Annual Economic Report 2012

DRIVING THE DIGITAL FUTURE

European Telecommunications Network Operators' Association

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Contents

What is ETNO

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

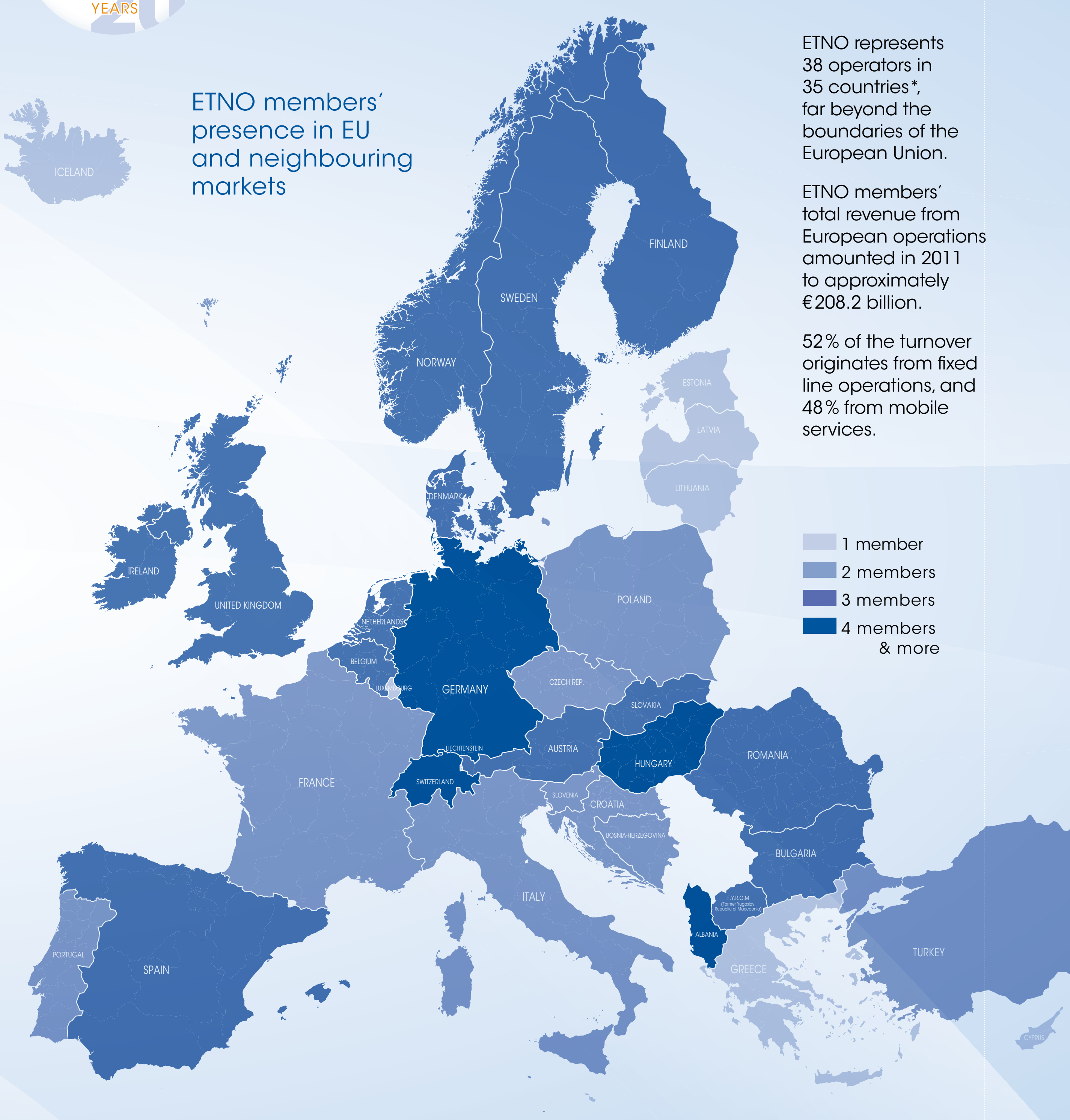
ETNO's 38 member companies and 12 observers* from Europe and beyond represent a significant part of total ICT activity in Europe. They account for an aggregate annual turnover of more than €600 billion and employ over 1.6 million people. ETNO companies are the main drivers of broadband and are committed to its continual growth in Europe.

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.

* December 2012

ETNO members' presence in EU and neighbouring markets



ETNO represents 38 operators in 35 countries*, far beyond the boundaries of the European Union.

ETNO members' total revenue from European operations amounted in 2011 to approximately €208.2 billion.

52% of the turnover originates from fixed line operations, and 48% from mobile services.

*ALBtelecom (Albania), Belgacom, BH Telecom (Bosnia and Herzegovina), Telefónica 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), 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), Vivacom (Bulgaria).

1. Introduction

Introduction by Daniel Pataki
ETNO Director

I am pleased to introduce to you the third edition of the ETNO annual economic report which coincides with the 20th anniversary of ETNO.

As demonstrated in the report, the telecoms markets have gone through a major revolution over the past 20 years. Value of the sector has shifted from fixed to mobile for voice and Internet. With a total turnover for 2011 of 208.2 billion , ETNO members experienced a revenue decline for the third year in a row. At the same time their investments continued to increase.

In the long run, however, new business models and revenue sources will be needed in order to sustain the pace of investment required in Europe to fully realize the potential of this sector and for ETNO members to play their role in achieving the Digital Agenda goals.

The past 20 years have brought European users a lot of innovation and choice. This would not have been possible without investment of ETNO members which today continue to account for more than two thirds of investments in the sector.

As ETNO celebrates its 20 years, it is also the time when the telecoms sector should get ready for the next 20 years. These will be marked by ever more innovation and integration of ICT in our everyday life. Increasing cooperation with other sectors will allow the entire economy to benefit from the Internet. This will lead to new ways of envisaging transport, energy and education.

With a more targeted and flexible regulatory environment, in line with the announcement by Vice President Kroes last July, operators should be better equipped to get ready for the new challenges ahead. The future of the telecoms sector is starting now. ETNO is an integral part of it.

Enjoy reading

Daniel Pataki
ETNO Director

European regulatory agenda

1992	1996	1997	1998	2000	2002
Telecom Review *(liberalisation of voice communications markets postponed)*	Mobiles Directive *(licensing procedures for new entrants in the mobile market)* "Full Competition" Directive *(liberalisation of voice telephony markets to be effective from 1 Jan. 1998)*	Bill on the separation of cable activities *(structural separation of cable activities for telcos in a dominant position)*	Effective liberalisation of voice telephony markets in most EU countries	Unbundling regulation	Telecom package *(incl. Directive on Universal Service and Directive on Access and Interconnection)*

Introduction by Luigi Gambardella ETNO Executive Board Chairman

I am pleased to introduce the 2012 ETNO Annual Economic Report, prepared in close cooperation with IDATE. This report provides an overview of the main trends in the European telecoms sector and of the role of ETNO members.

Latest figures demonstrate that in 2011 EU telecoms sector's revenues experienced a decline for the third year in a row, in a context of moderate economic recovery, showing that structural rather than cyclical changes are shaping the sector.

As revenues from traditional fixed and mobile voice products are declining, EU telcos have to develop new business models that will generate new revenue streams.

Today one out of four customers subscribes to a managed VoIP service, while video downloads and search engines remain the bulk of Internet usage.

However, despite this complex scenario, data shows sthat operators remain committed to investing. Telcos' investments in Europe were up 5.2% in 2011, which is quite remarkable when compared to Capex growth in the USA and in advanced Asia last year (up 1.4%). ETNO members provide 63% of the overall investments in networks and telecommunication services in Europe.

ETNO members continue driving broadband deployment. Latest coverage figures show that 2013 targets of the EU Digital Agenda are well on track. As for 2020 objectives, figures clearly show that they will be reached only through a mix of technologies and platforms, fixed and mobile. Achieving these goals will require combined efforts by all. Creating the best conditions for investment and reassuring the markets in today's difficult times must remain the key priorities.

The continued increase in the usage of social networking sites and other Over the Top applications confirms the need for new models of cooperation.

Policies for our sector need to be flexible in order to enable operators to adapt to rapidly changing realities and let new business models emerge from the markets.

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.

This year marks the 20th anniversary of our association. We are proud of what we have achieved so far and we keep looking forward in order to provide European citizens with future-proof telecommunication services and high-quality user experience.

Luigi Gambardella
ETNO Executive Board Chairman

2003	2007	2009	2010	2011	2012
Recommendation on relevant markets *(leading to national analyses of relevant markets for remedies to be implemented when necessary)*	Second Telecom Review	Telecoms Reform Package	A Digital Agenda for Europe Infra-community roaming regulation	Report on the cost of non-Europe in telecommunication markets *('Steps towards a truly internal market for e-communications in the run-up to 2020')*	2 recommendations to boost investments in NGA *(cost assessment method for wholesale access prices and non-discriminatory access)* annouced by Digital Agenda Commissioner

1. Introduction

Introduction by Didier Pouillot, IDATE

1992-2012: ETNO celebrates its 20th anniversary this year. 20 years during which the telecommunications landscape has changed beyond recognition, both at the European and global levels. The explosion in equipment and usage, the opening up to competition and the turmoil in the digital ecosystem… are all tangible indicators of this transformation.

Increasingly advanced equipment and usage

In 1992, there were 6 million mobile subscribers in Europe (within the area covered by ETNO). By the end of 2012, the number is expected to border on 800 million. High speed access, initially reserved for companies through dedicated networks and links, has recently crossed the 160 million mark, implying that just over half of European households are connected. This advanced equipment has partially replaced traditional forms of access, to begin with fixed telephony: having risen until the early 2000s, the number of switched lines has since been on a steady decline which has especially gained momentum over the past five years. In 2012, the number fell below the 1992 level!

In parallel, there has been a tremendous diversification in usage, with a general trend away from voice in favour of data, especially as IP paves the way for an extremely wide range of new services and applications. As a result, the internet has given rise to a large variety of innovations and is in particular the source of the three main "game changers" in the digital ecosystem, namely hyperconnectivity dominated by the mobile, content and application deployment in the cloud and big data accompanying the explosion in traffic which occupies a central position in business models of the future.

An increasingly open industrial structure…

In 1992, the majority of telecom services were still in the hands of incumbent operators. Only the mobile sector had started to open up (newcomers accounted for almost 20% of mobile subscribers at the end of 1992) as had the more limited sector of business services. As far as fixed telephony was concerned on the other hand, only the United Kingdom, leading the way, had embarked on the process of deregulation and, in total, close to 100% of the European market was in the hands of incumbent operators.

Twenty years on, incumbent operators' share of the mobile sector has fallen to 36% (in share of subscribers) and to nearly 60% in fixed telephony (in terms of revenues). Within the European Union and its 27 member states, the number of mobile operators has risen from 22 in 1992 to over 100 in 2012, representing an average of one incumbent for three alternative providers. As far as fixed internet access is concerned, the incumbents' share is approaching 50% (in terms of subscribers) but the number of suppliers on a European scale amounts to several hundreds.

Industry and market

1992	1997	1999
Creation of ETNO 6 million mobile subscribers in Europe (ETNO perimeter) at year end	500,000 broadband subscribers in Europe (ETNO perimeter) at year end	European mobile subscriber base passes the 100-million mark More than 100 mobile operators in Europe (ETNO perimeter)

At the level of ETNO, the situation is slightly more optimistic insofar as its members, incumbent operators on their respective domestic markets, have often taken up positions in alternative operators abroad as part of their internationalization. Overall, their share of the sector's total revenue is about 60%. They also provide 63% of the investment made in networks and telecommunication services in Europe and account for almost 72% of the activity of operators of all origins.

…and operators face increasing challenges within the digital ecosystem

In more general terms, operators' standing is measured in relation to what is now referred to as the digital ecosystem, which itself has also been in a state of upheaval, in particular since the early 2000s insofar as value has shifted both downstream towards content provision and upstream towards intelligent equipment and nowadays above all in terminals. Operators find themselves in the midst of these developments, under pressure with respect to their own growth. After a long period of continuous growth, their revenue has begun to fall since 2009; for the first time last year, there was a slowdown in revenue from mobile services throughout Europe. Operators' capitalization is shrinking just as Google's, or more strikingly Apple's, is soaring. In September 2012, the consolidated market value of the five largest European incumbent operators is not even a third of Apple's value!

Drivers of change among others

Among all the factors that have transformed the telecommunications landscape in the last 20 years, quite a few others could also have been mentioned. Regulation is indisputably one of them, owing to the growing importance of the authorities of the Commission and national regulators. The economic climate is also another, which of course partially explains why the sector has been in a slump in recent years, over and above the structural factors mentioned earlier. Mention could also have been made, half way through these two decades, of the "reprehensible exuberance" of operators that got carried away with the dot.com bubble and became involved in committing huge sums to activities promising grossly overestimated rewards. Nowadays, it is financing the NGAN, needed to meet the boom in traffic, which raises a number of questions concerning the development of business models to enable European industry to regain the initiative.

All these factors merely serve to highlight further the challenges faced by operators throughout this period and those they must still face today such as how to achieve a return to growth and to continue to invest in an increasingly restrictive environment?

Didier Pouillot
Head of BU Telecom Strategy,
IDATE

2000			2005	2007	2008
Vodafone-Manneman merger in a €180-billion transaction	Purchase of Orange by France Telecom (€40 billion excl. debt) and of US mobile operator VoiceStream by Deutsche Telekom ($35 billion)	5 UMTS licences granted in the UK for £22.4 billion 6 UMTS licences granted in Germany for €50.8 billion	European mobile subscriber base passes the 500-million mark	European broadband subscriber base passes the 100-million mark	Mobile retail revenues exceed fixed retail revenues in overall Europe (ETNO perimeter)

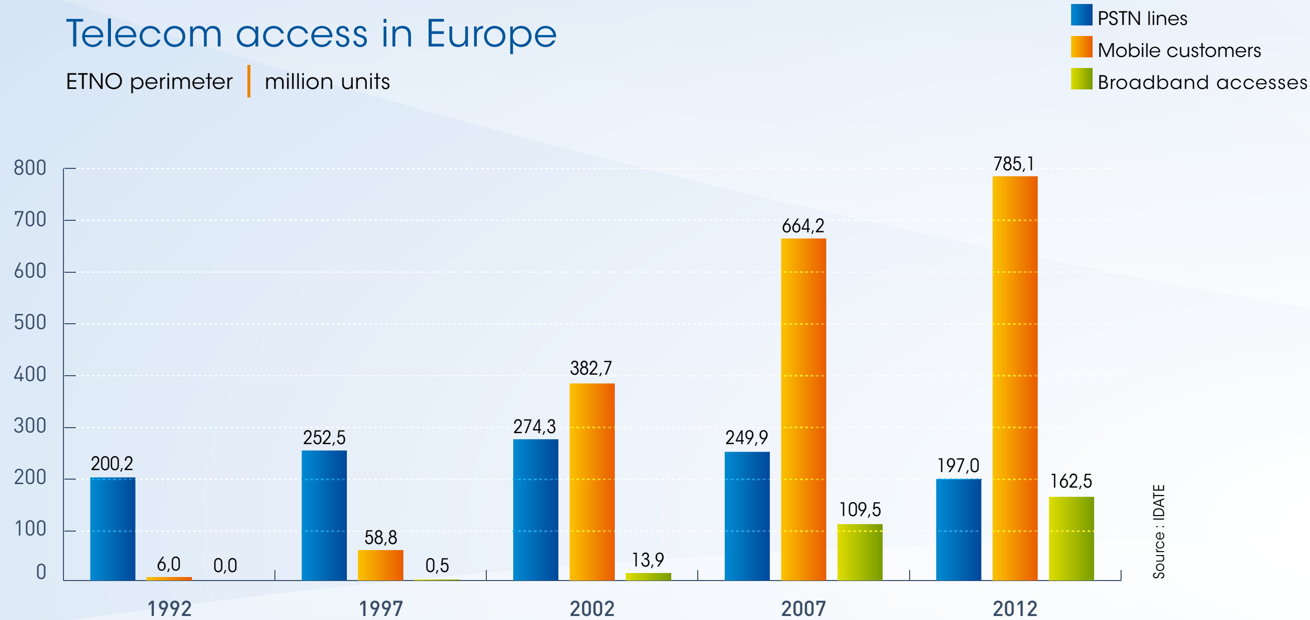
2. Twenty years of revolution

Overall figures

1992→2012

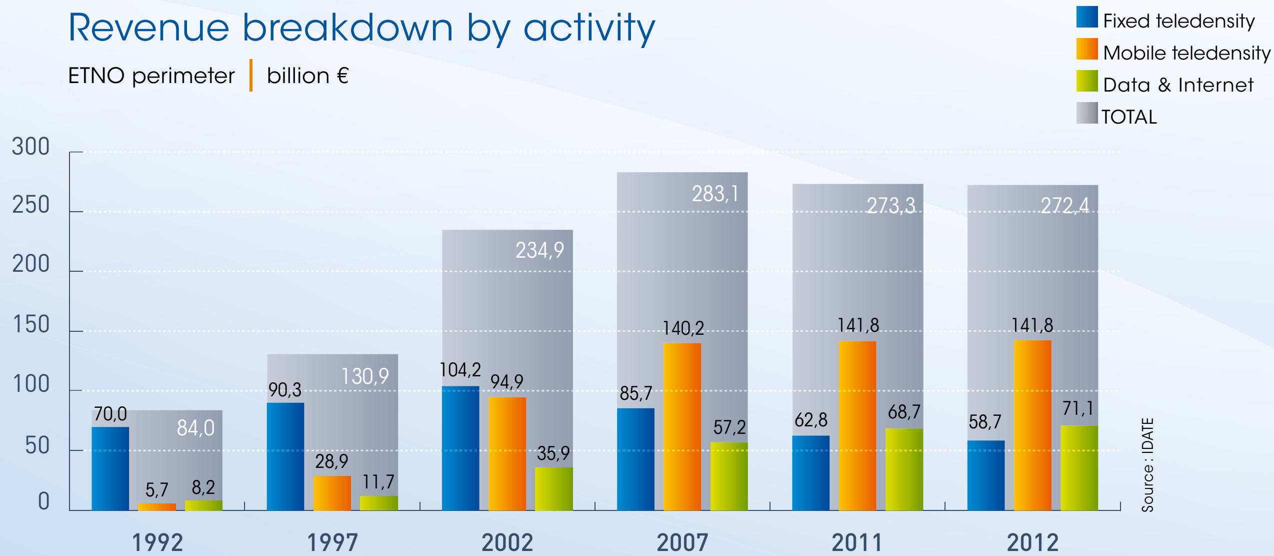
Telecom access in Europe

ETNO perimeter | million units



Revenue breakdown by activity

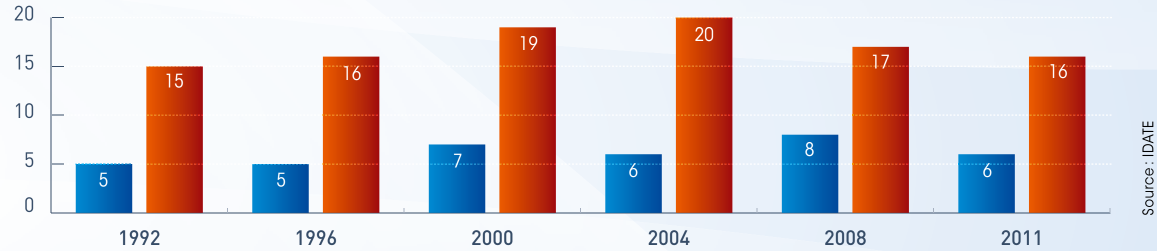
ETNO perimeter | billion €



Number of European telcos among world top

ETNO perimeter

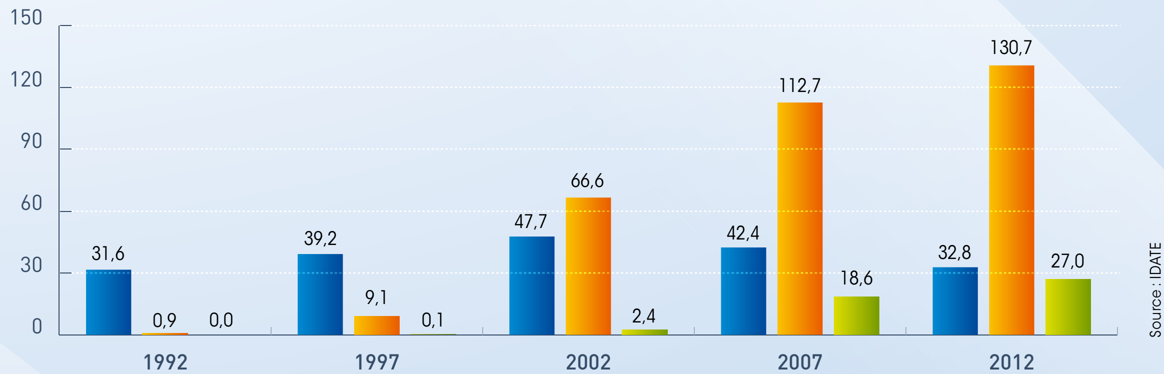
... out of world top 20
... out of world top 50



Teledensities

ETNO perimeter | as a % of population

Fixed teledensity
Mobile teledensity
Broadband teledensity



3. Market Trends

Main developments in European telecoms markets

Totalling € 274.7 billion in 2011, the European telecom service market decreased for the third year in a row, by 1.5% that year, in a context of moderate economic recovery (+4.2% for current GDP in the region) showing that structural rather than cyclical changes are definitely shaping the sector. Moreover, Europe's share of the global telecoms market has been declining regularly over the recent years, from 31% in 2005 to just over 25% in 2011 as the gap between global growth (+3.2% in 2011) and that of Europe is broadening. Telcos' investments in Europe were up 5.2% in 2011 to € 45.5 billion which is quite remarkable notably when compared with Capex growth in the USA and in advanced Asia last year (+1.4% in both).

Estimates 2012 Europe :

Revenues still under pressure

- Overall sector revenue growth : -0,4%
- ETNO members : -3% with investments flat despite revenue decline

Source : IDATE

In 2011, telecoms markets have been declining or flat in all European countries except a few, such as the Netherlands, Romania and more notably Turkey. Some national markets which could keep positive growth over the recent period were down last year for the first time, in particular France (-2.3% in 2011 vs +0.8% in 2008 and +0.9% in 2008) and Norway (-0.8% vs +2.3% and +2.1% for the two years before). Revenues were flat (between –0.5% and +0.5%) in six countries only, while declines were close or stronger than –5% in five national markets (Croatia, Greece, Bulgaria, the Czech Republic, Hungary) and to a lesser extent in Spain (-4.3%).

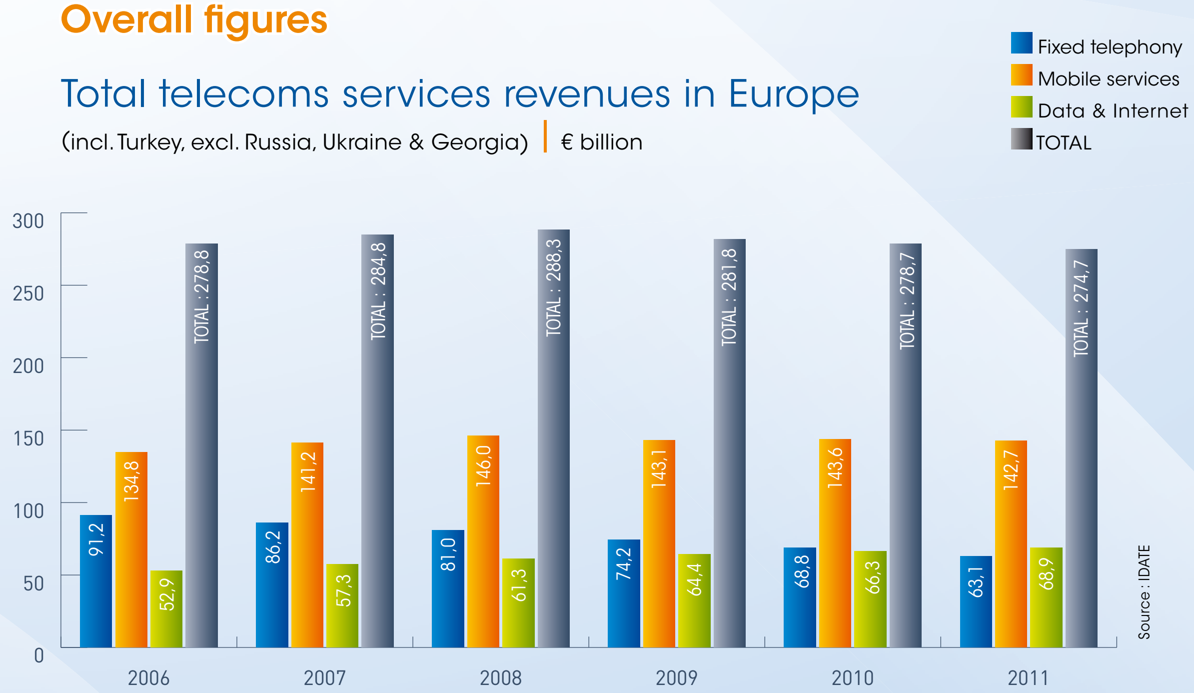
Fixed telephony revenues were down 8.3% in average with the number of PSTN lines declining by 5% (-22% from 2005) as more and more subscribers switch to VoIP using their broadband lines for telephony service; at end 2011, 60.9 million subscribers used VoIP managed services, which is one out of 4 fixed voice service subscribers not taking into account those users of OTT solutions such as Skype or Google Talk. Fixed broadband subscriber base was up 5.5% to 154 million connections in Europe (ETNO perimeter) at end 2011 with penetration rates ranging from less than 10% (10 subscribers per 100 inhabitants) in Turkey or 15% in Romania to over 40% in Switzerland or in the Netherlands for a 26% European average. Broadband revenues were up 6.5% during the year, now accounting for more than 15% of total telecom revenues (7% in 2005).

Mobile services remain the bulk of telcos revenues, accounting for 52% of the total market (142.7 billion EUR in 2011) but sector revenues also declined last year (-0.6%) as dynamics in mobile data could not compensate for decline in mobile voice. The European cellular subscriber base increased by 24 million units and mobile density gained 3.6 pp in 2011 exceeding 127% in average for the ETNO perimeter.

Overall figures

Total telecoms services revenues in Europe

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



3. Market Trends

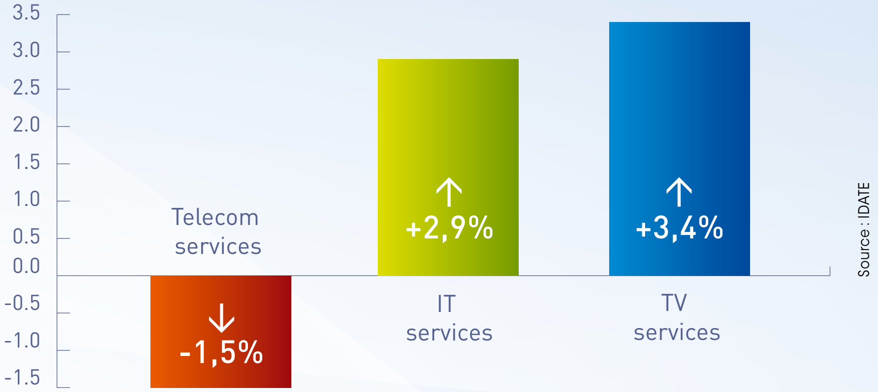
Telecoms market revenue growth in EU compared to US/Asia & overall economic growth | %

Current GDP growth | %

EU-5 EU-15 EU-27 EU (ETNO perimeter) USA Advanced Asia

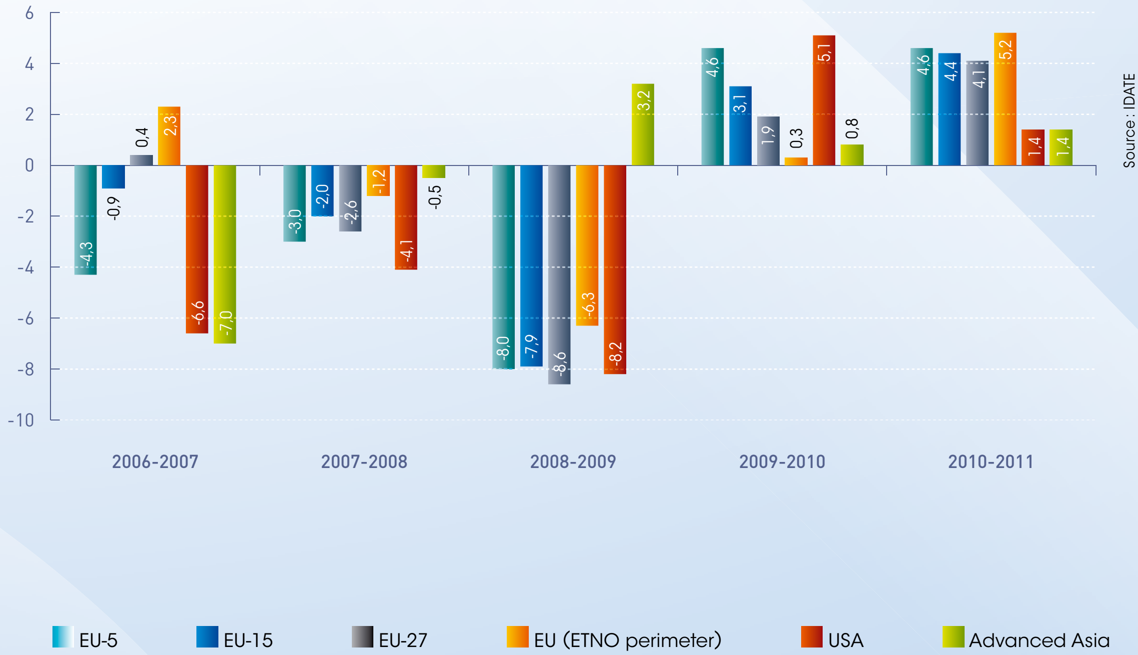
EU telecoms market growth 2010-2011 compared to IT services & TV services

ETNO perimeter | %



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

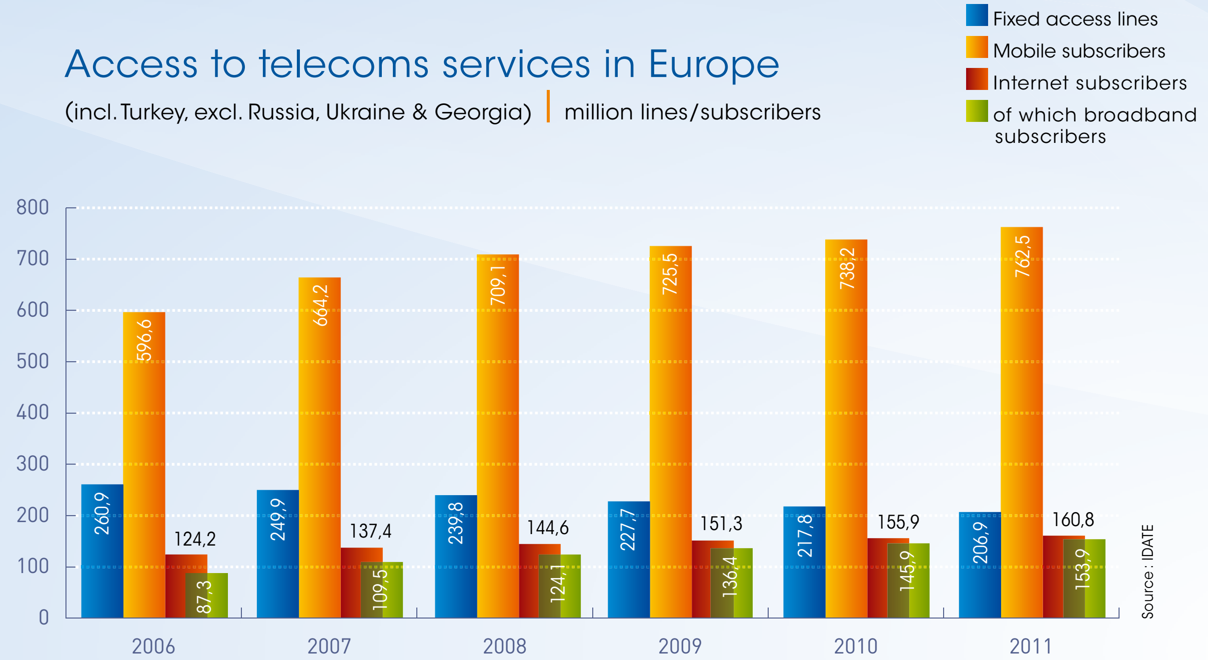
CAPEX growth of the EU telecoms sector vs. CAPEX in the USA and in advanced Asia



3. Market Trends

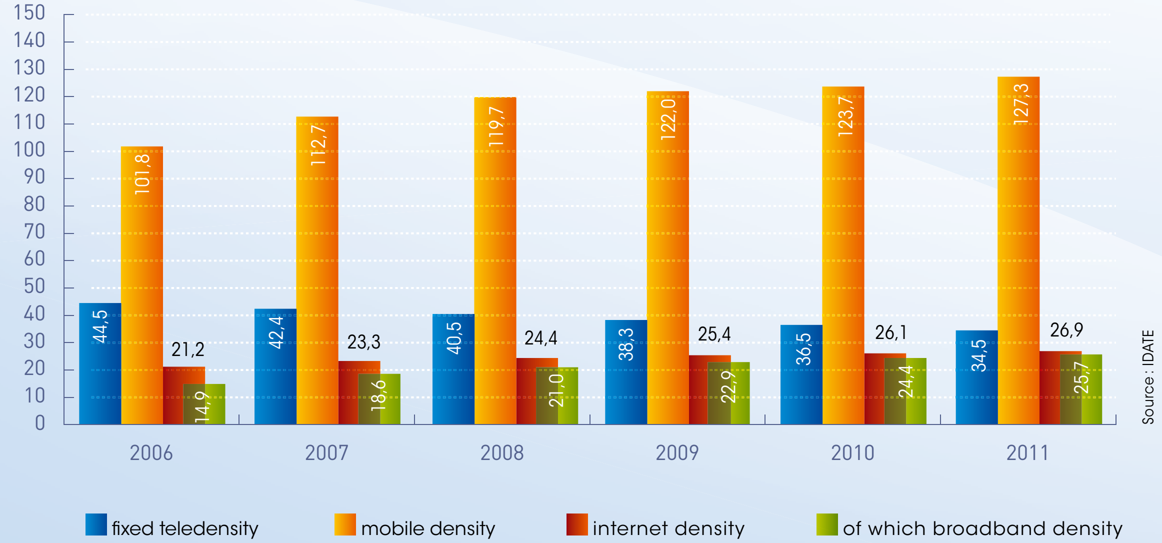
Access to telecoms services in Europe

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



Teledensities in Europe

(incl. Turkey, excl. Russia, Ukraine & Georgia) | lines/subscribers per population

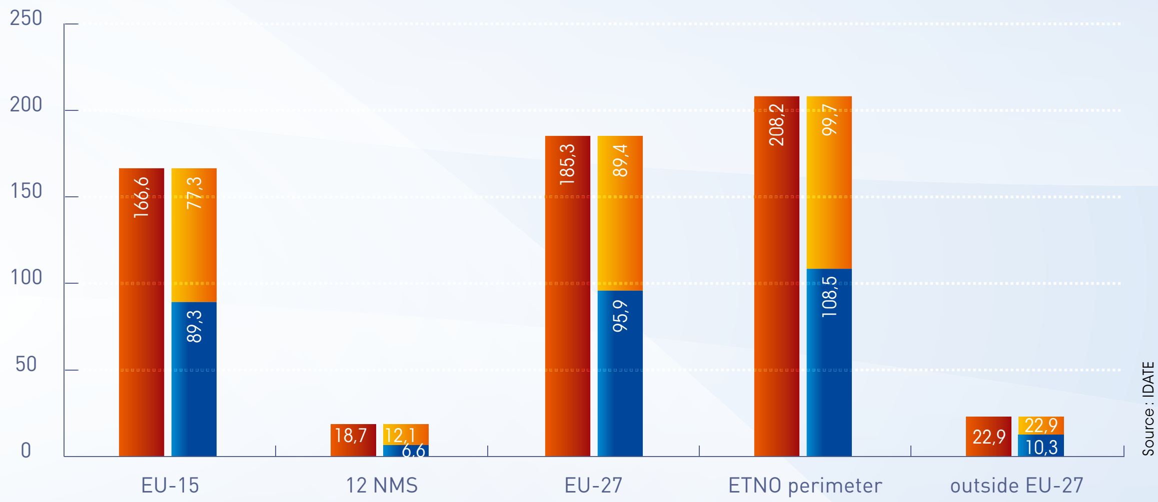


ETNO members

Split of ETNO members' turnover | € billion

	EU-15	12 NMS*	EU-27	ETNO perimeter	outside EU-27
2011 European turnover	**166,6**	**18,7**	**185,3**	**208,2**	**22,9**
of which fixed	89,3	6,6	95,9	108,5	12,6
of which mobile	77,3	12,1	89,4	99,7	10,3

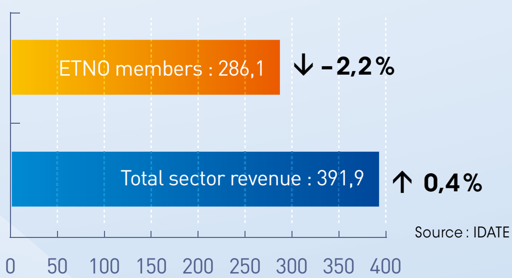
Source : IDATE



Aggregated revenue of ETNO members

(EU + non EU) | € billion

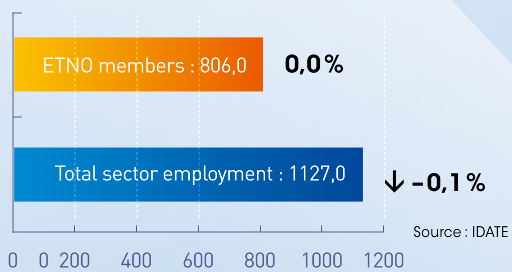
share of total sector revenue = 73,0 %



ETNO members' employees

(EU + non EU) | thousand

share of total sector employment = 71,5 %



4. Revenue & Service Trends

Overall mobile segment in decline despite mobile data dynamics

2011 was another difficult year for the economy of telecom services in Europe with two factors in particular contributing to the overall decline in revenues: a continued drop in fixed telephony and a more recent downturn in mobile services.

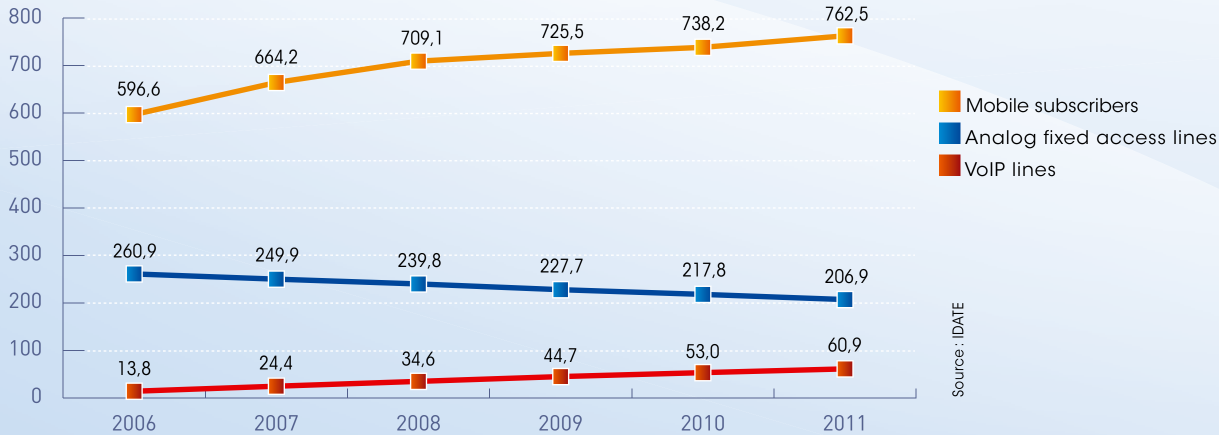
There are clearly 3 areas with contrasted dynamics:

- decline in fixed telephony revenues is accelerating (-8.3% in 2011 and –31% over the last 5 years). The segment now accounts for only 23% of the total retail telecoms market vs 33% in 2006
- mobile revenues are also declining but at a much more limited pace (-0.6%) thanks to the dynamics of mobile data (+10%). Mobile voice revenues were down 4.7% in 2011 (–13.2% over the past 3 years), a decline driven by significant drops in some large countries: Spain (-8.3%), France (-8.2%) and Germany (-7.1%). This can be explained by a decrease in tariffs but also in metered traffic notably through the switch to IP applications, such as IM or VoIP
- broadband remains the sole segment where revenues are increasing (+3.8% in 2011), fueled by an expanding subscriber base (+5.5% to 154 millions at the end of 2011 in ETNO countries). The segment's share is total telecom service revenues is now 25%.

Overall figures

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

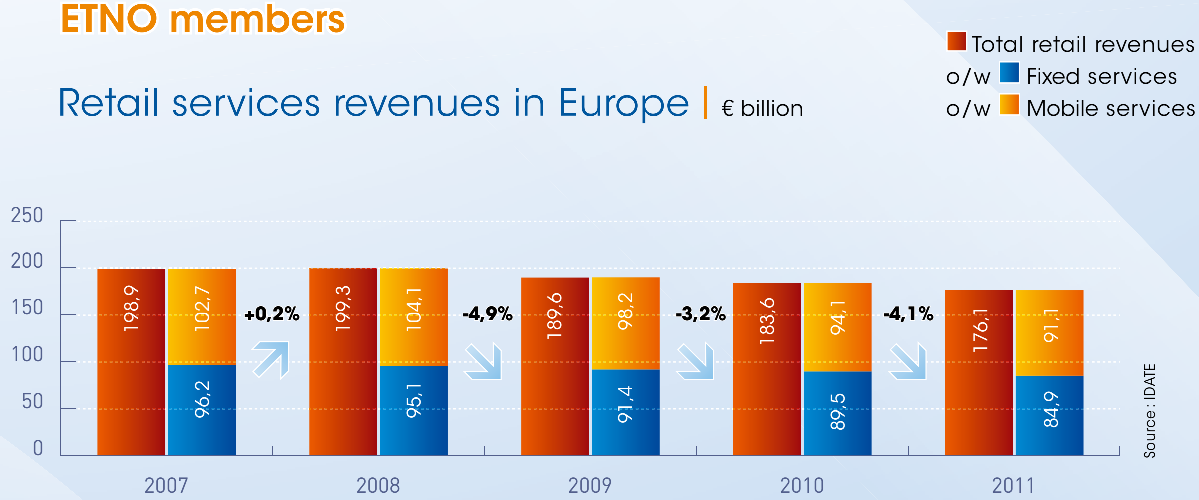
(incl. Turkey, excl. Russia, Ukraine & Georgia) | million



Source : IDATE

ETNO members

Retail services revenues in Europe | € billion



5. Investment Trends

ETNO members accounting for more than two thirds of investment in fixed networks

Investments in wireline networks in Europe amounted to € 24.8 billion, increasing by 4.9% in 2011 compared to 2010 (with ETNO members still accounting for 67% of this expenditure) and regaining levels very close to pre-crisis spending.

The number of FTTx homes passed increased to 123.9 million at the end of 2011, of which 28 million FTTH/B homes passed (+35% compared to the end of 2010) with ETNO accounting for 43% of this total. The situation remains very diverse according to the countries, with few of them largely or almost fully covered mainly in eastern countries (Lithuania is 95% covered with FTTH/B). In western countries, large deployments of VDSL or FTTLA networks (in Germany, in the UK, in Belgium…) appear to have retained investments in FTTH until now.

The number of FTTH/B subscribers reached 5.2 million at the end of 2011, a 34%-growth over one year, which represents a 18.6% penetration rate in areas covered.

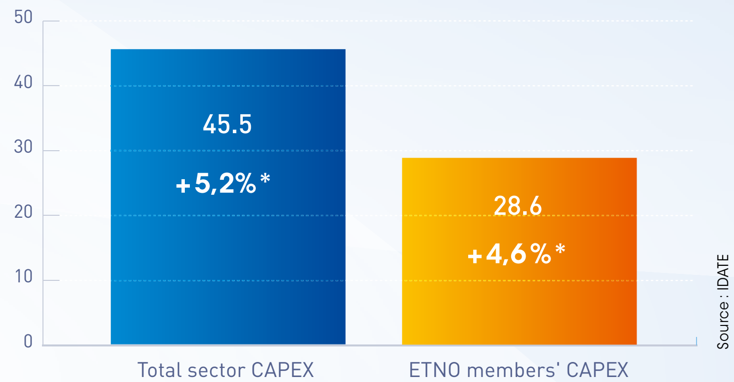
Investments in mobile networks represented 45.5% of the total CAPEX in Europe in 2011 or €20.7 billion, a 5.6% increase compared to 2010 as network operators need more and more capacity to meet customer demand for mobile data, investing in 3G+ and first 4G networks. ETNO members accounted for nearly 63% of this expenditure.

Overall figures

Total sector investment for 2011

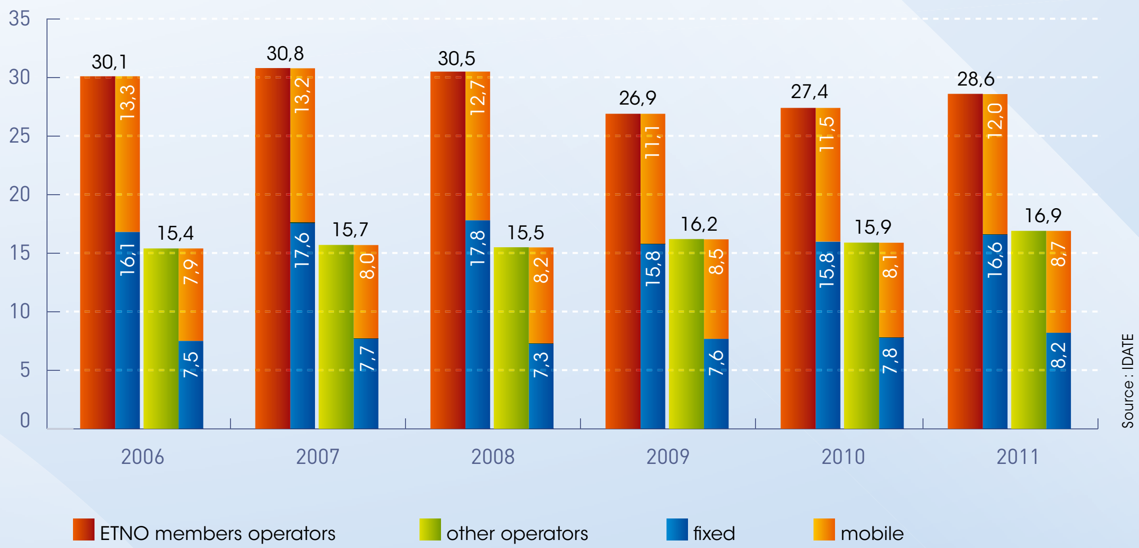
ETNO members' CAPEX (ETNO perimeter) and share of total sector CAPEX | € billion

Share of ETNO members = 62,9%



Investment in fixed vs mobile segments

Telcos' tangible CAPEX (ETNO perimeter) | € billion

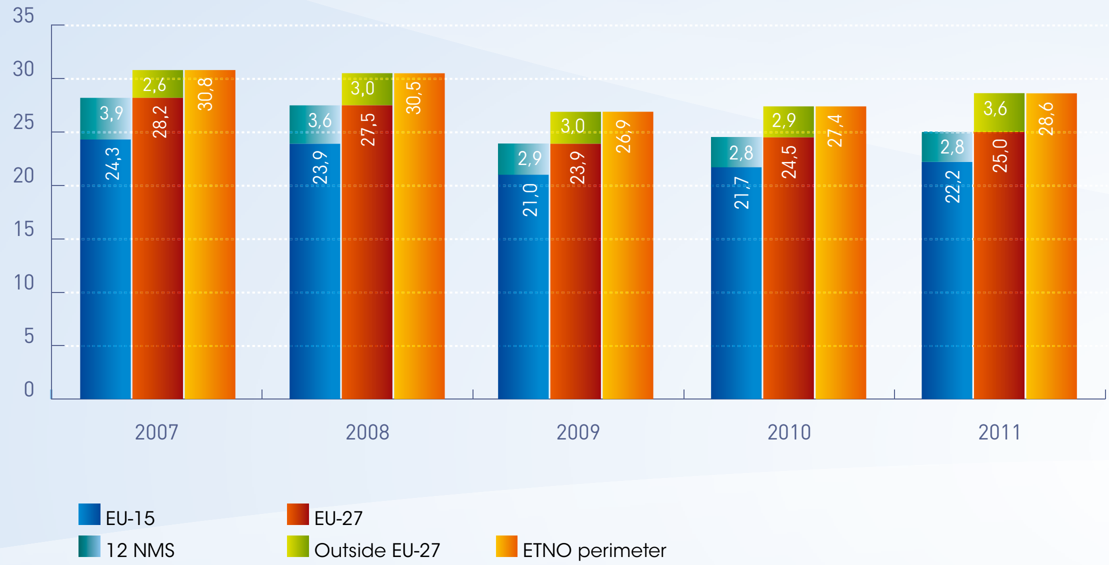


5. Investment Trends

ETNO members

Aggregated investment by ETNO members in Europe

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



Source : IDATE

Share of revenue devoted to CAPEX in 2011

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

	EU-15	12 NMS	EU-27	ETNO perimeter	outside EU-27
Tangible CAPEX/turnover	13,3%	14,8%	13,5%	13,7%	15,4%
fixed	14,8%	18,6%	15,0%	15,2%	16,2%
mobile	11,7%	12,7%	11,8%	12,1%	14,5%

Source : IDATE

6. Broadband

Broadband take up continues to increase with NGA accounting for nearly 20% of net growth

Broadband penetration in Europe continued to increase to 25.7% at the end of 2011 (25.7 broadband subscribers per 100 inhabitants), with a subscriber base of 154 millions (140.5 millions in EU-27).

Fixed broadband coverage is now over 90% (in terms of population) in most European countries with ADSL as the primary access technology but take up still varies widely from one country to another. At the end of 2011, penetration was over 40% in the Netherlands and Switzerland or close to this level in Denmark and Norway while it only reached the 10%-mark in Turkey. Generally speaking, take up is higher in Western countries (nearing 31% in average) than in Central and Eastern European countries (15%). It is also higher in Scandinavian and in Benelux countries.

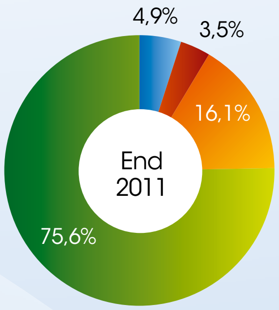
ADSL remains the prominent broadband access technology supporting nearly 3 connections out of 4 but its share has been declining slightly over recent years (DSL's share was 80% in 2008) in favour of cable modem, second with 13%, and alternative technologies (FTTx, WLL, satellite). In particular FTTH/B connections whose share is still low (3.5% at end 2011) have gained 0.7 pp in one year.

Overall figures

Broadband penetration per technology

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

| % of total broadband connections



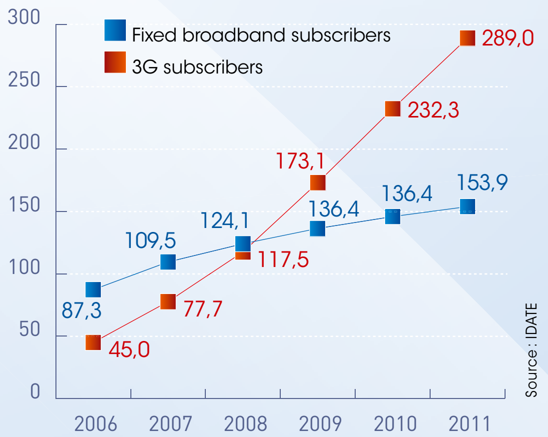
Source : IDATE

Total fixed broadband connections in 2011 = 153,9 millions of which :

- ADSL: 116,3
- Cable modem: 24,8
- FTTx: 5,3
- Other technologies*: 7,5 (LAN, FBWA, satellite…)

Fixed vs mobile broadband

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



* VDSL and cable/ DOCSIS 3.0 are accounted for in the FTTx category

7. NGA

ETNO members to drive NGA deployments

The total number of FTTH/B homes passed reached 29 million in Europe (133 million FTTx homes passed including VDSL, FTTLA notably) at the end of 2011, with 5.2 million subscribers (14.4 million FTTx subscribers).

There have been close to 300 FTTx rollouts in Europe thus far, most of them based on an FTTH/B architecture (236), on scales that vary from only a few dozen buildings to several million homes passed.

Even though until now incumbent carriers account for only part of those deployments (representing just over 30% of homes passed with fibre in Europe, 43% for ETNO members including subsidiaries acting as competitive operators outside their domestic markets), they are the ones with the greatest growth potential. Virtually all of Europe's incumbent carriers are either involved in FTTH/B rollouts, are gearing up to it or are in the planning stages announcing multi-billion Euro investments.

Furthermore, some of them are greatly involved in VDSL projects in their domestic markets (Deutsche Telekom with over 12 million homes passed at the end of 2011; Belgacom, 3.8 millions; Swisscom, 3.5 millions or Türk Telekom, 3 millions) with penetration in covered areas varying greatly according to countries, from approximately 6% in Germany to 50% in Switzerland.

Overall figures

Main technologies/network architecture models

NGA deployment (Homes passed at end 2011) | million

Homes passed at end 2010	Total EU	ETNO members	% ETNO members
FTTH/B	29.1	12.6	43,4%
FTTx* (incl. VDSL, FTTLA, LAN...)	132.7	43.4	32,7%

Source: IDATE

*All cable/DOCSIS 3.0 deployments are taken into account in the FTTx category

NGA deployment in Europe

FTTx deployments and share of ETNO members per country (end 2011)

	FTTx homes passed (000s)[1]	share ETNO
Austria	3 505	60%
Belgium	6 779	56%
Bulgaria	1 550	6%
Croatia	496	56%
Cyprus	0	100%
Czech Republic	2 074	14%
Denmark	2 806	67%
Estonia	432	57%
Finland	667	94%
France	6 600	14%
Germany	33 919	36%
Greece	125	100%
Hungary	2 843	38%
Iceland	150	39%
Ireland	838	2%
Italy	3 083	97%
Latvia	601	67%
Lithuania	1 258	53%
Luxembourg	249	100%
Malta	0	0%
Netherlands	4 032	36%
Norway	549	na
Poland	3 528	44%
Portugal	5 350	30%
Romania	5 700	na
Slovakia	1 514	45%
Slovenia	707	21%
Spain	11 349	20%
Sweden	1 632	51%
Switzerland	5 933	66%
Turkey	4 000	75%
UK	20 400	0%

(1) aggregated data

Source : IDATE for ouncil Europe

Broadband coverage at end 2011[(1)]

	D.A. 2013	DIGITAL AGENDA 2020		
	ADSLx	VDSL [(2)]	FTTLA [(2)]	FTTH/B
Austria	99%	55%	36%	5%
Belgium	100%	79%	62%	0%
Bulgaria	90%	0%	0%	49%
Croatia	100%	16%	13%	4%
Cyprus	98%	na	na	na
Czech Republic	92%	29%	0%	5%
Denmark	100%	24%	52%	32%
Estonia	95%	8%	32%	35%
Finland	100%	na	na	26%
France	100%	0%	0%	19%
Germany	98%	30%	50%	3%
Greece	96%	na	0%	na
Hungary	98%	5%	51%	17%
Iceland	95%	na	na	na
Ireland	96%	0%	48%	2%
Italy	96%	2%	0%	11%
Latvia	95%	11%	0%	61%
Lithuania	95%	0%	0%	93%
Luxembourg	100%	91%	0%	21%
Malta	99%	na	na	na
Netherlands	99%	7%	33%	14%
Norway	97%	na	0%	25%
Poland	80%	7%	12%	2%
Portugal	100%	0%	78%	53%
Romania	85%	0%	14%	27%
Slovakia	90%	0%	22%	58%
Slovenia	95%	2%	30%	39%
Spain	100%	4%	53%	9%
Sweden	98%	na	0%	36%
Switzerland	97%	99%	57%	12%
Turkey	100%	16%	na	5%
UK	100%	26%	48%	1%
Total EU-15	**99%**	**17%**	**32%**	**10%**
Total EU-27	**97%**	**15%**	**29%**	**12%**
ETNO	**97%**	**16%**	**29%**	**12%**

Source : IDATE for FTTH Council Europe

(1) homes passed as a % of households
(2) capable of speeds over 30 Mbps

8. New Broadband Services

Over the Top services and applications become more and more popular

Internet usage is fueled by a very large variety of services, most of them developing very rapidly. Besides email which is certainly the most basic one, online search, social networks, video viewing and e-commerce represent the biggest challenges in terms of additional Internet revenues, the first two in particular that also promote mobile usage.

Online search should remain the most popular fixed online activity:

- search and derived services (mapping, directory services) remain strong, whilst e-commerce incurs online payments which often acts as a barrier

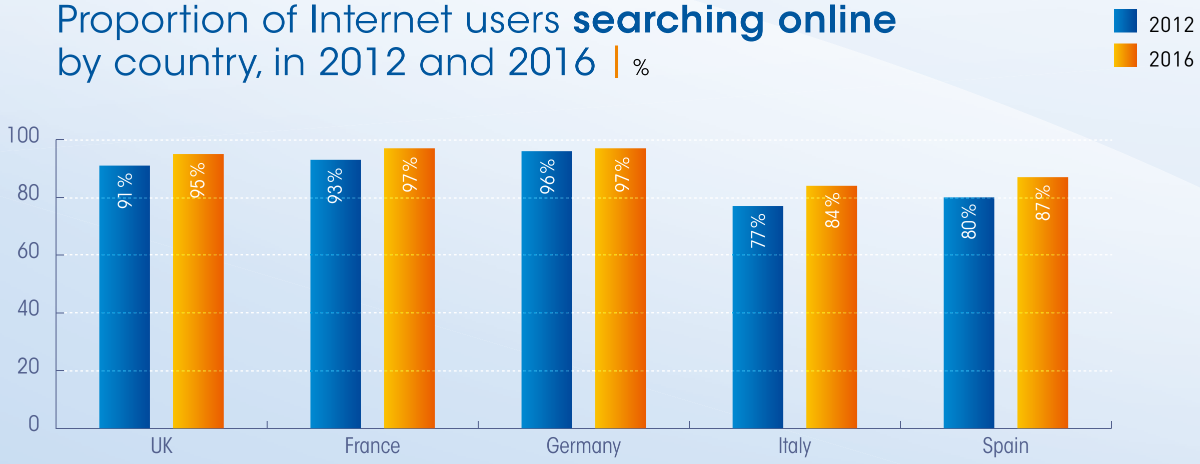
- other very popular web services such as mail, non-merchant services (wikipedia, governmental services…) generate only minimal revenues

Search and mobile networking, now saturated or near saturation on fixed networks, are growth engines for mobile usage:

- mobile search is less popular than fixed online search, with mobile apps the dominant model for accessing content. Still, as mobile Internet user numbers grow, so will mobile search
- mobile social networking will be neck and neck with mobile search, with the mobile allowing users to stay logged on while on the move.

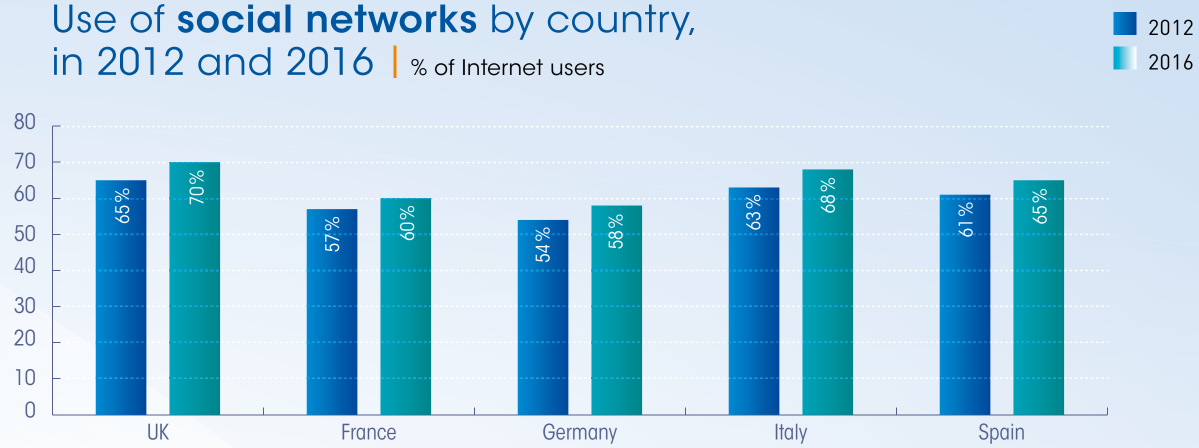
Overall figures

Proportion of Internet users **searching online** by country, in 2012 and 2016 | %



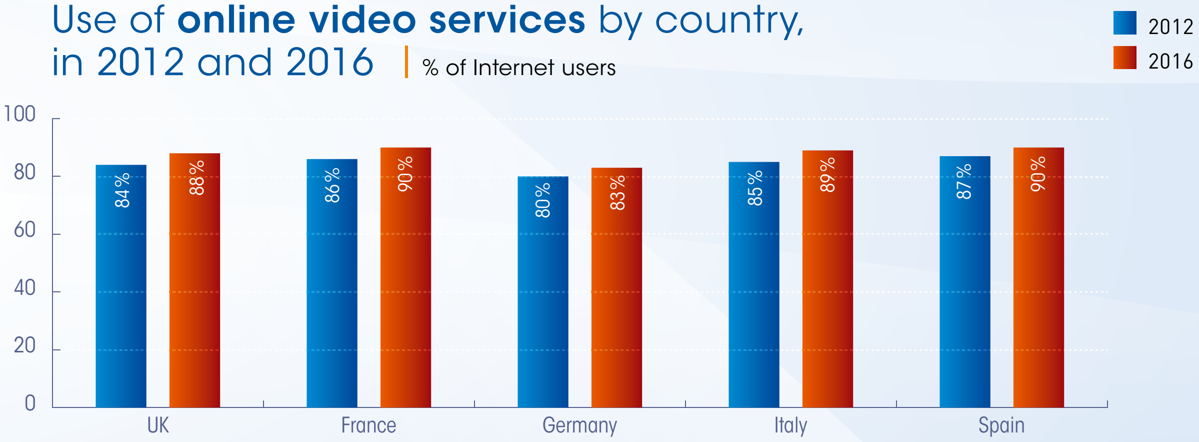
Source: IDATE, in "World Internet Services Market", June 2012

Use of **social networks** by country, in 2012 and 2016 | % of Internet users



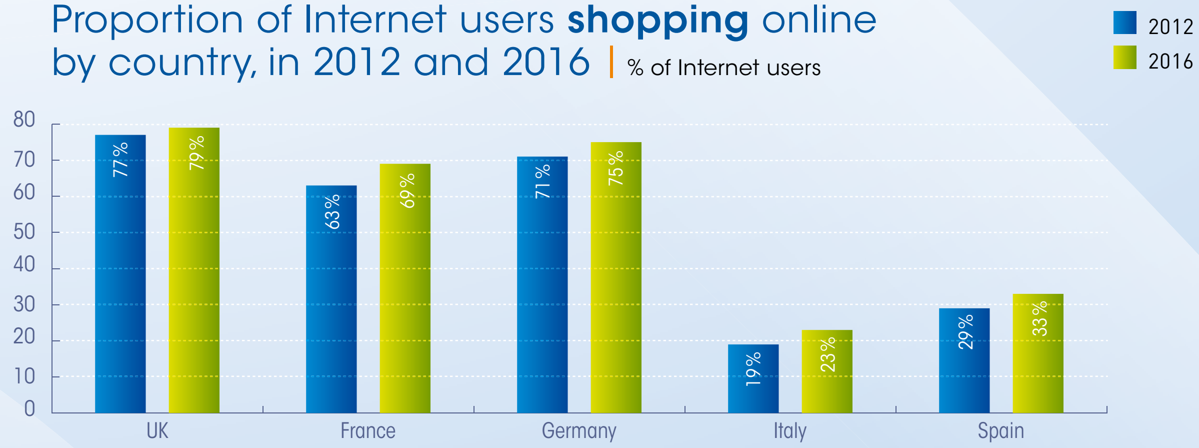
Source: IDATE, in "World Internet Services Market", June 2012

Use of **online video services** by country, in 2012 and 2016 | % of Internet users



Source: IDATE, in "World Internet Services Market", June 2012

Proportion of Internet users **shopping** online by country, in 2012 and 2016 | % of Internet users



Source: IDATE, in "World Internet Services Market", June 2012

9. Ranking in european & wo

Top 50 telecom operators in the world

Rank	Company	Country	2011 sales (€ million)
1	NTT	Japan	94 624
2	AT&T	USA	91 076
3	Verizon	USA	79 686
4	Telefónica	Spain	62 837
5	China Mobile	China	58 728
6	Deutsche Telekom	Germany	58 653
7	Vodafone	UK	53 547
8	France Telecom	France	45 277
9	America Móvil	Mexico	38 480
10	KDDI	Japan	32 168
11	Telecom Italia	Italy	29 958
12	Softbank	Japan	28 839
13	China Telecom	China	27 245
14	Comcast	USA	26 754
15	Sprint Nextel	USA	24 205
16	China Unicom	China	23 264
17	BT	UK	22 273
18	Telstra	Australia	18 602
19	Vimpelcom	Russia	14 562
20	BCE	Canada	14 161
21	Time Warner Cable	USA	14 140
22	KT	South Korea	13 181
23	KPN	Netherlands	13 022
24	Telenor	Norway	12 641
25	SFR	France	12 234
26	MTN	South Africa	12 064
27	Tele Norte Leste	Brazil	11 990
28	TeliaSonera	Sweden	11 550
29	Bharti Airtel	India	11 003
30	STC	Saudi Arabia	10 775
31	SingTel	Singapore	10 757
32	SK Telecom	South Korea	10 368
33	Swisscom	Switzerland	9 281
34	Rogers	Canada	9 027
35	MTS	Russia	8 853
36	Hutchison Whampoa	HK	8 312
37	Qwest	USA	8 030
38	Everything Everywhere	UK	7 816
39	Telus	Canada	7 552
40	Rostelecom	Russia	7 241
41	Liberty Global	USA	6 836
42	Belgacom	Belgium	6 406
43	Etisalat	UAE	6 311
44	Qtel	Qatar	6 272
45	Portugal Telecom	Portugal	6 147
46	LG U+	South Korea	6 002
47	MegaFon	Russia	5 934
48	PT Telkom	Indonesia	5 839
49	Bouygues Telecom	France	5 741
50	Türk Telekom	Turkey	5 123

Source : IDATE

rld companies

Top 20 European telecoms operators

Rank	Company	Country	2011 sales (€ million)
1	Telefónica	Spain	62 837
2	Deutsche Telekom	Germany	58 653
3	Vodafone	UK	53 547
4	France Telecom	France	45 277
5	Telecom Italia	Italy	29 958
6	BT	UK	22 273
7	KPN	Netherlands	13 022
8	Telenor	Norway	12 641
9	SFR	France	12 234
10	TeliaSonera	Sweden	11 550
11	Swisscom	Switzerland	9 281
12	Everything Everywhere	UK	7 816
13	Belgacom	Belgium	6 406
14	Portugal Telecom	Portugal	6 147
15	Bouygues Telecom	France	5 741
16	Türk Telekom	Turkey	5 123
17	OTE	Greece	5 038
18	Virgin Media	UK	4 605
19	Tele2	Sweden	4 510
20	Telekom Austria	Austria	4 455

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 •
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• Türk Telekom (Turkey) www.turktelekom.com.tr • VIVACOM (Bulgaria) www.vivacom.bg •

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Deutsche Telekom Group companies who are members of ETNO: Deutsche Telekom, Hrvastki Telekom, Magyar Telekom, Makedonski Telekom & Slovak Telekom

ETNO Observers

ETNO A.I.S.B.L. • Av.Louise 54 • 1050 Brussels, Belgium • Tel:+32 (0)2 219 32 42 • Fax:+32 (0)2 219 64 12 • eMail:etno@etno.be • www.etno.eu