First Annual Economic Report

ACHIEVING THE DIGITAL AGENDA TOGETHER

November 2010

European Telecommunications Network Operators' Association

Contents

What is ETNO

ETNO has been the voice of Europe's telecommunications network operators since 1992.

Its 41 members in 35 countries collectively account for a turnover of more than €225 billion and up to one million employees.

ETNO members also hold new entrant positions outside their national markets. ETNO brings together the main investors in innovative and high-quality e-communications platforms and services, representing 70% of total sector investment.

ETNO strongly contributes to shaping a favourable regulatory and commercial environment for its members to continue to deploy innovative and high quality services and platforms for the benefit of European consumers and businesses.

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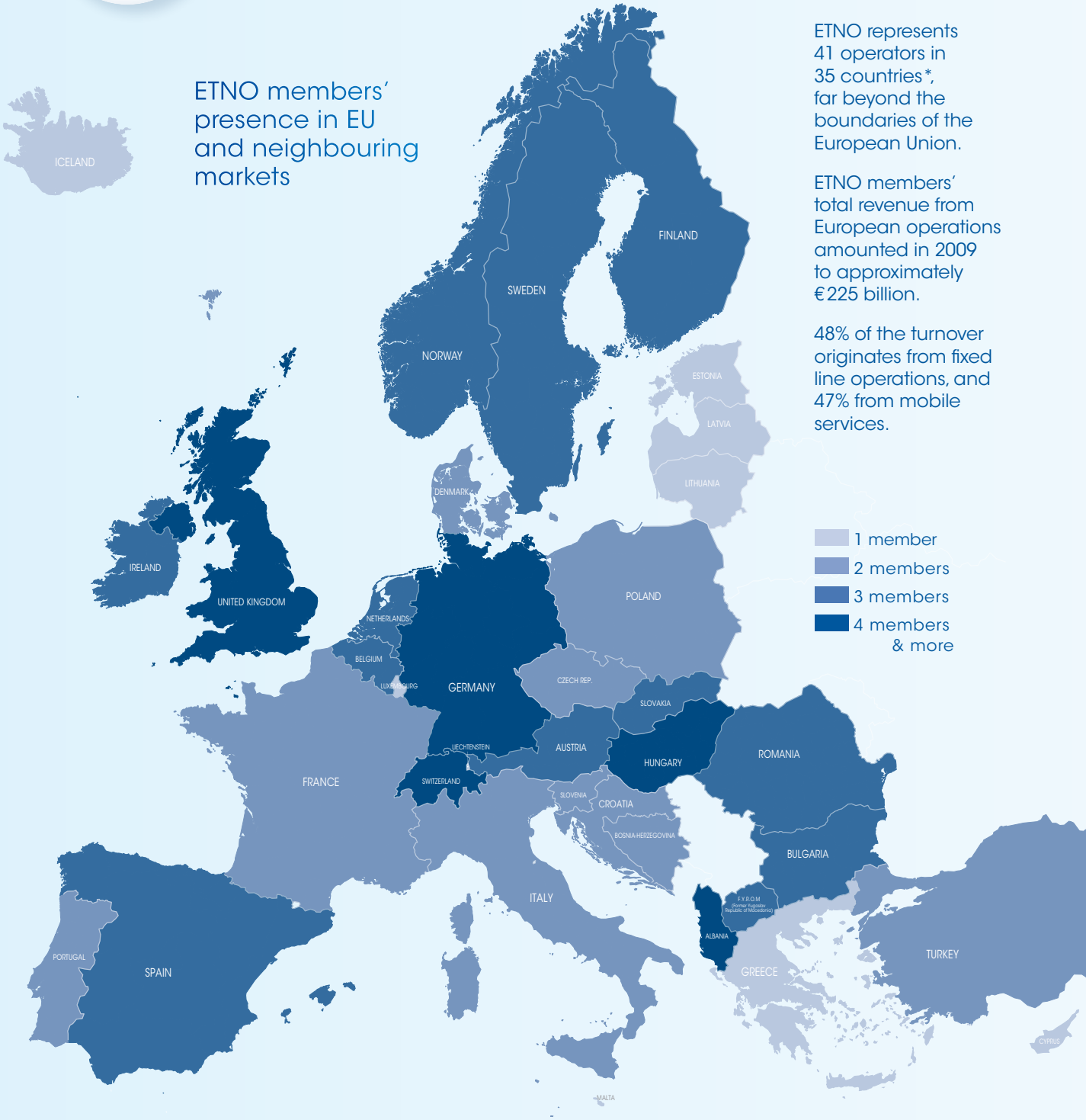
ETNO members' presence in EU and neighbouring markets

ETNO represents 41 operators in 35 countries*, far beyond the boundaries of the European Union.

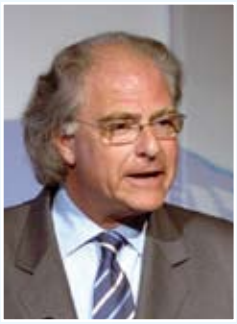
ETNO members' total revenue from European operations amounted in 2009 to approximately €225 billion.

48% of the turnover originates from fixed line operations, and 47% from mobile services.



* ALBtelecom (Albania), Belgacom, BH Telecom (Bosnia and Herzegovina), Telefonica O2 Czech Republic, Croatian Telecom, Cyprus Telecommunications Authority (CYTA), Deutsche Telekom, Entreprise des Postes et Télécommunications Luxembourg, eircom, Elisa Communications Corporation (Finland), Elion (Estonia), Finnet Group (Finland), France Telecom, Go (Malta), Invitel (Hungary), Koninklijke KPN, Lattelekom (Latvia), Makedonski Telekom (F.Y.R of Macedonia), Magyar Telekom (Hungary), Netia Holdings (Poland), OTE (Greece), Portugal Telecom, Romtelecom (Romania), Síminn (Iceland Telecom Ltd.), Slovak Telekom, Societatea Nationala de Radiocomunicatii (SNR-Romania), Swisscom, TDC, TDF (France), Telecom Italia, Telecom Liechtenstein, Telefónica, Telekom Austria, Telekom Slovenije, Telekomunikacja Polska, Telenor (Norway), TeliaSonera (Sweden-Finland), TEO (Lithuania), Türk Telekomünikasyon (Turkey), VIPNet (Croatia), Vivacom (Bulgaria).

1. Introduction



Introduction by Michael Bartholomew, ETNO Director

I am pleased to introduce the first ETNO Annual Economic Report, prepared in close cooperation with IDATE. This report provides an overview of the main trends and development in the EU telecoms sector and of the role of ETNO members.

Despite a drop in revenue in 2009, the EU telecoms sector resisted the crisis better than other segments of the EU ICT industry and the economy as a whole.

The crisis, coupled with regulatory uncertainty, had a negative impact on investment which reduced considerably compared to 2008. ETNO members continue, however, to devote a significant share of revenue to investment, including in the deployment of high speed broadband networks for which they account for more than two thirds of total investment.

While fixed line telephony subscribers tend to further decrease, broadband take up accelerated in Europe as a result of the innovation and investment efforts by telecoms networks operators.

Consumer demand for broadband applications, including IP-TV, online music and usage of social networking sites is exploding, leading to an on-going increase in data traffic and bandwidth capacity needs.

As illustrated in this report, ETNO members are not only deploying new networks, they are also investing in the development of new innovative broadband-applications in wide ranging areas, including online content, e-health and energy.

As the main investors in tomorrow's networks and services, ETNO members enable European citizens and businesses to fully benefit from broadband and directly contribute to achieving the objectives of the Digital Agenda for Europe.

Michael Bartholomew,
ETNO Director

Introduction by Didier Pouillot, IDATE

IDATE Consulting & Research

For the past five years, this report has highlighted the main trends on the telecoms markets in Europe and in particular the role played by ETNO members. This year's edition, the First Annual Economic Report, is enriched with further data on the industry's trends.

The decline of the European telecoms services market, due to both the economic downturn and structural adjustments, was a first in the industry history. Of course, the average 2.2% revenue decrease, to €276 billion, varied by countries and by segments. Although Western and Eastern markets were generally on the same trend, deceleration could already be observed in Western countries in the previous years while the market downturn was more abrupt in Eastern countries (from a 4.4% growth in 2008 to a 2.1% decline in 2009).

Regarding activities, revenue from mobile services which now accounts for more than half of total, was down by 1.4% on average and revenue from fixed services decreased by 3.1%. In both mobile and fixed services sub-segments, voice services were particularly affected and the remaining growth in data and internet services could not compensate.

In this context, ETNO members' activity was hit, notably in traditional retail services and in regulated wholesale services. However, they still account for more or less 70% of the industry revenues. Their tangible investments in Europe accounted for more than €27 billion, representing on average 12% of their regional revenues. The decline compared to the previous year (and compared to other operators) was significant both for fixed networks (from € 17.3 billion in 2008 to € 15.5 billion in 2009) and for mobile networks (from 12.6 billion € to € 11.7 billion). Today, telcos are investing heavily in NGA networks: ETNO members in particular are deploying FTTx networks. At the end of 2009, they have built 63% of FTTx homes passed in Europe facing competitions not only from other telcos but also from cable operators and from diverse newcomers (utilities, local authorities …).

All this data illustrate the important role ETNO members continue to play in a context of a structural mutation of the telecoms industry as a whole and in a particularly difficult economic environment. Beyond their performance and relative resilience to the crisis, telecoms also have a key role to play to accelerate the economic recovery. This should encourage operators to commit to pursuing their innovation efforts.

Didier Pouillot
Head of the Telecom Economics Practice, IDATE

2. MARKET TRENDS

Europe's telecoms sector resists better to the crisis than the overall economy

While totalling € 275.8 billion in 2009, the European telecom service market decreased by 2.2% that year in a context of economic downturn (- 2.9% for current GDP in the region). Europe's share in the global telecoms market has also been declining regularly over the recent years, from 33% in 2004 to just over 28% in 2009. In addition telcos' investments in Europe decreased by 6.4% in 2009 to € 42.2 billion, partly due to economic uncertainties.

Both density and revenue dynamics can vary widely, even among the EU-27 member states (€ 253.1 billion, accounting for 92% of the total for Europe). The crisis accentuated the differences between well-equipped countries which were able to reduce their spending on services, and others which tried to continue to grow under tense economic circumstances.

In terms of revenue dynamics, however, few countries (Turkey notably) recorded growth in 2009, the vast majority declined. All segments were hit (fixed telephony, corporate data and mobile services) except fixed broadband. The revenue growth in this segment was nevertheless decelerating. When looking in details into some categories, it appears that a few sub-segments still recorded strong growth (e.g. +10% in mobile data service revenue).

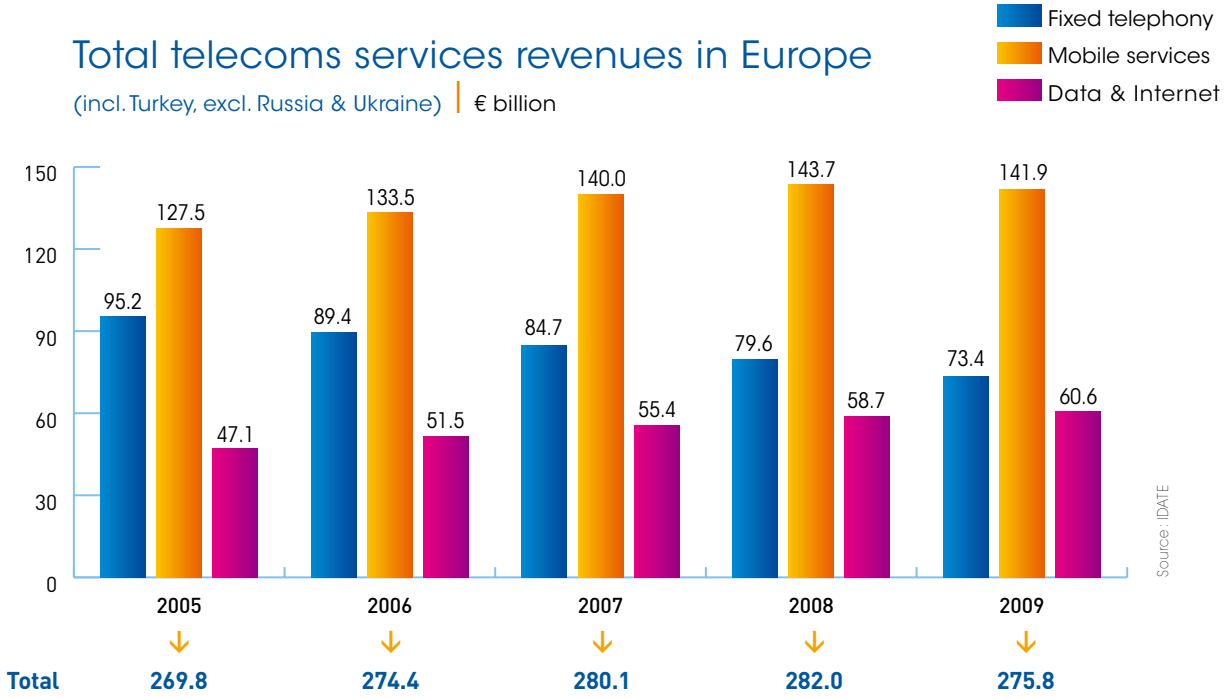
Furthermore, overall revenue decline was mainly due to drops in ARPU* as subscriber bases continued to increase in all segments, although at a slower pace compared to previous years.

Regarding fixed telephony, the number of VoIP subscribers was up 30% to nearly 54 million at the end of 2009, and the net balance for aggregated PSTN lines and VoIP subscribers was positive (e.g. +3 millions in the EU-5). Mobile density, which is the highest level in the world, gained again two points in 2009, reaching 126 % (126 customers per 100 inhabitants) at the end of the year. On the one hand, there is a moderate growth compared to previous years. On the other hand, it is significant considering the change in the balance between pre-paid and postpaid customers: the pre-paid customer base has decreased in most countries though it still accounts for more than half of total mobile customers. Finally, 11 million new subscribers were connected to fixed broadband in 2009 (+9%).

Overall figures

Total telecoms services revenues in Europe

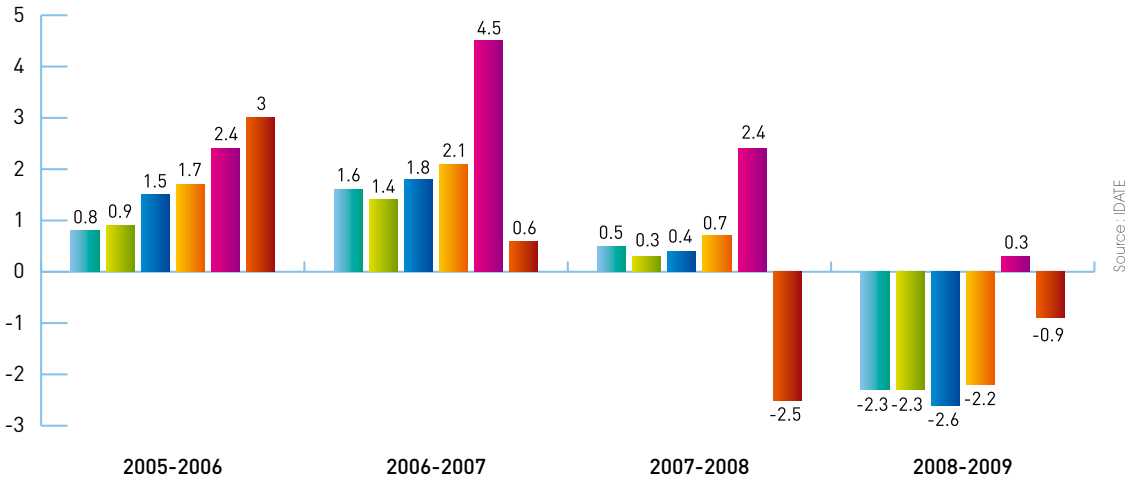
(incl. Turkey, excl. Russia & Ukraine) | € billion



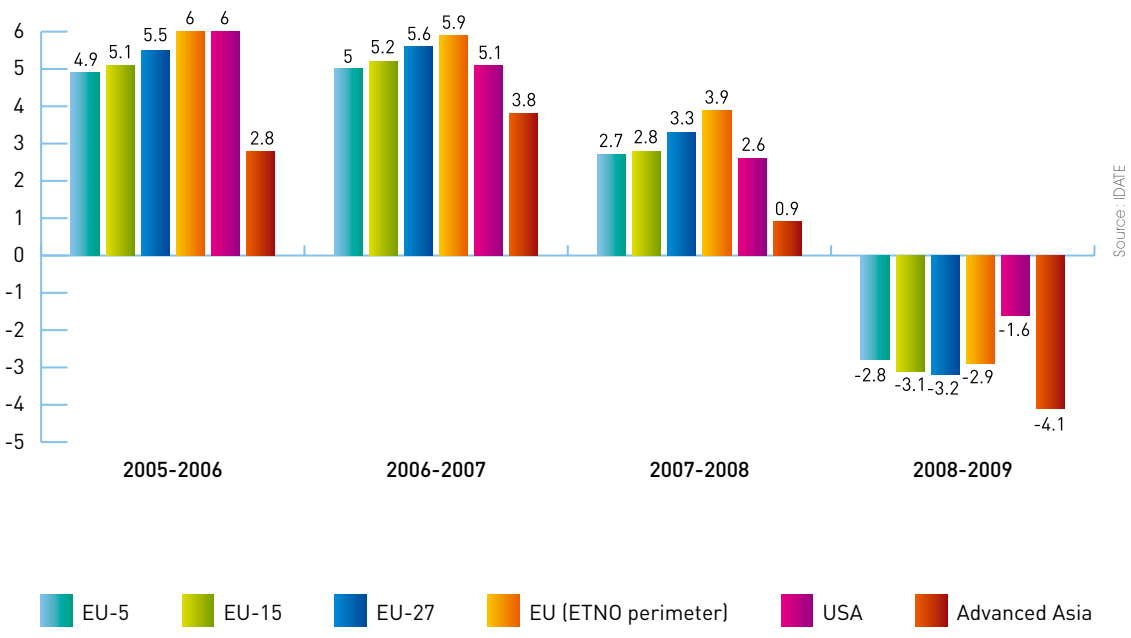
* Average Revenue Per User

2. MARKET TRENDS

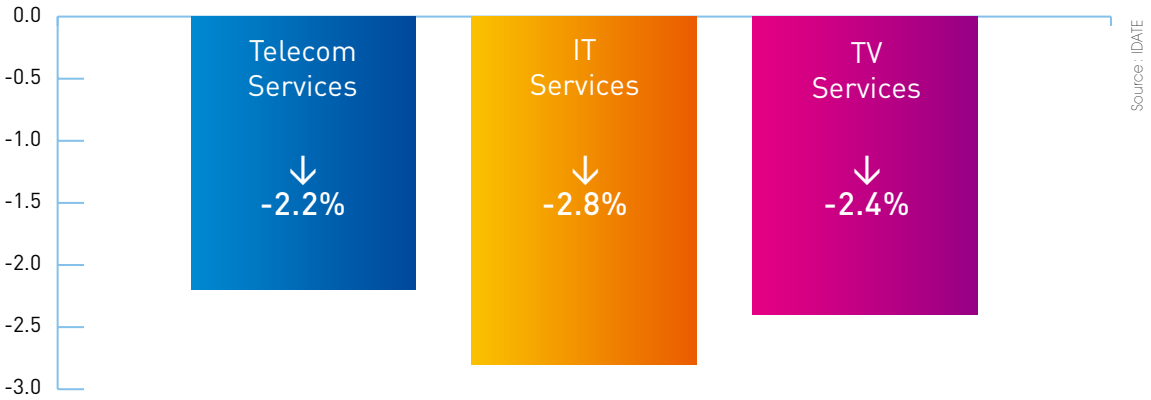
Telecoms market revenue growth in EU compared to US/Asia & overall economic growth | percent



GDP growth | percent

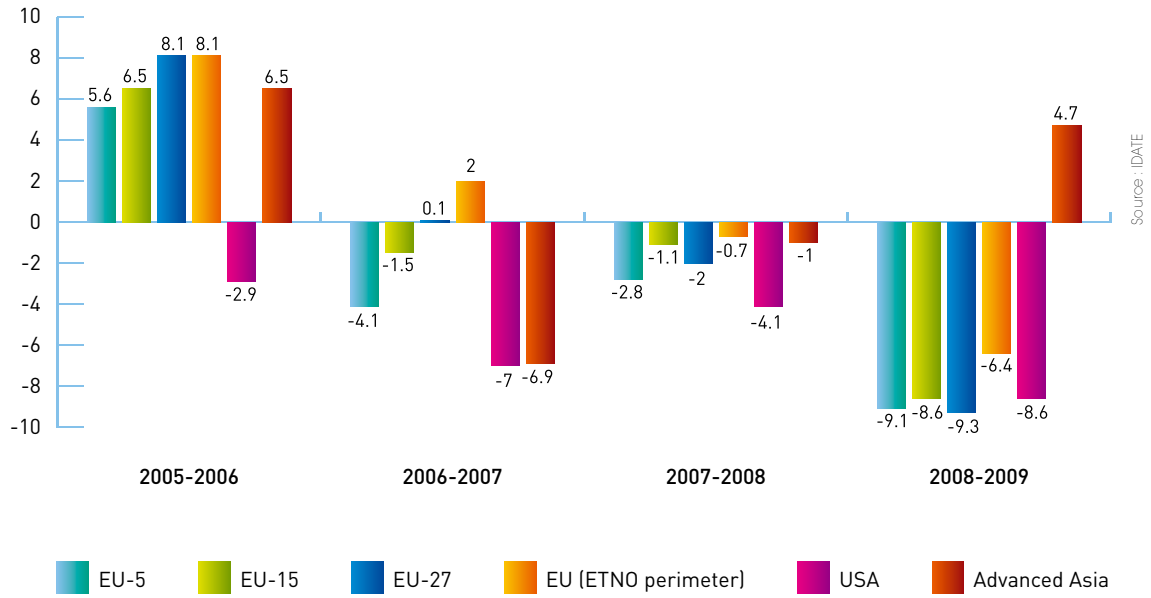


EU Telecoms market growth 2008-2009 compared to other segments of EU ICT industry | percent



Investment in EU telecoms sector compared to US/Asia | percent

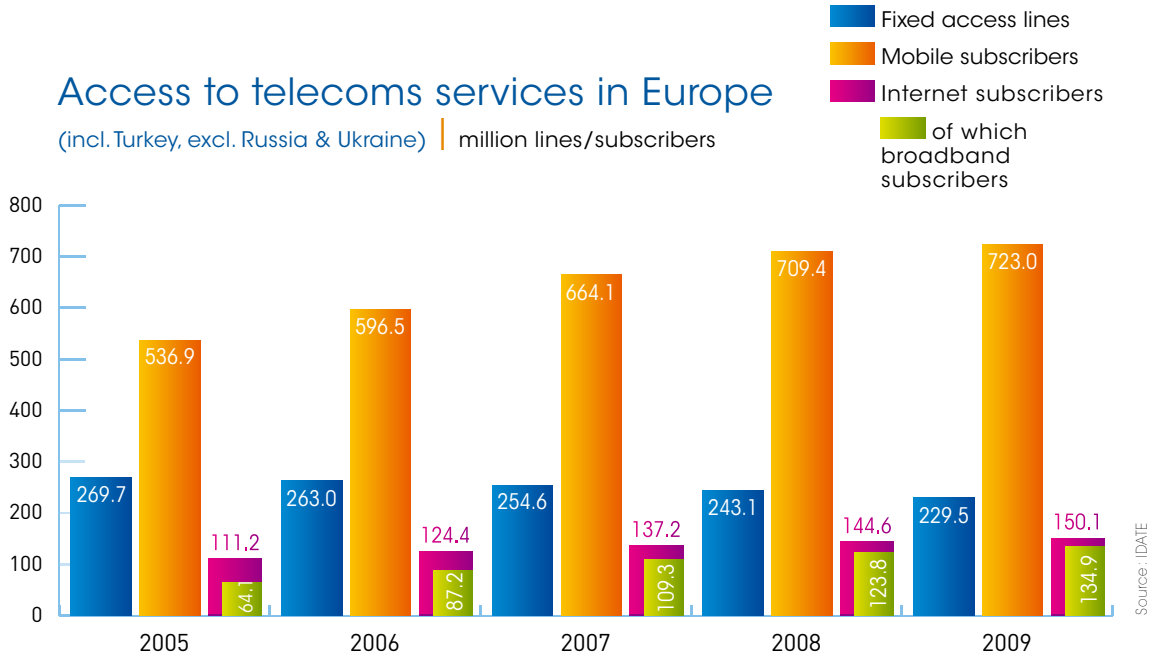
CAPEX growth of the EU telecoms sector vs. CAPEX in the USA and in advanced Asia



2. MARKET TRENDS

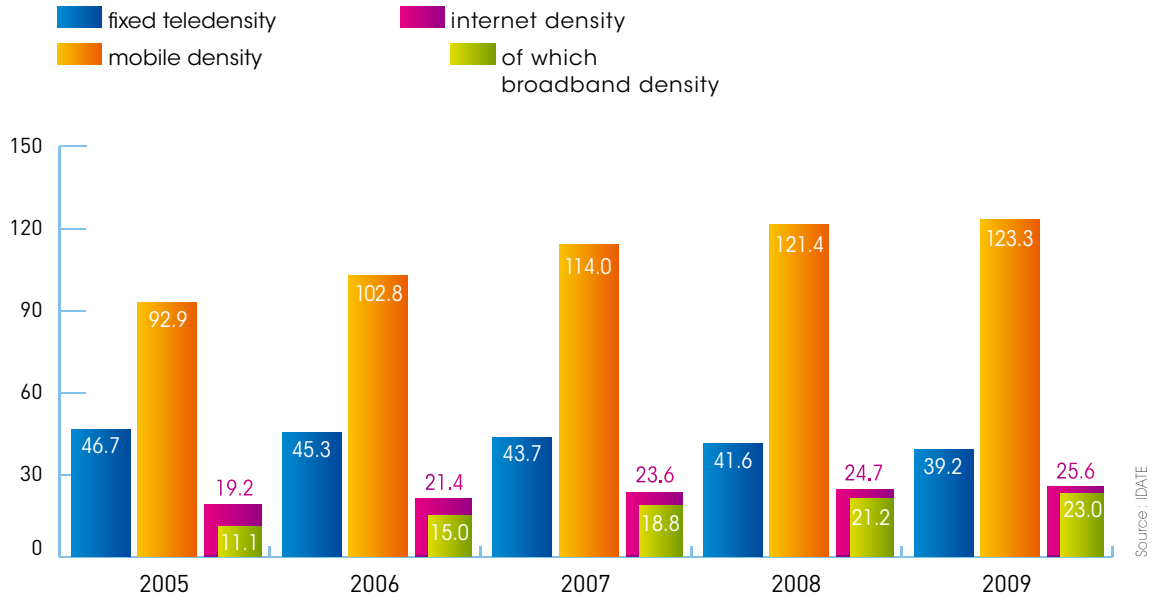
Access to telecoms services in Europe

(incl. Turkey, excl. Russia & Ukraine) | million lines/subscribers



Teledensities in Europe

(incl. Turkey, excl. Russia & Ukraine) | percent of penetration per population

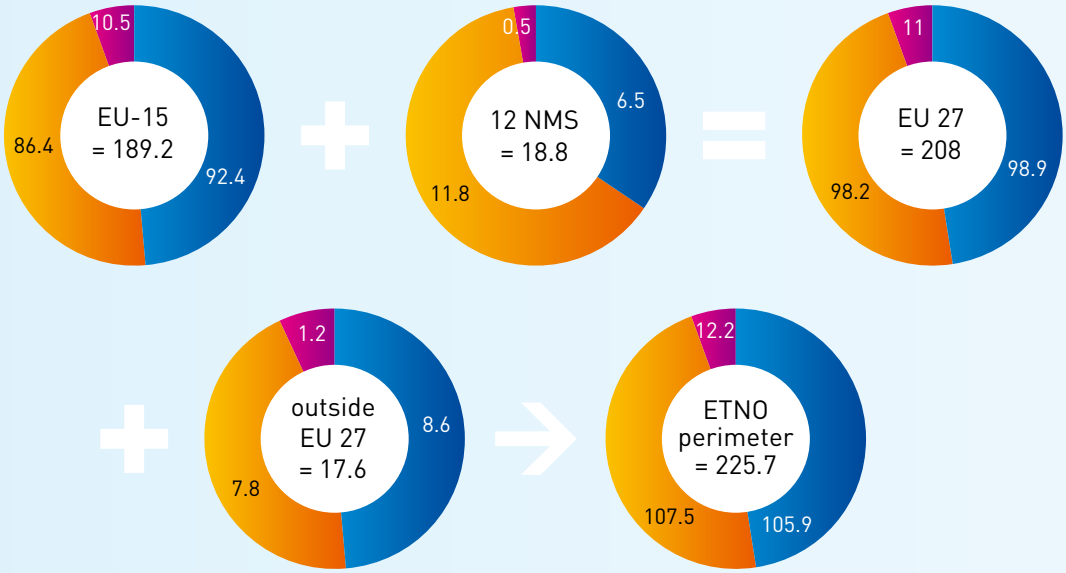


ETNO members

Split of ETNO members' turnover | € billion

	EU-15	12 NMS*	EU-27	outside EU-27	ETNO perimeter
2009 European turnover (bn €)	189.2	18.8	208.0	17.6	225.7
of which fixed	92.4	6.5	98.9	8.6	107.5
of which mobile	86.4	11.8	98.2	7.8	105.9
of which other (non core. corporate. etc.) **	10.5	0.5	11.0	1.2	12.2

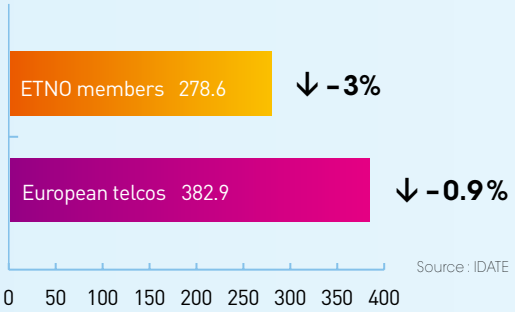
Source : IDATE



Aggregated global revenue of European telcos

(EU + non EU) | € billion

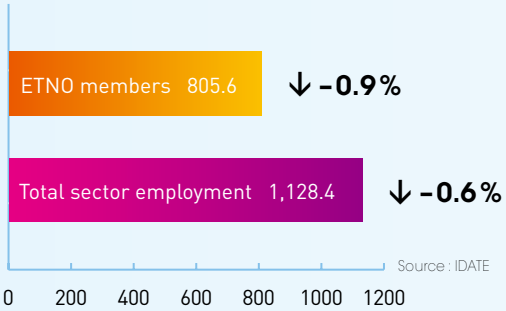
Share of ETNO members = 72.8%



ETNO members' employees

(EU + non EU) | thousand

Share of ETNO members = 71.4%



3. REVENUE AND SERVICE TRENDS

Voice over the internet and mobile telephony continue to boom while a downward trend in fixed sector is confirmed

The marked deceleration of growth in the European market reached its peak in 2009. In a Europe heavily impacted by the economic and financial crisis despite massive stimulus efforts, the sharp downturn from the second half of 2008 gave way to a recession (-2.2% in telecom service markets in 2009) which was only tempered by a slight recovery at the end of the year.

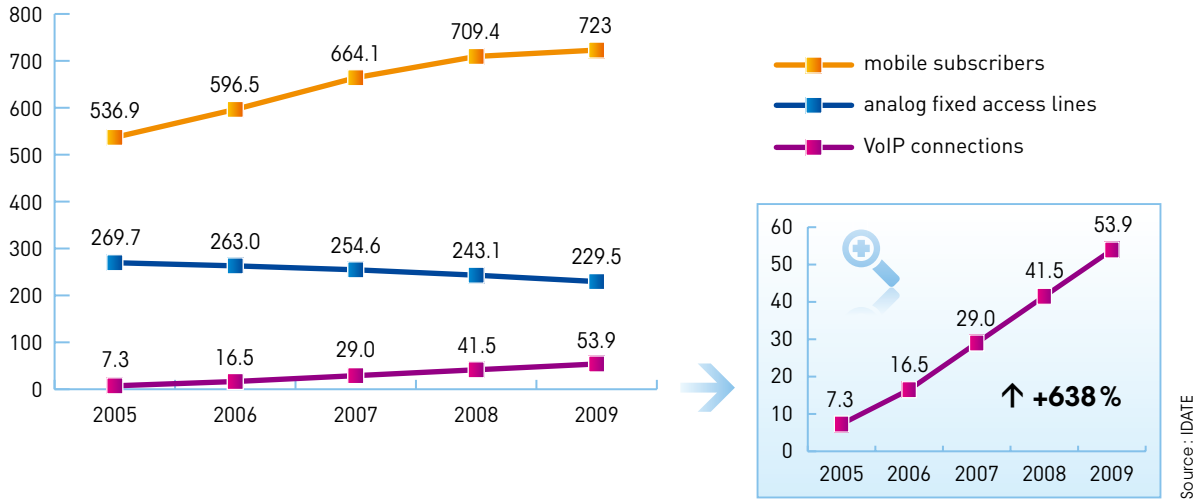
The deep impact of the crisis can be attributed to a one-two punch of:

- structural instability due to mobile services running out of steam, with a first time ever decrease in 2009 (when they had previously driven the European telecoms market' growth) and intense pressure on fixed telephony markets (-7.8% in 2009) that was worsened by the crisis, especially pressure on traffic as a result of fixed-mobile substitution and development of VoIP;
- Instability due to the unprecedented economic and financial crisis, which put pressure on the broadband segment with fewer new subscribers to capture, in addition to the mechanical effect due to the high penetration level now reached in most countries. Though the European broadband subscriber base was still on the rise in 2009 (+9%), the related revenue increase has been unable to make up for the decline in other segments.

Overall figures

Fixed telephony vs mobile telephony take up growth + take up of VoIP services in Europe

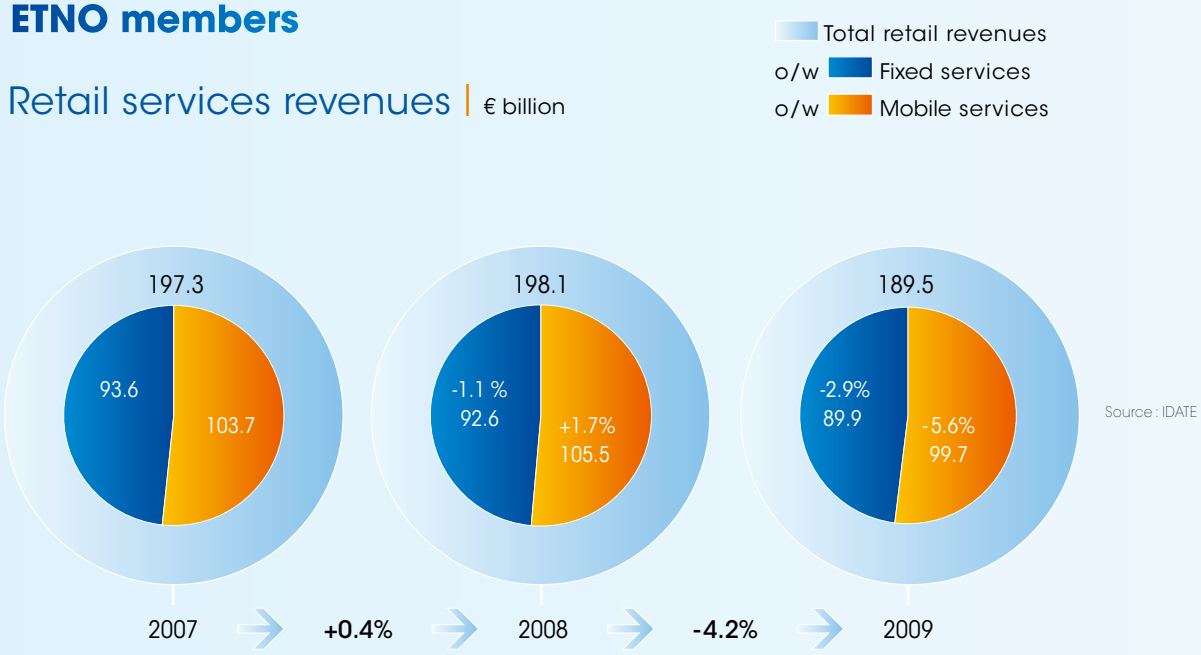
(incl. Turkey, excl. Russia & Ukraine) | million



Source : IDATE

ETNO members

Retail services revenues | € billion



Source : IDATE

4. INVESTMENT TRENDS

ETNO members continue to drive network and service investment

Investments in wireline networks in Europe amounted to € 22.6 billion, declining by -7.7% in 2009 compared to 2008 (with ETNO members accounting for more than two thirds of this expenditure) despite progress in optical fibre deployments.

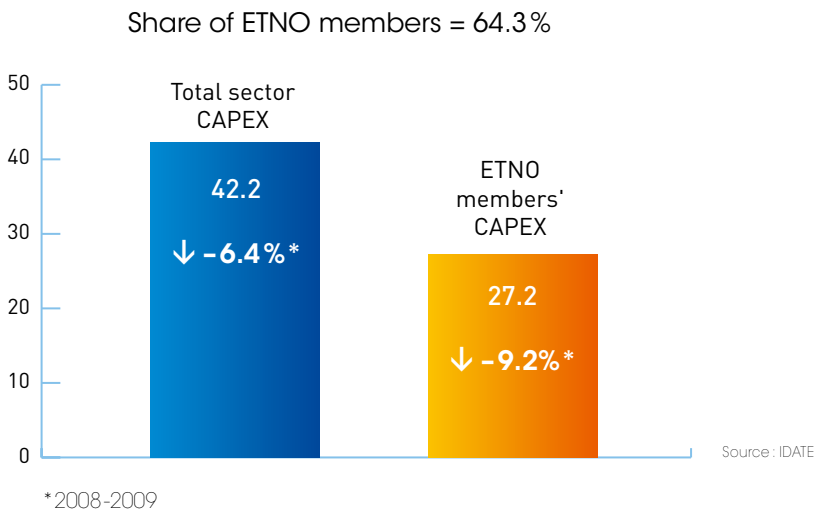
The number of FTTx homes passed increased by 45% in one year, to 38.6 million at the end of 2009. However, operators are now more focused on leveraging their FTTx investments and on acquiring – or retaining – subscribers in the areas where the majority of homes are equipped. The subscriber base grew by 76% in 2009 to 4.8 million at the end of the year.

Investments in mobile networks represented 47% of the total CAPEX in Europe in 2009 and were worth € 19.7 billion, a 4.9% decrease compared to 2008. ETNO members accounted for nearly 60% of this expenditure. In their efforts to make investments more efficient (particularly when economic constraints are reinforced), telcos look for partnerships for sharing part of their infrastructure or combining operations.

Overall figures

Total sector investment for 2009

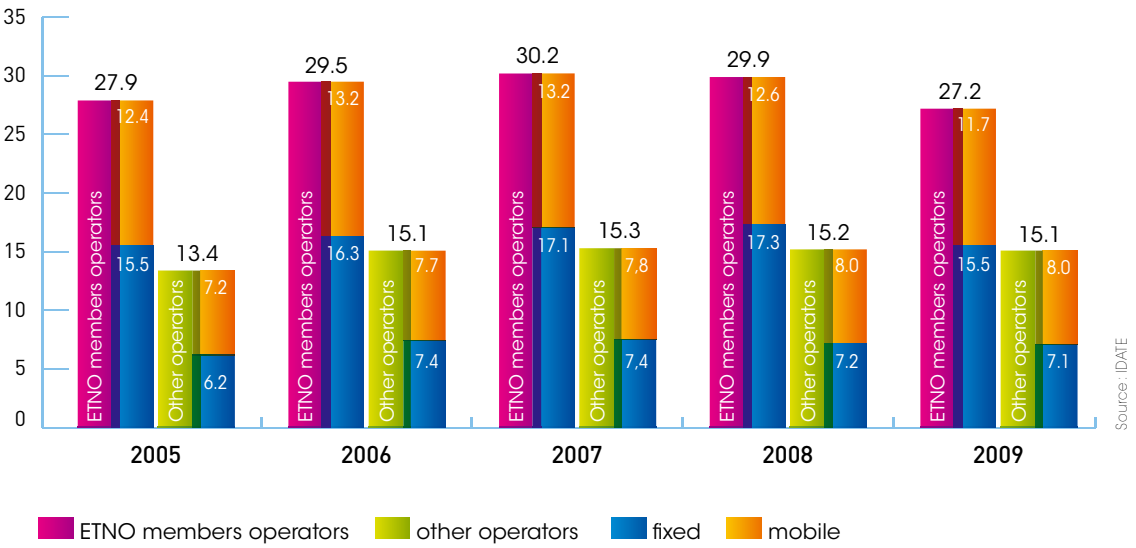
ETNO members' CAPEX (ETNO perimeter) and share of total sector CAPEX | € billion



*2008-2009

Investment in fixed vs mobile segments

Telcos' tangible CAPEX (ETNO perimeter) | € billion

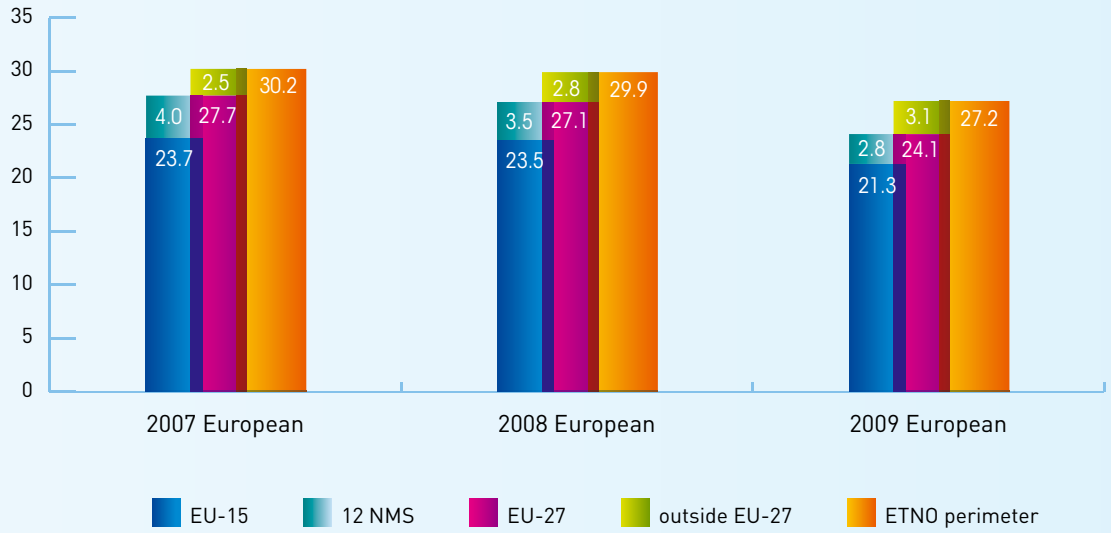


4. INVESTMENT TRENDS

ETNO members

Aggregated investment by ETNO members in Europe

ETNO members' tangible CAPEX in Europe (ETNO perimeter) | € billion



Share of revenue devoted to CAPEX in 2009

Part of turnover devoted to investment (ETNO members) | percent

	EU-15	12 NMS	EU-27	ETNO perimeter	outside EU-27
Tangible CAPEX/turnover	11.2 %	15.0 %	11.6 %	12.0 %	17.5 %
fixed	13.6 %	17.3 %	13.9 %	14.4 %	21.1 %
mobile	10.1 %	14.4 %	10.6 %	11.0 %	16.3 %

Source: IDATE

5. BROADBAND

Broadband take up continues to boom increasingly on alternative platforms

Broadband penetration in Europe increased significantly in 2008 and 2009, from 15% at the end of 2007 to 19.5% at the end of 2009, with a subscriber base of 134.9 millions (123.8 millions in EU-27).

One size certainly does not fit all in terms of broadband adoption in Europe, with marked differences between Western European countries, whose average density was 28% in 2009, and Eastern European countries, which averaged just 10% density. While four nations have broadband densities that top 35% (Denmark, Norway, Switzerland and the Netherlands), others have not even reached 15% (Slovakia, Romania, Poland and Bulgaria) or are below 10% (Turkey).

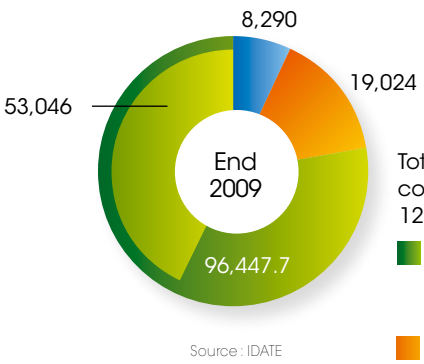
Broadband is still taking off in the ten EU member states of central and eastern Europe (14.9% density at end 2009), with significant inroads in Estonia and Slovenia, where broadband density was noticeably higher at the end of 2009 (over 23%).

Overall figures

Broadband penetration per technology

Structure of the European fixed broadband market (EU-27)

thousands connections



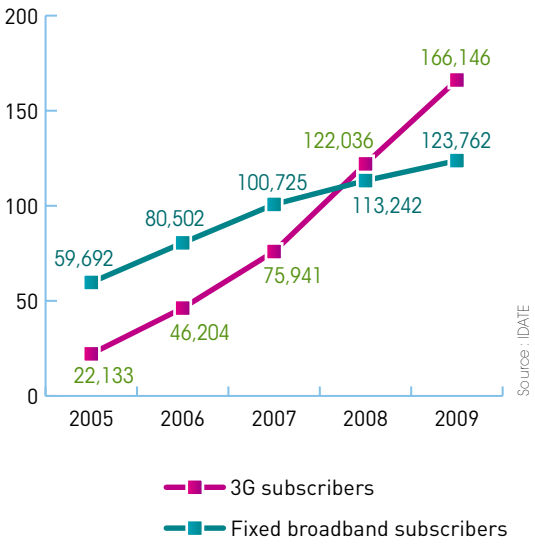
Source : IDATE

Total fixed broadband connections in 2009 = 123,761.7 of which :

- ADSL
  - of which ADSL retailed by incumbent
- cable modem
- other technologies (FTTx, LAN, FBWA, satellite…)

Fixed vs mobile broadband

Fixed and mobile broadband subscribers in EU-27 | thousand subscribers



Source : IDATE

6 NGA

ETNO members are driving NGA deployment although overall investments remain weak

The total number of FTTH/B homes passed reached 17.1 millions in Europe (38.7 million FTTx homes passed including VDSL, FTTLA notably) at the end of 2009, with 2.6 million subscribers (4.8 million FTTx subscribers).

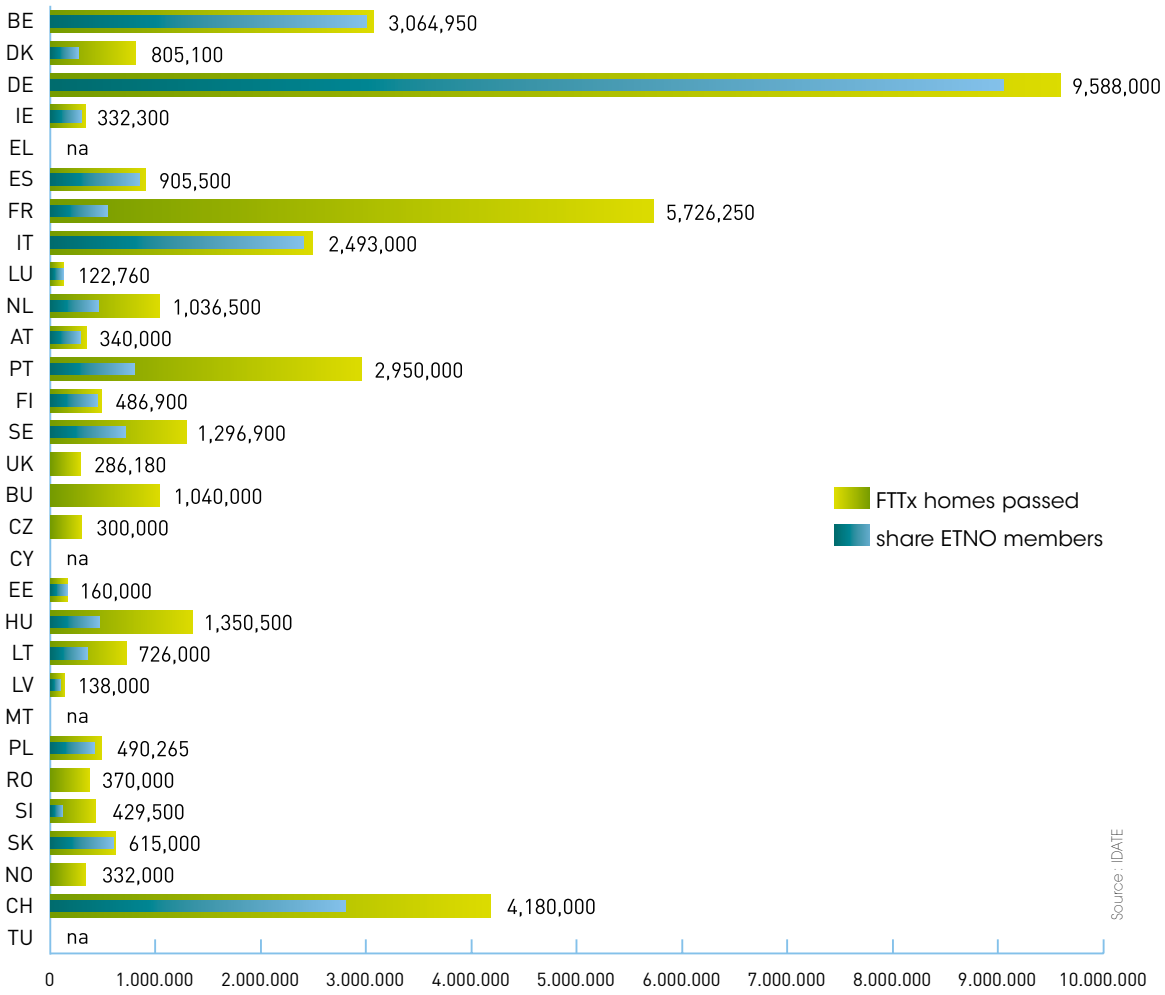
The FTTH/B market in Western Europe continues to develop. Rollouts are progressing steadily and there were close to 13.7 million homes passed for FTTH/B by the end of 2009, compared to 10 million one year before. Growth is nevertheless tending to slow. This indicates that, even though we are far from having reached a level of saturation in terms of ultra high-speed network coverage, the players involved are starting to shift their priorities from rollouts to marketing, and are putting more and more effort into improving penetration rates.

In Eastern Europe, the FTTH/B market is being spurred by a healthy growth momentum in several countries like Lithuania, Slovenia and Estonia where fibre access accounts for 40%, 14% and 11%, respectively of the broadband market. Lithuania stands out here for having the highest percentage of households that subscribe to an FTTH/B access service of anywhere in Europe, East or West.

Overall figures

NGA deployment in Europe

FTTx home passed at end 2009 and share of ETNO members in deployment per country | units



Main technologies/ network architecture models

NGA deployment (Homes passed at end 2009) | million

Homes passed at end 2009	Total EU	ETNO members	% ETNO members
FTTH/B	16.9	6.9	40.6%
FTTx (incl. VDSL, FTTLA, LAN…)	38.6	24.3	62.9%

Source : IDATE

7 NEW BROADBAND SERVICES

IP TV and online music continue to drive take up of broadband services

The internet tends to enrich the user experience, especially with video, high-definition and 3D becoming more widespread as access networks provide higher and higher speeds.

Online video consumption has boomed over the past several years, in number of users, in viewing time and in number of videos viewed. Innovative applications like virtual interfaces and biometrics are gaining a number of followers.

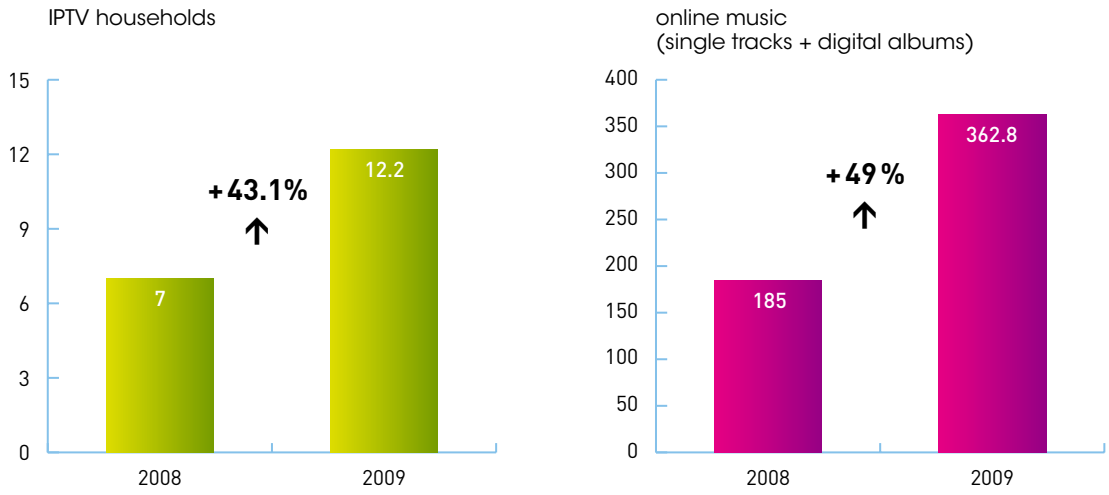
On a broader scale, social networking has become an everyday practice on the internet, just like search, communication (e-mail and instant messaging), browsing portals and other content and news sites, and e-commerce.

The capacities made available to users have been increasing steadily, thanks to technological progress, leading to an exploding demand for those new services and applications. One billion videos were watched on YouTube every day in 2009, the number of users signed up for Facebook globally increased from 130 million at the end of 2008 to more than 350 million one year after, to 500 million now. In Europe, the IPTV subscriber base increased by 43% in 2009, to 12.2 million households while e-commerce sales rose by an average 22%.

Overall figures

Aggregated subscriber growth in: IPTV/ HD TV / Music online

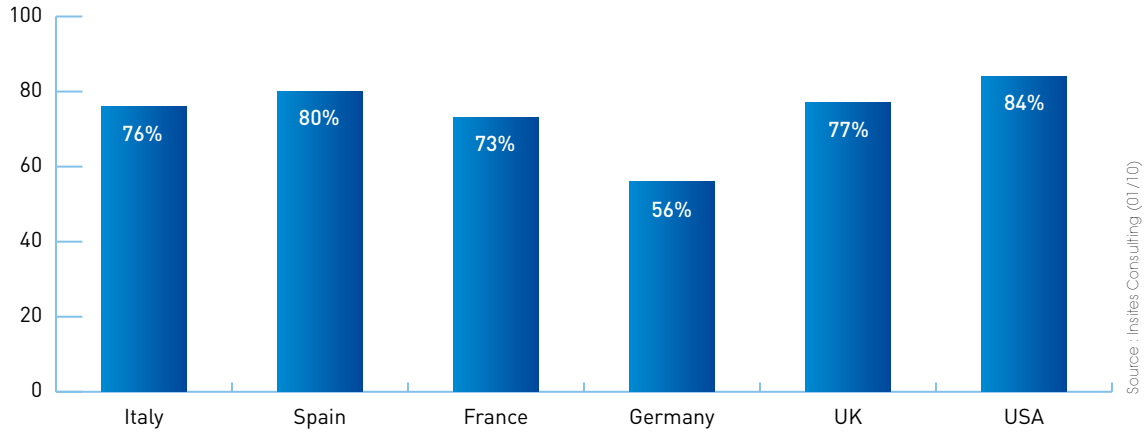
Development of online services in Europe (ETNO perimeter) | million



Source : IDATE (based on IFPI for music online)

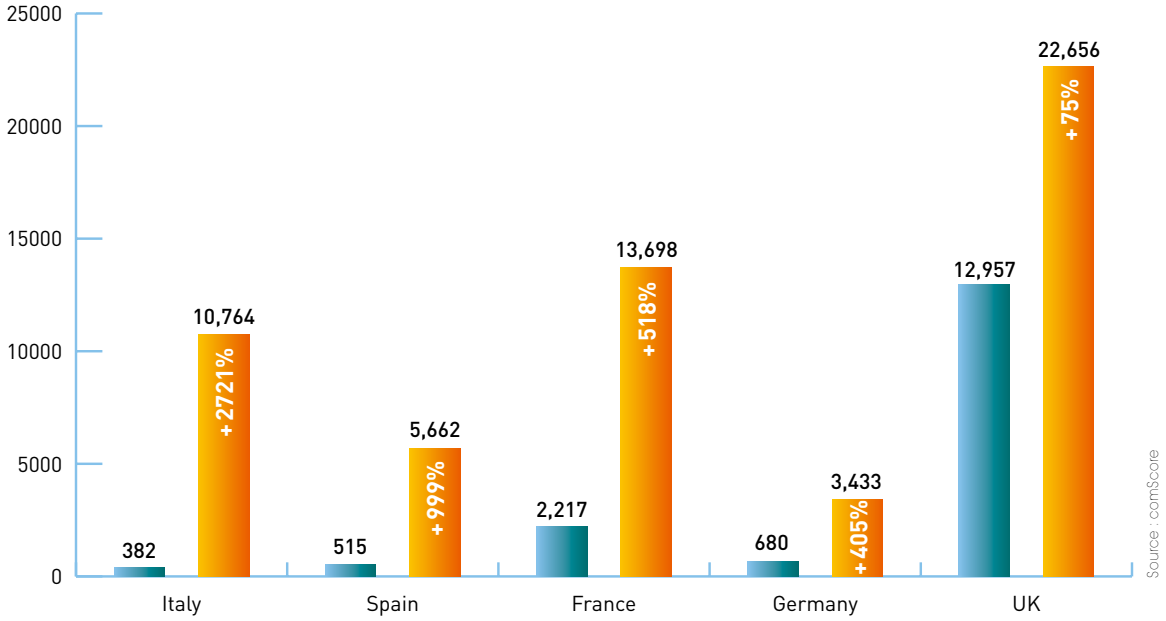
Social networking sites

% of Internet users using social networks | percent



Growth of Facebook audience in the main European countries

% of growth from February 2008 to February 2009 | thousand of unique visitors



8. DELIVERING ON THE DIGITAL AGENDA

e-Health

ETNO member companies throughout Europe are leaders in the development and provision of e-health applications, including distance diagnosis and monitoring systems, platforms of practitioners, electronic health cards, etc.

- Belgacom: with the creation of the Recip-e model for development and deployment of the e-prescription, the Belgian health sector is evolving towards the health 2.0 model. Belgacom has defined three main domains of activity where core assets could leverage professional and private services: HIN (Health Information Network), Telemedicine and Home caring. CareNet (eMutualities), Recip-e (ePrescription) and Belgium-HF (Telemedicine) are three major running projects in the health sector today powered by Belgacom.

- Deutsche Telekom develops a e-health portfolio including clinical Services, Health insurance and telematic services. Deutsche Telekom's telemedicine solution "Conference on tumors" allows doctors to participate in conferences remotely and exchange findings and x-ray images online. Sensitive data is exchanged through the diagnostics portal in Friedrichshafen, which has been certified by Germany's Federal Office for Information Security (BSI). The service is to be extended to tumor centers around the country. Deutsche Telekom also experienced in T-City Friedrichshafen a service allowing people with insulin-dependent diabetes to measure their blood sugar level on a daily basis, through the GlucoTel diabetes management system. Virtual rounds have been used in T-City since 2007. Remote patient care is performed using the Motiva systems: patients measure their vital signs – such as blood pressure, heart rate and body weight – themselves at home.

- KPN has taken majority participations in IPT (Telemedicine) and eZorg which connects almost all general practitioners and pharmacists. KPN has also introduced several health-specific propositions such as Zorgconnect. KPN's DiabeticStation is an interactive measuring station that enables diabetes patients to measure their own vital values.

- Orange launched two healthcare services in the UK in 2010 inaugurating its e-health activity in the country. In July, Orange became the first operator in the UK to launch a healthcare specific direct-dial solution with its smartnumbers service. This aims to improve patient services and increase efficiency by cutting the time it takes to contact healthcare professionals. The new service, which was set up in partnership with Resilient Networks plc, provides patients and mobile healthcare workers with a single phone number that gives instant access to the best person available.

8. DELIVERING ON THE DIGITAL AGENDA

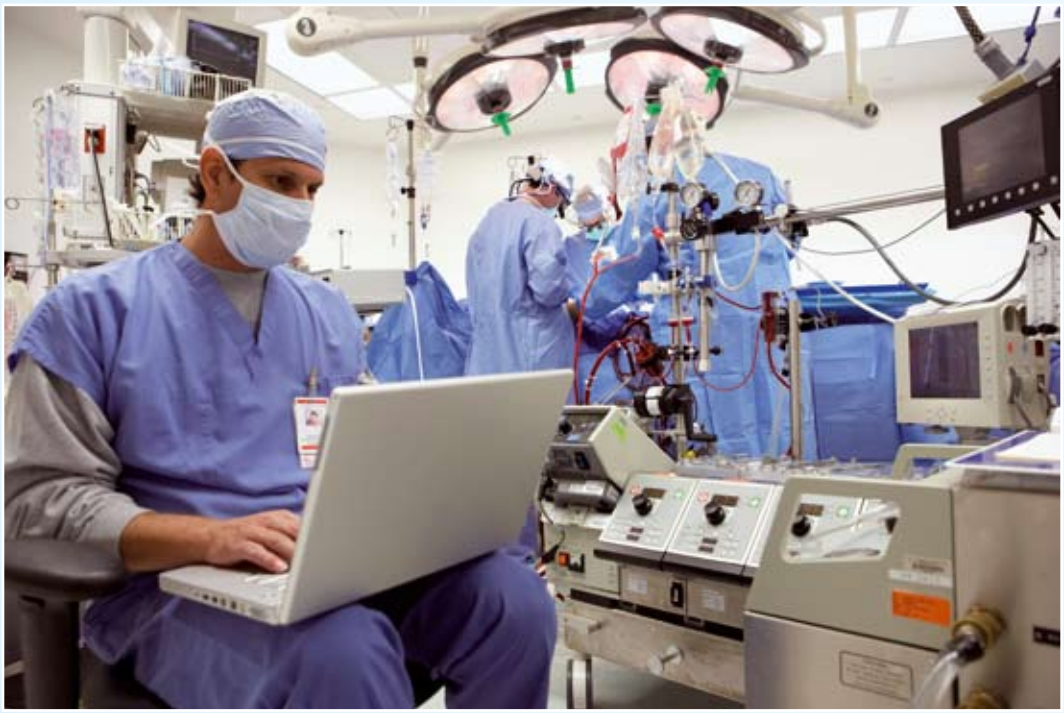
The Orange Healthcare gateway, which was launched in September, is set to generate GBP 325 million of savings for the National Health System by providing a modular messaging platform that uses mobile communications to improve efficiency. The system enables healthcare professionals to get messages to patients and employees quickly and easily, whether to remind them of upcoming appointments, improve the communication of test results, speed up the resourcing of replacement nurses or improve patient adherence to medication. The applications are available through a simple, secure web environment, which allows mobile technology to become an integral part of the way healthcare providers communicate with patients and employees.

- Portugal Telecom developed a service management platform for healthcare providers units, with an impact on the optimization of resources and processes, which is reflected in reduced assistance time. PT also created a Digital Health Network which uses fibre to connect all entities providing health-related services (hospitals, health centres, and pharmacies, among others). Other PT services in the area of e-health include BabyCare, a solution that enables parents of premature babies to watch their children remotely via the internet. PT also offers medical consultations via Videoconference and Telemedecine facilities.

- Swisscom's Evita e-health service enables patients and doctors to access all medical data, including prescriptions, analyses, diagnoses, allergies and blood pressure levels. Data can be accessed remotely and in full security.

- TDC has been involved in several projects, such as the 'Circle-project', which enable children staying in hospital for a longer period of time to follow their usual school classes via webcam and interactive blackboards. TDC also participated in a project allowing patients of Regions Hospital Silkeborg to receive video consultations in their own homes before and after the operation, thereby reducing the number of hospitalisation days. As part of the Danish Cancer Society campaign "Turn down the sun", TDC delivers a daily text message with a UV index that indicates how much sun protection is needed.

- Telecom Italia's My doctor @ home service enables patients suffering from chronic illnesses – or in post-hospital care – to monitor their physiological parameters (body weight, blood pressure, heart rate, blood oxygen levels, glycaemia, lung capacity, electrocardiography etc.) directly from their own homes or in properly equipped areas (health centres, chemists', doctors' surgeries etc.). The service is currently under trial. Line@Medica Diabete is aimed at people with diabetes. The service allows the visualisation of glycaemia data on a mobile phone and automatically updates the patient's glycaemic diary, which is archived in electronic form.



- Telefonica offers a large range of telemedicine products aimed at healthcare professionals and patients, including: monitoring services for the chronically ill, heart patients, diabetes or those with lung pulmonary illnesses, as well as post-op hospital attention; tele-rehabilitation for knee and heart operations and; medical telepresence, or high-definition remote diagnostic services. Telefonica's Colabor@ platform allows healthcare medical results remotely with other doctors and in real time, including scans, ECTs, videos and photographs.

- The pilot project for a Networked Care System "Videofon" operated by Telekom Austria in cooperation with Volkshilfe Styria and Zydacron received the "ebiz egovernment award". Telekom Austria also provided the regional hospitals in Innsbruck with fail-safe connection, enabling electronic medical files with Direct Connection to Patients' Beds – 6,000 PC Clients Connected. Furthermore Telekom Austria's electronic health card offers a series of added-value secured services that facilitate practitioners' daily work.

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Digital literacy

- As part of the government's "Start2surf@home" campaign, Belgacom's Start2Surf kit comprises a new computer with all necessary softwares, including antivirus and antispam software, and 12 months of free access to Belgacom Internet. Belgacom also pays particular attention to online child safety. Belgacom supports Action Innocence, which visited 3,198 schoolchildren in 2009 to raise awareness about the dangers of the internet. 30,000 leaflets were distributed through Belgacom's shops, with advice to teenagers about safe Internet usage

- Together with the European Schoolnet and other European Internet and mobile providers, Deutsche Telekom launched the website "TeachToday.eu", offering teachers and educators a broad range of information in six different languages on new mobile and Internet technologies as well as on issues such as Internet and phone bullying, publication of unsuitable photos in online networks, and indiscriminate use of personal data. The aim is to actively support teachers throughout Europe so that they can guide their students to handle the new technologies positively, safely and responsibly. The "Ein Netz für Kinder" initiative has established a safe surfing space that helps children understand the structure of the Internet and gives them practice in using the new medium. In the Czech Republic, for example, staff at T-Mobile trains senior citizens to use cell phones. Magyar Telekom has launched the "Learn, Grandma!" scheme to help Internet newbies over 55 years of age in Hungary to understand the medium.

- In Ireland, eircom is an official partner of the 'I Can Do' programme, a digital skills programme offering 60 hours of on-line interactive, guided learning. The digital learning programme is designed to give people the skills needed to get the most from using digital technology for music, photographs, videos and living on-line. Furthermore, eircom's 'Study Hub' provides on-line video tutorials for all students studying for their second level examinations.

- KPN's 'ComputerPlusBus' aims at familiarizing the elderly on how to use new media to make contact with others. Employees and ex-employees of KPN travel around with the ComputerPlusBus to familiarize pensioners with media such as internet, SMS and MSN. In association with Ouders Online (Parents Online), KPN has set up a foundation that shows teachers, parents and children the possibilities of the internet, but also points out the pitfalls. The "My Child Online" web site gives information on how children can surf the internet safely and can get in contact with others.

- The purpose of Magyar Telekom's Digital Bridge at Small Settlements Program is to increase awareness about achievements of and opportunities offered by information and communication technologies in regions where the digital divide might appear. The program aims to provide better communication means to disadvantaged settlements of less than 3000 inhabitants, thus supporting local and regional development. Magyar Telekom volunteers to provide customized training. 127 events of this kind had been held by the end of 2009. In 2009, the Program was supplemented by a new element. Volunteers continue to educate

the inhabitants as part of the program called Digital Bridge Fest, in addition to which a talent contest is held by an NGO (winners are offered the opportunity to perform for a live audience through the internet).

- As a key partner of Microsoft for the launch of the Windows Phone 7 platform, Orange customers across Europe benefit from the industry-leading 'Expert Assistance' service. This personalised service, which is part of the Orange Care portfolio of enhanced customer care services, provides dedicated and expert help to ensure customers get the best out of their smartphones. As a standard, Orange and Microsoft will be helping customers learn about, set-up and get the most out of their Windows Phone 7 by providing live demos and interactive screens in flagship stores across Europe. In many stores and telesales points, customers will even be able to benefit from "Orange Personal Trainers".

- Through Portugal Telecom's e-Escolas and e-Escolinhas projects, 720 thousand laptops connected to the Internet via mobile broadband were provided to students from the first cycle of Basic Education to Higher Education. PT already connected hundred schools at 100 Mbps and is developing the installation of Local Area Networks in over 1,200 schools – supplying equipment and wireless coverage – as well as the rollout of a Wide Area Network connecting over 6,400 schools and 19 Ministries at 64 Mbps. PT is also involved in the recycling and distribution to schools and NGOs of computers withdrawn from active service within the PT Group. TMN Kid Kit groups a series of essential features for kids' mobile, with a focus on security. As far as online child protection is concerned, PT signed in 2008 the Code of Conduct for activities of delivery of content services that aims to protect minors from harmful content when using mobile communication services. It also signed a protocol of cooperation with FCCN

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(Foundation for National Scientific Computing) in the domains of IT and Internet security. The Portugal Telecom Foundation initiated a project of enterprise volunteer work through which employees of the PT Group train students and teachers about the secure use of the Internet.

- In 2009, Slovak Telekom announced the fourth Slovak Telekom Award – a competition to recognise educators who use internet. 154 projects were enrolled in the competition, confirming the fact that the internet is used in teaching at all school levels, including for the first time kindergartens. The fact that more than 20% of competing projects came from kindergartens clearly confirmed that through games and play, even the youngest generation can get to know the internet and modern communications. All projects became part of the virtual library at www.cenast.sk, used by educators as a source for creative and modern teaching. By the end of 2009, the library comprised almost 700 projects on using ICT at schools.

- Telenor, togheter with the Red Cross, ChildMinder and the Norwegian Media Authority launched Norway's biggest ever campaign against digital bullying. The project aims at spreading information to about 50 lower secondary schools, 7,500 pupils and 3,500 parents by spreading information about how parents and children should handle digital bullying situations.

- Telecom Italia signed a Protocol of Understanding with the Minister of Education, Universities and Research (MIUR) for the dissemination of ICT in schools, with the objective of assisting young people in the use of new technologies and promoting their utilisation for educational purposes. The partnership includes the provision of special offers and also cultural and educational initiatives aimed at increasing the awareness of young people about issues connected with environmental sustainability, bullying and the safe use of the network. The Internet Saloon initiative, launched in partnership between the Association for Metropolitan Interests of Milan and the Telecom Italia Company, Gruppo Credito Valtellinese, HP and Microsoft, aims to promote the dissemination of the Internet and new technologies among people over 50.

- Fundación Telefónica provides training through the EducaRed educational programme from which up to one hundred thousand people benefited in 2009. Likewise, Telefónica invested in other programmes to improve the technological abilities of groups at risk of exclusion. The "Connect Me" scheme in Peru seeks to reduce the literacy divide and

bring ICTs closer to rural communities with very limited access to such services. Through its Mobile Bus, Telefónica has provided training to thousands of people in the interior of the country, in matters relating to education, health and productivity. Fundación Telefónica Classrooms in Latin America aims at strengthening, through the use of ICTs, the teaching and learning processes of teachers and members of communities which are affected by child labour.

- Telefónica O2 Czech Republic developed a three-year programme to combat school bullying. The initiative stresses the importance of communication with parents, children and schools. In addition to this, a specific website has been set up (www.minimalizacesikany.cz), with information on how new technologies are used as a bullying instrument. The goal is to make children, parents and members of the education community aware of this problem and to show them how it can be addressed.

- Online child safety is of a key importance for Telekom Austria who since 2006 has been working intensively with the initiative Saferinternet.at, which supports parents and children with events, information and tips for safe use of the Internet. Telekom Austria took part in the 7th European Safer Internet Day 2010 under the motto "Think before you post!". In addition, Telekom Austria is a member of Stopline.at, to which Internet users can turn easily, quickly and without bureaucracy - also anonymously - if they come across web pages with forbidden content.

- Telekom Slovenije together with its mobile subsidiary Mobitel is involved in charity programmes – the companies are donating personal computers to less fortunate children, and notebook computers to regular schools to provide early digital education for children.

- Telekommunikacja Polska's Education with TP programme, launched back in 2004, aims at supporting the Polish educational system by facilitating access to modern educational methods for students and teachers. Under this programme, 14 500 thousand Polish schools and more than four million children and teenagers get access to Internet. Another important focus of this programme is to promote internet safety for children and to promote professional skills of teachers. The implementation of the Program involves volunteers from TP, who conduct classes for the youngest students on the principles of safe Internet usage and education on the Internet.

- TeliaSonera: Sonera in Finland collaborates with national authorities and is frequently engaged in educational activities at schools and events like the 'Information Safety Week'. In Estonia, the Eesti Telekom Group (EMT, Elion, MicroLink) together with the foundation Vaata Maailma initiated the project Come Along! in May 2009. The goal is to provide basic and supplemental internet training courses for 100,000 people during the next three years. In Lithuania, the TEO mobile academy, TEOBUSAS, specifically teaches children and their parents how to use Internet safety. In Lithuania, Omnitel is participating in an EU sponsored project to create a more family-friendly workplace and improve life for socially vulnerable families.

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Services for disabled users

- In Ireland, eircom provides a range of products and services for disabled users, including special telephone equipment for users with speech, hearing or dexterity difficulties. For users with speech and hearing difficulties, eircom also provides a text relay service that enables a telephone call with a valid person. The operator also offers bills in Braille and recently upgraded its web site to make it fully accessible by disabled, in line with the 'Web Content Accessibility Guidelines' and in cooperation with the National Disability Forum.
- KPN's texting system for the visually and hearing impaired was recently updated to replace an earlier, rather outdated generation of machines. This guarantees the continuity of a service that KPN has provided for decades in the Netherlands. Because the visually impaired cannot look up a number in a telephone directory KPN Nederland has for years been offering a 'Gidsservice' directory enquiries service at the standard rate for telephone calls. A customer only needs to ring the special number and KPN looks up the caller's desired

number and puts him through straightaway. This Gidsservice is operated in collaboration with the Dutch umbrella organisation representing people with disability.

- Magyar Telekom's Internet for Equal Opportunities (Egálnet) Program: Egálnet is a community site that enables registered organizations to use a simple program to create their own websites, as well as to keep in touch with each other. The target group of the program includes NGOs representing socially disadvantaged or disabled people. 171 organizations joined the program by the end of 2009, out of which 114 launched their own websites already.

- Orange has launched a web-based service specially adapted for disabled customers in France. The remote customer service allows customers with hearing or speech impairments to contact trained specialists in real-time by phone, videoconference (using sign language or subtitles) or written chat. The initiative, which is the first of its kind in France, strengthens Orange's existing range of products and services that are designed to meet the needs of disabled customers in France. These include a catalogue of specially adapted products and services, 5,000 trained staff, a distribution network with 186 autonomy-label stores, a toll-free number and a dedicated website. www.autonomie.francetelecom.fr

- Portugal Telecom offers a wide range of adapted solutions for citizens with special needs, including services for users with different types of impairments or disabilities, severe illnesses or elderly people at risk, taking into consideration sight, speech-communication, cognition, neural-motor dysfunction and hearing impairment. Portugal Telecom's Estrela (Star) Project in partnership with the Federation of the Portuguese Cerebral Palsy Associations (APPC) involves the installation of centres with educational and training resources for Cerebral Palsy associations throughout the country. The Astro Project– Tele Classroom enables children when staying at the hospital or in isolation/ convalescence at home to benefit from tele-classrooms. TMN Talks & Zooms are innovative solutions aiming at improving the quality of life of citizens with visual impairments. The TMN Talks & Zooms gives voice to the written content on the mobile display. The Talks component converts all information into sounds by means of a voice synthesiser, and the Zooms part enables augmenting the display information, thus affording an easy reading.

- The Endowment Fund Slovak Telekom was established with the objective of "Opening the Information World to Everyone" and assisting physically or socially disadvantaged groups and individuals who aspire to living a full life full of discoveries. The funds are distributed based on an assessment by independent professional commissions. So far, the Endowment Fund has already distributed almost EUR 430,000, supporting as many as 141 projects and, through an individual scheme, 109 individuals.

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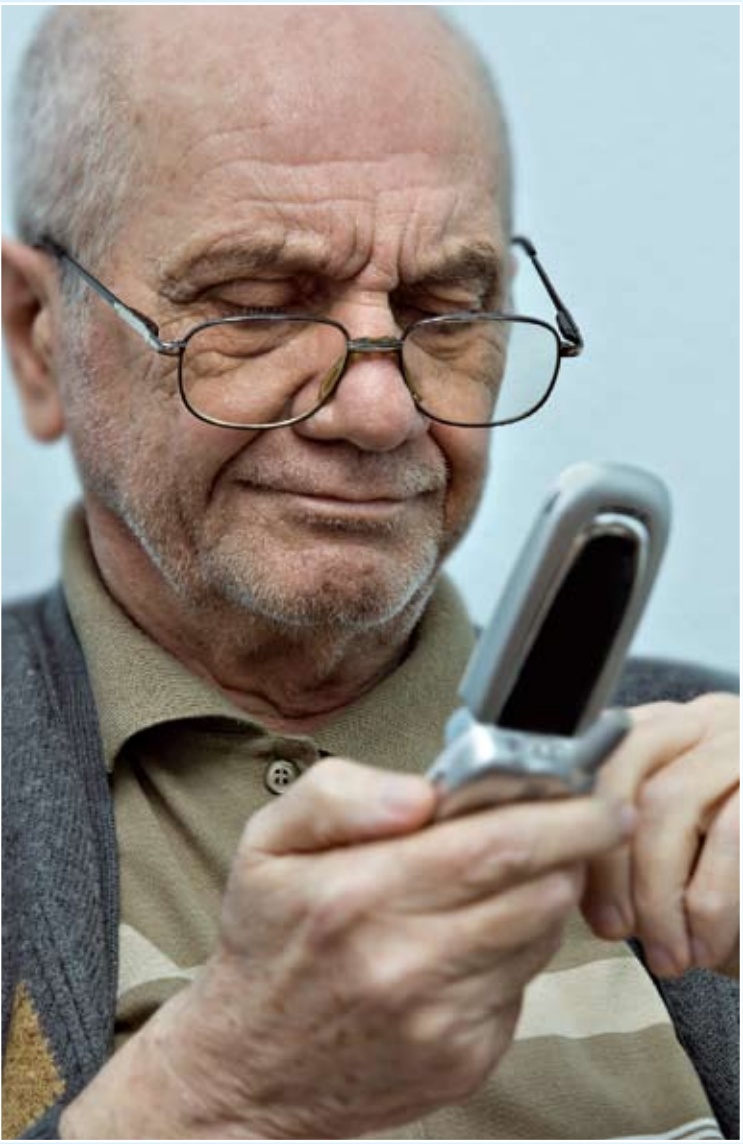
- Telecom Italia's "Smart Inclusion" project developed at the Bambino Gesù Pediatric Hospital in Rome with the support of the Ministry of Public Administration and Innovation and with the scientific supervision of CNR-ISOF of Bologna integrates remote teaching and entertainment and the management of clinical data services on a single technological platform. The project allows children staying in hospital for a long period to join social activities by connecting to the outside world in a simple manner and the healthcare staff will have advanced tools available to support the care processes. The project is being extended to other hospitals.

- Together with the Austrian Blind Union (ÖBSV), Telekom Austria developed an Internet site that is ideal for the visually impaired. Additionally, all seven provincial committees of the ÖBSV will be equipped with ADSL broadband access. The toll-free service number 0800-22 77 00 automatically connects each caller to the respective provincial committee of the ÖBSV.

- Over the past five years, Telefónica developed a plan which seeks to reduce the social divide which results from certain types of disability. In 2009, Telefonica's products and services to improve access to ICTs for such groups included "Teclón" landline handsets designed for the elderly and or those with hearing or visual disabilities, reduced mobility or cognitive problems; mobile phones adapted via an induction loop or mobile phones adapted to visually impaired people through a screen reader. Telefonica also offers work stations adapted for use by the disabled, consisting of a computer with a number of special applications and devices, such as keyboard stickers with extra-large characters, mouse emulators, virtual keyboards etc. Telefonica also developed a tele-interpretation platform in sign language. The company also developed initiatives aimed at disabled people in countries it operates, including Intermediation Centre for people with hypoacusis in Argentina; a relay Centre in Colombia for people with hearing difficulties; adapted public telephones in Brazil; Mobile transcription in Germany; special handsets for elderly and disabled in Ireland and Czech Republic as well as an iPhone application for people with autism in Ireland.

- Telekommunikacja Polska's b –link program allows disabled people to control a computer using blinking eyes. B-link allows displaying and navigating web pages, controlling the mouse and keyboard during the use of software, switching on and off the sound and shutdown.

Assistance to the elderly



- Belgacom provides elderly users with bespoke mobile phones. Simple and user-friendly, they provide basic services, with a bright and easy-to-read screen, large keys, and a powerful loudspeaker. In collaboration with the mutual health insurance funds in Belgium, Belgacom has launched Zorg TV, which provides information and coaching to patients suffering from type 2 diabetes, via Belgacom's video telephony and digital TV platforms.

- The Orange Doro PhoneEasy 345 is a mobile handset specially adapted for the elderly. The Doro 345, which is available in France since September 2009, is an easy-to-use telephone, with large, well spaced-out keys. It has a button especially for customers who have taken out the tele-assistance mobile option, which automatically calls and sends a text message to relatives or puts you through to the Mondial Assistance hotline platform, 24 hours a day and 7 days a week. The handset also has a radio and an integrated torch and is compatible with hearing aids. The Doro PhoneEasy is also available in the UK and Switzerland.

- Portugal Telecom's Emergency service is a domiciliary remote support to persons in risk. It is composed by a fixed telephone base and by a censor that allows the automatic activation of an alarm call to five pre-defined numbers. The TeleAlarm terminal provides a 24h connection to the Portuguese Red Cross. Green # is a number dedicated to people with special needs and elderly people (to register requests, to give advice on services and products, etc). The Aladim program offers special conditions for RDIS and ADSL for citizens with special needs and respective organisations, special schools and schools with projects for students with special needs.

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- Swisscom's TeleAlarm allows elderly people to continue living in a familiar environment in full confidence and security. The emergency call platform operates the call automatically in a situation of emergency. The systems includes up to eight pre-registered numbers which will all be called until answered.

- Telecom Italia's Spine is a R&D project based on Body Sensor Networks, for "physical activity monitoring" or "assisted living" applications. The use of SPINE is suitable for the remote monitoring of people movement. The sensors are placed on the body of the patient and allow determining the position of the person and its movements. The doctor or the sanitary staff is informed of the daily activity of the patient and receives in real time alarm messages, (i.e. if the patient falls down). The development of machine-to-machine healthcare devices facilitates the collection of physical data from disabled or elderly people.

- Telekom Slovenije has introduced a special programme to familiarise elderly people with the internet by offereing live training and specially tailored packages. With its mobile subsidiary Mobitel it also launched a mobile phone, especially adapted to the needs of elederly users.

- Telefónica offers a fixed home tele-assistance service, though which, in case of emergency, the elderly or disabled person can press a personal panic button and communicate with a coordination centre. Communication is seen as the basic function, which can be supplemented by a home automation sensor in the home. In the event of alarm, carers or family members are advised by the coordination centre, who will also contact, if necessary, the emergency services. Mobile tele-assistance is mainly aimed at those suffering from Alzheimer's disease, the elderly, children and the disabled. It allows them greater independence, and, at the same time, be locatable at all times. In 2009, Telefónica signed up to the "Simplit" programme, the first certificate scheme that ensures that the products thus recognised are easy to use, comfortable and intuitive, and designed with use by the elderly in mind.

- Telefonica O2 Czech Republic is the general partner of the Senior Helpline - an information and crisis intervention line. The help line offers a complete service, including quality psychological assistance as well as necessary practical information and medical, legal and social security advice. Telefónica O2 also offers a new TALKpremium mobile telephone model by Emporia, designed especially to meet the needs of the elderly and people with disabilities.

Climate change

- In collaboration with Belgacom, Sunswitch, leader in sales and installation of photovoltaic solar panels in French speaking Belgium, has developed a unique offer that monitors the management and production of green electricity. This intelligent green electric meter is equipped with a GPRS card that offers different services such as alert, continuous technical control, performance comparison, error analysis or even green certificates management to the owners as well as the technicians. In 2009, Belgacom managed to reduce its carbon emissions by 55% compared to 2007 and 24% compared to 2008. Belgacom set itself a 70% CO_2 reduction target for its Belgian activities over the period 2007-2020, and promoted green products and solutions for its customers. This target applies to all its operations in Belgium: office buildings, fixed and mobile networks, data-centres, fleet vehicles, air/train business travel, employee commuting, and outsourced transport. Belgacom also became the biggest buyer of certified renewable electricity in Belgium and launched an online tool which helps its customers quantify the CO_2 savings related to the use of its videoconferencing and teleworking solutions.

- Deutsche Telekom's T-Systems and Friedrichshafen Public Utilities (TWF) are currently supplying the Oberhof and Windhag districts with intelligent power and gas meters (Smart Meters). The digital meters send the consumption data to TWF via radio communication or DSL. Software processes the information and makes it available to the customer on a personalized Internet portal – and the information can be updated every 15 minutes. This gives customers a good overview of their energy consumption at all times and allows them to modify their behavior accordingly. Integration of the Smart Meter marks the T-City Friedrichshafen's first step towards a Smart Grid. The objective is to equip power supply systems with communication solutions in order to better attune supply and demand to each other.

- In Ireland, eircom focuses on efficiency in many areas which impact on climate change and CO_2 emissions, including data centres, virtual networks, home working, teleconferencing and reduced travel.

- KPN successfully concluded a trial project with KyotoCooling in the data center in Amersfoort and intends now to apply this energy-efficient cooling method, which uses the outside air, on a large scale, thereby reducing the total energy consumption of the KPN data centers.

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- Magyar Telekom's strategy to reduce its own carbon footprint includes a hybrid car fleet, the introduction of PEM cells on base stations, the creation and the promotion of a car sharing system and the launch of an automatic remote switching of computers out of use. The company also purchases almost 15% of its electric energy from renewable sources. Besides, the company has started several projects to rationalise its networks' energy consumption. Free air cooling has already been installed in almost 1000 base stations. Magyar Telekom uses videoconferences instead of travelling when feasible, and offers services to its customers that replace travel and material consumption as well - such as e-billing, hosting (data park) and other services. The company targeted a 10% CO_2 reduction between 2008 and 2011.

- By promoting the use of videoconference services, Orange Business Services is also helping improve the environmental footprint of their business customers by reducing the necessity for travel. Open Videopresence, launched in 2009, provides a user-friendly videoconferencing service that requires no additional equipment and is fully compatible with all existing networks and equipment. The system is available in over 100 countries and enables users to organize video conferences via a simple web-portal wherever they are and with whomever they want, including with people outside the company. With Open Videopresence, the technical complexity is taken over by Orange Business Services in order to guarantee simplicity for the end-users and to ensure the best possible quality of service.

- Portugal Telecom's Energy Management Strategy aims at reducing energy consumption, maximising the adoption of renewable energies, including environmental criteria in the selection of suppliers and encouraging responsible consumption (availability of user guides promoting the good use of services and equipment and package disposal). One of the transversal projects adopted by PT was the replacement of traditional lighting systems with high energetic efficiency lamp systems (LEEE), with a direct impact on reducing costs and decreasing the carbon footprint. PT is focused on Energy Certification of its buildings and three of its main buildings are already certified in terms of energy efficiency. PT reduced 21% of CO_2 emissions comparing with 2008.

- Over the last four years, Slovak Telekom decreased the production of pollutants from own sources, by increasing the efficiency of energy consumption, optimising use of work sites, reducing fuel consumption, and testing alternative transportation fuels. Through optimisation of power supply for telecommunications technology and cooling system used in technology premises, the Company managed to save more than 1300 MWh of electric energy, which means approximately 300 tons of CO_2 less.

- In May 2009, TDC entered into a 'curve breaker' agreement with the Danish Electricity Savings Trust, committing to improving its energy efficiency in Denmark by 15% per year up to the 2014. The agreement is a direct extension of TDC's climate change work. TDC intends to reduce its CO_2 emissions by at least 5% by 2014. As part of the partnership, TDC carried out an employee campaign to reduce power consumption at TDC's Danish locations. In 2009, TDC was part of the Great Klimaår organized by WWF and Tryg Foundation and TDC hosted a travelling exhibition in both Copenhagen and Aarhus. In 2009, TDC was also co-sponsoring Earth Hour Copenhagen TDC turned off while the light at all locations and stores in the Copenhagen area and was on the way in to send a signal to world leaders that the world wanted an ambitious climate agreement.

- Telecom Italia's Green@Home system is a prototype of a domestic energy monitoring system that is designed to improve energy efficiency in the home. The system is based on intelligent sockets that allow the monitoring of energy consumption and remote control for feeding the electrical devices plugged into the sockets. After the trials, Telecom Italia has signed an agreement with Electrolux, Enel and Indesit to research and develop innovative services based on communication between next generation domestic appliances and the electrical infrastructure. In December, 2009, Telecom Italia and Bticino launched a partnership for the "smart" management of the home, enabling users to remotely manage through the web the automated functions of home management (lights, roller blinds, temperature and music control) and safety (interior and exterior video surveillance, anti-theft equipment, the reception of alarms and notifications of emergencies). Telecom Italia also coordinates the E-Cube project which researches, develops and implements innovative ICT solutions which allow the efficient management of energy in the domestic and industrial fields. The project will develop smart plugs, smart appliances, optimal algorithms for the management of equipment and other components that may be used for the remote control and monitoring of consumption. Particular attention is being paid to the protection of the consumers' privacy which will use solutions put forward by E-Cube, and to the definition of policies to guarantee their diffusion.

- In 2009, Telefonica began to implement efficiency measures in order to reduce electricity consumption by 30% by 2015 compared to 2007. Telefónica O2 UK has been implementing a smart metering system in its networks since 2008. This smart management system has enabled a reduction of approximately two tones of CO_2 per year. In December 2008, Telefónica O2 Ireland commissioned the first self-sustaining base station in Ireland in Knockaleva, Colon, County Louth. The base station is supplied directly by electricity generated by a small wind turbine and solar panels, completely independently from any connection to the national grid. In 2009, Telefónica O2 Germany, Ireland and the United Kingdom marketed the GreenHeartTM range of the Sony Ericsson Naite handsets, one

of the main features of which is the reduction of its general carbon footprint by 15%. Telefónica R&D has developed the "My energy" application which enables management of energy using a mobile phone (compatible with IPod and HTC). In 2009, the new headquarters of the company in Madrid were awarded environmental management certification by AENOR, having met the international ISO 14001:2004 standard. As far as the Major Client Segment is concerned, Telefónica supplies a range of products and services which offer energy efficiency and a reduction in costs and CO_2 emissions to numerous companies around the world, including telepresence and videoconferencing services. Telefónica offers its corporate customers the Virtual Hosting service, which provides virtual servers with capacities equivalent to physical servers, set up on Telefónica's virtualisation platforms located at Data Management Centres (DMCs).

- Telekom Austria developed a new system allowing its business clients to monitor and optimise energy consumption of their data centers.

- Telekom Slovenije launched the Eco-quiz project, a programme for elementary schools promoting environmental awareness through an online quiz competition. Telekom Slovenije has introduced paperless billing for business and residential customers as the first mass publisher of e-invoices in the market.

- Telekomunikacja Polska launched the e-invoice with the aim to protect the environment. Consumers can access their invoice at any place through the Internet and pay directly using the electronic payment service.

- TeliaSonera Group: In Sweden, TeliaSonera continues to have 100 percent purchased electricity from renewable sources without CO_2 emissions. Finland signed a contract for renewable electricity beginning in last quarter of 2009 and reaching full effect in 2010. The calculated share of renewable energy from the group's purchased electricity consumption was 64 percent in 2009. In 2009, videoconferencing almost tripled with more than 6,500 meetings in 40 locations. At the same time, air travels between locations equipped with TelePresence equipment and Stockholm decreased by 44 percent compared to 2008. In 2009, 560 TelePresence videoconferences were held in Helsinki and Gothenburg, saving up to 35 working months in travel time, one million € in travel costs and 141 metric tons CO_2.

- Telenor in Norway is introducing a buyback/recycling scheme for mobile phones. For every phone handed over, the Red Cross plants 25 trees in Asia.

Other

- Belgacom has become a partner of Softkinetic, a Belgian company specialising in human movement interfacing. Its technology brings to television, to video games and to computers an intuitive interface that responds to gesture. Users can switch channel without using the remotecontrol, play games without a joystick, react to marketing information just by using their hands but without touching the screen, and follow fitness programmes that analyse their movements in real time.

- Deutsche Telekom's T-Systems has been working in close collaboration with various industry partners and transport network operators to develop future-proof e-ticketing standards. As a result, several organisations have chosen to deploy T-Systems' electronic and mobile ticketing solutions. The solution enables passengers to purchase tickets by holding NFC-enabled mobile phones close to radio chips installed at bus stops or train stations. The software automatically identifies and displays the departure time and point – so users only have to select the type of ticket they want, choose their destination, and confirm the transaction. The solution can be used for many other types of mobile services – such as making hotel reservations and paying for parking.

- Portugal Telecom has developed a portal solution for the Ministry of Internal Affairs through which any citizen can access data that allows them to get in touch faster with the Security Forces, the Border and Foreign Citizen Service, and the National Authority for Civil Protection.

- TDC has established a partnership with the Danish Red Cross, one of three IT- and telecom centers of expertise for the International Red Cross. Besides a cash donation, TDC offers know-how and facilities to further the Danish Red Cross' development in this field. TDC also houses the Danish Red Cross' emergency relief warehouse and have facilitated an on-call staff of TDC-employees to assist when disaster hits anywhere in the world.

- Telecom Italia signed an agreement on September 2009 with Movincom, a consortium set up by various businesses in different categories (for example, transportation, parking, insurance and hotels) to develop payment services through a mobile handset. The agreement will make it possible for Telecom Italia's customers to purchase a wide range of goods and services offered by businesses belonging to the consortium using a cell phone. Starting in 2010, Telecom Italia will integrate a specific application on the new SIM cards so that purchases of all goods and services offered by Movincom businesses can be made using mobile phones.

- Telefónica introduced in 2009, its "Gender Violence Social Programme", which, through new communications technologies, offers victims rapid help and protection, 24 hours a day, 365 days a year, wherever the person concerned might be. The aim is to prevent or minimise aggression, by facilitating rapid and simple contact (by pressing a key or "Search" on a mobile phone) which immediately alerts the necessary individuals and organisation (emergency services, security organisations or specialist staff). It also guarantees the monitoring, information and support in each case, at all times and in all possible situations, through a simple phone call and the immediate updating of the application's database, giving the victim a greater sense of security and improved quality of life.

- Telekom Slovenije is participating in awareness campaigns, including raising donations through Telekom Slovenije call centers in cooperation with the Red Cross Slovenia, Caritas, Europa Donna, Red Nose Foundation. Defibrillators, equipment for premature infants, etc. were donated and further support given to "calls in distress for youngsters and elderly".

- Telenor's Unified Communications service is a customer-tailored service where speech, data, text, video and conferencing solutions are linked up both from a functional and a technical point of view. This service enables a company's employees to have a single phone number for their PC client, landline and mobile phone; choose whether they want to answer incoming calls on their PC or mobile phone - both devices can be set up to ring simultaneously; and check colleagues' availability.

9. RANKING IN EUROPEAN & WORLD COMPANIES

Top 40 global telecoms operators

Rank	Company	Country	2009 sales (€ million)
1	AT&T	USA	88,548
2	NTT	Japan	78,322
3	Verizon	USA	77,600
4	Deutsche Telekom	Germany	64,602
5	Telefónica	Spain	56,731
6	Vodafone	UK	50,075
7	China Mobile	China	47,646
8	Orange	France	45,944
9	Telecom Italia	Italy	27,163
10	KDDI	Japan	26,479
11	BT	UK	23,545
12	Sprint Nextel	USA	23,052
13	China Telecom	China	21,944
14	Softbank	Japan	21,258
15	América Movil	Mexico	21,030
16	China Unicom	China	16,224
17	Telstra	Australia	14,267
18	KPN	Netherlands	13,451
19	SFR	France	12,374
20	BCE	Canada	11,198
21	Telenor	Norway	11,175
22	KT	South Korea	11,077
23	Tele Norte Leste	Brazil	10,757
24	TeliaSonera	Sweden	10,271
25	STC	Saudi Arabia	9,747
26	MTN	South Africa	9,505
27	Qwest	USA	8,861
28	SingTel	Singapore	8,349
29	Comcast	USA	7,931
30	Swisscom	Switzerland	7,925
31	Hutchison Whampoa	HK	7,224
32	SK Telecom	South Korea	6,822
33	Portugal Telecom	Portugal	6,785
34	Telmex	Mexico	6,346
35	Telus	Canada	6,065
36	Belgacom	Belgium	5,990
37	OTE	Greece	5,984
38	Vivo	Brazil	5,891
39	Bharti Airtel	India	5,890
40	Svyazinvest	Russia	5,875

Source: IDATE

Top 20 European telecoms operators

Rank	Company	Country	2009 sales (€ million)
1	Deutsche Telekom	Germany	64,602
2	Telefónica	Spain	56,731
3	Vodafone	UK	50,075
4	Orange	France	45,944
5	Telecom Italia	Italy	27,163
6	BT	UK	23,545
7	KPN	Netherlands	13,451
8	SFR	France	12,374
9	Telenor	Norway	11,175
10	TeliaSonera	Sweden	10,271
11	Swisscom	Switzerland	7,925
12	Portugal Telecom	Portugal	6,785
13	Belgacom	Belgium	5,990
14	OTE	Greece	5,984
15	Wind	Italy	5,726
16	Bouygues Telecom	France	5,368
17	Turk Telekom	Turkey	4,921
18	TDC	Denmark	4,826
19	Telekom Austria	Austria	4,802
20	Tele2	Sweden	3,695

Source : IDATE

Further information:

• ALBtelecom (Albania) www.albtelecom.al • Belgacom (Belgium) www.belgacom.com •
• BH Telecom (Bosnia and Herzegovina) www.bhtelecom.ba • Croatian Telecom (Croatia) www.t.ht.hr •
• Cyprus Telecommunications Authority (Cyprus) www.cyta.com.cy • Deutsche Telekom (Germany) www.telekom3.de •
• eircom (Ireland) www.eircom.ie • Elion (Estonia) www.elion.ee • Elisa Communications Corporation (Finland) www.elisa.com •
• Entreprise des Postes et Télécommunications Luxembourg www.pt.lu • Finnet Group (Finland) www.finnet.fi •
• GO (Malta) www.go.com • Invitel (Hungary) www.invitel.hu • • Koninklijke KPN (The Netherlands) www.kpn.com •
• Lattelecom (Latvia) www.Lattelecom.lv • Magyar Telekom (Hungary) www.magyartelekom.hu •
• Makedonski Telekom (F.Y.R. of Macedonia) www.telekom.mk • Netia Holdings (Poland) www.netia.pl •
• Orange (France) www.orange.com OTE (Greece) www.ote.gr • Portugal Telecom (Portugal) www.telecom.pt •
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• Societatea Nationala de Radiocomunicatii (Romania) www.radiocom.ro • Swisscom (Switzerland) www.swisscom.com •
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• Telekom Austria (Austria) www.telekom.at • Telekom Slovenije (Slovenia) www.telekom.si •
• Telekomunikacja Polska (Poland) www.telekomunikacja.pl • Telenor (Norway) www.telenor.com •
• TeliaSonera (Sweden – Finland) www.teliasonera.com • Teo Lt (Lithuania) www.teo.lt • Türk Telekom (Turkey) www.turktelekom.com.tr •
• VIPNet (Croatia) www.vipnet.hr • VIVACOM (Bulgaria) www.vivacom.bg •

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