

ANNUAL ECONOMIC REPORT 2011



DRIVING THE DIGITAL FUTURE

January 2012

European Telecommunications Network Operators' Association



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What is ETNO

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



ETNO's 40 member companies and 10 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.

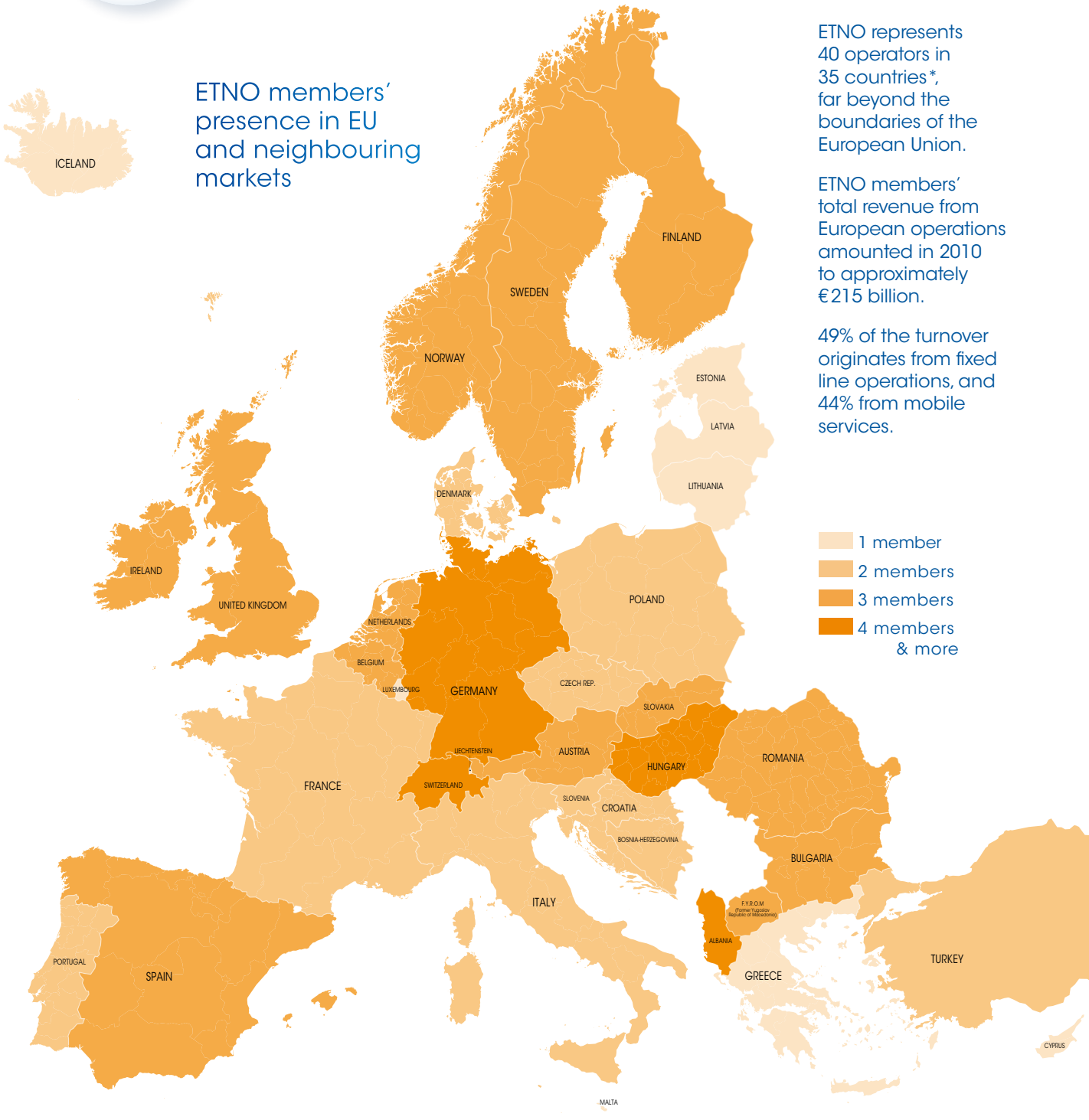
ETNO members also hold new entrant positions outside their national markets. ETNO brings together the main investors in innovative and high-quality e-communications platforms and services, representing 70% of total sector investment.

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 2011



ETNO members' presence in EU and neighbouring markets



ETNO represents 40 operators in 35 countries*, far beyond the boundaries of the European Union.

ETNO members' total revenue from European operations amounted in 2010 to approximately €215 billion.

49% of the turnover originates from fixed line operations, and 44% 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), Eilon (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), Siminn (Iceland Telecom Ltd.), Slovak Telekom, Societatea Nationala de Radiocomunicatii (SNR-Romania), Swisscom, TDC, TDF (France), Telecom Italia, Telekom Liechtenstein, Telefónica, Telekom Austria, Telekom Slovenije, Telekomunikacja Polska, Telenor (Norway), TeliaSonera (Sweden-Finland), TEO (Lithuania), Türk Telekomünikasyon (Turkey), Vivacom (Bulgaria).

1. Introduction



Introduction by Luigi Gambardella ETNO Executive Board Chair

I am delighted to introduce to you the 2011 yearly economic report of ETNO. Latest revenue data demonstrate that EU telecoms sector revenue continued to experience a decline for the second year in a row, although at a slower pace, despite a slight recovery of the economy as a whole.

This demonstrates that our sector is faced with structural changes. While revenues from traditional fixed and mobile voice products are declining, EU telco's have to develop new business models that will generate new revenue streams.

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

Data show that operators remain committed to investing despite reduced revenue. Even if investment has slightly increased compared to 2009, overall, investment has now fallen below the 2005 level.

ETNO members continue to drive 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 of 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 usage of social networking sites and other Over the Top Applications confirm the need for new models of cooperation.

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

*Luigi Gambardella
ETNO Executive Board Chair*

Introduction by Didier Pouillot, IDATE



For the past six years, this report has highlighted the main trends in the telecoms markets in Europe and in particular the role played by ETNO members. Since last year, this overview has been enriched with

further data on the industry's trends to form the ETNO's Yearly Economic Report.

In 2010, the European telecoms services market declined for the second time in a row as a consequence of the overall economic downturn and of structural industry reshaping. The average 1.4% revenue decrease, to € 275 billion, varied by segments and by countries but there were only few exceptions (modest growth was recorded in 4 countries) even if some improvement could be seen when compared with 2008-2009 market trends. Gaps between western and eastern countries in terms of growth have narrowed over the recent period.

Regarding activities, revenue from mobile services which now accounts for more than half of total revenue, was up by 0.4% on average while revenue from fixed services decreased by 3.2%. In both mobile and fixed services sub-segments, data services were particularly dynamic: they could compensate for the decrease of voice services in the mobile area but not in fixed services as the development of broadband connections also leads to a shift from traditional services (switched telephony notably) to cheaper applications over IP (VoIP, IM, email...).

In this context, ETNO members' activity was impacted, notably in their domestic markets where they face increased competition in mobile and broadband services and pricing constraints in regulated wholesale services. However, they still account for 72.5% of the industry revenues. Their tangible investments in Europe accounted for € 28.3 billion, slightly increasing (+4% year-over-year) and representing on average just over 13% of their regional revenues. The increase comes mainly from expenditure in mobile networks (from 11.4 billion € to € 12.2 billion).

Today, telcos are investing heavily in NGA networks: ETNO members in particular are deploying FTTx networks. At the end of 2010, they have built 37.6 million FTTx homes passed in Europe, a 50%+ increase compared to deployments at the end of 2009, one out of 4 is based on FTTH/B architecture (+33% FTTH/B homes passed by ETNO members year-over-year). In this race, they are faced with competition from alternative telcos but more significantly from cable operators and from diverse newcomers (utilities, local authorities ...).

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

*Didier Pouillot
Head of the Telecom Economics Practice,
IDATE*

2. MARKET TRENDS

Main developments on Europe's telecoms markets

With a total revenue of € 274.9 billion in 2010, the European telecoms service market decreased by 1.4% despite slow economic recovery (+ 3.5% for current GDP in the region) showing that structural rather than cyclical changes are shaping the sector. Furthermore, Europe's share of the global telecoms market has been declining regularly over recent years, from 33% in 2004 to just over 27% in 2010.

Telcos' investments in Europe were up 2.3% in 2010 to € 44.5 billion but remained low compared with spending during the years before 2009.

Estimates 2011 Europe:

Revenues still under pressure

- Overall sector revenue growth: -2%
- ETNO members: -4%

Investments increasing despite revenue decline:

- 5% increase in overall investments

Source: IDATE

In 2010, telecoms markets have been growing only in a handful of European countries, the same countries for which revenues increased in 2009 (Finland, France, Norway and Turkey). Revenues were flat in two other countries, the Netherlands and the United Kingdom but throughout the rest of Europe, telecoms markets remained under pressure, with only slight improvement in most countries and worsening conditions in a few of them, starting with Greece.

Fixed telephony revenues were down 8% in average with the number of PSTN lines declining by more than 5% (-18.4% from 2005). More and more subscribers switched to VoIP using their broadband lines for telephony service; at the end of 2010, one out of 5 phone subscribers used managed VoIP (53.5 million VoIP subscribers in countries within the ETNO-perimeter, not taking into account those users of OTT solutions such as Skype). The fixed broadband subscriber base was

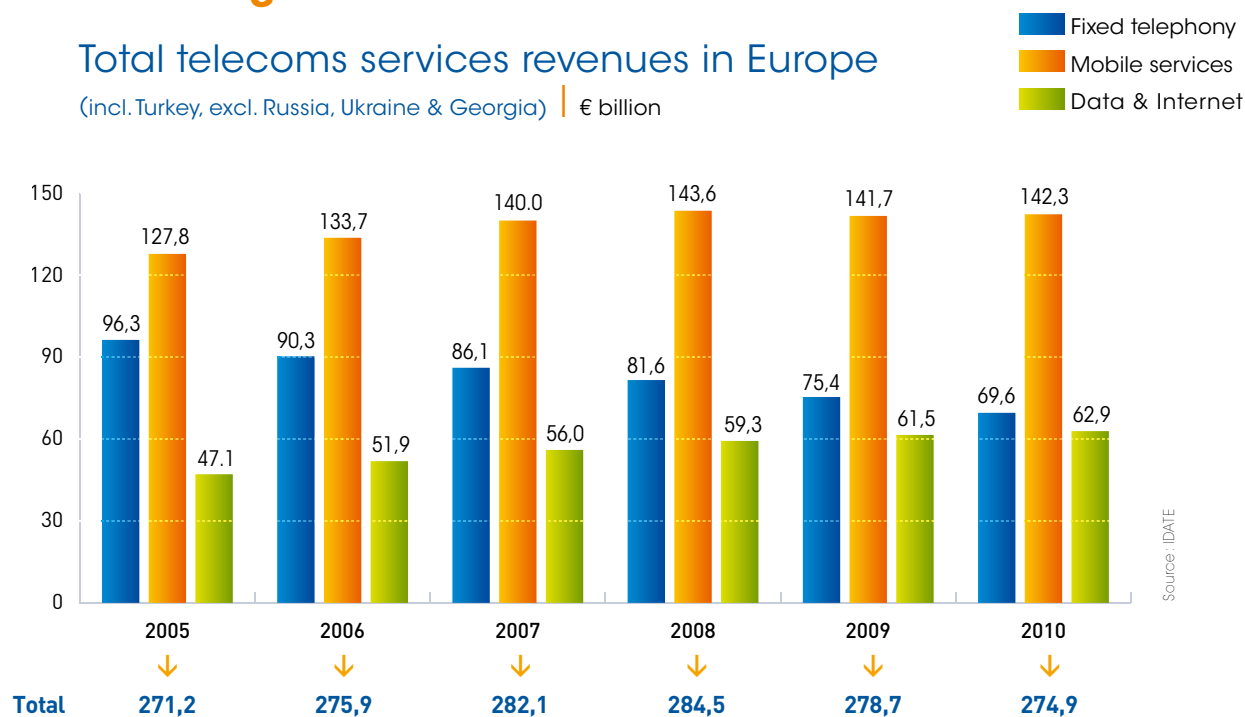
up 6.3% with penetration rates ranging from less than 10% (10 subscribers per 100 inhabitants) in Turkey to close to 40% in Denmark, the Netherlands and Switzerland: The European average (ETNO-perimeter) was 24.4% at the end of 2010 and broadband revenues increased by 6.3% during the year, accounting for 13.6% of total telecom revenues (7% in 2005).

However, the bulk of telcos revenues came from mobile services: with €142.3 billion in 2010, they accounted for 52% of the total revenue and their share has increased over time even if growth has dramatically slowed down in recent years (+0.5% in 2010, -1.3% in 2009). Dynamics in mobile data revenues (+21.5%) compensate for the decline in mobile voice. The European cellular subscriber base can not grow much more as penetration has now reached a very high level in most countries (123% in average for ETNO perimeter).

Overall figures

Total telecoms services revenues in Europe

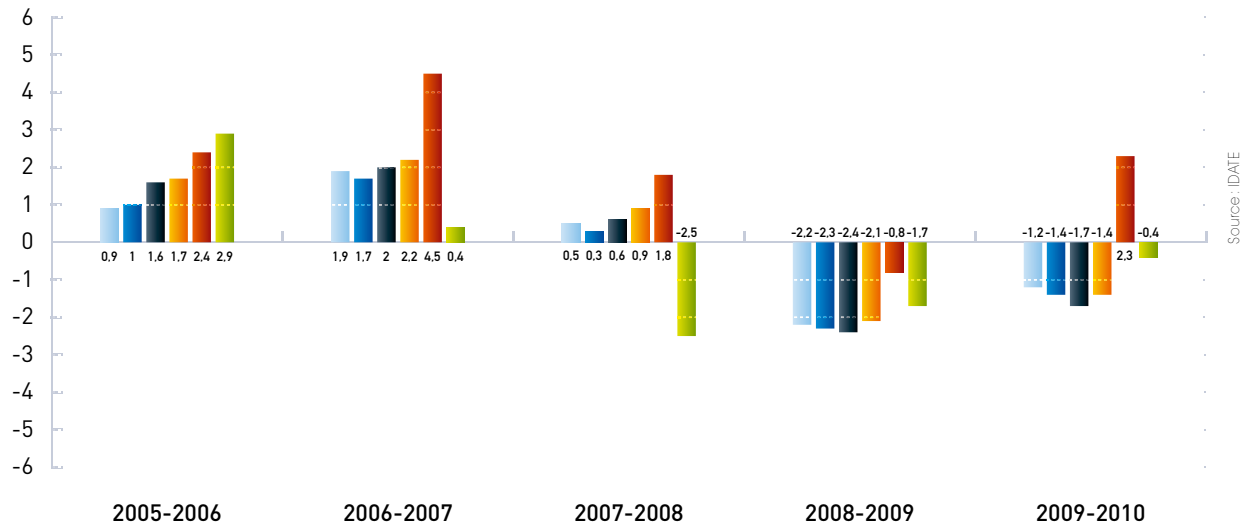
(incl. Turkey, excl. Russia, Ukraine & Georgia) | € billion



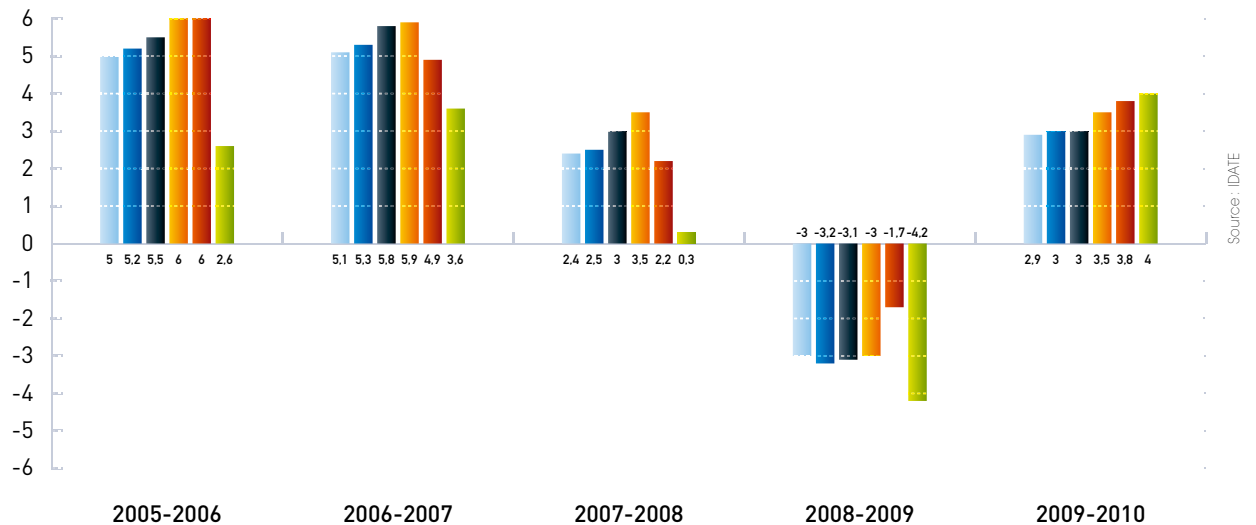
* Average Revenue Per User

2. MARKET TRENDS

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

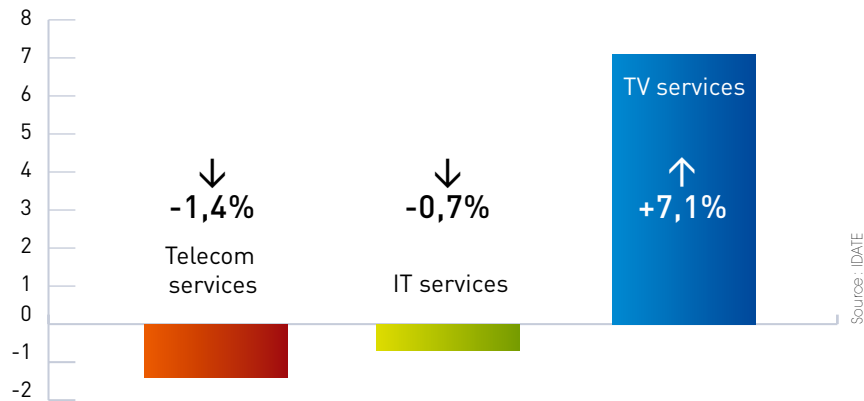


Current GDP growth | %



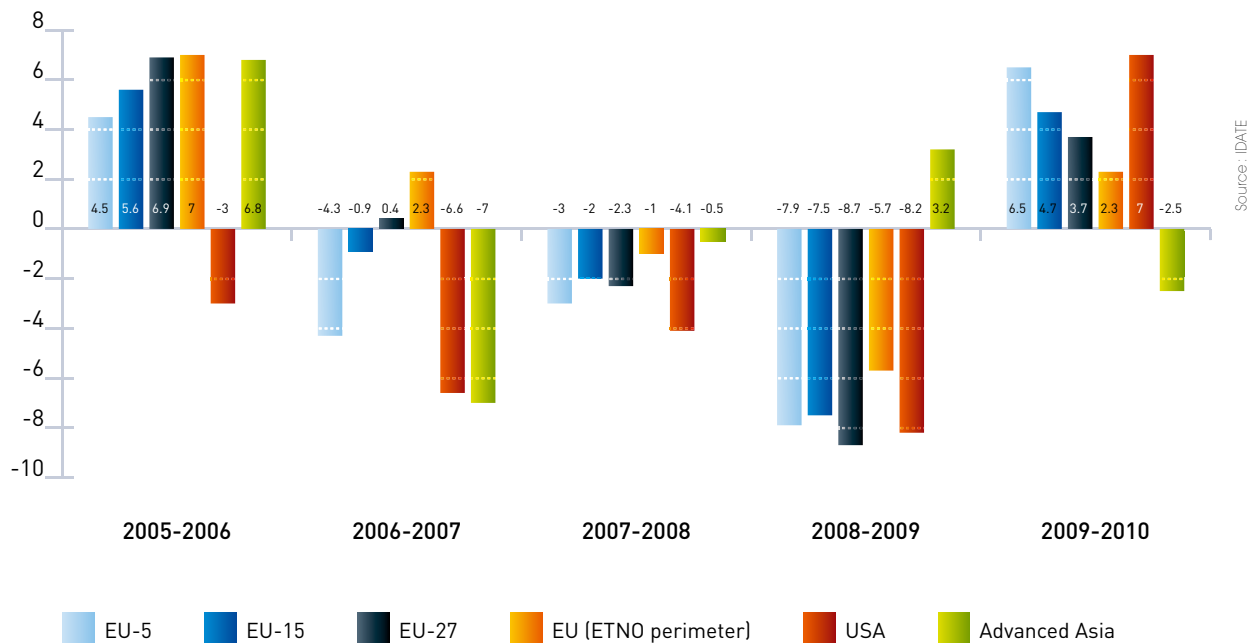
■ EU-5
 ■ EU-15
 ■ EU-27
 ■ EU (ETNO perimeter)
 ■ USA
 ■ Advanced Asia

EU Telecoms market growth 2009-2010 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

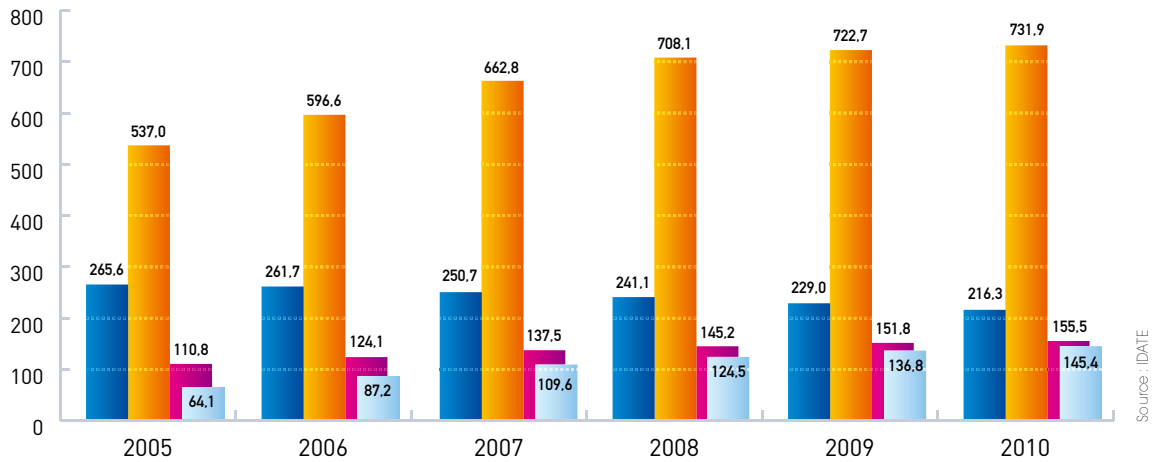


2. MARKET TRENDS

Access to telecoms services in Europe

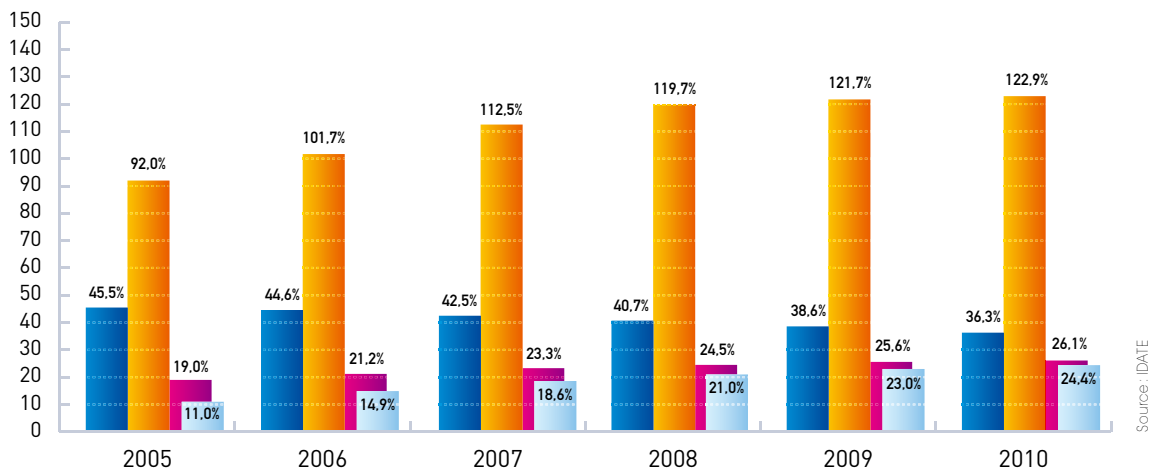
(incl. Turkey, excl. Russia, Ukraine & Georgia) | million lines/subscribers

- Fixed access lines
- Mobile subscribers
- Internet subscribers
- of which broadband subscribers



Teledensities in Europe

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



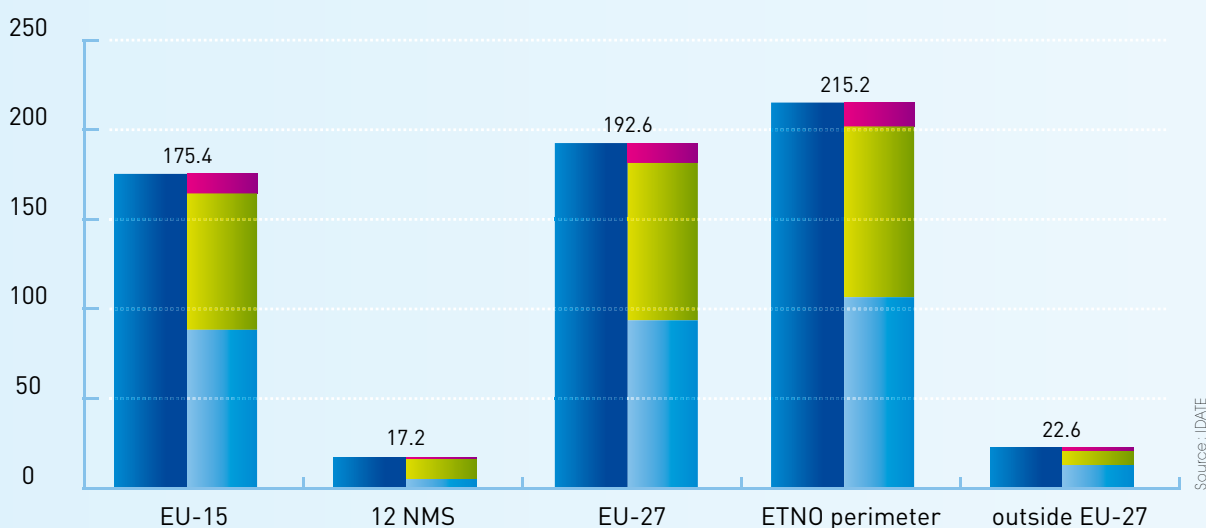
- fixed teledensity
- mobile density
- internet density
- of which broadband density

ETNO members

Split of ETNO members' turnover | € billion

	EU-15	12 NMS*	EU-27	ETNO perimeter	outside EU-27
2010 European turnover (bn €)	175.4	17.2	192.6	215.2	22.6
of which fixed	88.4	5.3	93.7	106.6	12.7
of which mobile	76.1	11.7	87.8	95.3	7.4
of which other (non core, corporate, etc.)	10.9	0.2	11.1	13.3	2.2

Source: IDATE

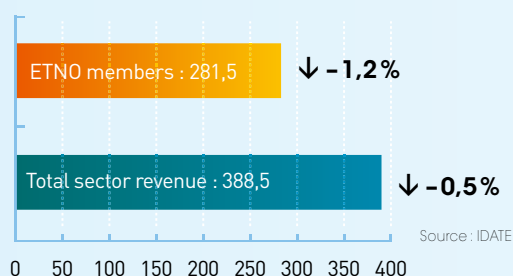


Source: IDATE

Aggregated revenue of ETNO members

(EU + non EU) | € billion

share of total sector revenue = 72.5%

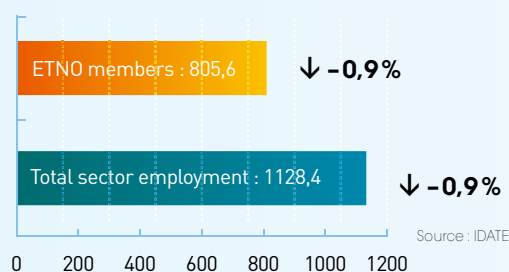


Source: IDATE

ETNO members' employees

(EU + non EU) | thousand

share of total sector employment = 65.2%



Source: IDATE

3. REVENUE AND SERVICE TRENDS

Broadband and mobile segments just compensate for the decline in fixed telephony

After the deterioration of the European telecoms markets in 2009, recovery seems to be underway, but results posted in 2010 were still weakened by the severity of the economic crisis. All segments were impacted with an accelerated decline in activities already concerned with structural downturn (fixed telephony) and a slowdown of growth was seen in other services (mobile, broadband).

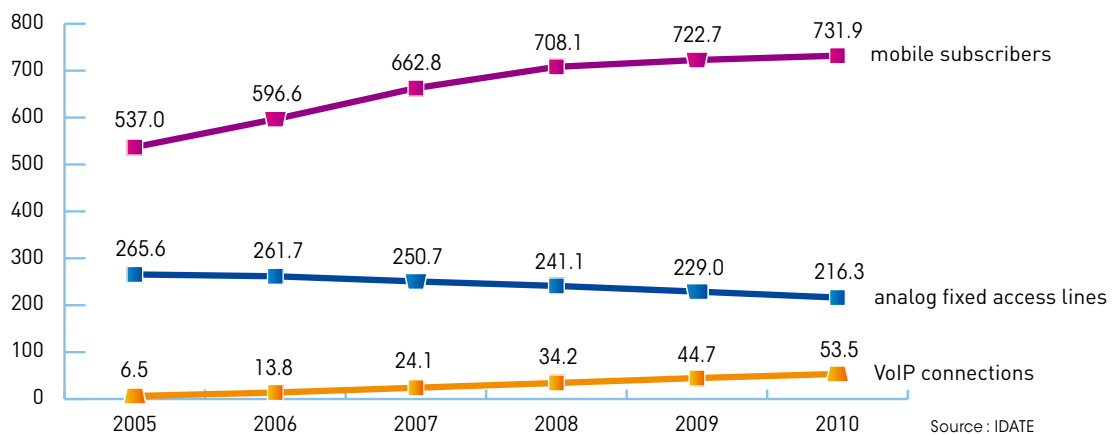
There are clearly 3 areas with contrasted dynamics:

- Fixed telephony revenues are declining rapidly (-2% in 2010 and -6.3% over the last 5 years) and now account for only 49% of the total retail telecoms market.
- Growth in Europe's mobile market was very low in 2010: only 1%. The combination of a smaller decrease for mobile voice services (though users continued to switch to fixed IP and other mobile solutions such as SMS) and a slightly higher increase for mobile data services put things back on track after the recession in 2009. But most of the progress can be attributed to non-EU countries.
- The broadband and ultra-fast broadband segments are the major growth drivers in Europe's telecom services market, fuelled by a growing subscriber base (+7.3% to 146 millions at the end of 2010 in ETNO countries).

Overall figures

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

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

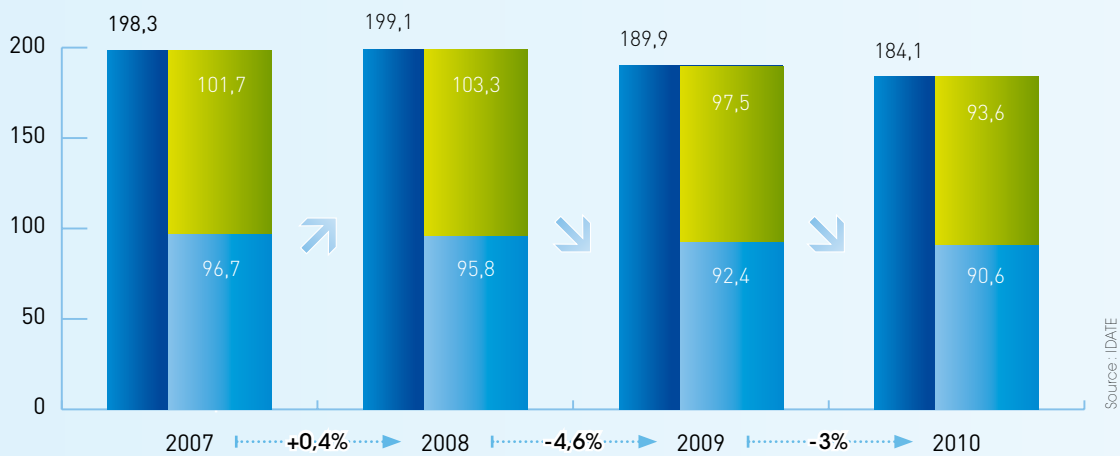




ETNO members

Retail services revenues in Europe | € billion

- Total retail revenues
- o/w ■ Fixed services
- o/w ■ Mobile services



Source: IDATE

4. INVESTMENT TRENDS

ETNO members accounting for about two thirds of investment in networks and services

Investments in wireline networks in Europe amounted to € 24 billion, increasing by 2.3% in 2010 compared to 2009 (with ETNO members still accounting for 64% of this expenditure) but remained below pre-crisis levels.

The number of FTTx homes passed increased to 79.2 million at the end of 2010, of which 20.7 million were FTTH/B homes passed (+22% compared to the end of 2009) with ETNO accounting for 44% of this total (47% when considering FTTx including VDSL and FTTLA).

The number of FTTH/B subscribers reached 3.9 million at the end of 2010, a 39%-growth over one year, showing that operators are mainly focused on leveraging their investments (i.e. acquiring – or retaining – subscribers in the areas where homes

are already equipped) rather than investing in new areas: the penetration ratio (subscribers as a % of homes passed) increased from 16.3% at the beginning of the year to 18.6% at the end.

Investments in mobile networks represented 46% of the total CAPEX in Europe in 2010 or € 20.4 billion, a 2% increase compared to 2009 as network operators need increasingly more capacity to meet customer demand for mobile data.

ETNO members accounted for nearly 60% of this expenditure.

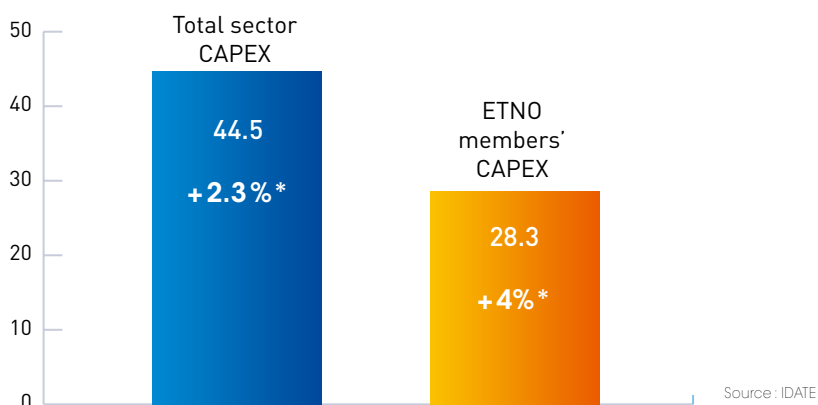


Overall figures

Total sector investment for 2010

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

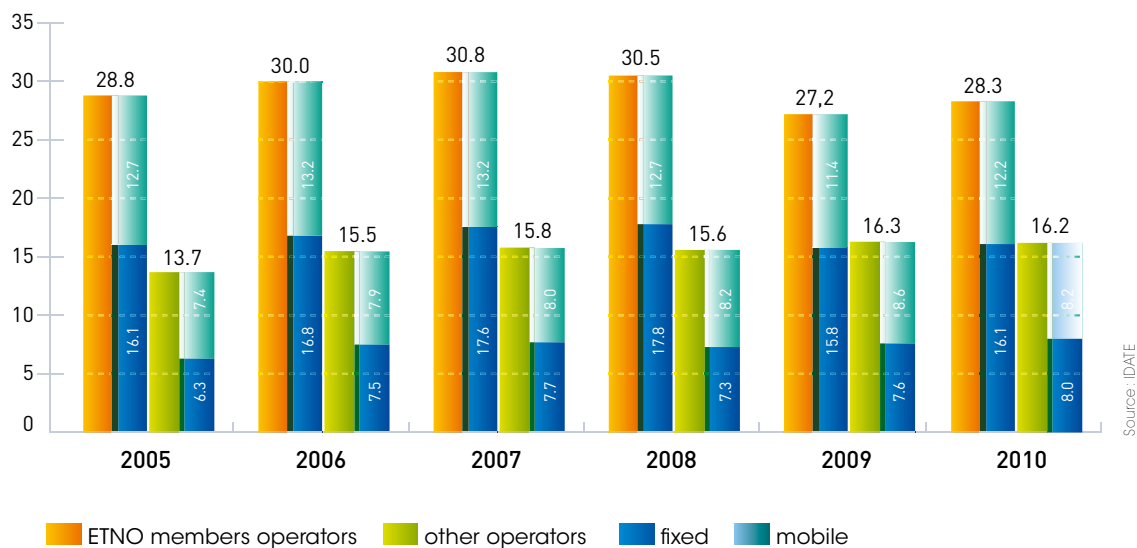
Share of ETNO members = 63.6%



*2009-2010

Investment in fixed vs mobile segments

Telcos' tangible CAPEX (ETNO perimeter) | € billion

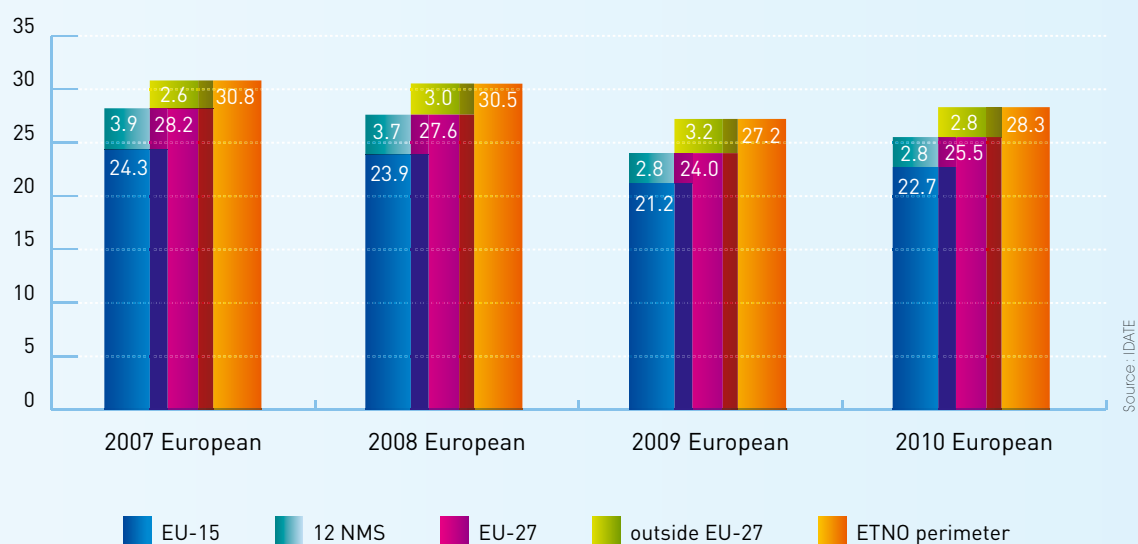


4. INVESTMENT TRENDS

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 2010

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

	EU-15	12 NMS	EU-27	ETNO perimeter	outside EU-27
Tangible CAPEX/turnover	12.9%	16.5%	13.2%	13.1%	12.3%
fixed	14.6%	25.8%	15.2%	15.1%	13.8%
mobile	12.8%	12.5%	12.8%	12.8%	13.2%

Source: I.D.A.T.E

5. BROADBAND

Broadband take up continues to boom with a progressive switch to NGA

Broadband penetration in Europe continued to increase in the recent period to 24.2% at the end of 2010 (24.2 broadband subscribers per 100 inhabitants), with a subscriber base of 146 millions (132.9 millions in EU-27).

Although fixed broadband coverage is now well advanced in Europe, with ADSL available to 95% of population in average, take up still varies widely according to countries. At the end of 2010, penetration was close to 40% in the Netherlands, Denmark and Switzerland while it was below the 10%-mark in Turkey. Generally speaking, take up is higher in Western countries (30% in average) than in Central and Eastern European countries (15%). It is also higher in Nordic countries (Scandinavia) and in Benelux countries.

ADSL remains the prominent broadband access technology supporting more than 3 connections out of 4. Cable modem is second but at a lower level compared to ADSL (15% of broadband connections) as coverage is far less.

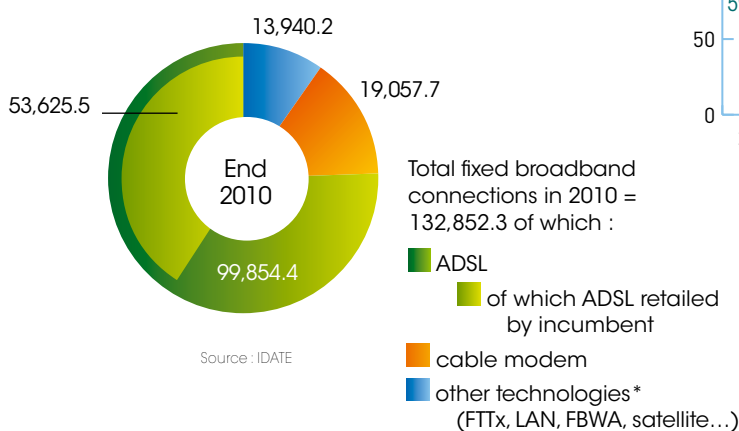
Finally, ultra-fast broadband is gaining ground: with close to 11 million FTTx connections at the end of 2010, accounting for just over 8% of the total at the end of 2010 (4.7% at the end of 2009).

Overall figures

Broadband penetration per technology

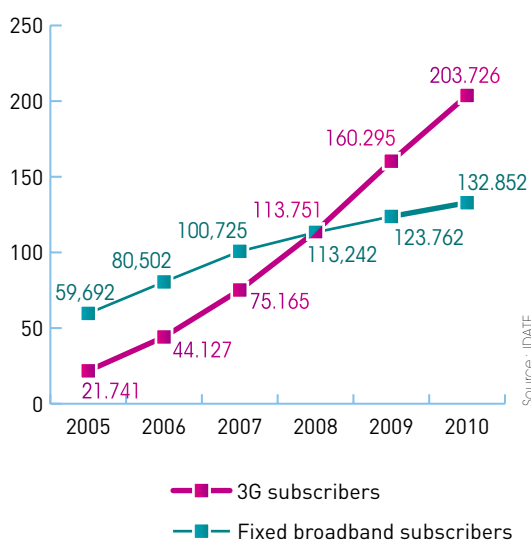
Structure of the European fixed broadband market (EU-27)

thousands connections



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

5 NGA

ETNO members to drive NGA deployments

Data on broadband networks deployment show that the Digital Agenda targets for 2013 are well on track. As regards next generation access broadband, data confirm the leading role of ETNO members and the importance of a mix of technologies and platforms in order to achieve the 2020 targets of the Digital Agenda.

The total number of FTTH/B homes passed reached 20.7 millions in Europe (79.2 million FTTx homes passed including VDSL, FTTLA notably) at the end of 2010, with 3.9 million subscribers (10 million FTTx subscribers).

Data on broadband networks deployment show that the Digital Agenda targets for 2013 are well on track. As regards, next generation access broadband, data confirm the leading role of ETNO members and the importance of a mix of technologies and platforms in order to achieve the 2020 targets of the Digital Agenda.

There have been close to 250 FTTH/B rollouts in Europe on scales that vary from only a few dozen buildings to several million homes passed. Though until now incumbent carriers account for only part of those deployments (representing less than 20% of homes passed with fibre in Europe, 44% 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 10 million homes passed at the end of 2010; Belgacom, 3.3 million, Swisscom and Turk Telekom, 3 million each, Telekom Austria, 1.5 million).

In 2010, FTTH/B and FTTx deployments by ETNO members have increased by 33% and 55%, representing the biggest growth.



Overall figures

NGA deployment in Europe

FTTx deployments and share of ETNO members per country | units

	FTTx homes passed (000s)	share ETNO
BE	5 769.0	57.2%
DK	973.5	33.9%
DE	23 242.0	43.0%
IE	887.9	36.1%
EL	na	na
ES	5 327.6	98.7%
FR	6 092.3	11.5%
IT	2 943.0	96.8%
LU	216.0	100.0%
NL	2 403.0	46.7%
AT	3 327.5	46.4%
PT	4 759.0	21.0%
FI	596.9	92.1%
SE	1 520.0	52.6%
UK	4 625.0	0.0%
BU	1 000.0	0.0%
CZ	360.0	0.0%
CY	na	na
EE	325.0	50.8%
HU	1 821.7	45.1%
LT	1 059.0	53.8%
LV	370.5	83.7%
MT	na	na
PL	525.4	79.1%
RO	440.0	0.0%
SI	576.0	23.6%
SK	810.0	84.0%
CR	273.3	93.6%
NW	399.0	na
CH	5 249.0	61.3%
TU	3 580.0	83.8%

Source: IDATE for council Europe

Broadband coverage at end 2010

(1) as a % of population
(2) home passed as a % of households

	D.A. 2013	DIGITAL AGENDA 2020		
	ADSL (1)	VDSL (2)	FTTLA (2)	FTTH/B (2)
Austria	98%	41.2%	46.7%	3.5%
Belgium	100%	68.8%	51.4%	0.1%
Bulgaria	81%	0.0%	0.0%	35.2%
Croatia	90%	11.9%	0.0%	2.9%
Cyprus	97%	na	na	na
Czech Republic	92%	0.0%	0.0%	5.1%
Denmark	100%	3.5%	0.0%	30.8%
Estonia	94%	1.5%	26.1%	25.4%
Finland	96%	na	na	23.2%
France	100%	0.0%	0.0%	20.9%
Germany	97%	24.8%	31.4%	1.5%
Greece	92%	0.0%	0.0%	na
Hungary	98%	0.0%	39.9%	5.9%
Iceland	95%	na	na	na
Ireland	96%	21.3%	36.7%	1.2%
Italy	96%	1.6%	0.0%	10.1%
Latvia	89%	0.0%	0.0%	36.1%
Lithuania	89%	0.0%	0.0%	81.8%
Luxembourg	100%	78.1%	0.0%	20.5%
Malta	99%	na	na	na
Netherlands	99%	22.4%	0.0%	9.9%
Norway	97%	0.0%	0.0%	18.0%
Poland	77%	0.6%	na	0.7%
Portugal	99%	0.0%	79.3%	38.6%
Romania	82%	0.0%	na	na
Slovakia	83%	0.0%	0.0%	na
Slovenia	92%	1.9%	30.4%	37.7%
Spain	99%	0.0%	28.7%	2.5%
Sweden	98%	na	0.0%	32.3%
Switzerland	97%	85.3%	56.9%	7.1%
Turkey	na	19.2%	na	3.7%
UK	100%	15.3%	49.8%	1.1%
Total EU-15	98%	12.6%	22.3%	8.8%
Total EU-27	95%	10.2%	18.9%	8.7%

Source: IDATE for FTT Council Europe

Main technologies/ network architecture models

NGA deployment (Homes passed at end 200) | million

Homes passed at end 2010	Total EU	ETNO members	% ETNO members
FTTH/B	20.7	9.2	44.2%
FTTx* (incl. VDSL, FTTLA, LAN...)	79.2	37.6	47.4%

Source: IDATE

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

6 NEW BROADBAND SERVICES

Over the top services and applications continue to drive consumers usage of Internet

Four major usages should shape the internet future:

- Online search is by far the most commonly used service, involving 78% of Internet users worldwide in 2010 and rising to 82% in 2015. Derived services (mapping, directory search, etc.) are also very commonly used.
- Video consumption has grown strongly, particularly due to videos shared on sites like YouTube. This use also includes premium videos (VoD and catch-up TV). Globally, about three-quarters of Internet users watch online videos.
- Social networks have also experienced considerable growth: currently, two-thirds of Internet users are registered with a social network.
- Lastly, e-commerce is more difficult to translate into practice, since it usually entails online payment. However, this use will continue to grow until it involves nearly half of Internet users in 2015.

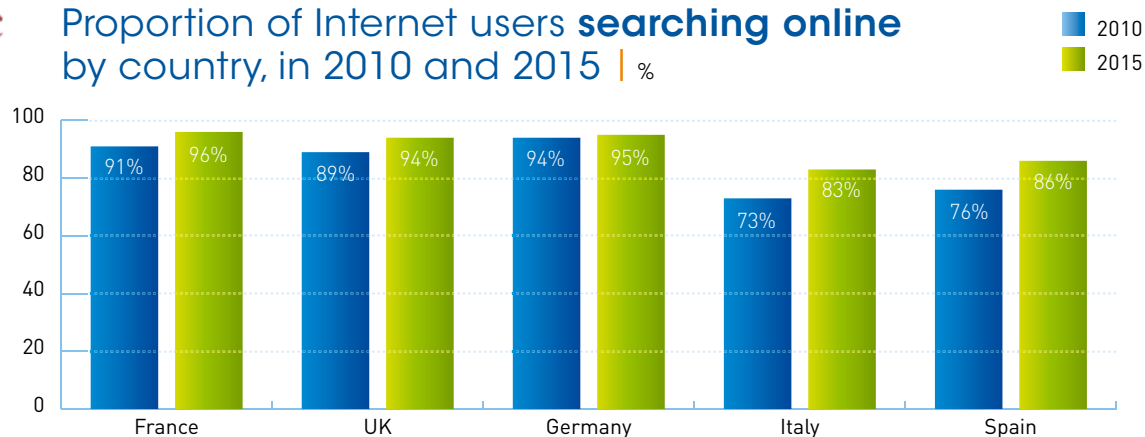


Other Web services are also very well developed in terms of users (email, access to non-merchant services such as Wikipedia, online banking, government services, etc.), but they currently represent a very small part of Internet revenues, and this situation is unlikely to change.

Overall figures

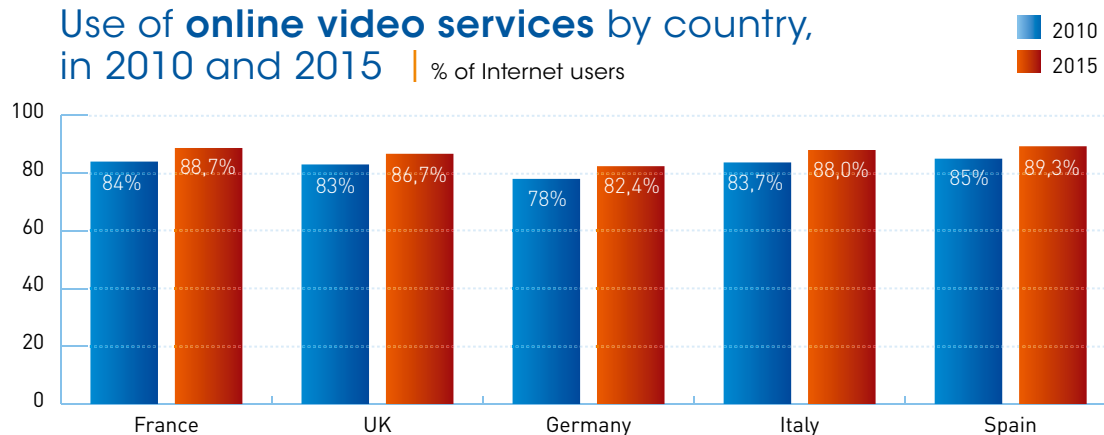


Proportion of Internet users searching online by country, in 2010 and 2015 | %



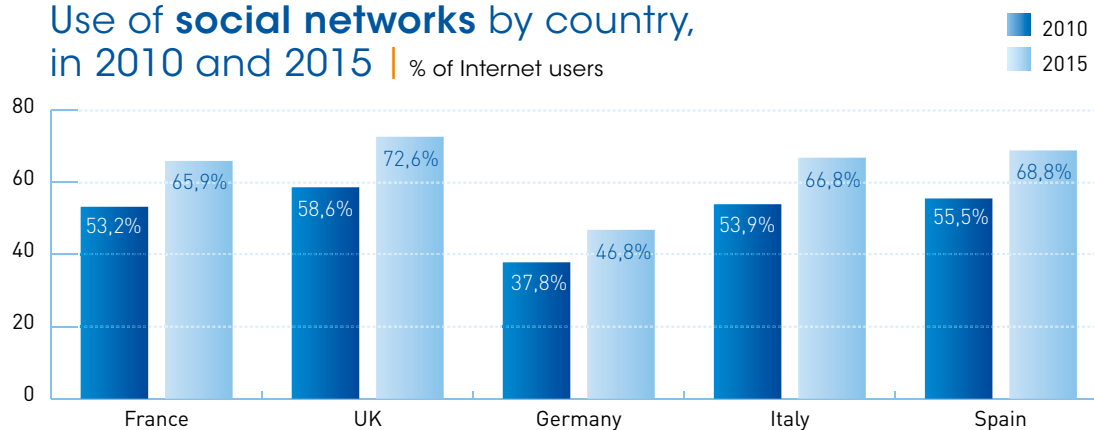
Source: IDATE, in "World Internet Services Market", June 2011

Use of **online video services** by country, in 2010 and 2015 | % of Internet users



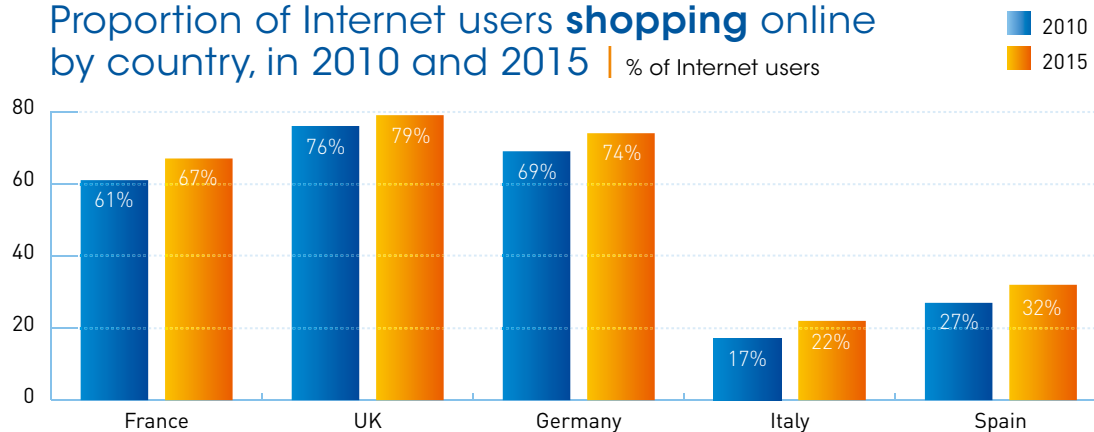
Source: IDATE, in "World Internet Services Market", June 2011

Use of **social networks** by country, in 2010 and 2015 | % of Internet users



Source: IDATE, in "World Internet Services Market", June 2011

Proportion of Internet users **shopping online** by country, in 2010 and 2015 | % of Internet users



Source: IDATE, in "World Internet Services Market", June 2011

7. RANKING IN EUROPEAN & WORLD COMPANIES

Top 40 global telecoms operators

Rank	Company	Country	2010 sales (€ million)
1	AT&T	USA	93,831
2	NTT	Japan	88,639
3	Verizon	USA	80,457
4	Deutsche Telekom	Germany	62,421
5	Telefónica	Spain	60,740
6	China Mobile	China	54,115
7	Vodafone	UK	53,534
8	France Télécom	France	45,503
9	América Movil	Mexico	36,322
10	KDDI	Japan	29,542
11	Telecom Italia	Italy	27,571
12	Comcast	USA	27,000
13	Softbank	Japan	25,845
14	Sprint Nextel	USA	24,585
15	China Telecom	China	24,520
16	BT	UK	23,423
17	China Unicom	China	19,104
18	Telstra	Australia	17,186
19	Time Warner Cable	USA	14,245
20	KT	South Korea	13,932
21	KPN	Netherlands	13,324
22	BCE	Canada	13,243
23	Tele Norte Leste	Brazil	12,652
24	SFR	France	12,454
25	Telenor	Norway	11,848
26	MTN	South Africa	11,827
27	TeliaSonera	Sweden	11,165
28	STC	Saudi Arabia	10,427
29	SK Telecom	South Korea	10,081
30	SingTel	Singapore	10,006
31	Bharti Airtel	India	9,819
32	Rogers	Canada	8,931
33	Swisscom	Switzerland	8,679
34	Vimpelcom	Russia	7,937
35	Hutchison Whampoa	HK	7,442
36	Telus	Canada	7,167
37	Qwest	USA	7,000
38	Rostelecom	Russia	6,856
39	Liberty Global	USA	6,808
40	Belgacom	Belgium	6,603

Source: IDATE

Top 20 European telecoms operators

Rank	Company	Country	2009 sales (€ million)
1	Deutsche Telekom	Germany	62,421
2	Telefónica	Spain	60,740
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4	France Télécom	France	45,503
5	Telecom Italia	Italy	27,571
6	BT	UK	23,423
7	KPN	Netherlands	13,324
8	SFR	France	12,454
9	Telenor	Norway	11,848
10	TeliaSonera	Sweden	11,165
11	Swisscom	Switzerland	8,679
12	Belgacom	Belgium	6,603
13	Wind	Italy	5,898
14	Bouygues Telecom	France	5,636
15	Turk Telekom	Turkey	5,452
16	Telekom Austria	Austria	4,651
17	Virgin Media	UK	4,522
18	Tele2	Sweden	4,208
19	Portugal Telecom	Portugal	3,742
20	TDC	Denmark	3,513

Source: I.D.A.T.E.

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 • 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 •
- Orange (France) www.orange.com • OTE (Greece) www.ote.gr • Portugal Telecom (Portugal) www.telecom.pt •
- RomTelecom (Romania) www.romtelecom.ro • Síminn (Iceland) www.simi.is • Slovak Telekom (Slovakia) www.slovaktelekom.sk •
- Societatea Nationala de Radiocomunicatii (Romania) www.radiocom.ro • Swisscom (Switzerland) www.swisscom.com •
- TDC (Denmark) www.tdc.com • TDF (France) www.tdf.fr • Telecom Italia (Italy) www.telecomitalia.it •
- Telecom Liechtenstein www.telecom.li • Telefónica (Spain) www.telefonica.com • Telefónica O₂ (Czech Republic) www.cz.o2.com •
- 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 • VIVACOM (Bulgaria) www.vivacom.bg •

ETNO Members:

 ALBtelecom (Albania)	 Elion Enterprises Ltd. (Estonia)	 OTE (Greece)	 TDF (France)	 Telenor (Norway)
 Belgacom (Belgium)	 Entreprise des Postes et Télécommunications (Luxembourg)	 Portugal Telecom (Portugal)	 Telecom Italia (Italy)	 Telekom Slovenije (Slovenia)
 BH Telecom (Bosnia and Herzegovina)	 Finnet Group (Finland)	 Societatea Nationala de Radiocomunicatii (Romania)	 Telecom Liechtenstein (Liechtenstein)	 TeliaSonera (Sweden-Finland)
 Cyprus Telecommunications Authority (Cyprus)	 Orange (France)	 RomTelecom (Romania)	 Telefónica (Spain)	 Teo (Lithuania)
 T-Group*	 GO (Malta)	 Síminn (Iceland Telecom Ltd.)	 Telefónica O ₂ (Czech Republic)	 Türk Telekomünikasyon (Turkey)
 eircom (Ireland)	 Koninklijke KPN (The Netherlands)	 Swisscom (Switzerland)	 Telekom Austria (Austria)	 VIVACOM (Bulgaria)
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* T-Group companies who are members of ETNO: Deutsche Telekom, Hrvatski Telekom, Magyar Telekom, Makedonski Telekom and Slovak Telekom.

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