS lines among business customers.

### Retail revenues from access services



#### SLIGHT DECREASE IN REVENUES

Retail revenues from access services include periodic base fees and setup charges. Base fees refer to revenues which are earned periodically and do not depend on the actual use of the subscriber line.

Setup charges for subscriber lines include revenues generated by the setup, transfer and disconnection of subscriber lines for voice telephony.

- Compared to the previous quarter, revenues from access services in Q2 2008 fell by approximately 2.8% in the residential segment and 0.5% in the business segment.
- The share of revenues which can be attributed to the business segment came to approximately 37% in Q2 2008.
- Overall retail revenues from access services dropped by about 2% compared to the previous quarter.

### Retail revenues from carrier services

#### BUSINESS CUSTOMERS STILL AHEAD OF RESIDENTIAL SEGMENT



Retail revenues from carrier services are based on call minutes.

The revenues shown include retail fees charged by operators for calls to the domestic fixed-link network, domestic mobile networks, international destinations, online services and service numbers. The corresponding wholesale revenues are not included in these figures.

- In Q2 2008, revenues from carrier services declined by about 18% in the residential segment and by approximately 13% in the business segment compared to the same quarter in the previous year. These developments are generally more pronounced than in the case of access services, which clearly suggests that competition from the mobile sector has had a far stronger effect on carrier services.
- Especially in the case of residential customers, the substantial decline in revenues in recent years can be attributed to the plummeting significance of narrowband Internet dial-up services. This development is closely linked to the increase in broadband penetration in recent years, and narrowband Internet traffic is expected to become negligible in the medium term (cf. p. 32).

### Fixed-link lines

#### **NUMBER OF LINES CONTINUES TO DROP**



This chart shows the overall number of fixed-link lines, regardless of the underlying infrastructure (e.g., [own] copper-wire pairs, coaxial cable, leased lines, fiber). These figures assign equal weight to POTS (plain old telephone service), ISDN and multi-ISDN lines.

- In Q2 2008, the number of lines in the residential segment declined once again after increasing slightly in the previous quarter. The number of lines also decreased in the business segment.
- Compared to the previous quarter, the number of subscriber lines dropped by approximately 0.3% among business customers and 1.3% among residential customers.
- The total number of lines (including residential and business customers) has fallen by about 4% since Q2 2007.
- The reason for this decline especially among residential customers is the increasing popularity of mobile telephony. The importance of fixed-link connections as the basis for broadband Internet access is also declining due to the increasing prevalence of mobile broadband connections.

### Revenues from termination



#### STABLE DEVELOPMENT

Revenues are generated in this area when a network operator routes a call from an external network to a subscriber connected to its own network. The service of termination is not provided for (or charged to) retail customers, but for other network operators at the wholesale level.

- Termination revenues are subject to fairly large seasonal fluctuations.
- In Q2 2008, revenues from termination came to EUR 16.6 million, which represents a decrease of approximately 3.6% compared to the same quarter in the previous year. The fact that these revenues have remained relatively stable over time despite the decreasing number of lines can probably be attributed to two causes: First, more and more calls are being made from mobile networks to fixed-link networks, and second, the fixed-link lines canceled in recent quarters were apparently used to make rather few telephone calls. However, the data does not reveal a clear trend over the last few years.

### Geographical numbers in use



#### DECLINE CONTINUES

Geographical numbers refer to domestic telephone numbers which serve the purpose of addressing fixed physical network termination points (generally fixed-link lines) assigned to local networks, as well as providing public telephone services in fixed-link networks.

As more than one number may be assigned to a single line, the number of geographical numbers is not identical to the number of fixed-link subscriber lines.

#### Signs of a steady decline in geographical numbers in use began to appear as early as Q2 2006; since that time, this trend has continued, lagging behind the decrease in the number of fixed-link lines.

\* The data from Q1 2008 was corrected due to an error in reported data.

### Location-independent fixed-link telephone numbers and numbers for convergent services

#### DECLINE IN (0)720 AND (0)780 NUMBER RANGES



Location-independent fixed-link telephone numbers in the (0)720 range refer to domestic numbers which serve to address subscribers who use services that enable them to retain their telephone number regardless of their location.

Services offered in addition to public telephone services are also permitted in this range.

Telephone numbers in the (0)780 range are intended for convergent services. Each number in the (0)780 number range must also have an entry in the ENUM system, which makes it possible to assign telephone numbers to unique Internet domain names.

These number ranges were first introduced in mid-2004 by the Communication Parameters, Fees and Value-Added Services Ordinance (KEM-V).

- As shown in the chart above, the use of location-independent fixed-link telephone numbers and numbers for convergent services has increased sharply in recent years. This can largely be attributed to the use of these numbers in connection with VoIP services.
- In Q2 2008, however, numbers in use in the (0)720 and (0)780 ranges dropped by approximately 6.8% and 7.3% (respectively) compared to the previous quarter.

# Service numbers in use: (0)800, (0)810, (0)820, (0)821 and (0)828 number ranges

#### SLIGHT INCREASE



The chart above is mainly intended to provide an overview of the use of toll-free services and services with regulated maximum prices.

The chart depicts the following number ranges:

- (0)800 range: toll-free services
- (0)810 range: max. EUR 0.10 per minute or text message
- (0)820 range: max. EUR 0.20 per minute or text message
- (0)821 range: max. EUR 0.20 per call or text message
- (0)828 range: text messages only; standard charges apply.
- In Q2 2008, the number of (0)800 numbers in use was just under 15,000, showing only a marginal increase compared to the previous quarter. The sudden increase between Q1 and Q2 2007 was caused by the market entry of a new communications service provider which specializes in this number range.
- The (0)810, (0)820, (0)821 and (0)828 number ranges once again saw strong growth (approximately 10%) compared to the previous quarter.

# Service numbers in use: (0)900 and (0)930 number ranges

#### STABLE DEVELOPMENT



Service numbers in the (0)900 and (0)930 ranges refer to telephone numbers for value-added services without price regulations.

The chart above depicts the following number ranges:

(0)900 range: max. EUR 3.64 per minute or max. EUR 10.00 per text message(0)930 range: EUR 3.64 per minute or max. EUR 10.00 per text message (erotic hotlines).

- In Q2 2008, service numbers in the (0)900 range rose by 0.8% compared to the previous quarter.
- In the (0)930 range, this increase came to approximately 0.9%.

# Ported geographical numbers and service numbers

#### SLIGHT INCREASE IN PORTING OF GEOGRAPHICAL NUMBERS



Number porting allows retail customers to retain their telephone numbers when they switch communications service providers.

This means that customers can keep their original geographical telephone numbers (within the same local area code) when they switch to a new service provider.

The chart above shows the total number of geographical numbers and service numbers ported.

- The number of geographical numbers ported increased by approximately 2.6% in Q2 2008.
- At the same time, the number of service numbers ported rose approximately 4.6% compared to the previous quarter.

\* The data from Q1 2008 was corrected due to an erroneous data report.

## Section 2 | Leased lines



### Number of retail leased lines in Austria



#### DECLINING TREND IN LOW DATA RATES

Retail leased lines are those which are not provided for communications network operators or communications service providers (i.e., holders of general licensing approvals). With regard to data transmission rates, a distinction is drawn between leased lines with a capacity of 2 Mbit/s or less and those with a capacity exceeding 2 Mbit/s.

- The number of retail leased lines with a capacity of 2 Mbit/s or less dropped steadily over the reporting period.
- Across all bandwidths, the overall number of domestic retail leased lines still shows a declining trend.
- Despite this development, the total transmission capacity of all leased lines (not shown) is increasing due to the continuing shift toward higher bandwidths.
- \* The decline in the number of leased lines with a capacity exceeding 2 Mbit/s in Q1 2008 can be attributed to a correction in the data provided by one operator.

### Revenues from retail leased lines in Austria



#### **TREND TOWARD HIGHER BANDWIDTHS**

The chart above shows the revenues generated by retail leased lines in Austria. As in the previous chart, a distinction between lines with a capacity of 2 Mbit/s or less and lines with a capacity exceeding 2 Mbit/s is also drawn in this context.

- In Q2 2008, the total revenues from domestic retail leased lines with a capacity of 2 Mbit/s or less decreased approximately 3.5% year on year, while the revenues from lines with a capacity exceeding 2 Mbit/s increased by approximately 40%.
- These fluctuations in revenues can mainly be attributed to the sale of leased lines in projectbased business (e.g., due to annual settlement or one-off payments at the start of a contract).

### Revenues from wholesale leased lines in Austria



#### STABLE DEVELOPMENT

Wholesale leased lines are those which are provided only for communications network operators or communications service providers (i.e., holders of general licensing approvals). The chart above shows the total revenues from wholesale leased lines broken down into lines with a capacity of 2 Mbit/s or less and lines with a capacity exceeding 2Mbit/s.

In Q2 2008, revenues from leased lines with a capacity of 2 Mbit/s or less dropped 1.2% year on year; at the same time, revenues from lines with a capacity exceeding 2 Mbit/s increased by 1.4%.

## Section 3 | Mobile communications



### Mobile penetration

#### PENETRATION RATE CONTINUES TO CLIMB



The mobile penetration rate is calculated as the number of activated SIM cards divided by the country's population.

- In October 2007, the average penetration rate for the EU-27 came to 111.8% (source: 13<sup>th</sup> Implementation Report of the European Commission). This rising trend continued in the year 2008.
- In Q2 2008, mobile penetration in Austria came to approximately 122%. The increase in recent quarters has been driven by the increasing popularity of SIM cards used for data services (mobile broadband).

### Revenues from mobile services



#### MOBILE REVENUES DECLINING

The total revenues from mobile communications shown in the chart above include revenues at both the wholesale and retail levels.

Wholesale revenues: Termination, origination, international roaming, national roaming, sale of airtime to resellers.

**Retail revenues:** Connection charges for voice calls, periodic base fees, activation fees, text messaging fees, fees for data services and value-added data services, compensation for special coverage obligations and fees pursuant to the Telecommunications Fee Subsidies Act, and miscellaneous fees.

- In Q2 2008, revenues from mobile communications came to approximately EUR 855 million, which represents a decline of approximately 4.8% year on year.
- This decline can be attributed to reductions in termination fees and to falling revenues from international roaming, among other factors. At the same time, retail revenues are also decreasing, and the increase in call minutes accompanying this decline points to substantial rate reductions at the retail level. The revenues from data services have risen sharply, which has served to mitigate but not completely offset the losses in other areas.

### Call minutes on the retail market



#### NUMBER OF MINUTES CONTINUES TO CLIMB

The chart above provides an overview of technically measured call minutes. These minutes refer to the actual duration of mobile calls made by retail customers.

In contrast, billed call minutes refer to the number of minutes actually charged to retail customers. The main factors accounting for the difference between these two figures are the number of free minutes included in the periodic base fee and the pulse rate used for calls. This difference can be especially large in cases where flat rate packages are offered. The chart above includes voice services only (i.e., without data services, video telephony, etc.).

- In the years under review, we can identify cyclical fluctuations with a substantial increase in the fourth quarter of each year. These fluctuations clearly point to increased demand for communications services at the end of the year.
- While revenues in the mobile sector have been declining, technical call minutes have continued to show significant growth.
- A substantial increase was also recorded in Q2 2008. Technical call minutes on the retail market increased by nearly 18% year on year and came to approximately EUR 4.904 billion in Q2 2008.
- In 2007, technical call minutes in the mobile sector rose more than 23% compared to the previous year. This sharp increase in call volumes resulted from new pricing policies among mobile operators, which are now offering more flat-rate packages (even for out-of-network calls). This has also led to a decline in the number of call minutes in fixed-link networks.

### Text messaging (SMS)

#### ▶ NEARLY 1.15 BILLION TEXT MESSAGES IN Q2 2008



The values in the chart above include all text messages sent in each quarter, including value-added text messaging services (technical measurement).

As in the case of call minutes, the term "technical measurement" means that the chart also includes text messages which are not charged individually to the retail customer (e.g., text messages included in the periodic base fee).

MMS messages are not included in these figures.

- Until Q4 2005, the year-on-year growth rates in text messaging were significantly lower than those observed in call minutes. At the beginning of 2006, however, this development was reversed: Since that time, the use of text messaging services has grown far more quickly than that of voice telephony services. In the first half of 2008, 51% more text messages were sent than in the corresponding period in 2007. As in the case of call minutes, the main reason for this sharp increase was the introduction of flat-rate packages for text messaging.
- The number of text messages continued to rise in Q2 2008, with more than 1.15 billion messages sent during that period.

### Multimedia messaging (MMS)



#### SEASONAL FLUCTUATIONS

The values in the chart above include all multimedia messages sent in each quarter, including value-added multimedia messaging services (technical measurement).

As in the case of call minutes, the term "technical measurement" means that the chart also includes multimedia messages which are not charged individually to the retail customer (e.g., messages included in the periodic base fee).

SMS messages are not included in these figures.

A year-on-year comparison of the number of MMS messages sent in Q2 2008 reveals a slight decrease (approximately 0.1%) to about 7.8 million messages.

### SIM cards in use

#### CONTINUED GROWTH IN NUMBER OF 3G-COMPATIBLE SIM CARDS



The chart above shows the number of SIM cards activated and in use, broken down into 2G (GSM) and 3G (UMTS) cards.

The number of SIM cards in use is not necessarily the same as the number of subscriber numbers in use, as multiple numbers may be assigned to one SIM card; conversely, multiple SIM cards may also be assigned to the same number.

- Once again, the number of 3G-compatible SIM cards (UMTS) in use increased substantially in Q2 2008. Among other things, this can be attributed to the fact that some operators are now issuing 3G-compatible SIM cards to all customers even if they only use 2G services (GSM telephony).
- The number of 3G-compatible cards rose by approximately 9% compared to the previous quarter. Thus the share of 3G-compatible cards in the overall number of activated SIM cards has already risen to nearly 33%.
- The number of 2G SIM cards declined slightly (by just over 1%) compared to the previous quarter.
- The overall number of SIM cards rose by about 8.4% (to approximately 10.2 million) compared to Q2 2007.

### Mobile numbers in use

#### CONTINUED GROWTH AMONG CONTRACT CUSTOMERS



The chart above shows the percentages of subscriber numbers in use which can be attributed to contract customers and to prepaid customers.

- There are far more contract customers than prepaid customers in Austria.
- In Q2 2008, the number of prepaid subscriber numbers in use declined slightly, this time by approximately 2.1% compared to the previous quarter.
- At the same time, contract subscriber numbers showed an increase of approximately 4.4% compared to the previous quarter.
- The total number of mobile numbers in use increased by about 2.1% quarter on quarter and by approximately 8.4% year on year.

### Mobile numbers ported (cumulative)

#### STEADY INCREASE



The chart above shows the total number of mobile numbers which have been ported (number of imports) since mobile number portability (MNP) was introduced in October 2004.

- In Q2 2008, the cumulative number of numbers ported in Austria came to approximately 369,000.
- An average of about 25,000 numbers have been ported each quarter, which accounted for approximately 0.25% of all mobile numbers in use in Q2 2008.
- Throughout the EU, a total of 46 million users (8.31%) had had their numbers ported as of early October 2007 (source: 13th Implementation Report of the European Commission). In Austria, ported mobile numbers account for approximately 3.6% of all mobile numbers.

### Market shares of mobile operators in Austria



#### **STABLE DEVELOPMENT**

The chart above shows the market shares (based on the number of subscribers) of mobile operators which offer mobile communications services and operate a mobile network in Austria. Subscribers who use the services of resellers are included in the figures for the respective "home" network (e.g., YESSS! subscribers are included in the figures for Orange). The figures shown on this page were made available by individual companies specifically for this publication (Orange, Hutchison – "3"), or taken from annual reports (Mobilkom, T-Mobile) or other publicly available sources.

In Q2 2008, Mobilkom still commanded the largest market share and was even able to strengthen its position (41.8%, up 1.1%). The mobile operator Hutchison ("3") was able to increase its market share (5.5%, up 0.1%) compared to the previous quarter, whereas T-Mobile (32.4%, down 0.4%) and Orange (20.2%, down 0.8%) suffered slight losses in this respect.

## Section 4 Comparisons of fixed-link and mobile networks



# Revenues from fixed-link, mobile, broadband and leased line services

#### REVENUES DECLINING



**Fixed-link network**: Revenues from residential and business customers as well as public pay telephones, retail revenues from periodic base fees, setup charges and connection charges, wholesale revenues from origination, termination and transit, revenues from additional services and other fees, remuneration pursuant to the Telecommunications Fee Subsidies Act and for special coverage obligations;

**Broadband:** Retail revenues from periodic base fees, setup charges and volume-based charges; wholesale revenues from setup charges, ongoing charges and volume-based charges;

**Leased lines:** Retail revenues from periodic base fees and setup charges for domestic retail leased lines; wholesale revenues from periodic base fees and setup charges for terminating and trunk segments;

**Mobile communications:** Retail revenues from periodic base fees, activation fees, connection charges (voice and broadband) and data services, remuneration for special coverage obligations and remuneration pursuant to the Telecommunications Fee Subsidies Act; wholesale revenues from termination, origination, international roaming, national roaming, and the sale of airtime to resellers.

- In Q2 2008, mobile revenues were 190% higher than fixed-link revenues, up from 179% in Q2 2007. Revenues in the mobile sector as well as the fixed-link sector have continued to decline steadily.
- In Q2 2008, revenues from broadband services dropped approximately 4.4% compared to the previous quarter.
- Between 2006 and 2007, total revenues (i.e., retail and wholesale revenues across all sectors) fell by approximately 4.7%, compared to a decline of 1.3% between 2005 and 2006. The reasons for this decline include rate reductions in the mobile sector (visible in the increasing number of call minutes and text messages coupled with a decline in revenues), the reduction of termination fees and a decline in revenues from international roaming. Fixed-link networks saw a substantial drop in revenues, especially from carrier services. In Q2 2008, the decline in total revenues across all sectors came to approximately 0.8% compared to the previous quarter and about 6.9% year on year.

### Technical minutes in fixed-link and mobile networks



#### MOBILE SECTOR WIDENS ITS LEAD ON FIXED-LINK NETWORKS

The call minutes in the chart above include the following:

**Fixed-link sector**: Call minutes to the domestic fixed-link network, domestic mobile networks, international destinations, service numbers and directory assistance services as well as online services; **Mobile communications**: Call minutes to the domestic fixed-link network, domestic mobile networks, international numbers, service numbers and directory assistance services.

- In terms of call minutes, the mobile sector had already overtaken the fixed-link networks by the end of 2004. Since Q2 2007, the number of call minutes in mobile networks has been more than double the corresponding number in fixed-link networks (excluding calls to online services).
- At the end of 2004, the number of call minutes to online services (dial-up Internet services; not shown) was approximately the same as the total remaining number of voice telephony minutes in fixed-link networks (call minutes to fixed-link and mobile networks, international calls, etc.), but this figure has declined substantially since that time. This development can be attributed to rapid growth in the number of broadband connections.
- In Q2 2008, the number of online minutes continued to decline, falling to 184 million. At the same time, technical minutes in the mobile sector continued to climb, with an increase of approximate-ly 1.9% compared to the previous quarter. This drastic increase in mobile call minutes resulted from new pricing policies among mobile operators, which are now offering more flat rates with a certain number of minutes included in each package. In combination with the mobile broadband services offered, this development has led to a decrease in the number of fixed-link lines.
- The fixed-link sector saw a decline of approximately 10.3% compared to the previous quarter; this can largely be attributed to technical minutes for online services.
- Overall, the number of call minutes rose by approximately 10% year on year.

## Section 5 Broadband



### Fixed broadband connections

#### **NUMBER OF CONNECTIONS RISES SLIGHTLY**



The chart above shows the total number of fixed broadband connections in Austria (regardless of the technology used for the connections). In this context, fixed broadband connections include copper-wire pairs in the Telekom Austria network, unbundled lines, coaxial cable, FWA (fixed wireless access, e.g., W-LAN, WiFi and WLL for "fixed" access, not at hot spots) and other infrastructure. Broadband Internet connections based on mobile technology (UMTS) are not included in these statistics.

- In recent years, the broadband market has seen substantial growth. In Q1 2008, there were already some 95 million fixed broadband connections throughout the EU (source: www.ectaportal.com, Broadband Scorecard, EU-27). International comparisons usually only include fixed broadband connections.
- In Austria, the total number of fixed broadband connections came to 1,705,000 in Q2 2008, thus showing an increase of more than 10.3% over one year. Compared to the previous quarter, the number of broadband connections increased by approximately 1%.
- Over the period depicted in the chart (Q3 2005 to Q2 2008), the average growth in this number came to approximately 5.5% per quarter. In absolute terms, the number of broadband connections rose by about 13,000 between Q1 and Q2 2008.
- The increasing prevalence of mobile broadband connections (see p. 35) has also had a dampening effect on the development of fixed-link access types.

### Broadband penetration (% of households)

BROADBAND PENETRATION REACHES 48% OF HOUSEHOLDS



Broadband penetration refers to the ratio of the number of fixed broadband connections to the total number of households (expressed as a percentage). The total number of broadband connections also includes those used in businesses. Broadband Internet connections based on mobile technology (UMTS) are not included in these figures.

- Based on the number of households, broadband penetration in Austria rose from approximately 41% in Q4 2006 to nearly 48% in Q2 2008, thus reaching a new all-time high.
- Measured against the population of Austria (i.e., per capita penetration), the level of broadband penetration came to approximately 20.3% in Q1 2008. In the same quarter, the EU-27 average was 19.5% (source: Eurostat and www.ectaportal.com, Broadband Scorecard Q1/2008; mobile broadband connections not included; including those connections would raise Austria's penetration rate to about 28.2%).

### Retail broadband connections 1/2

#### BROADBAND CONNECTIONS SEE CONTINUED GROWTH



The number of retail broadband connections includes all connections which offer a download bandwidth exceeding 144 Kbit/s. The number of mobile broadband connections refers to the number of mobile communications contracts which include a data transfer volume of at least 250 MB per month.

The chart above provides a breakdown according to the infrastructure used: copper-wire pairs in the Telekom Austria network (subdivided into Telekom Austria's retail broadband connections and broadband connections implemented through bitstreaming), unbundled lines, coaxial cable, FWA (fixed wireless access, e.g., W-LAN, WiFi and WLL for "fixed" access, not at hot spots), mobile broadband connections and other infrastructure.

"Other infrastructure" includes leased lines, FTTH (fiber to the home), PLC (power line communication) and satellite broadband connections.

- All of the access technologies have shown substantial growth in the past. In 2006, growth in mobile broadband connections surpassed the sharp increases in the number of unbundled lines, which had recorded the most substantial growth up to that point.
- In Q2 2008, the total number of fixed broadband connections rose approximately 0.8% compared to the previous quarter. Including mobile broadband, the overall number of connections saw an increase of 3.4%.

### Retail broadband connections 2/2

#### **MOBILE BROADBAND ACCOUNTS FOR NEARLY 30% OF CONNECTIONS**



The chart above distinguishes between connections which use copper-wire pairs in the Telekom Austria (TA) network, unbundled lines, coaxial cable, FWA (fixed wireless access), mobile infrastructure and other infrastructure.

- Of the 2.44 million broadband connections in Austria, approximately 30% rely on mobile technology.
- As for fixed broadband connections, the share sold to retail customers by Telekom Austria came to 43.3% in Q2 2008. However, approximately 63% of all fixed broadband connections still rely on Telekom Austria infrastructure (TA connections, bitstreaming and unbundling).
- The share of fixed broadband connections implemented using unbundled subscriber lines rose from 14.2% in Q1 2007 to approximately 14.3% in Q2 2008.

### Mobile broadband connections

#### RAPID GROWTH



The chart above shows the number of mobile communications contracts which include a data transfer volume of 250 MB or more per month.

These figures do not include prepaid products.

- The number of mobile broadband connections has increased rapidly, reaching approximately 730,700 in Q2 2008.
- According to the current Telecommunications Market Ordinance (TKMVO), mobile broadband Internet connections are not included in the relevant market for broadband services.
- If we add the number of mobile broadband connections to the total number of broadband connections in Austria (see p. 31), the level of broadband penetration comes to nearly 68.4% (based on the number of households).

### Wholesale broadband connections

#### 



The chart above shows the number of wholesale broadband connections made available to other communications service providers in wholesale offers. In contrast to the market definition in the TKMVO, the figures shown do not include self-provided services.

The figures are broken down by infrastructure into bitstreaming in the Telekom Austria network, on unbundled lines and in coaxial networks (open access).

- In Q2 2008, Telekom Austria bitstream connections on the wholesale market declined by 3.7% quarter on quarter, coming to about 89,000 connections sold. The number of connections implemented using coaxial cable has remained relatively stable. The decline in the number of connections established on unbundled lines can be attributed to a correction in the data reported by one provider.
- The chart clearly shows that Telekom Austria's bitstreaming offer accounts for a majority of broadband connections on the wholesale market.

### Revenues from fixed broadband connections

#### SLIGHT DECREASE



The chart above shows the revenues generated by retail and wholesale broadband connections in Austria. Retail revenues represent the total of ongoing monthly charges, volume-based charges for data transfer volumes and miscellaneous revenues in the retail segment.

Wholesale broadband revenues refer to the total of one-off setup charges, ongoing monthly charges for ATM connections, ongoing monthly charges based on retail customers, data volume charges and other revenues generated in connection with wholesale offers.

Revenues from broadband Internet connections based on mobile technology (UMTS) are not included in these statistics.

- In Q2 2008, retail broadband revenues dropped by approximately 4.2% and wholesale revenues declined by approximately 8.2% (each compared to the previous quarter).
- Year on year, broadband revenues declined by about 14.2%; given the simultaneous increase in the number of connections, this points to substantial reductions in prices. These price reductions were motivated in particular by pressure arising from the increasing popularity of mobile broadband connections.
- The clear differences between the two categories shown above can be attributed in part to the large share of broadband connections in vertically integrated enterprises.

## Section 6 | Business indicators



### Investments of telecommunications enterprises\*



#### ► NEARLY EUR 880 MILLION IN INVESTMENTS IN 2007

The chart above shows the development of investments in frequencies, technical infrastructure, sales and customer service in the years 2004 to 2007. In this context, it is important to note that the values reported are partly based on estimates and extrapolations from individual quarters for entire years. As a result, the exact figure for total investments cannot be calculated reliably.

The amounts shown here only include those investments made directly by telecommunications enterprises. They do not include investments in upstream branches of the industry.

Investments totaled approximately EUR 880 million in 2007. This substantial growth compared to the previous year can be attributed in particular to increased investments in mobile communications. In 2007, investments in the mobile communications sector came to EUR 530 million, up 24.1% from the previous year.

\* RTR intends to publish the 2008 figures in the Telecom Monitor for Q1 2009.

### Number of employees

#### SLIGHT DECREASE



The chart above shows the number of employees in the telecommunications sector, broken down into internal employees, leased personnel and freelancers, in terms of full-time equivalents (FTEs). When interpreting these figures, please note that the chart only includes staff employed directly by telecommunications enterprises.

The statistics do not include employees in supplier industries, external call-center employees or outsourced positions.

While the number of internal employees has declined slightly over time, the number of leased employees and freelancers has increased slightly, accounting for some 6.6% of the overall number of employees in the telecommunications sector in Q2 2008. In Q2 2008, the total number of employees showed a slight decrease (-1.3%) compared to the previous quarter, which can mainly be attributed to a reduction in leased personnel and freelance contractors.

## Section 7 | Appendix



MOR		IN USE (	P 24)
	MDLNS		F. 24)

	Mobile numbers (thousands)												
	20	05	2006				2007				2008		
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Mobile numbers in use (contract customers)	4,690	4,784	4,878	4,953	5,153	5,374	5,493	5,674	5,943	6,160	6,398	6,680	
Mobile numbers in use (prepaid customers)	3,871	3,864	3,866	3,891	3,942	3,880	3,823	3,748	3,675	3,695	3,613	3,537	
Total	8,561	8,648	8,744	8,844	9,095	9,254	9,316	9,422	9,618	9,855	10,0111	10,217	

#### MARKET SHARES OF MOBILE OPERATORS IN AUSTRIA (P. 26)

		Number of subscribers (absolute)											
	20	005	2006					20	2008				
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Mobilkom	3,297,700	3,318,500	3,436,700	3,472,800	3,529,400	3,630,500	3,697,300	3,764,000	3,853,700	3,959,300	4,100,900	4,257,400	
T-Mobile	3,015,000	3,059,000	3,148,000	3,112,000	3,157,000	3,412,500	3,139,000	3,148,000	3,227,000	3,273,000	3,300,000	3,300,000	
Orange	1,535,000	1,739,000	1,850,000	1,910,000	1,976,000	2,037,600	2,022,237	2,002,542	2,005,196	2,047,000	2,118,391	2,060,000	
Hutchison ("3")	255,000	281,000	346,500	359,000	379,900	405,300	460,600	465,000	480,600	513,000	544,000	562,000	

#### REVENUES FROM FIXED-LINK, MOBILE, BROADBAND AND LEASED LINE SERVICES (P. 28)

		Revenues in EUR (millions)											
	20	005	2006				2007				2008		
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Fixed-link revenues	398	402	385	364	360	360	347	330	321	315	302	295	
Revenues from mobile services	947	941	945	923	946	905	916	898	895	851	857	855	
Revenues from broadband services	120	122	135	137	141	148	156	159	158	139	143	136	
Revenues from leased lines	64	65	63	61	59	66	57	57	57	59	56	59	

#### TECHNICAL MINUTES IN FIXED-LINK AND MOBILE NETWORKS (P. 29)

		Number of call minutes (millions)											
	20	2005 2006						20		2008			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Online	1,435	1,374	1,240	1,009	859	794	689	512	429	360	255	184	
Technical minutes (fixed-link, excluding online minutes)	2,394	2,507	2,568	2,413	2,307	2,327	2,194	1,997	1,924	2,035	1,958	1,800	
Technical minutes (mobile)	2,914	3,176	3,247	3,342	3,359	3,780	3,956	4,171	4,226	4,624	4,814	4,904	

	Number of connections													
	20	005		20	06		2007				2008			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1 Q2		Q3	Q4	Q1	Q2		
TA DSL lines (copper-wire pairs)	422,700	466,300	498,000	520,000	549,200	572,000	597,700	602,100	603,800	642,500	724,700	738,300		
Bitstreaming in TA network	101,800	106,000	113,800	118,200	121,300	122,600	124,000	121,500	119,100	108,300	92,400	88,900		
Unbundled lines	89,300	101,700	124,400	141,200	148,100	171,200	207,100	222,700	229,200	234,400	240,800	243,900		
Coaxial cable	449,200	475,700	490,000	502,500	514,000	537,700	557,200	546,900	550,000	583,300	583,100	585,700		
FWA	12,800	14,900	16,300	17,700	18,900	20,100	21,100	40,000	40,200	41,000	38,500	37,600		
Mobile broadband	50,900	73,000	98,800	124,700	168,200	216,000	273,100	361,900	504,600	607,000	664,800	730,700		
Other infrastructure	6,800	7,100	7,200	7,300	7,500	8,200	8,200	11,700	12,000	12,500	12,500	11,300		

#### RETAIL BROADBAND CONNECTIONS 1/2 (P. 33)