



EETT

HELLENIC TELECOMMUNICATIONS & POST COMMISSION

2013

Market
Review

Electronic Communications
& Postal Services



HELLENIC TELECOMMUNICATIONS & POST COMMISSION

Market review of Electronic Communications & Postal Services for 2013

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Executive summary

The current Market Review presents in detail the progress of the electronic communications and postal services markets in Greece for the year 2013. The data used and presented herein are based on the processing of the supervised companies' financial statements, questionnaires sent by EETT and information drawn from respective reports of the European Commission and organisations such as the Body of European Regulators for European Communications (BEREC) and the Universal Postal Union (UPU).

(a) Electronic Communications

In 2013, the sector grew significantly global-wise, driven by consumer demand for broadband access services, especially mobile broadband. However, in Europe, the impact of the economic crisis on the sector appears to be significant resulting to stagnant sector financials and intense market reorganization trends. Specifically, important mergers took place recently both in major European markets (Germany, United Kingdom, Spain) as well as in smaller ones. The growth may as well be triggered by services through new generation access networks and mobile broadband, which demonstrate high growth rates both in terms of consumer acceptance and adoption. These developments make it even more imperative that National Regulatory Authorities monitor competition matters.

In Greece, the telecommunications sector continued to shrink in 2013, in terms of both financials and players. The most striking development was that its contribution to the GDP fell by 35%, in addition to the downward trend of the operators' main financials, namely their turnover (by ~12%), gross profit (by ~22%) and assets (by ~7.5%). The turnover reduction is linked to the continuing economic crisis and the significant reduction in consumers' purchasing power. Nevertheless, EETT's latest data show that a small increase in investments may be interpreted as a sign of recovery. A short report on developments per market is given below.

The broadband market

In December 2013 the number of broadband lines reached 2,913,191, compared to 2,689,428 in December 2012. Broadband penetration reached 26.3% of the population, compared to 24.3% in December 2012. This increase (2 lines per 100 inhabitants) was the second largest in Europe and Greece was ranked 17th amongst the EU member states (up from 19th in December 2012). In 2013 the broadband connection gap between the EU and Greece was further bridged, with Greece falling short of the EU average by 3.5 connections per 100 residents, compared to 4.4 in December 2012. There was an increase in both alternative operators' xDSL broadband connections via Local Loop Unbundling (LLU), as well as in OTE xDSL retail connections. However, the VDSL connection percentage remained limited (less than 2%).

The average speed of ADSL wholesale and retail connections reached 13.5Mbps in December 2013, a significant increase compared to December 2012 (23%), that is attributed to the (limited nevertheless) increase in VDSL connections.



Broadband availability among the existing telephone lines was particularly high, something which does not reflect the corresponding LLU availability in most regions in Greece.

It should be noted that the average monthly cost of full access lines in Greece was 6.7% lower than the EU average.

Fixed telephony market

The number of telephony lines dropped slightly in 2013 and amounted to 43.3 lines per 100 residents (compared to 44.4 in December 2012). OTE lines were decreased by 7.1%, whilst the alternative operators' lines were increased by 5.5%. As a result, OTE's share in telephone lines fell to 59.4% in December 2013, compared to 62.4% in December 2012.

Traffic for the main types of calls (local, long distance, international and to mobile phones) amounted to 18.3 billion minutes in 2013 (3.2% down, compared to 2012), whilst revenues from fixed telephony services reached 1.55 billion euro in 2013 (7% down, compared to 2012). OTE's share in traffic dropped significantly in all call categories, declining to 49.6% (7.2% down, compared to 2012).

Mobile telecommunications market

In 2013, the number of mobile telephony connections amounted to 16.5 million, out of which 13 million were active. In total, mobile telephony penetration in Greece reached 123%. Active subscriptions fell by 2.7%, with the number of postpaid connections declining by 1.6% and prepaid connections by 3.3%. COSMOTE's share in the total number of connections fell in December 2013 to 45.3% (compared to 48.5% in December 2012). Conversely, the shares of VODAFONE and WIND in December 2013, reached 29.8% and 24.9% correspondingly.

The volume of voice calls remained at the same levels as in 2012, whilst 72% of those calls were on-net, compared to 75% in 2012. The total number of SMSs and MMSs fell by 19% and 17% respectively. Conversely, data roaming services increased significantly by 35.8%, reaching 14.67 billion MB.

Mobile telephony revenues dropped by 16.8% and amounted to 2.5 billion euro, with the greatest reduction in wholesale revenues attributed to the reduction in termination rates (176 million euro). The average revenue per postpaid and prepaid telephony user amounted to 288 euro and 61 euro respectively, falling significantly compared to 2012 (by 14.5% and 17% respectively).

Second-generation network coverage (2G) was available for 99.8% of Greece, third-generation networks (3G) exceeded 98.3% and fourth-generation networks (4G) reached 55% of the population.

Interconnection market

In fixed telephony, call origination dropped by 47% compared to 2012, reaching 404 million minutes, which is attributed to the further increase in LLU full access lines. In mobile telephony, termination rates dropped further, resulting in an average termination rate of 1.19 eurocents per minute in 2013, compared to 1.27 eurocents per minute in 2012 (a reduction of 6.3%).

Number Portability

Finally, it should be noted that portability continues to boost competition and is used by operators of both fixed and mobile telephony. The volume of ported numbers was significantly increased in 2013, compared to 2012, both for fixed telephony (28.1%) and mobile telephony (10.2%).

(b) Postal Services

Internationally, the postal services sector is undergoing a phase of intense changes and transformations. Some of its traditional business lines, such as letter post are decreasing, whilst others, such as parcels are rising significantly. These changes are mainly attributed to technological developments that have resulted on the one hand in the replacement of traditional mail by electronic mail and on the other hand in an increase in parcel post. At the same time, postal service providers are modernizing and upgrading the quality of their procedures, whilst also developing a range of other supplementary services (such as hybrid post, secure electronic communications services, financial transactions), in an effort to enhance their role and improve services.

On an international level

The greatest increase in size is observed in emerging markets, a fact linked to the faster growth rates of their economies. Contrariwise, both in North America and in Europe, postal revenues are falling, mainly due to the drop in letters and also, as a result of the economic crisis affecting quite a few countries.

The growth rate of sales through e-commerce continues to rise sharply. Characteristically, in 2014, an increase in revenues from sales to end consumers (B2C) is expected to reach an approximate 20.1%, on a global level. Greece is also extremely active in this sector, growing rapidly with a rate that exceeds 30%.

Greek postal market

In the Greek postal market, 461 million postal items were handled in total within 2013, generating revenues in the order of 563 million euro. At the same time the number of postal items handled fell by 10.8% compared to the previous year causing a reduction of revenues by 1.7%. This drop seems to have more adversely affected the Universal Service Provider (USP) which in Greece is ELTA, that nevertheless continues to predominate in letter post, but its postal revenues are almost equal to those of courier companies. Especially in the parcel market, courier companies predominate, handling 75.9% of the volume and generating 90% of the revenues. It should be noted that in 2013, ELTA held 88% of the total market share in terms of the number of postal items and 50% in terms of revenues.

In 2013, besides ELTA, eight companies operated in the Universal Service market under an Individual License, whilst 389 companies operated in the courier market. The 30% increase in the number of new companies compared to 2012, shows that the said market remains attractive from a business perspective and has positive growth prospects.



1

Electronic
Communications
Market



Electronic Communications Market

1.1. Progress of the electronic communications market

1.1.1. Globally

The overall macroeconomic outlook of the sector is quite positive on a global level. Developing countries are growing at satisfactory rates (over 3%), whilst US and Japan also experienced positive results. Consumer demand for broadband access services through wireless devices continues to be the main driver for growth in telecommunications. According to market estimations, between 2013 and 2019, the number of mobile broadband service subscribers will increase fourfold, whilst data traffic through smart phones will increase tenfold.

According to the European Commission's report on electronic communications¹, revenues growth globally was 4.2%. Additionally, the "Measuring the Information Society 2013" report, issued by the International Telecommunication Union (ITU) presents a series of indicators on the course of the electronic communications market². According to this report:

- Only 40% of the global population has Internet access, whilst in developed countries the percentage is greater than 77% and in developing countries greater than 31%.
- Europe is the continent with the greatest rate of broadband penetration (77%), America comes second (61%), whilst Africa ranks last with only 7%.
- Broadband network with speeds higher than 10Mbps, as well as ultra-fast broadband, are more widespread in Asia (Korea, Hong Kong, Japan), as well as certain European countries.
- The number of mobile telephony subscribers is estimated at 6.8 billion and this means penetration of approximately 96% globally, reaching 128% in developed countries and 89% in developing.
- The use of broadband connections is rising continuously with more than 2 billion subscribers globally at the end of 2013. Europe has the greatest penetration in wireless broadband connections – reaching 68%.
- 55% of households globally have a digital television. This percentage reaches 81% in developed countries.

1.1.2. In Europe

Even though the picture in EU-28 is (marginally) positive, with a growth rate of 0.1%, the repercussions of the economic crisis remain visible, especially in the countries of the South.

In 2013, the electronic communications sector in Europe continued to be affected by the negative economic conditions with the telecommunications operators' revenues and investments being heavily affected, as shown in Table 1.1, which presents information from countries comparable to Greece, according to certain criteria (population, income, etc.).

According to the European Commission's report on electronic communications in Europe³, the market fell by 3.3% in terms of revenues.

1. European Commission (Digital Agenda Scoreboard 2014).

2. ITU (2014), *Measuring the Information Society*, Geneva.

3. European Commission (Digital Agenda Scoreboard 2014).



According to the report of the Body of European Regulators for Electronic Communications (BEREC), retail revenues fell in 2013, with the exception of services through new generation access networks and mobile broadband, both of which increased.

In 2013, investments increased (1.4% up), though presenting large variations from one country to the next. For example, investments in Lithuania, Bulgaria and Greece dropped by more than 20% while they increased by more than 40% in countries such as Ireland, United Kingdom, Cyprus, Estonia and Hungary.

Consumers' pursue for better and affordable deals resulted in a greater use of bundled services, as well as greater subscribers' mobility in regard to selecting an operator.

It should be noted that the consumer price index in EU-28 remains negative (-3.5%), in contrast to the overall price index (1.5%).

Table 1.1

The crisis has affected revenues and investments in electronic communications (in billion EUR)

Countries	Revenues				Investments			
	2009	2010	2011	2012	2009	2010	2011	2012
Greece	7.77	6.90	6.39	5.94	1.35	1.07	0.94	0.73
Ireland	4.64	4.43	4.24	4.10	0.44	0.44	0.42	0.80
Portugal	5.41	5.25	5.32	4.59	1.05	1.08	0.90	0.77
Austria	4.93	4.90	4.53	4.39	0.52	0.69	0.50	0.55
Sweden	N/A	5.48	5.88	6.06	N/A	0.87	0.99	0.97
Netherlands	11.27	13.45	13.48	12.20	1.68	1.88	2.23	2.71
EU-27/28 Total	335.24	327.30	334.70	323.60	39.15	38.80	41.50	42.10

Source: All information regarding EU was taken from the Digital Agenda Scoreboards 2011, 2012 and 2014. Information on individual countries was taken from the corresponding National Regulatory Authorities (NRAs).

Broadband coverage in Europe reached 97%. New generation fixed network (FTTx, VDSL, Cable DOCSIS 3.0) coverage reached 62%, whilst new generation mobile networks (LTE) reached 59%, according to the European Commission's report on the electronic communications market in Europe.

It should be noted that the Digital Agenda 2020 sets particularly ambitious targets for broadband. Specifically by 2020, half of European households should have broadband access of at least 100Mbps, whilst speeds of 30Mbps should be available to all European citizens.

Regulatory initiatives

From a regulatory perspective, 2013 is characterised by a series of important initiatives:

The mid-year adoption of the Regulation on cost-accounting and non-discrimination introduces new practices that move away from specific cost models and impose stricter terms in order to ensure non-discrimination.

The process for implementing the Recommendation of the examined markets, that further reduces the number of relevant markets susceptible to ex ante regulation, whilst at the same time introduces new practices in the market definition and analysis procedures.

The submission of a Commission's proposal on a Regulation for the single electronic communications market, which covers a broad range of matters, among which, the licensing of operators that operate in many countries, radio-spectrum management procedures, international roaming, Internet Neutrality, consumer protection matters, as well as regulatory measures for ensuring access to new generation access networks. The proposed Regulation is now under negotiation on an institutional level, with the European Parliament having already submitted its comments (revising many of the proposed provisions), and pending the Council's comments.

Mergers and acquisitions

There has been a lot of activity in the European market with major mergers and acquisitions taking place that reflect major changes in business strategies.

Most mergers and acquisitions took place in Germany, with both VODAFONE (acquisition of KABEL Deutschland, the largest operator in Germany) and the US company LIBERTY GLOBAL (acquisition of KABEL BW, the second largest operator in Germany) entering into the cable television market. At the same time, Spanish TELEFONICA submitted a proposal for the acquisition of the German company E PLUS, which was completed within 2014, after consideration by the competent competition authorities.

Major mergers and acquisitions transactions were also took place in the United Kingdom (LIBERTY Global acquired the second largest operator, VIRGIN Media), Austria (HUTCHINSON WHAMPOA acquired the second largest mobile telephony company in Austria, ORANGE), Ireland (HUTCHINSON WHAMPOA acquired O2, a subsidiary of TELEFONICA), but also in other European countries (Portugal, Czech Republic, Hungary).

1.1.3. In Greece

The prolonged economic crisis in Greece continued to take its toll on the electronic communications sector both in terms of quantity and quality. In more detail, the number of licensed operators in the major sectors of electronic communications amounted to 598 at the end of 2013, compared to 615 in 2012 (Table 1.2), while the number of mobile and fixed operators amounted to 8 companies were operating in fixed telephony and 3 in mobile telephony (Table 1.3). It should be noted that, in recent years due to the economic conditions, there is a trend towards market concentration that is expected to get more intense in 2014.

Moreover the sector's main financials (turnover, gross profit and assets) are declining in the last five years. Their progress is summarized in Table 1.4 (see Section 1.2 for more details). Similarly, the contribution of the sector's turnover to the Gross Domestic Product (GDP) of Greece has been falling over the past decade, reaching 2.9% in 2013 (the highest level being that of 4.5% in 2002), a situation caused by the higher growth rate of the GDP in comparison to that of electronic communications (especially in the period 2003-2008), as well as by the reduction of telecommunications' turnover compared to the GDP in the period 2009-2013 (Chart 1.1).

Besides, the general cost trend for electronic communications services is reflected in the General Consumer Price Index (GCPI) over time, as presented in Charts 1.2 and 1.3. After a short-lived rise, due to an increase in taxation (VAT and the mobile telephony fee), the Communications Sub-index reverted in December of 2011 to its downward trend, a course which continued throughout 2013.

Bundled services have now prevailed as the dominant products in the telecommunications market with operators offering 2-play (fixed telephony + Internet) and 3-play (fixed telephony + Internet + television) services. Bundled services are now marketed at relatively affordable prices, due to the intense competition between telecommunication operators. On 31st December 2013, 2-play service subscribers numbered 2,707,063 compared to 2,189,284 a year earlier. As regards 3-play services (including IPTV and VoD), the penetration was much lower, with only 152,293 subscribers, compared to 125,214 a year earlier.

4. WIND as of 2009 (after the acquisition of TELLAS) is operating in both fixed and mobile telephony and therefore falls under both categories.

The number of fixed telephony lines in Greece fell between 2010 and 2013 from 5.2 million to 4.8 million. OTE's share in the fixed telephony access market fell from 72.7% at the end of 2010 to 62.4% at the end of 2012 and to 59.4% at the end of 2013.

In 2013, the number of mobile telephony connections amounted to 16.5 million, out of which 13 million were active. In total, mobile telephony penetration in Greece reached 117.5%.

Broadband penetration amounted to 25.8% compared to 23.8%, with 2,913,191 connections in 2013 compared to 2,689,428 at the end of 2012. As regards the roll-out of new generation access networks, potential VDSL coverage at the end of 2013 exceeded 69% of the fixed telephony subscribers in Greece, through the relevant infrastructure in 187 local exchanges. VDSL connections amounted to 48,878 compared to 3,165 in 2012.

With respect to mobile broadband and according to information as of December 2013, 4,412,039 users had Internet access capability through mobile phones and 969,763 users had Internet access by using the relative cards in their laptop. At the same time the development and roll-out of technologically advanced networks continued, enabling the launching of commercially available 4G/LTE services at the end of 2012. For 2013, 2G network coverage was available for 99.8% of Greece, 3G coverage exceeded 98.3% and 4G coverage reached 55% of the population.

Portability in fixed and mobile telephony increased by 18.6%. Approximately 1 million fixed and mobile telephony numbers change operator each year.

Termination rates dropped almost 250% to 1.269 eurocents from 4.95 eurocents in 2012, whilst a further reduction of rates to 1.189 eurocents (6.3% down) will be implemented as of January 1st, 2014.

Moreover, the cost of SMSs and the data services was cut by 12.5% and 55.6% respectively, following the implementation of the International Roaming Regulation.

Table 1.2

Authorised operators per category

Activity	2012	2013
Voice telephony and fixed network development	192	190
Voice telephony	179	185
Fixed network development	64	55
Satellite networks	53	51
2 nd generation mobile telephony (2G)	12	12
3 rd generation mobile telephony (3G)	13	13
TETRA	7	6
W-LAN	95	86
Total	615	598

Source: EETT

Note: Table 1.2 refers to the total number of operators authorized by EETT in the telecommunications market. The 2013 Annual Report of EETT (page 12) presents the turnover for the 89 largest companies of the sector that appear to have revenues from telecommunications activity that exceed 150,000 euro.

Table 1.3

Active fixed & mobile telephony operators

Operators	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fixed telephony	13	13	14	14	14	11	11	11	9	8
Mobile telephony	4	4	4	4	3	3	3	3	3	3

Source: EETT

Table 1.4

Electronic communications operators financials (in billion EUR)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013*
Turnover										
OPE	2.85	2.71	2.71	2.66	2.59	2.41	2.17	1.91	1.70	1.56
MTOs	4.08	3.96	4.53	4.59	4.50	4.27	3.58	3.23	2.99	2.51
Alternative Fixed Telephony Providers (**)	0.44	0.53	0.56	0.54	0.53	0.47	0.57	0.62	0.63	0.58
Other Operators (***)	0.54	0.53	0.57	0.70	0.61	0.62	0.58	0.63	0.62	0.57
Total	7.92	7.73	8.37	8.49	8.22	7.77	6.90	6.40	5.94	5.22
Gross Profits										
OPE	0.20	-0.82	0.31	0.31	0.31	0.35	0.14	0.20	0.06	-0.01
MTOs	2.05	1.67	1.99	2.06	1.94	1.04	0.73	0.75	0.64	0.48
Alternative Fixed Telephony Providers (**)	0.14	0.13	0.13	0.08	0.05	0.03	0.01	0.05	0.09	0.09
Other Operators (***)	0.17	0.12	0.13	0.15	0.17	0.14	0.14	0.15	0.14	0.12
Total	2.55	1.11	2.56	2.59	2.47	1.56	1.03	1.14	0.93	0.93
Total Assets										
OPE	6.79	7.16	6.80	8.36	8.87	8.24	7.95	7.76	6.61	6.33
MTOs	4.27	6.21	8.41	8.14	8.46	8.35	7.11	6.81	6.94	6.14
Alternative Fixed Telephony Providers (**)	0.58	0.65	0.93	1.18	1.53	1.32	1.41	1.12	0.92	0.85
Other Operators (***)	0.64	0.60	0.61	0.67	0.77	1.60	1.46	1.37	1.30	1.28
Total	12.28	14.62	16.74	18.34	19.63	19.51	17.93	17.07	15.77	14.59

Source: EETT (based on published balance sheets)

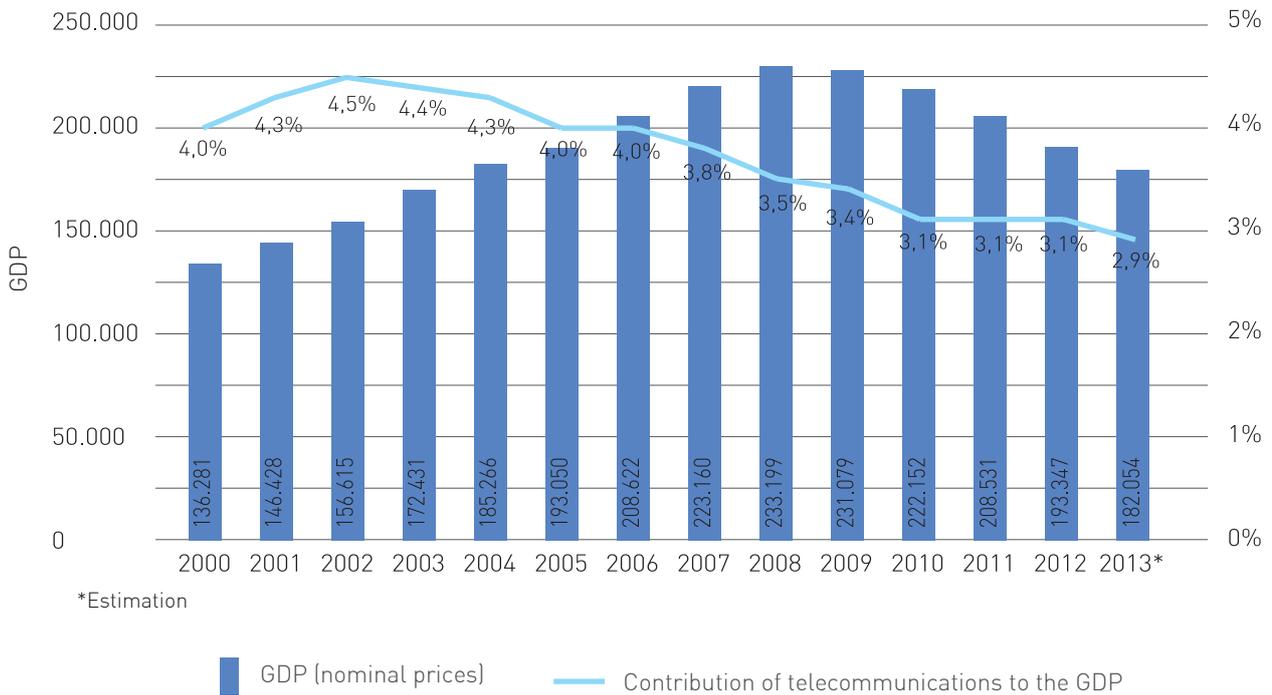
* Estimation.

** Includes all licensed fixed telephony operators.

*** Includes all remaining licensed operators.

Chart 1.1

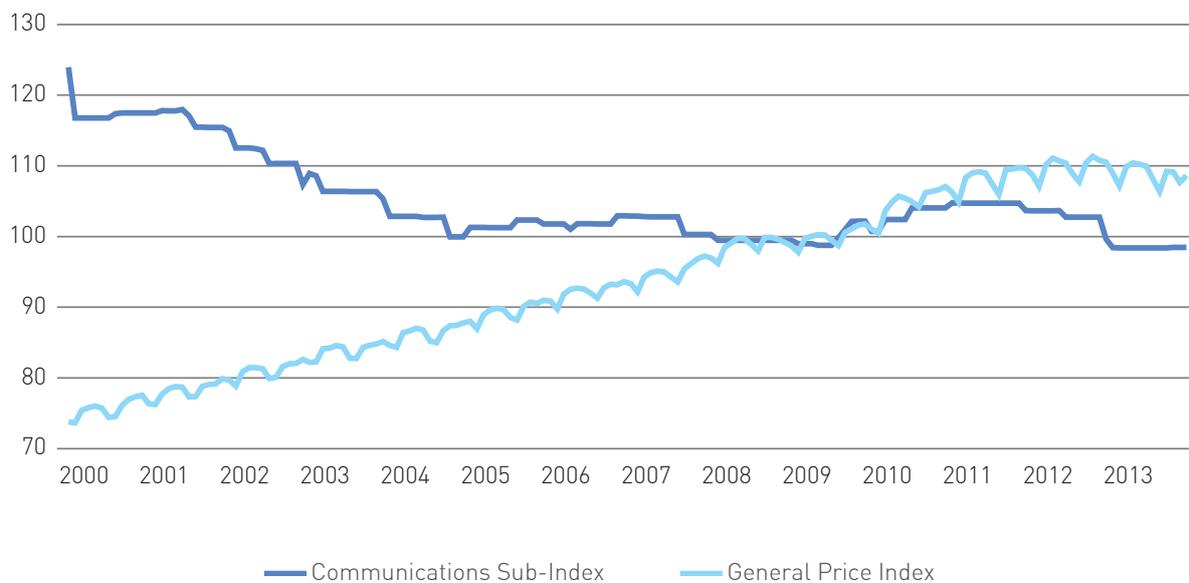
Telecommunications' contribution to Greece's GDP (in million EUR)



Source: EETT (based on published balance sheets) and EUROSTAT

Chart 1.2

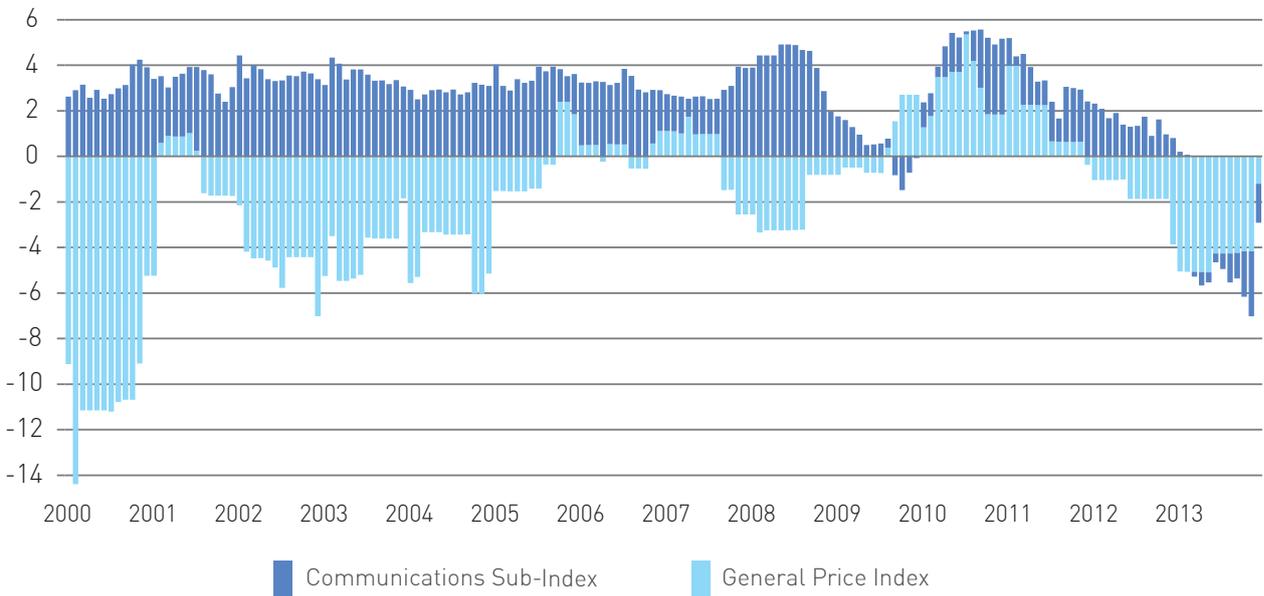
Progress of the Monthly Consumer Price Index (General Index-Communications Sub-Index)



Source: EETT (based on data from EL.STAT.)

Chart 1.3

Change of the Monthly Consumer Price Index compared to the respective index of the previous year



Source: EETT (based on data from EL.STAT.)

1.2. Progress of main financials in the electronic communications market

1.2.1. Financial data

This section presents the main financials of the electronic communications market, as derived from the published balance sheets of the licensed operators for 2013. The financials for the operators listed on the Athens Exchange (ATHEX) are drawn from their financial statements, in accordance with the International Financial Reporting Standards (IFRS). Additional information on turnover, investments and other financials that are gathered by EETT, on a six-month basis from licensed operators, have also been taken into account.

The figures for the overall market⁵ as presented in Chart 1.4 underwent significant changes. In more detail:

- The operators' turnover dropped by 12.1%, as a result of the drop in the turnover of Mobile Telephony Operators (MTOs) (by 15.8%) and OTE (by 8.6%). Alternative fixed telephony operators (OLOs) also experienced a reduction (8.6%) mainly due to the drop in revenues of COSMOLINE (39%) and ON TELECOMS (35%) (Charts 1.4-1.5).
- The same goes for gross profit, given that OTE displayed gross losses of 5 million euro (the 4.2% cutback in the company's operating expenses was not enough to offset the corresponding reduction of the turnover by 8.6%). MTOs displayed a 25.2% reduction, whilst OLOs experienced a borderline reduction (-0.02%), given that the improved performance of HELLAS ON LINE offset the losses of FORTHNET, COSMOLINE and ON TELECOMS (Chart 1.6).

⁵ All financials of licensed operators are taken into account.

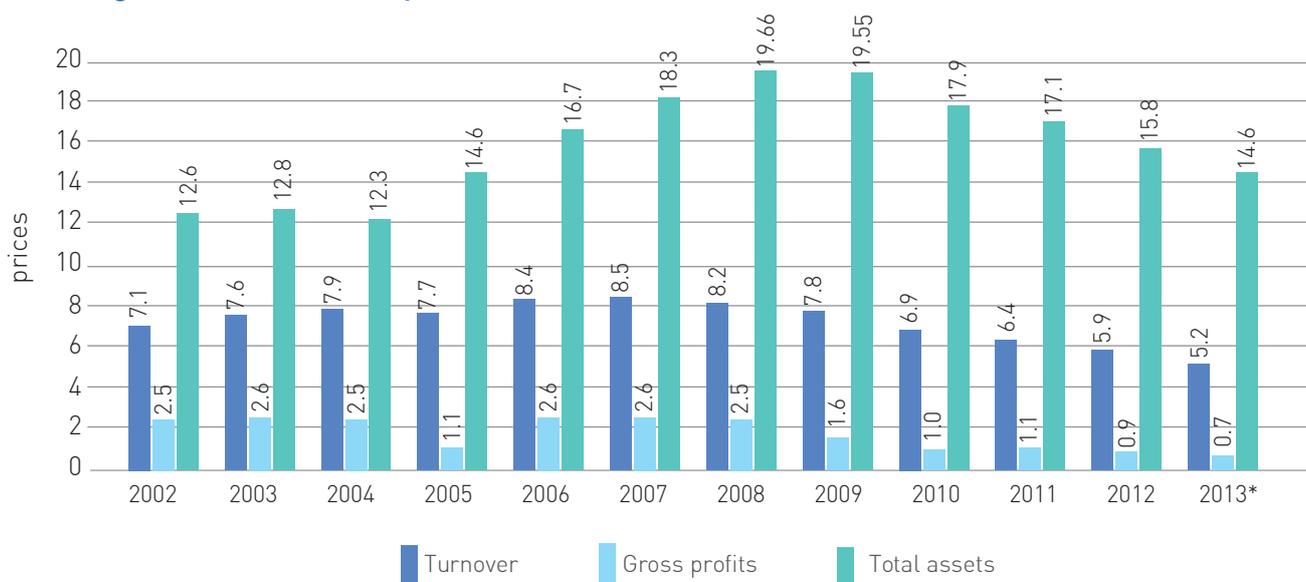
- The 7.5% reduction in assets is attributed to the 11.6% drop in the MTOs assets and the 7.8% drop in the assets of OLOs (Chart 1.7).
- After the downward trend of the past few years, there was an upturn in the total investments of electronic communications operators (7% up). This corresponds to 15% of the total turnover of the sector, a fact that is mainly attributed to OTE Group's investments (Chart 1.8).

Additionally, Charts 1.9 to 1.12 present ratios, which demonstrate in detail the economic performance of the fixed and mobile telephony operators, based on their published balance sheets⁶. Specifically:

- The Acid Test Ratio increased marginally (0.5%) for fixed telephony operators and rose significantly (17.1%) for MTOs (Chart 1.9).
- The Gross Profit Margin Ratio rose 4.4% for fixed telephony operators (due to improved performances by HELLAS ON LINE, CYTA HELLAS, NEWPHONE and FORTHNET) as well as 12.4% for MTOs (Chart 1.10).
- The Equity to Total Liabilities Ratio dropped by 34.2% for fixed telephony operators and 8.8% for MTOs (Chart 1.11).
- The average collecting period decreased for fixed telephony operators and MTOs (Chart 1.12).

Chart 1.4

Progress of licensed operators' basic financials (in billion EUR)



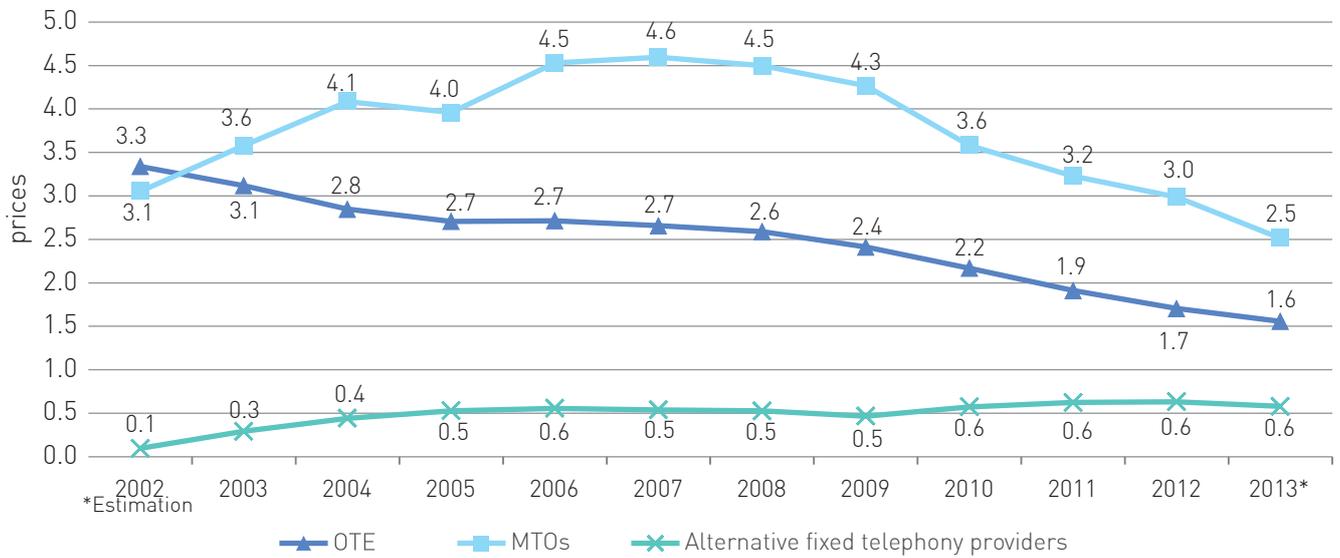
*Estimation

Source: EETT (based on published balance sheets)

6. In order to calculate these ratios, the balance sheets published for 2012 were used, given that the relevant procedure for 2013 had not been completed by the time of drafting the 2013 Market Review.

Chart 1.5

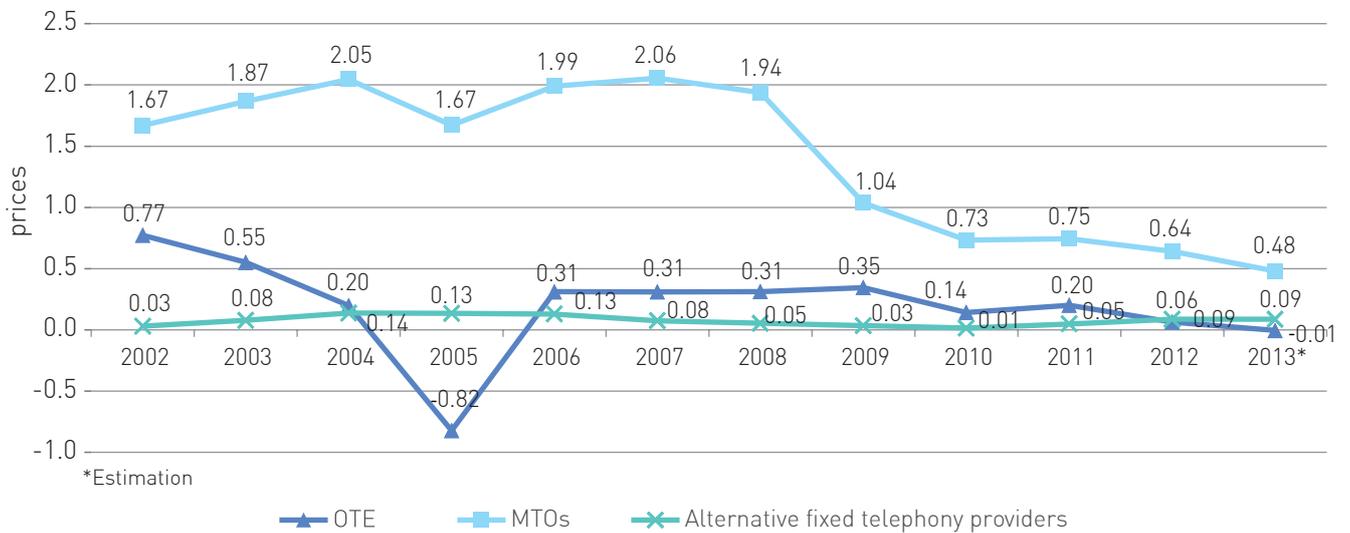
Electronic communications operators turnover (in billion EUR)



Source: EETT (based on published balance sheets)

Chart 1.6

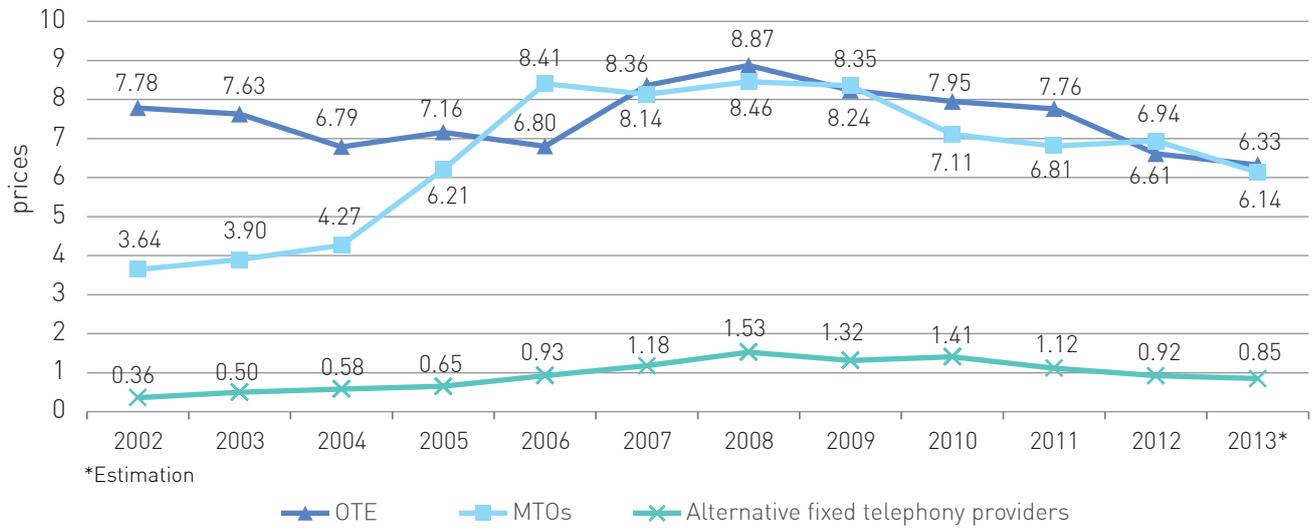
Gross profits for electronic communications providers (in billion EUR)



Source: EETT (based on published balance sheets)

Chart 1.7

Total electronic communications operators' assets (in billion EUR)

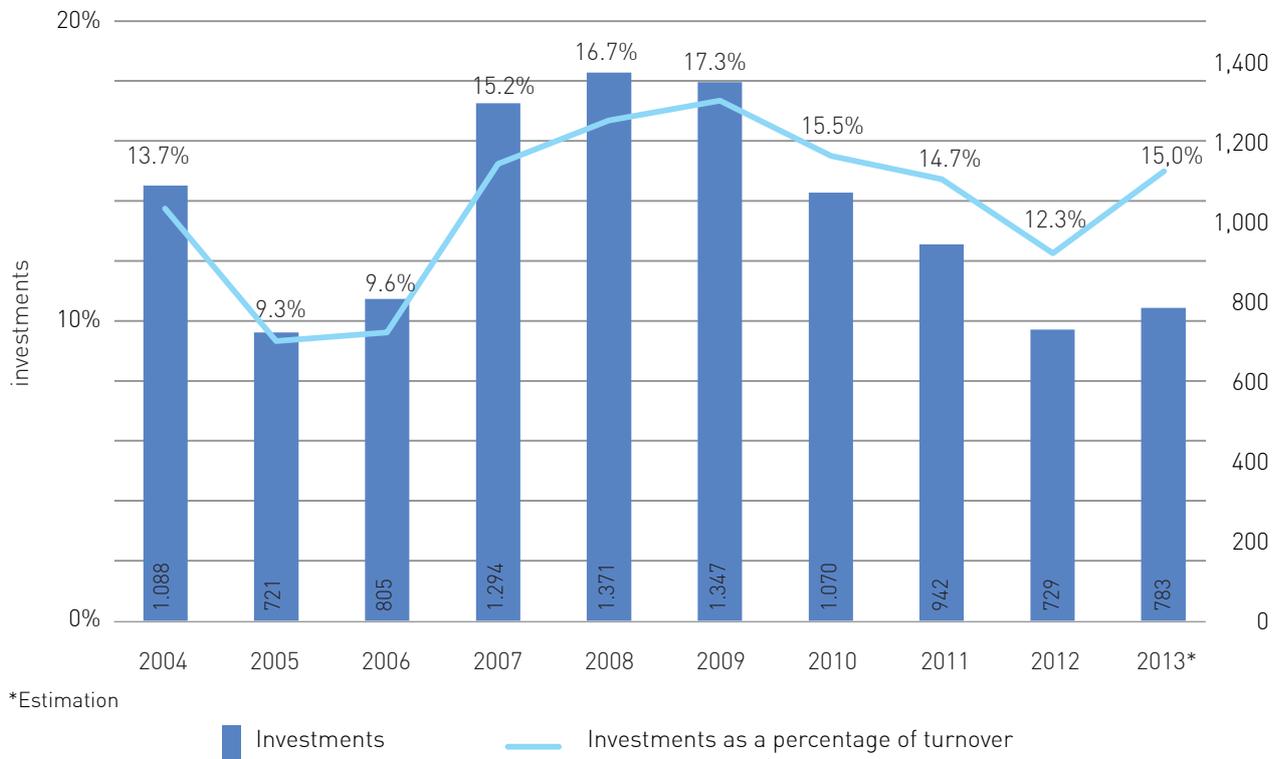


*Estimation

Source: EETT (based on published balance sheets)

Chart 1.8

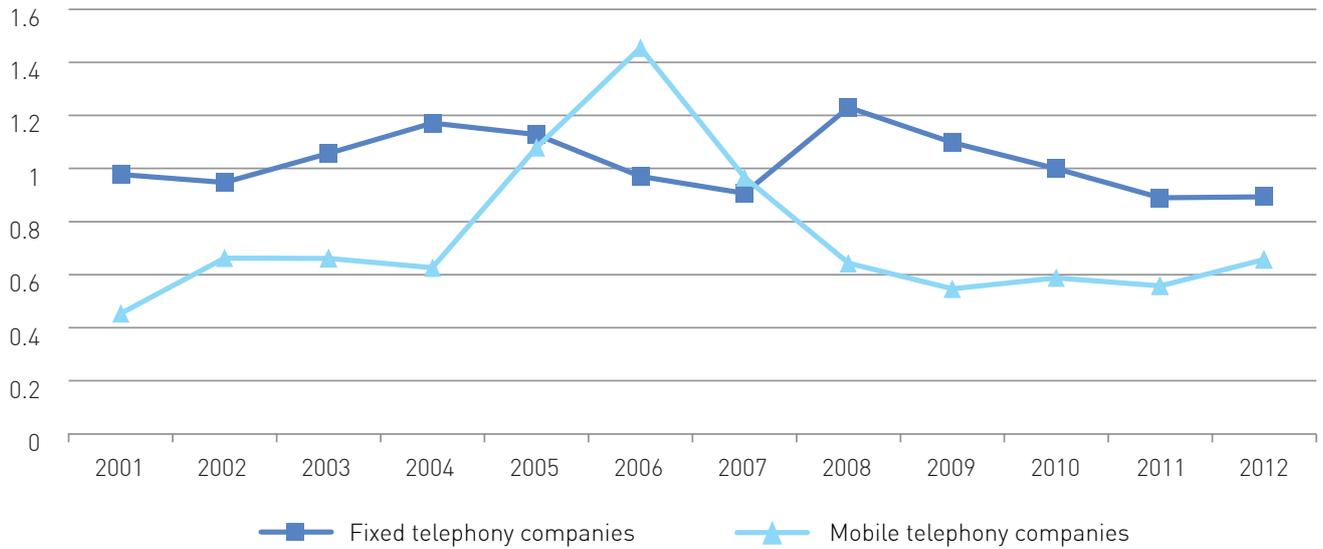
Electronic communications operators' investments (in million EUR)



*Estimation

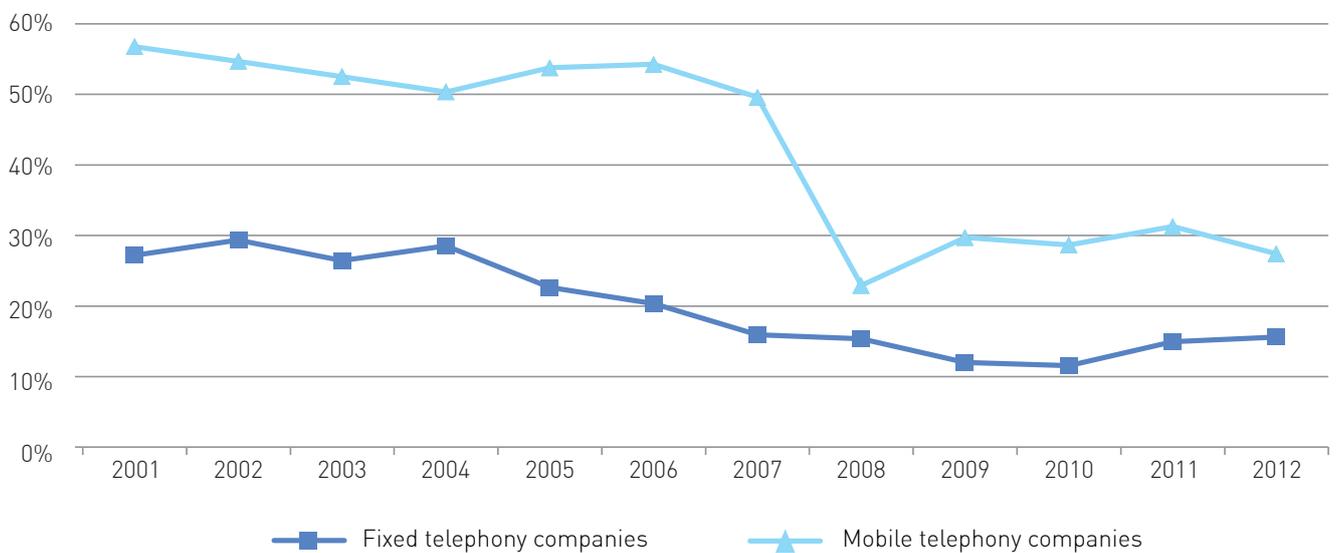
Source: EETT (based on published balance sheets)

Chart 1.9
Acid-Test Ratio



Source: EETT (based on published balance sheets)

Chart 1.10
Gross Profit Margin Ratio

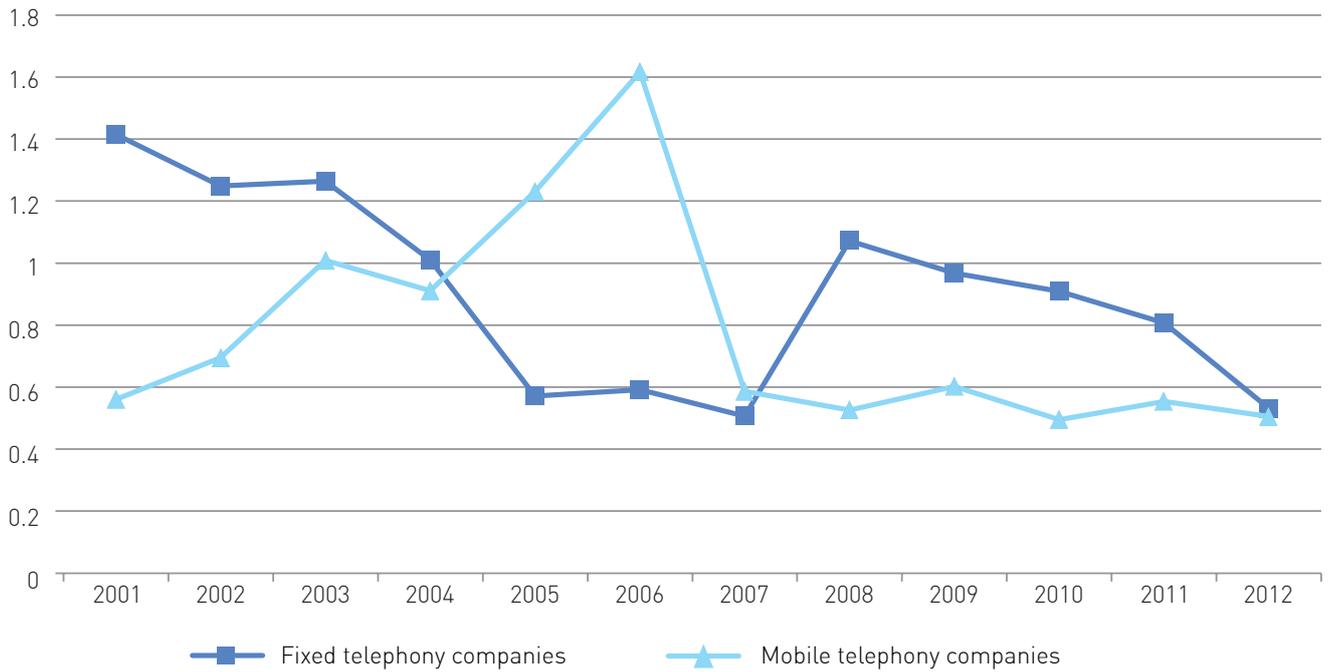


Source: EETT (based on published balance sheets)



Chart 1.11

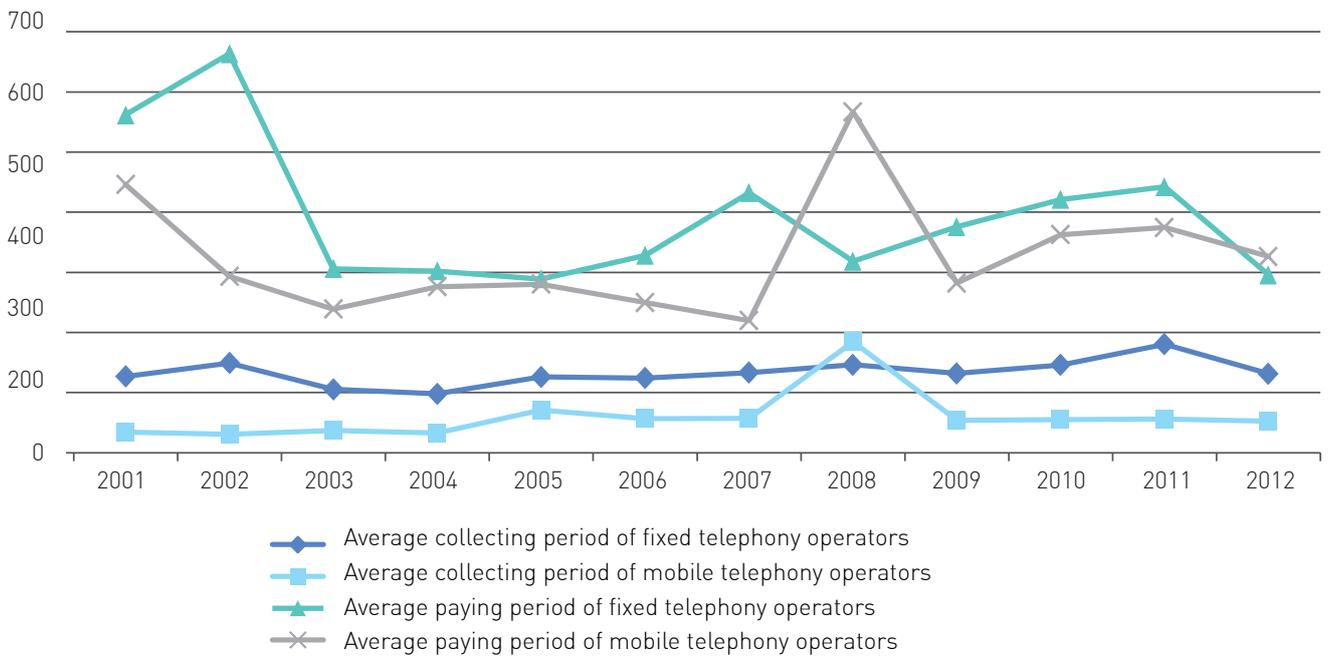
Equity to Total Liabilities Ratio



Source: EETT (based on published balance sheets)

Chart 1.12

Activity Ratios



Source: EETT (based on published balance sheets)

1.2.2. Broadband

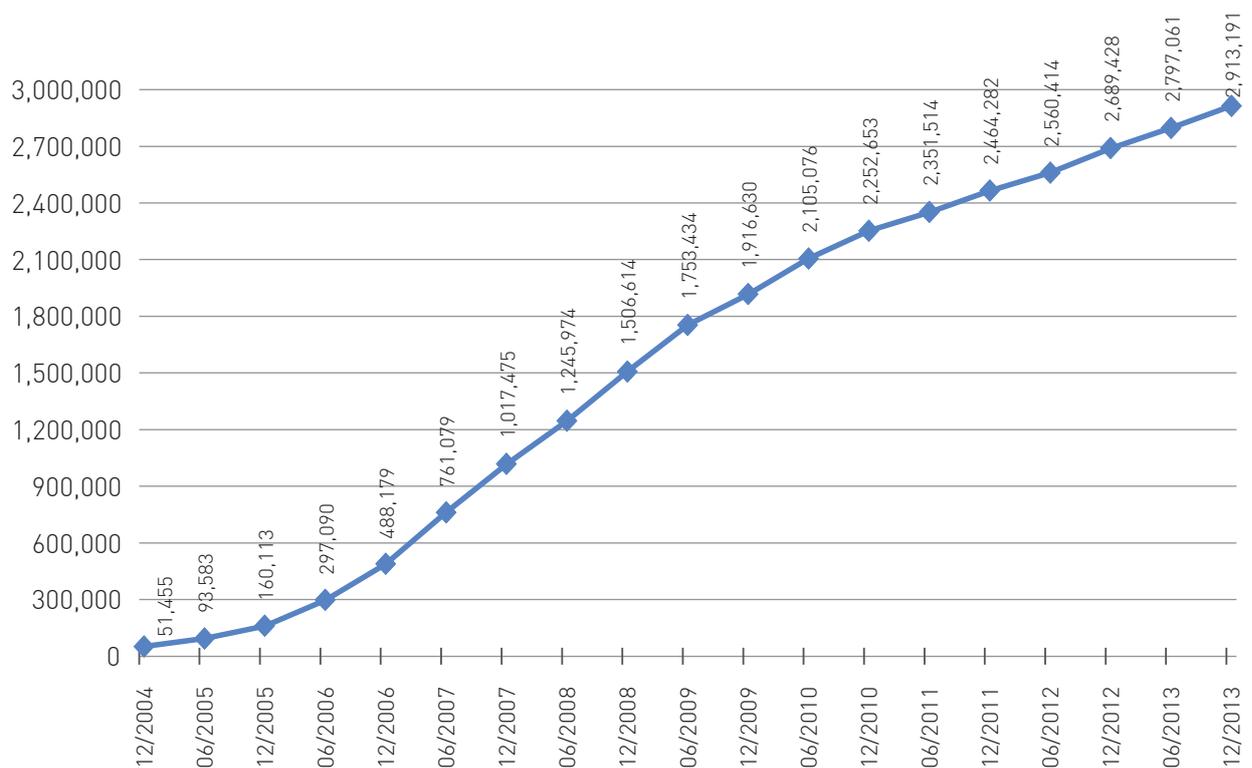
1.2.2.1. Progress of broadband lines

At the end of 2013, broadband connections amounted to 2,913,191 compared to 2,689,428 at the end of 2012, having increased by 8.3% (Chart 1.13). Broadband penetration⁷ reached 26.3% of the population compared to 24.3% in 2012, thus ranking Greece in the 17th place among the EU member states (19th in December 2012) (Chart 1.14).

- In 2013 the increase in broadband penetration in Greece was 2 lines per 100 inhabitants. This increase was the second highest among the EU member states and considerably higher than the European average (1.1 lines per 100 inhabitants). This shows that the on-going convergence of Greece with the rest of Europe, that has started in 2007, proceeds steadily (Charts 1.15 & 1.16).
- The broadband penetration gap between Greece and Europe fell from 11.8 lines per 100 residents in December 2006 – when the greatest divergence from the EU average was noted – to 3.5 lines in December 2013 (Chart 1.17).

Chart 1.13

Progress of broadband lines

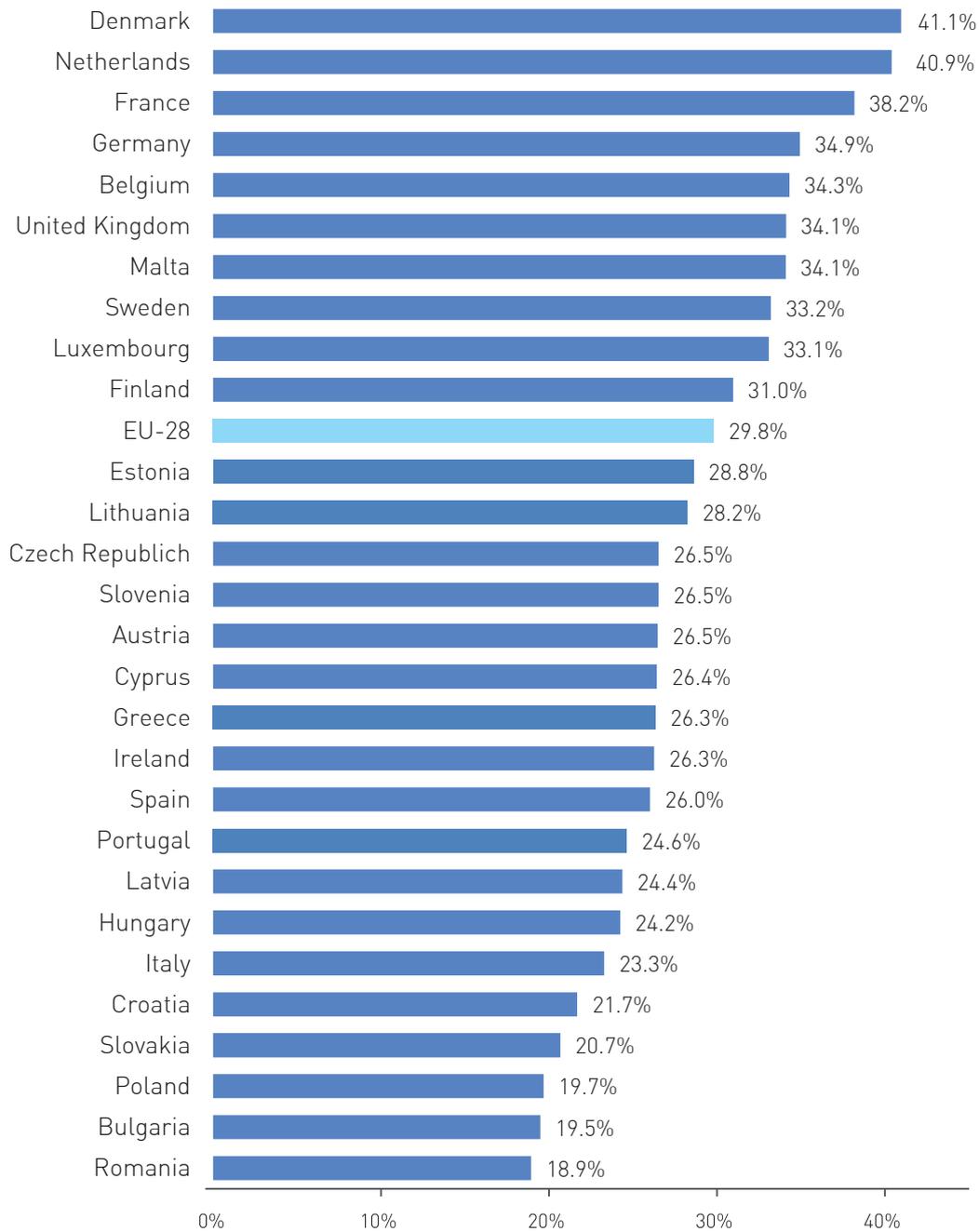


Source: EETT (based on data provided by licensed operators)

7. The European Commission's report gives different penetration figures due to a different population estimation.

Chart 1.14

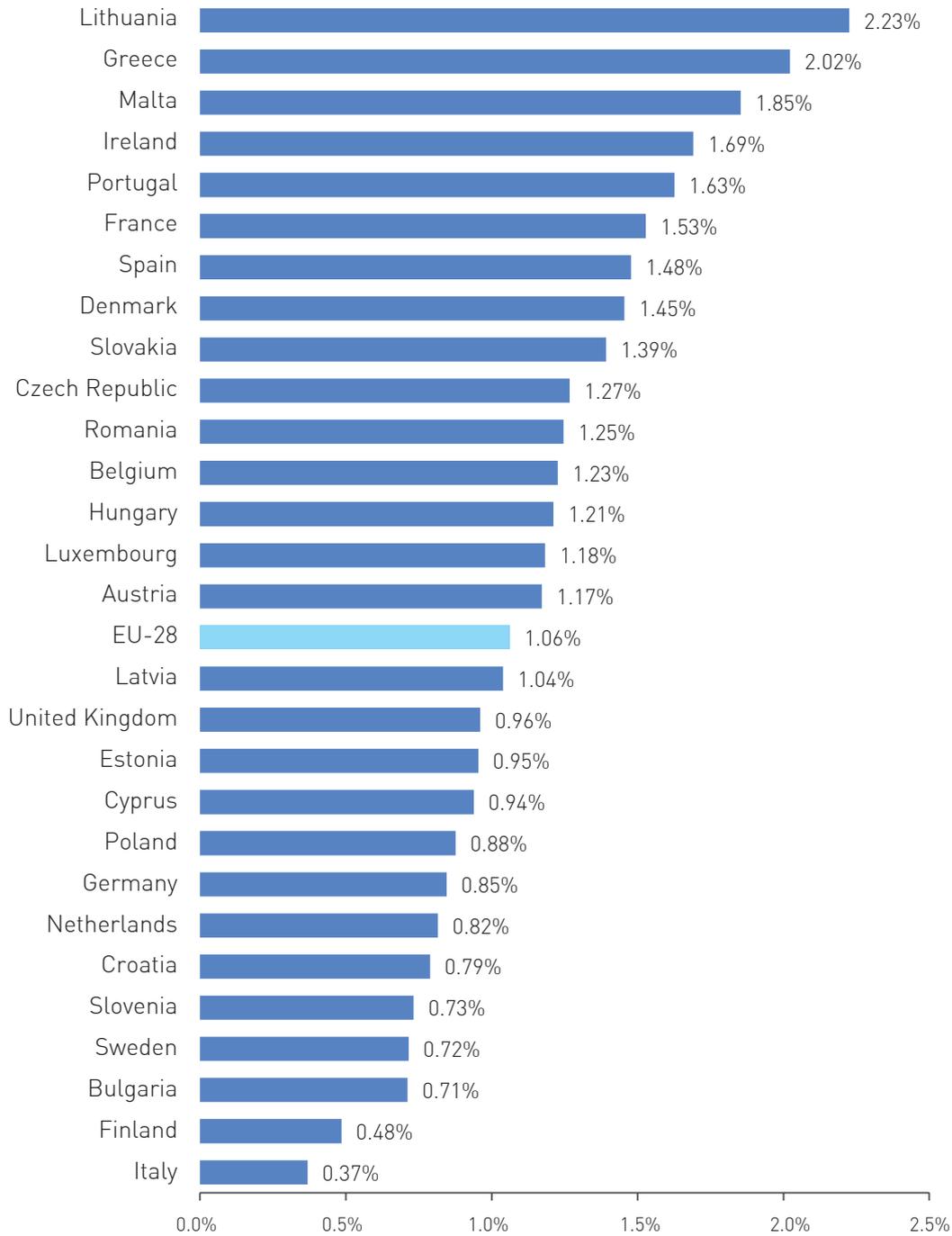
Broadband penetration rate in the EU (2013)



Source: European Commission (DAS 2014)

Chart 1.15

Broadband penetration change in the EU (2013)

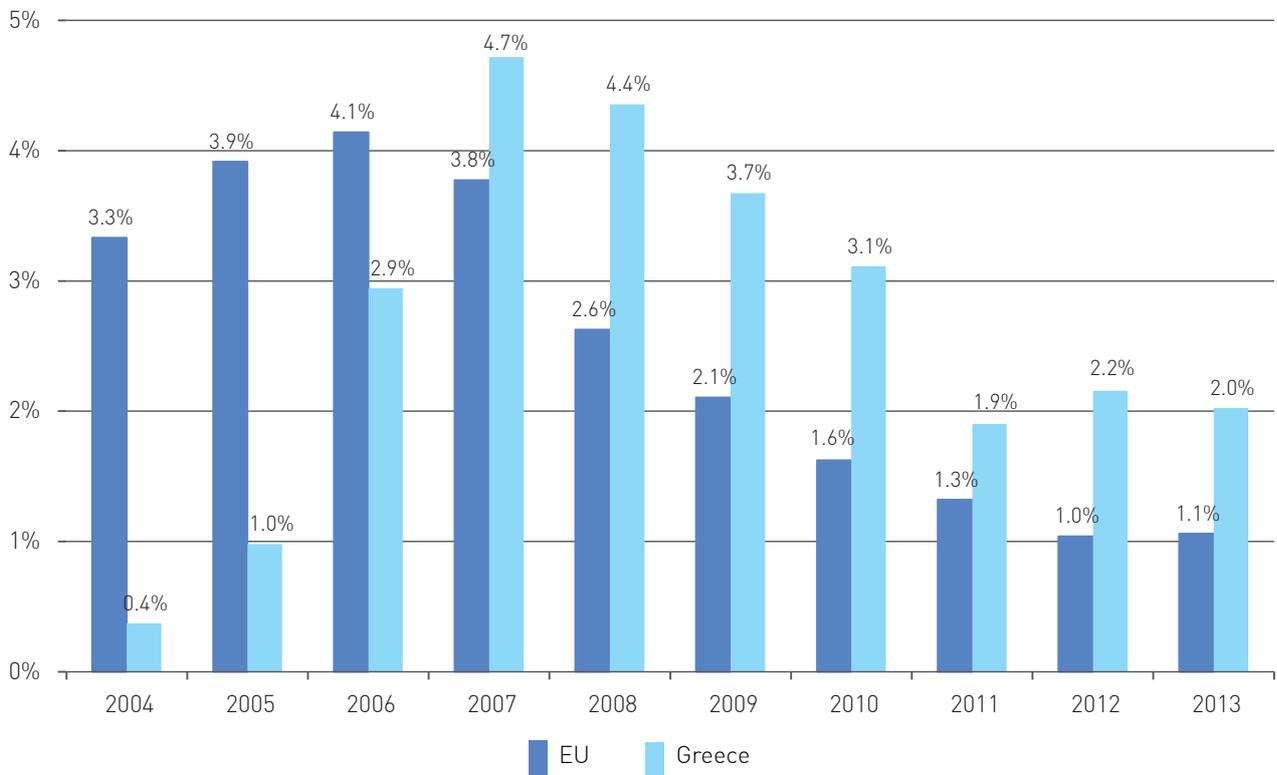


Source: European Commission (DAS 2014)



Chart 1.16

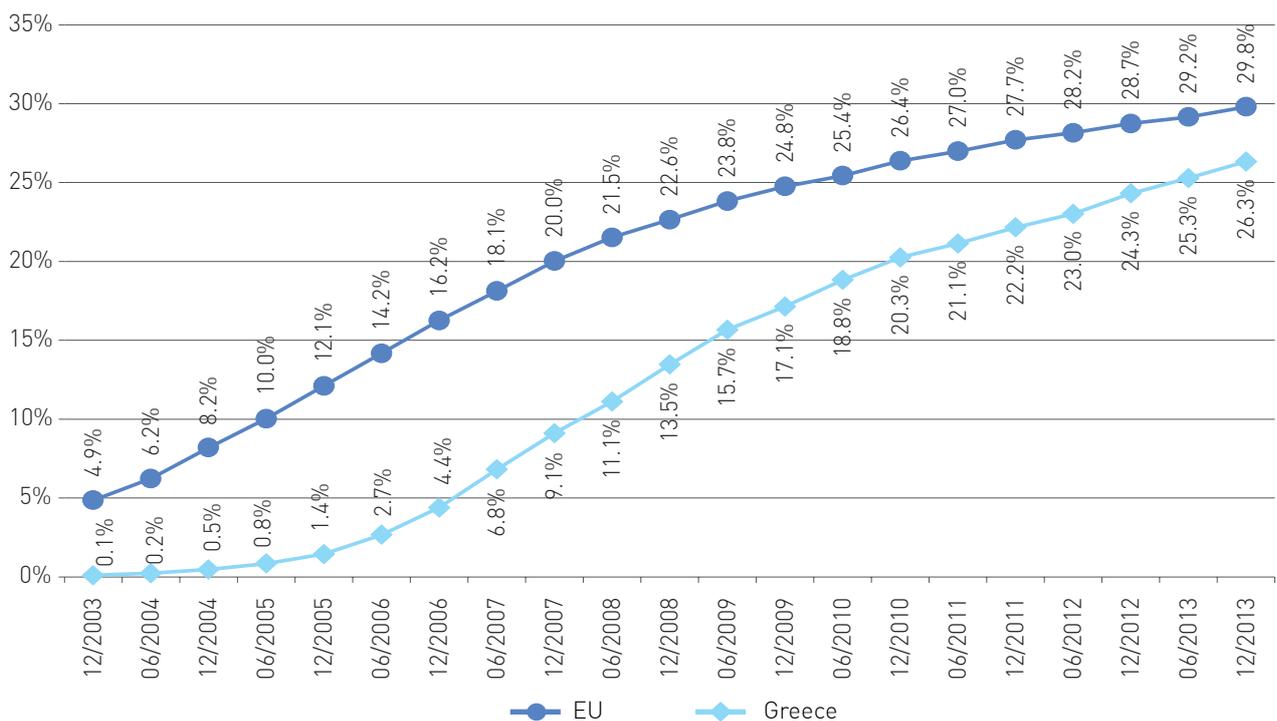
Annual growth of broadband penetration rate in Greece and EU (broadband lines per 100 inhabitants)



Source: EETT (based on data by the European Commission - DAS 2014)

Chart 1.17

Annual increase of broadband penetration rate in Greece and the EU



Source: EETT (based on data by the European Commission - DAS 2014)

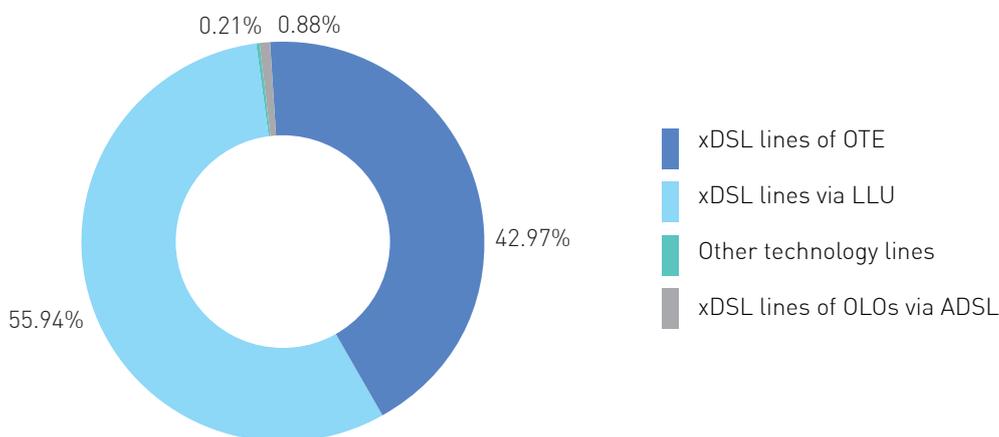
1.2.2.2. Broadband lines per technology

In December 2013, xDSL access through LLU amounted to 1,629,560 lines (compared to 1,489,873 at the end of December 2012), thus constituting 55.9% of the total broadband lines, compared to 55.4% in the previous years.

- OTE's retail xDSL lines also increased in absolute numbers, reaching 1,251,880 lines in December 2013 compared to 1,165,763 in December 2012. However, there was a small drop in their percentage of broadband lines, from 43.35% to 42.97%. From the total number of OTE's xDSL lines, 4.878 (i.e. 1.49% of the broadband lines) are VDSL lines.
- The number of ADSL lines reached 25,741 (0.88% of broadband lines) compared to 25,806 (0.96%) in December 2012. Finally, lines of other technologies remain at negligible levels below 0.3% (Charts 1.18 to 1.20).
- Chart 1.21 presents the percentage of broadband lines in EU member states with non xDSL technologies (i.e. those not based on the installed copper network). Greece's percentage reaches 0.2%, compared to the EU average of 27.8%.

Chart 1.18

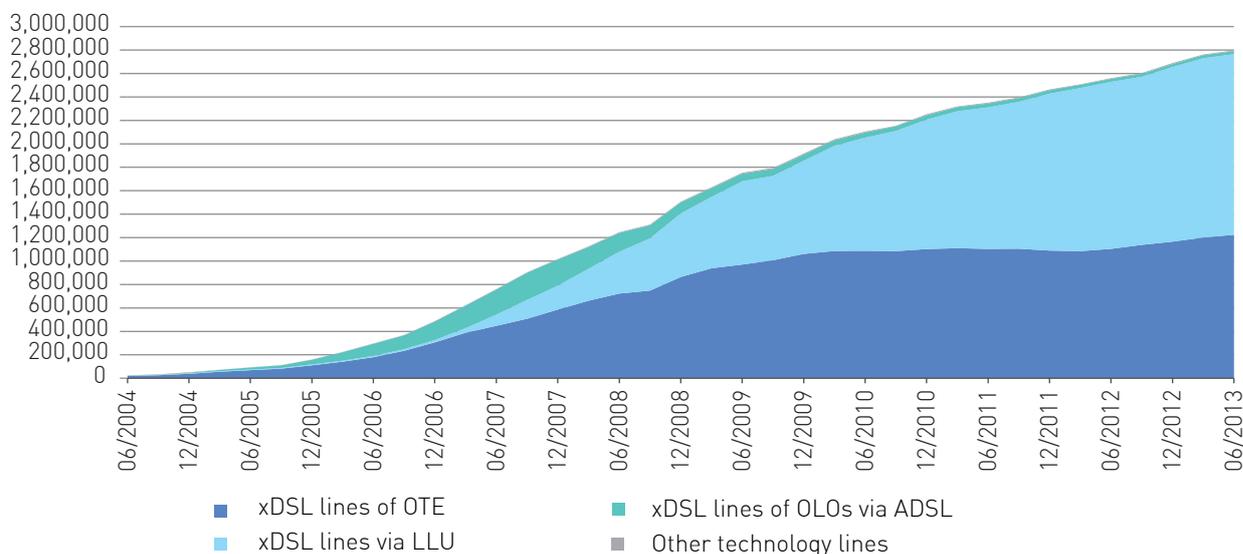
Distribution of broadband lines per technology (December 2013)



Source: EETT (based on data provided by licensed operators)

Chart 1.19

Progress of broadband lines per technology (in absolute numbers)

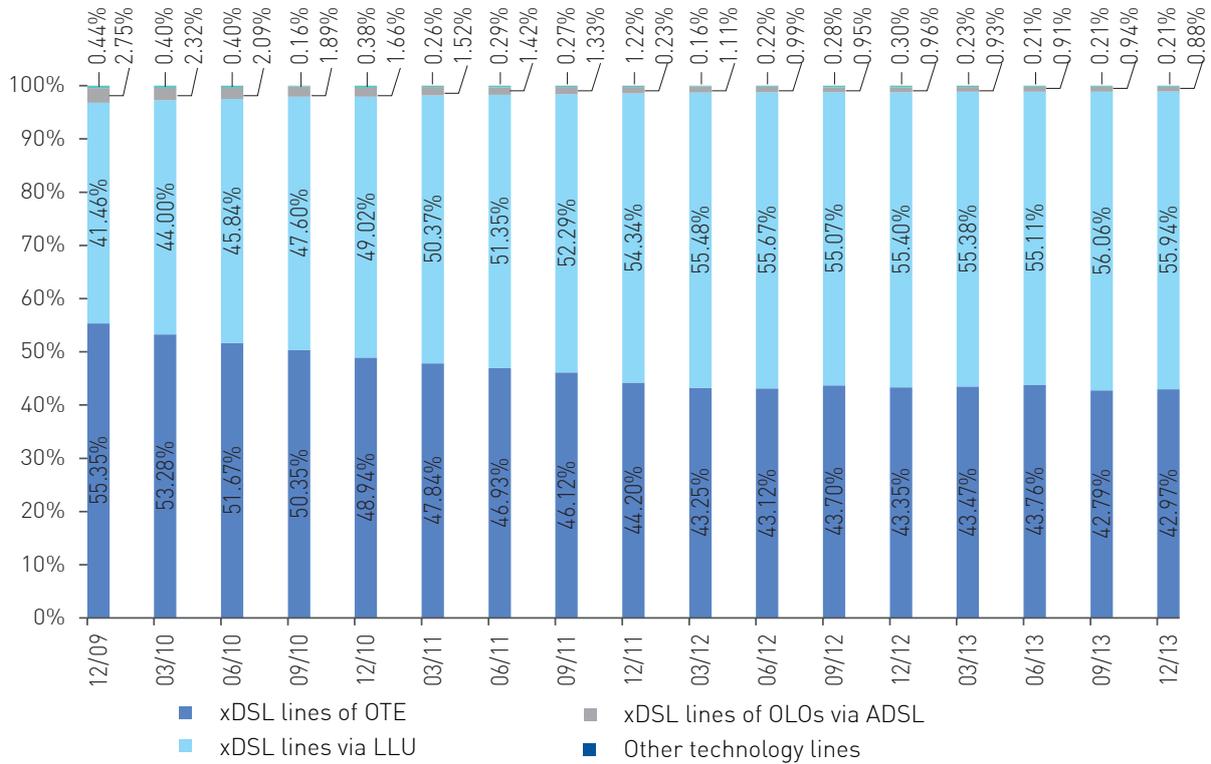


Source: EETT (based on data provided by licensed operators)



Chart 1.20

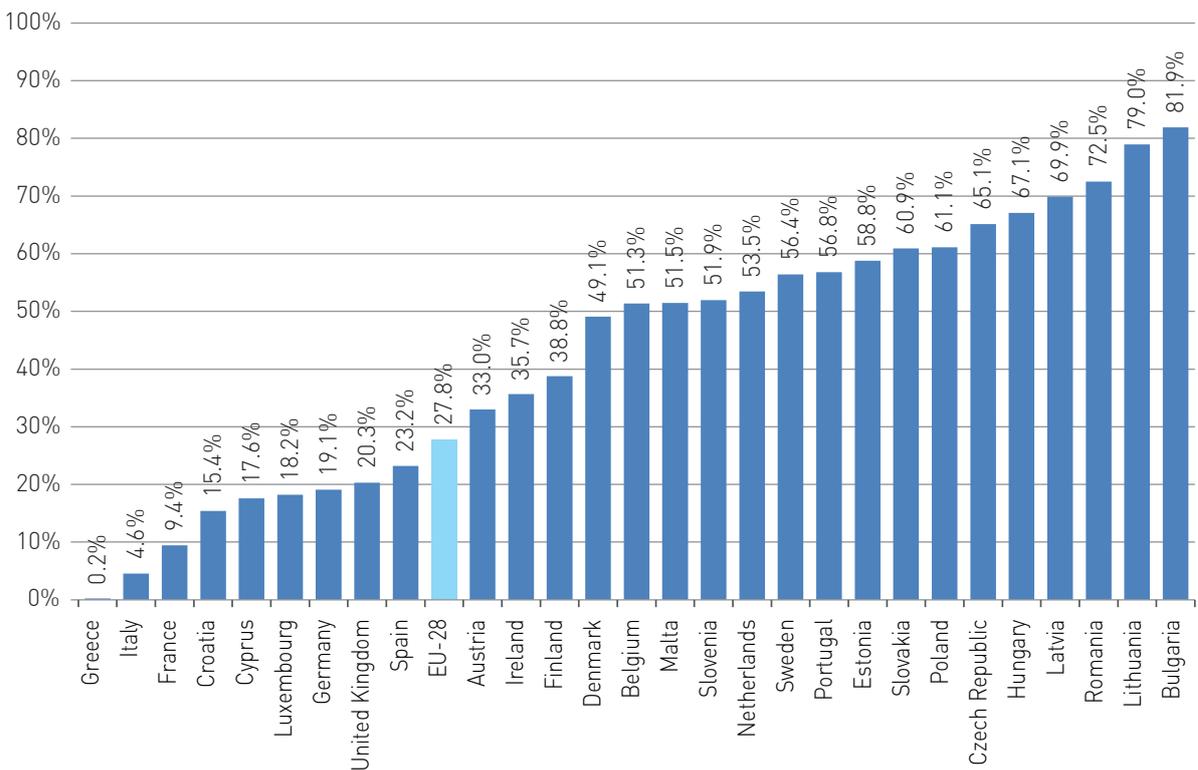
Progress of broadband lines per technology



Source: EETT (based on data by licensed operators)

Chart 1.21

Broadband lines with non DSL technologies in the EU (2013)



Source: EETT (based on data of the European Commission - DAS 2014)

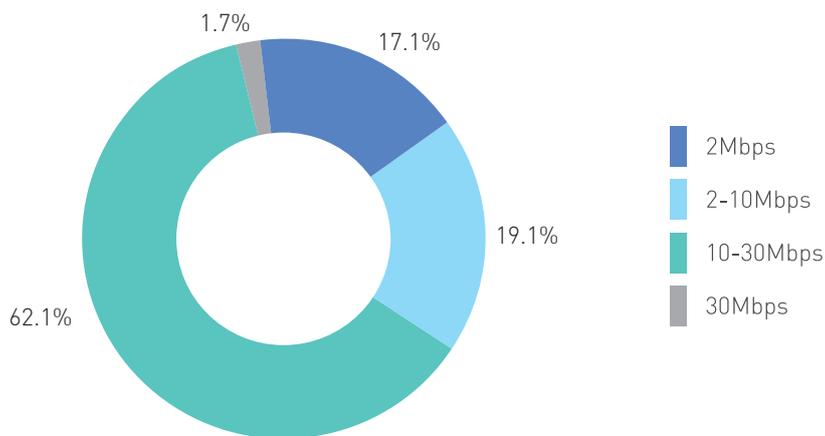
1.2.2.3. Broadband lines speed

The majority of broadband lines (63.8%) corresponds to a (downloading) speed of over 10Mbps. It should be noted that a new category of high speed lines has been added (30Mbps and above), which constitutes 1.7% of lines in Greece (Charts 1.22, 1.23 and 1.25).

The average speed of ADSL lines (wholesale and retail) has significantly increased, reaching 13.5Mbps in December 2013, compared to about 11Mbps in December 2012, as a result of the significant increase in VDSL lines (Chart 1.24).

Chart 1.22

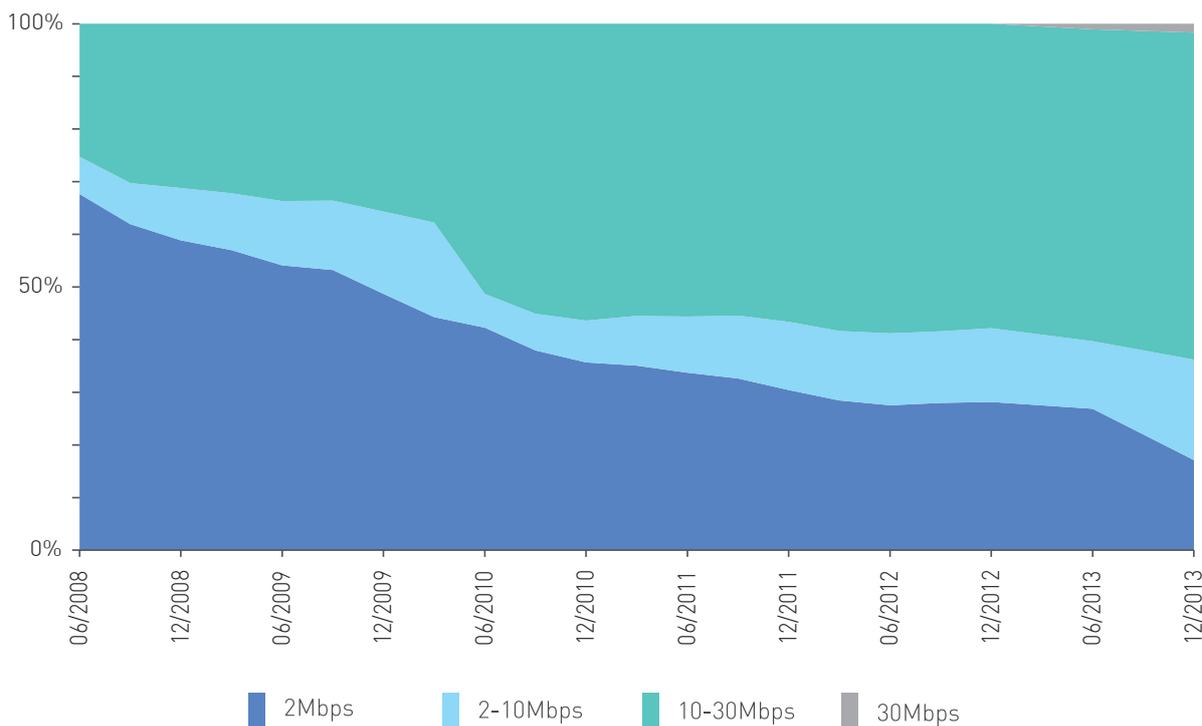
Percentage distribution of broadband line speeds (December 2013)



Source: EETT (based on data provided by licensed operators)

Chart 1.23

Progress of broadband line speeds

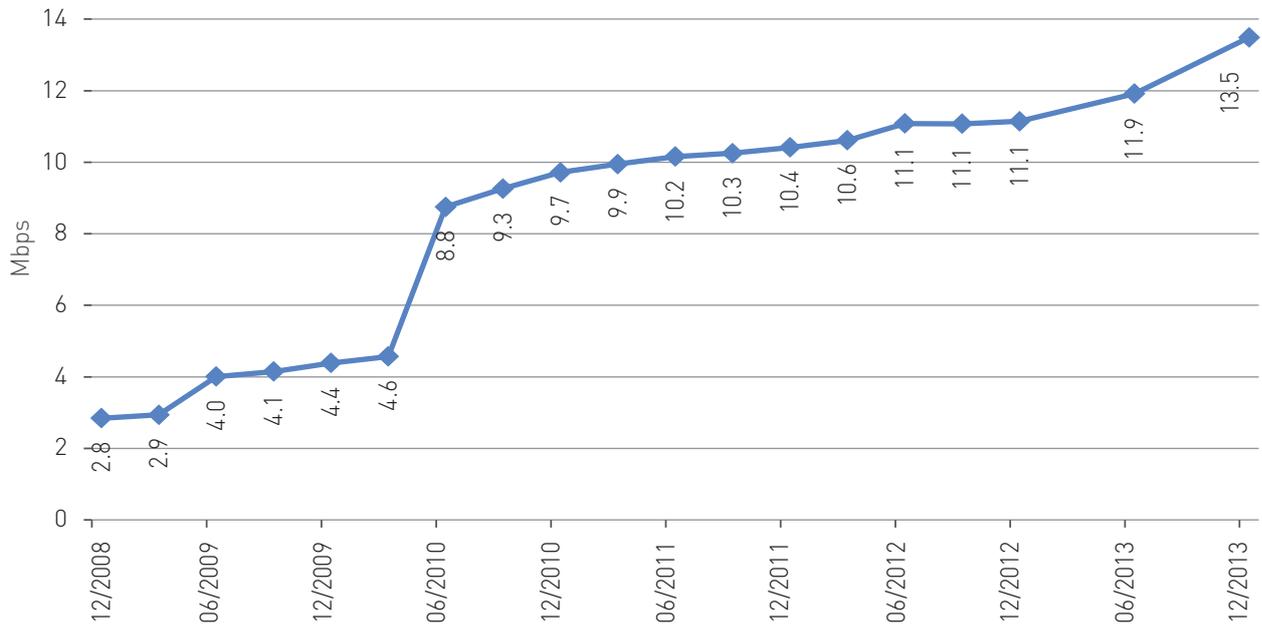


Source: EETT (based on data provided by licensed operators)



Chart 1.24

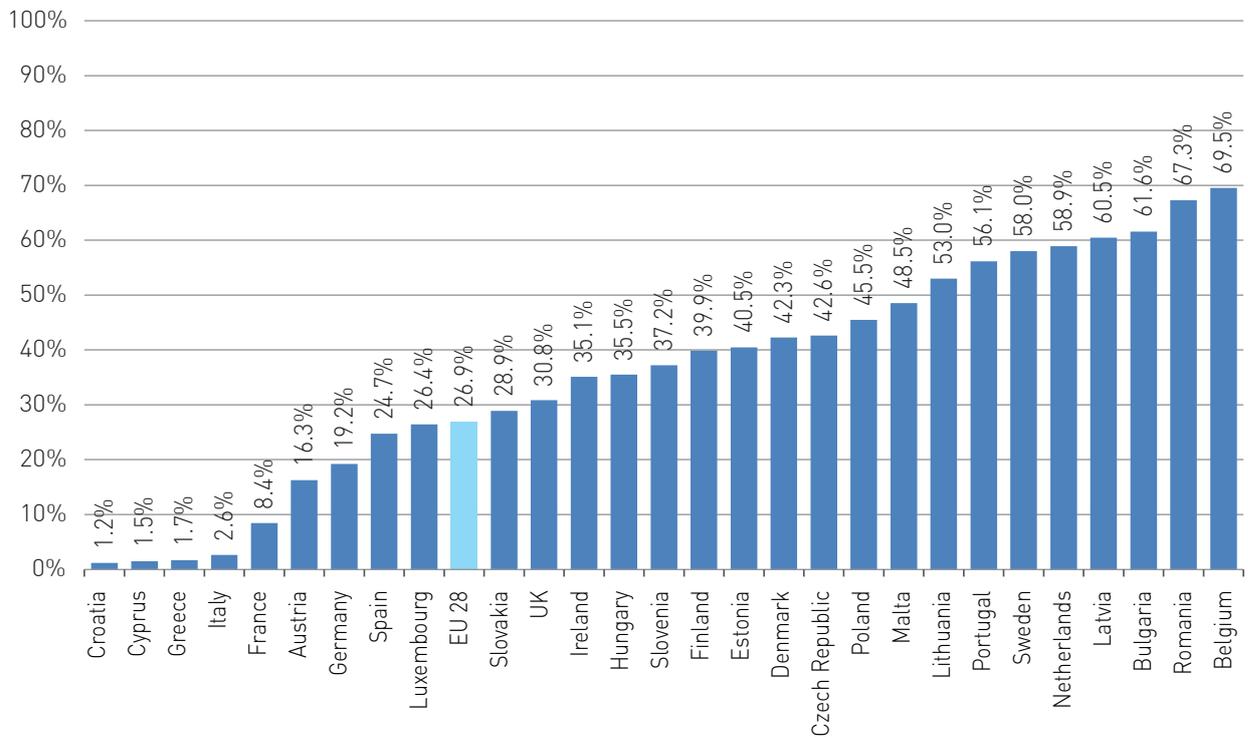
Progress of the average access speed of retail & wholesale ADSL lines



Source: EETT (based on data provided by licensed operators)

Chart 1.25

Percentage of lines with speeds >30Mbps in the EU member states (January 2014)



Source: EETT (based on data by the European Commission - DAS 2014)

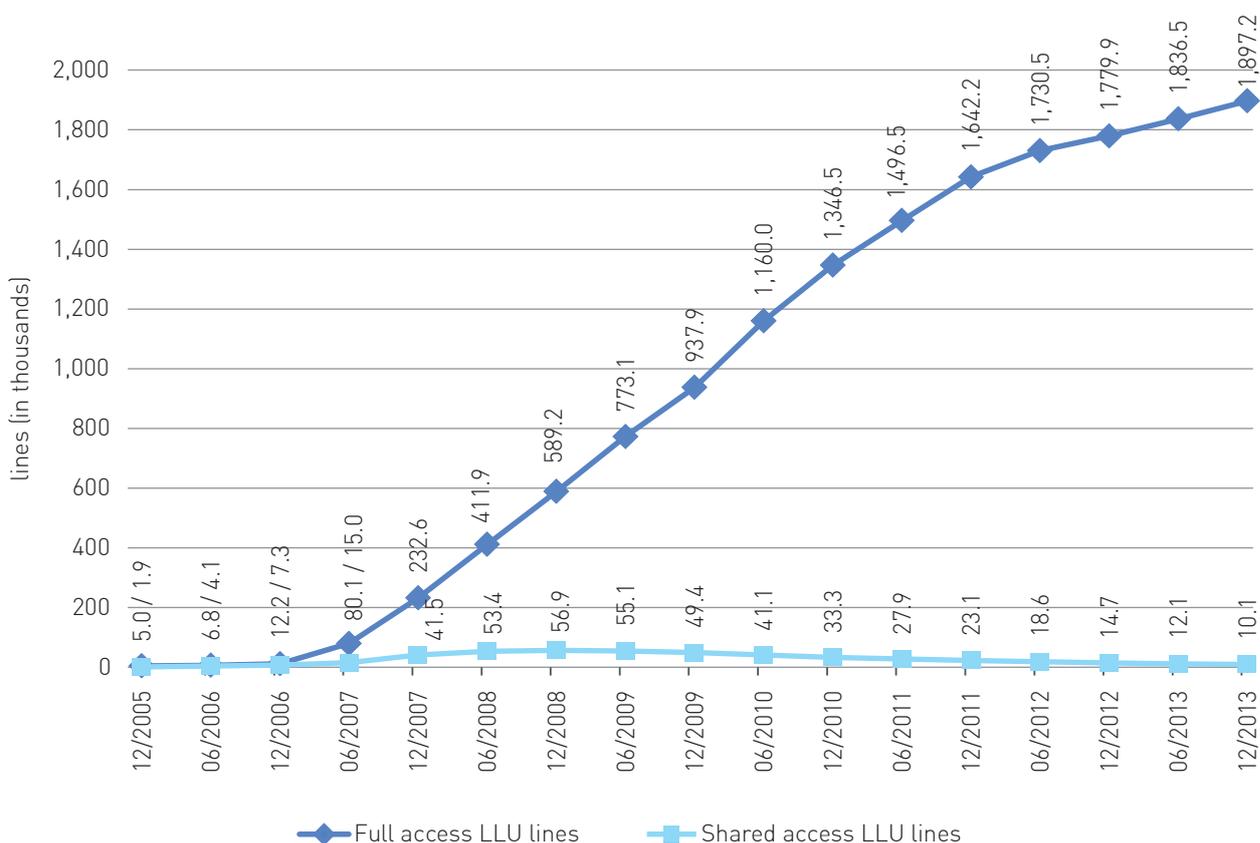
1.2.2.4. Local Loop Unbundling (LLU)

ADSL access via LLU continued to increase during 2013 (Chart 1.26), reaching 1,907,303 lines at the end of the year, compared to 1,794,558 at the end of 2012 (an increase of 6.3% compared to 7.8% in 2012). This increase is entirely attributed to full access lines, which amounted to 1,897,195 at the end of the year, compared to 1,779,852 at the end of 2012 (6.6% increase). Conversely, the number of shared access lines continued to drop and numbered 10,108 lines at the end of the year, compared to 14,706 lines at the end of 2012 (31.3% decrease).

The average monthly cost of full access lines in Greece is lower than the EU average (8.78 compared to 9.36 euro/month). Conversely, the average monthly cost of shared access lines in Greece was the 6th highest in the EU and significantly above the EU average (5 compared to 2.61 euro/month). The average cost is derived by including the one-off connection fee spread along a 36 month period in the monthly fee. Charts 1.27 and 1.28 illustrate the average cost of full access and shared access LLU lines respectively in EU member states.

Chart 1.26

Progress of LLU lines

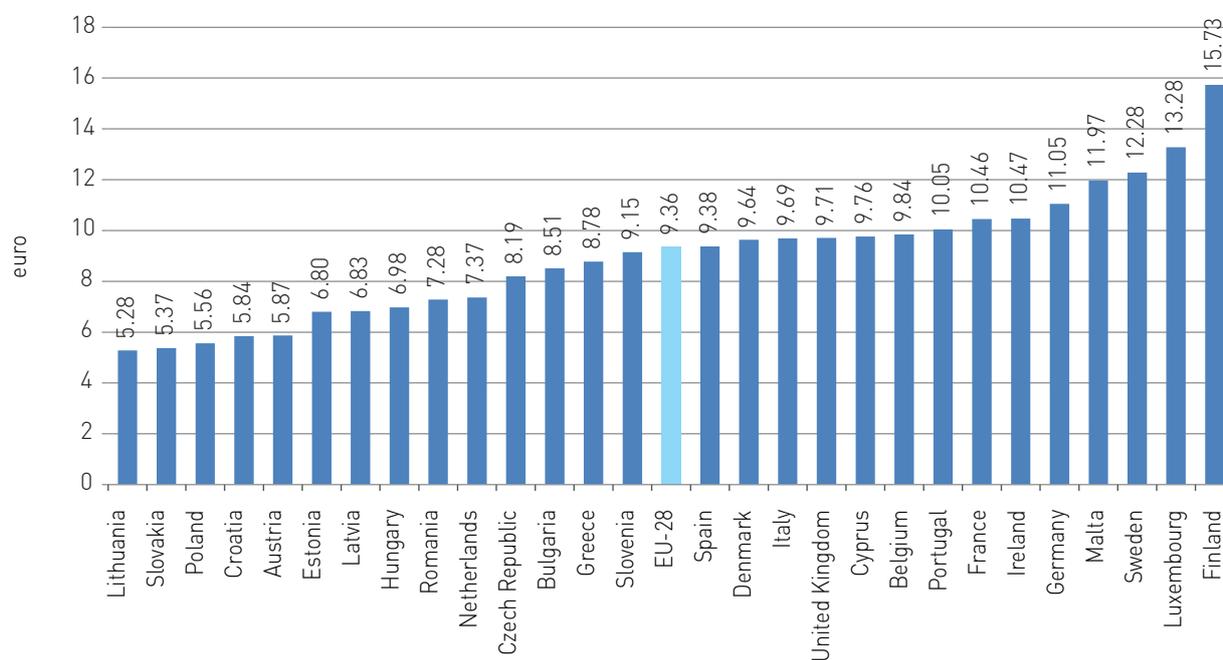


Source: EETT (based on data provided by licensed operators)



Chart 1.27

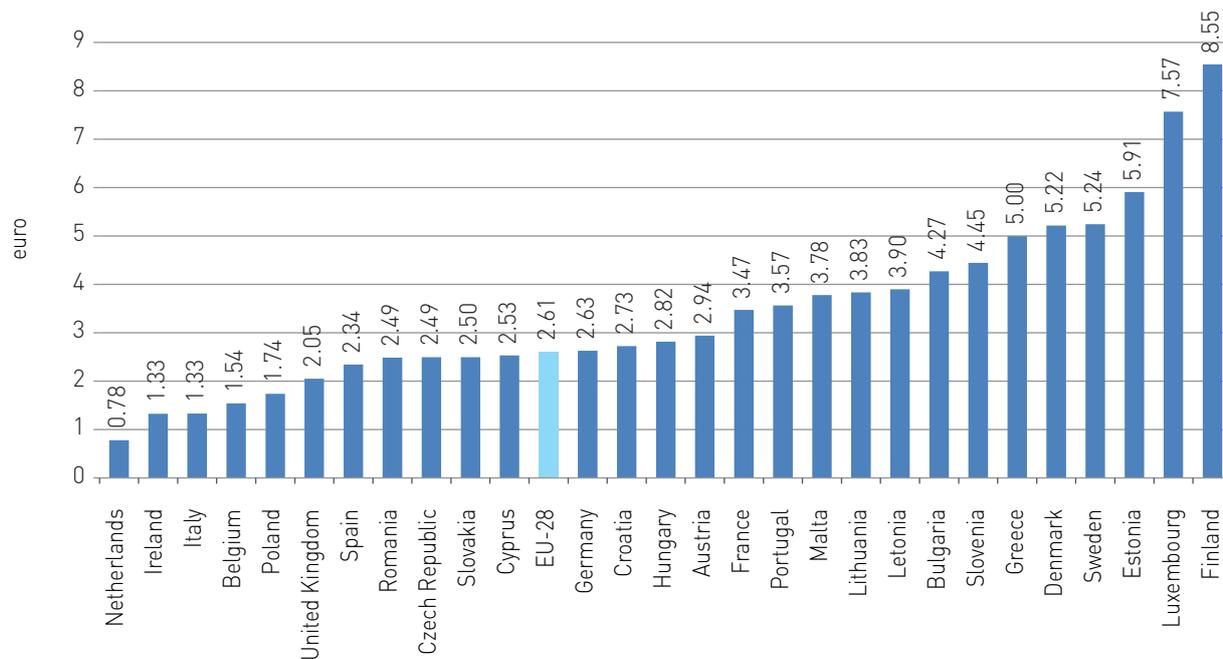
Average monthly cost of a full access LLU line in EU member states (October 2013)



Source: EETT (based on data by the European Commission - DAS 2014)

Chart 1.28

Average monthly cost of a shared access LLU line in EU member states (October 2013)



Source: EETT (based on data by the European Commission - DAS 2014)

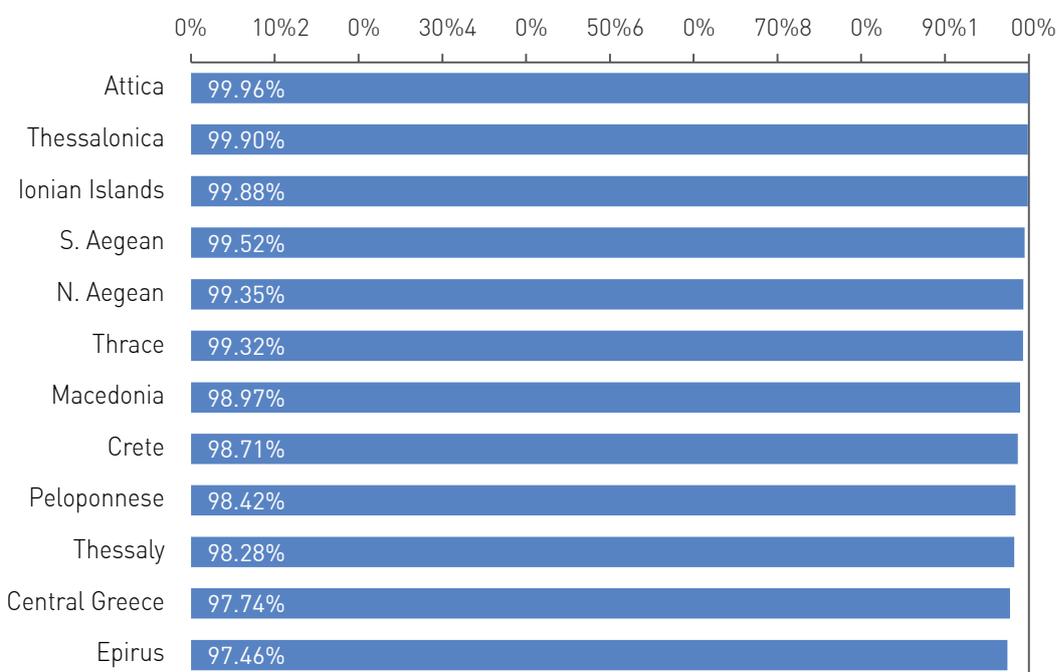
1.2.2.5. Geographical digital gap in Greece

Broadband availability is calculated as the percentage of main telephone lines ending in a local exchange (L/E) with broadband connection capacity. Overall, the levels are high. The prefectures of Attica and Thessaloniki reach levels above 99.9%, whilst levels fall under 98% only in the rest of Central Greece (97.74%) and Epirus (97.46%)⁸.

LLU availability is calculated as the percentage of main telephone lines, which terminate in a local exchange, in which alternative operators are co-located and therefore the consumer is able to connect via LLU. There are important variations from one region to another. Specifically, levels are higher in the prefectures of Thessaloniki (99%) and Attica (98%), as well as in the rest of Macedonia (90.4%). The lowest levels are found in S. Aegean (63.8%), the rest of Central Greece (61.1%) and Ionian Islands (53.1%). Charts 1.29 and 1.30 respectively present the geographical digital gap in Greece, illustrating the capacity to use broadband connections and LLU lines per region.

Chart 1.29

Broadband availability per geographic region (December 2013)

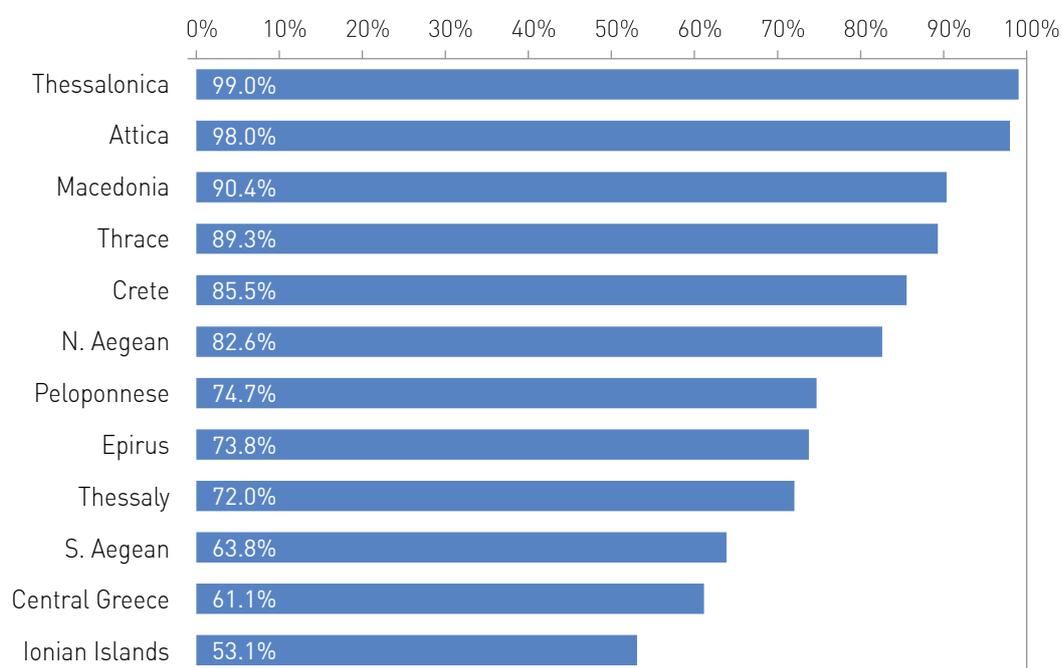


Source: EETT (based on data provided by licensed operators)

8. Broadband availability has only a small error margin, given that there is a small number of telephone lines per L/E, which do not have the capacity for broadband access (due to technology, long distance from L/E etc.).

Chart 1.30

LLU availability per geographic region in Greece (December 2013)



Source: EETT (based on data provided by licensed operators)

1.2.2.6. Domain names ending in [.gr]

The increase in both the number of applications and total assigned [.gr] Domain Names persisted throughout 2013. Their total number, including subdomains (com.gr, net.gr, org.gr, edu.gr, gov.gr), approached 420,000⁹. Chart 1.31 presents the development of the total number of Domain Names over time, for the period 2000-2013.

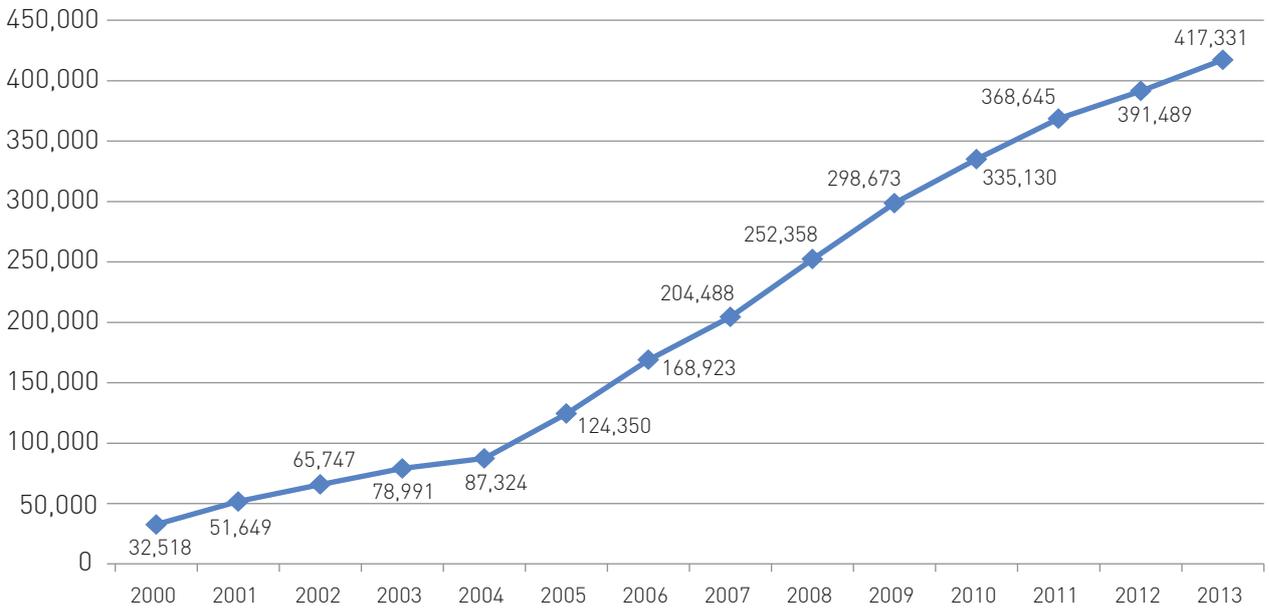
Accordingly, Chart 1.32 presents the progress of the requested and assigned Domain Names over time, whilst Chart 1.33 shows the progress of the assignment over the submitted applications.

Chart 1.34 presents the annual progress of the average assignment percentage for the period 2002-2013, that fell to 32% in 2013 from 68% in 2012. The reason behind this reduction is that numerous requests are made for the same Domain Name automatically, so that the applicants can secure the renewal of its registration at the time that the previous registration expires. Upon the first request for renewal, all others have to be rejected. Recommendations have already been made to registrars to limit the number of such requests.

⁹ It should be noted that the information on the total number of Domain Names for the last three years has been corrected, so as to reflect the "net" total number of active Domain Names.

Chart 1.31

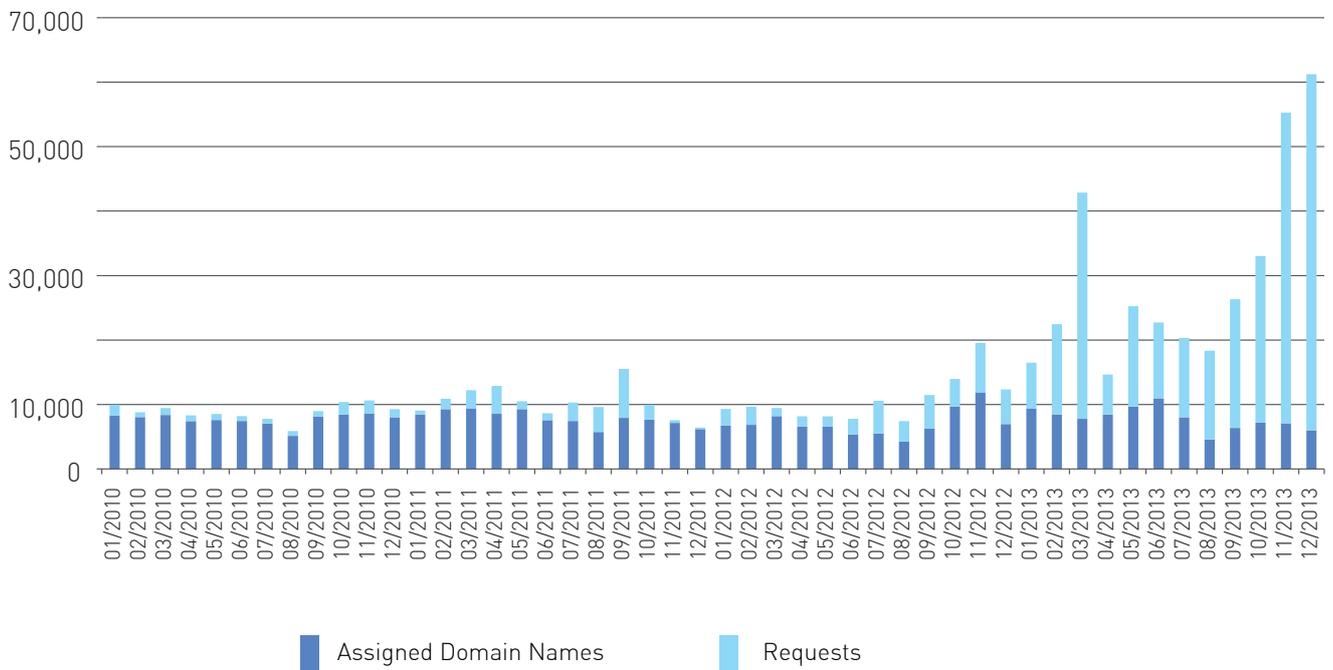
Progress of the number of domain names



Source: EETT (based on data provided by licensed operators)

Chart 1.32

Number of requested and assigned domain names

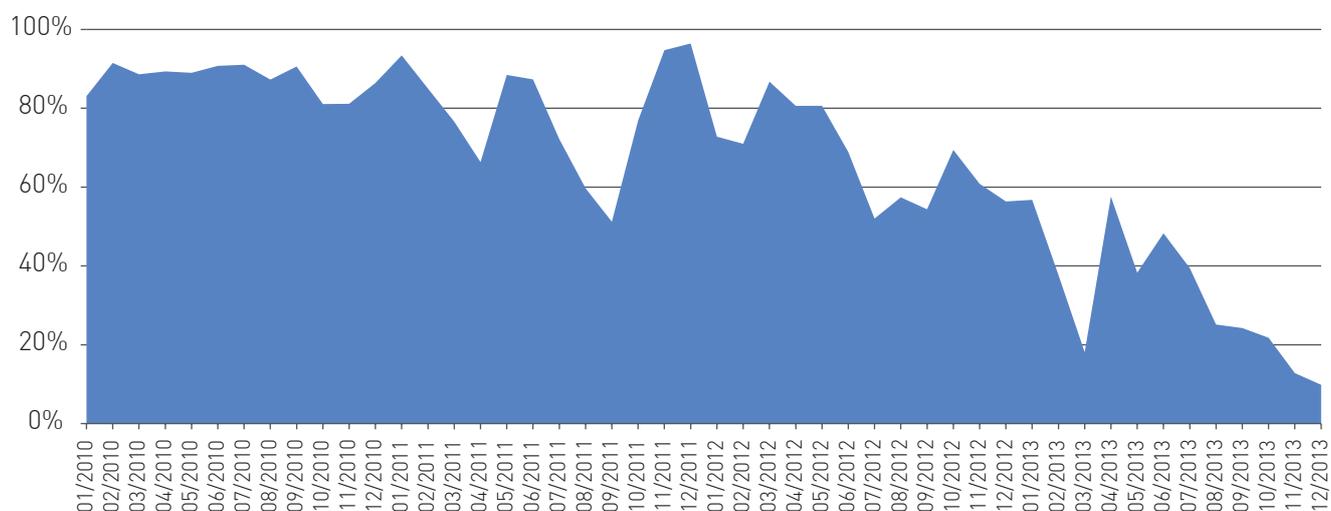


Source: Institute of Computer Science of the Foundation for Research and Technology (ICS-FORTH)



Chart 1.33

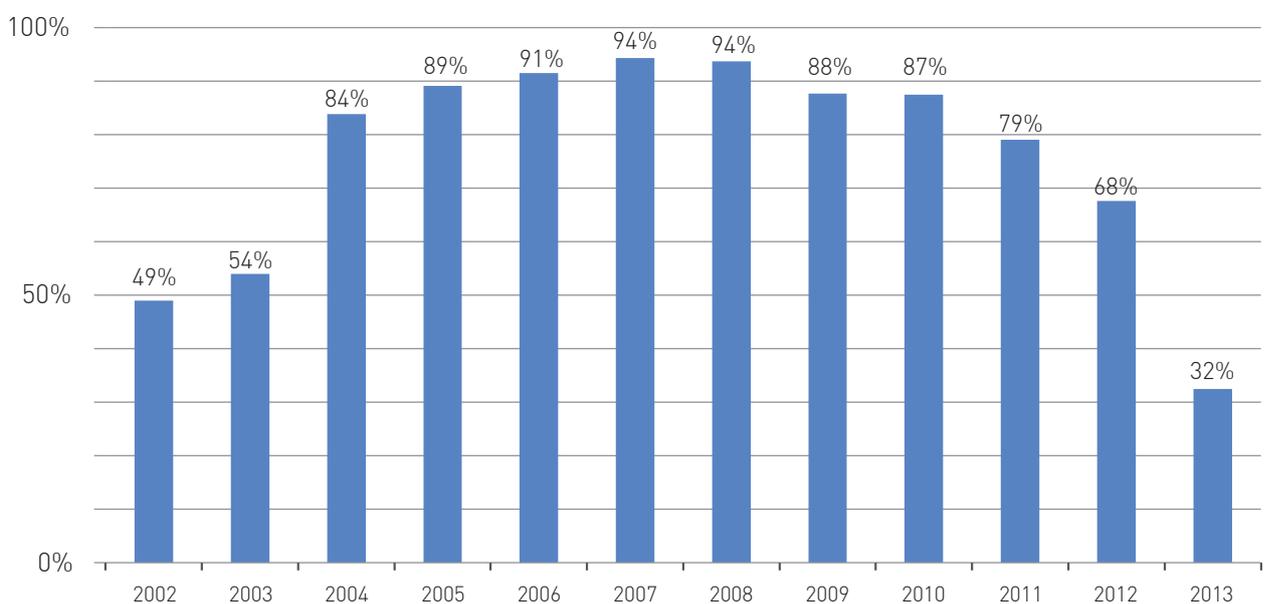
Assignment percentage over the number of applications



Source: Institute of Computer Science of the Foundation for Research and Technology (ICS-FORTH)

Chart 1.34

Average assignment percentage



Source: EETT

1.2.3. Telephony services at a fixed location

1.2.3.1. Access and subscriptions

In December 2013, fixed location access lines for the provision of publicly available telephone services (hereinafter called telephone lines) numbered 4,790,674 (reaching a penetration of 43.3% over the population) compared to 4,908,915 in December 2012 (a reduction of about 2.5%)(Table 1.5).

The progress of telephone lines penetration over the population and the annual change in their numbers are presented in Charts 1.35 and 1.36 respectively. It should be noted that these lines include OTE's PSTN and ISDN lines, as well as full access LLU, Wholesale Line Rental (WLR)¹⁰ and ISDN PRA of alternative providers.

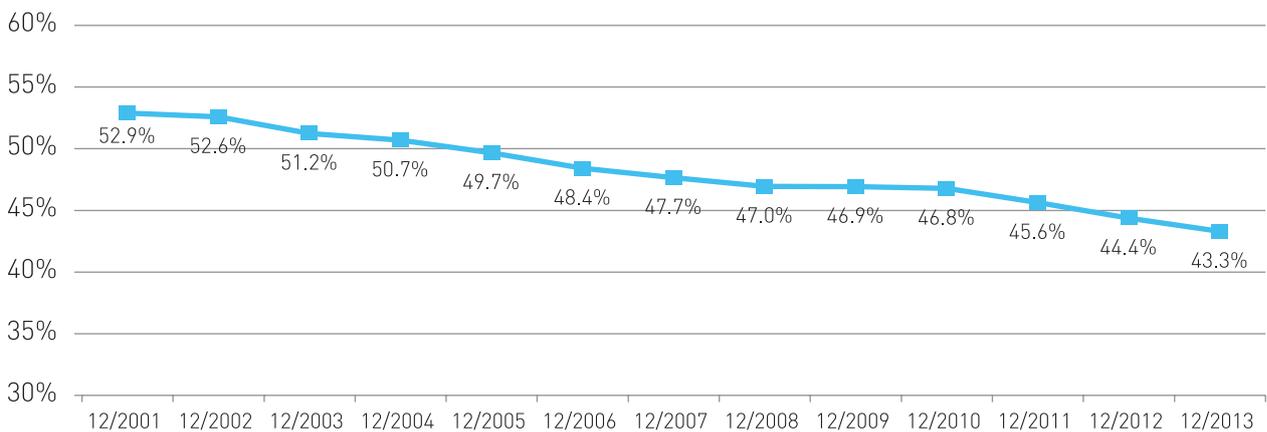
The relevant OTE's market share continues to fall and at the end of 2013 was 59.4%, compared to 62.4% at the end of 2012 (Chart 1.37). Specifically, the number of OTE telephone lines at the end of 2013 fell by 7.1% compared to the end of 2012 (219,000 fewer connections), whilst on the other hand the number of telephone lines of alternative operator increased by 5.5% (101,000 more connections).

Out of those, LLU lines continued to account for the overwhelming majority (over 97%), having increased by 6.6% with respect to the end of 2012 (Chart 1.38). The use of the WLR service continues to decrease, given that at the end of 2013 it amounted to 47,000 connections, with a 26.4% reduction compared to the end of 2012 (Chart 1.39).

The number of Carrier Preselection lines fell to 87,000 at the end of 2013, from 120,000 at the end of 2012. Carrier Preselection lines represent 3% of OTE's PSTN and ISDN lines (Chart 1.40).

Chart 1.35

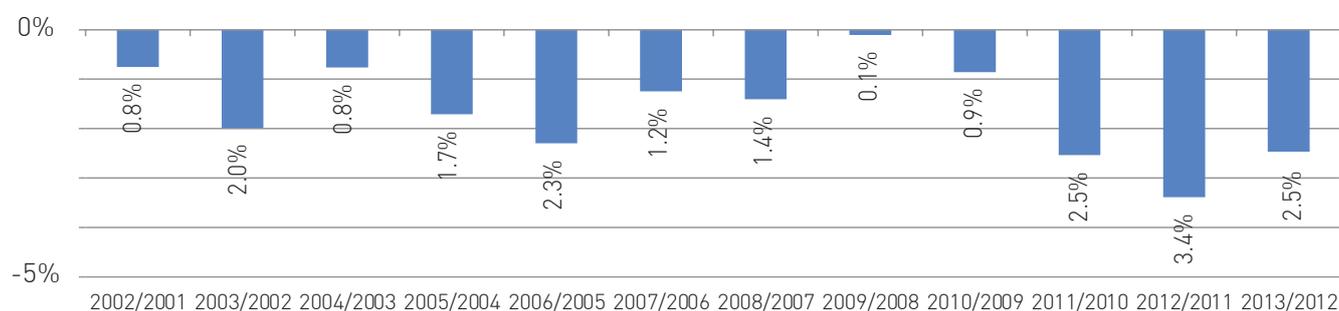
Penetration of telephony lines in Greece's population



Source: EETT (based on data provided by licensed operators)

10. WLR was launched in the Greek market in the first semester of 2009, permitting alternative providers to lease a subscriber line from OTE on wholesale terms and to resell it to the end user, through the Carrier Preselection service. Therefore these subscribers are billed for both their calls and their monthly fee through a single bill that they receive from their pre-selected alternative operator.

Chart 1.36

Annual percentage change of telephony lines

Source: EETT (based on data provided by licensed operators)

Table 1.5

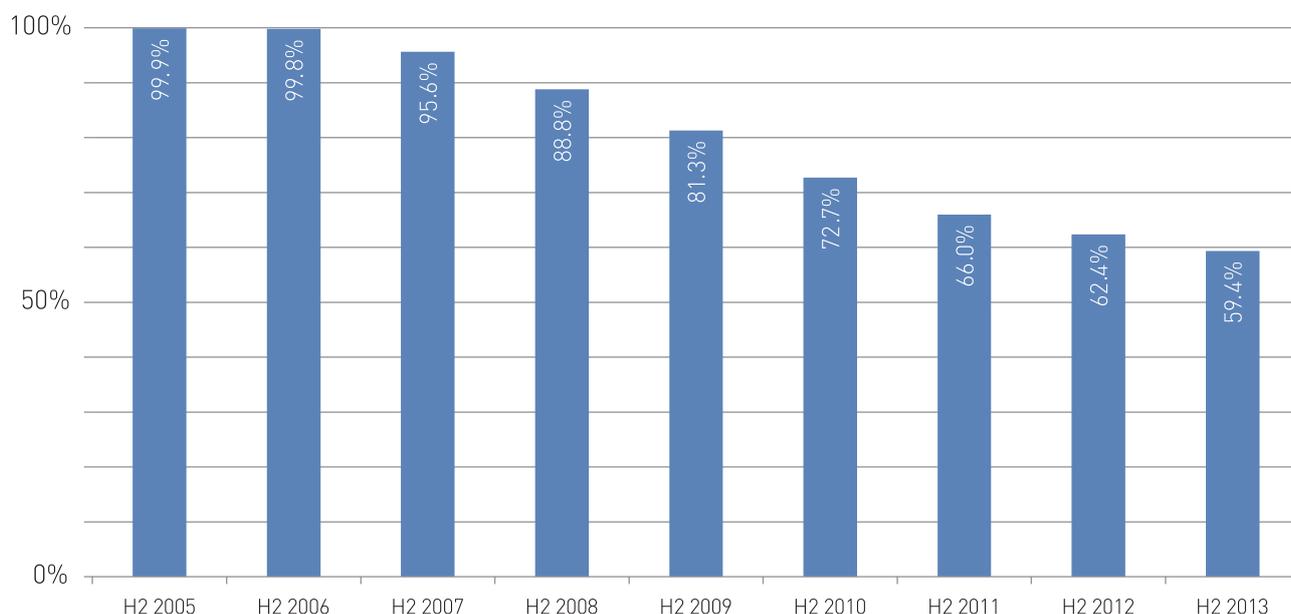
Progress of telephony lines

	OTE Lines			OLO's Lines			Total Lines
	PSTN	ISDN BRA	ISDN PRA	LLU Full Access	WLR	ISDN PRA	
Dec. 2000	5,659,274	96,972	3,946	-	-	-	5,760,192
Dec. 2001	5,607,726	199,033	5,385	-	-	-	5,812,144
Dec. 2002	5,412,796	349,751	6,023	93	-	-	5,768,663
Dec. 2003	5,200,231	448,542	6,766	650	-	-	5,656,189
Dec. 2004	5,078,908	525,499	7,138	1,787	-	-	5,613,332
Dec. 2005	4,927,622	578,505	7,094	5,018	-	444	5,518,683
Dec. 2006	4,778,245	597,867	6,213	12,176	-	334	5,394,835
Dec. 2007	4,509,564	579,533	6,185	232,582	-	480	5,328,344
Dec. 2008	4,110,102	548,388	5,971	589,234	-	681	5,254,376
Dec. 2009	3,744,759	517,337	5,677	937,878	42,405	695	5,248,751
Dec. 2010	3,306,469	473,183	5,259	1,346,498	71,883	747	5,204,039
Dec. 2011	2,917,578	426,830	4,808	1,642,183	82,091	1,820	5,075,310
Dec. 2012	2,670,296	387,692	4,320	1,779,852	63,964	2,791	4,908,915
Dec. 2013	2,484,926	355,655	3,791	1,897,195	47,082	3,025	4,790,674

Source: EETT

Chart 1.37

OTE's market shares based on the number of telephone lines*

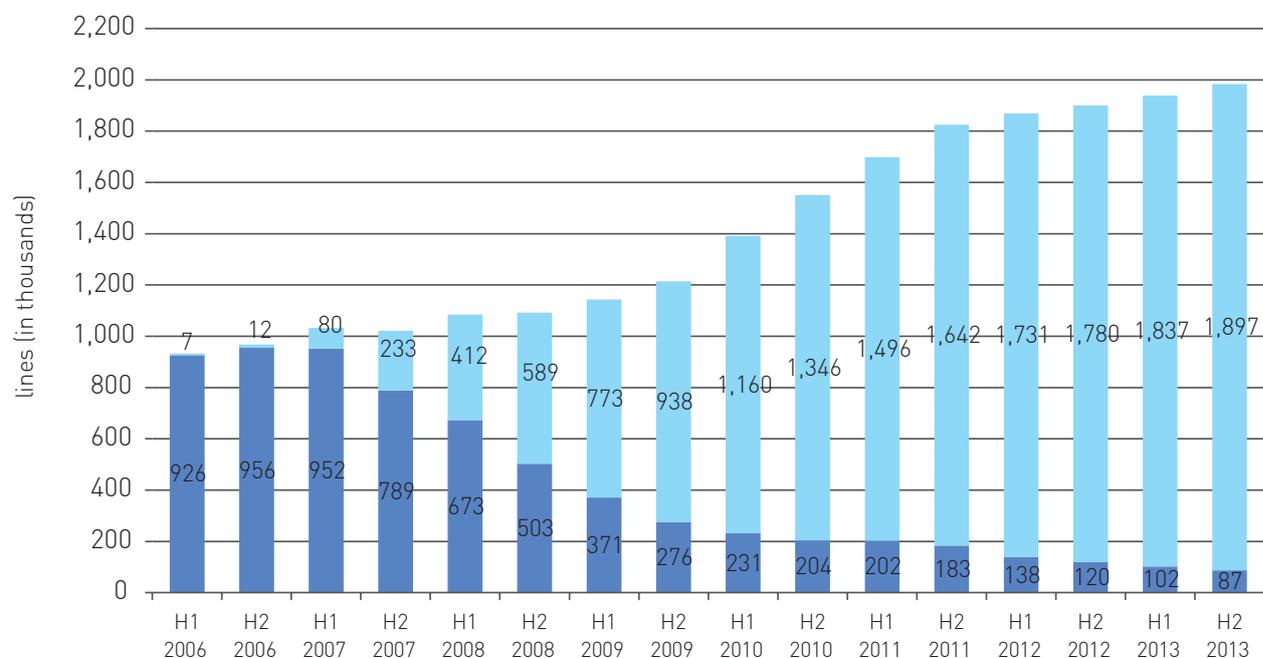


*at the end of the semester

Source: EETT (based on data by licensed operators)

Chart 1.38

Alternative operators' lines via carrier pre-selection and full LLU*



*at the end of the semester

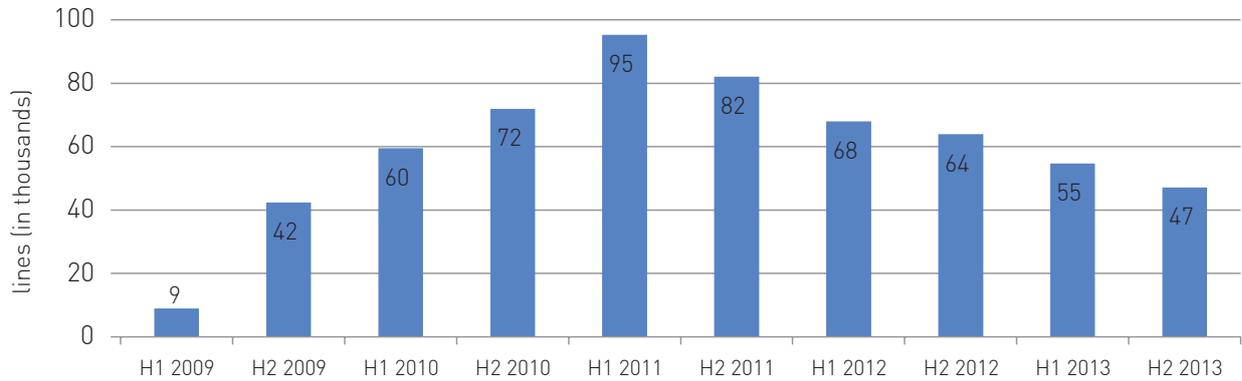
Carrier preselection lines Full LLU lines

Source: EETT (based on data by licensed operators)



Chart 1.39

Activated lines for wholesale line rental*

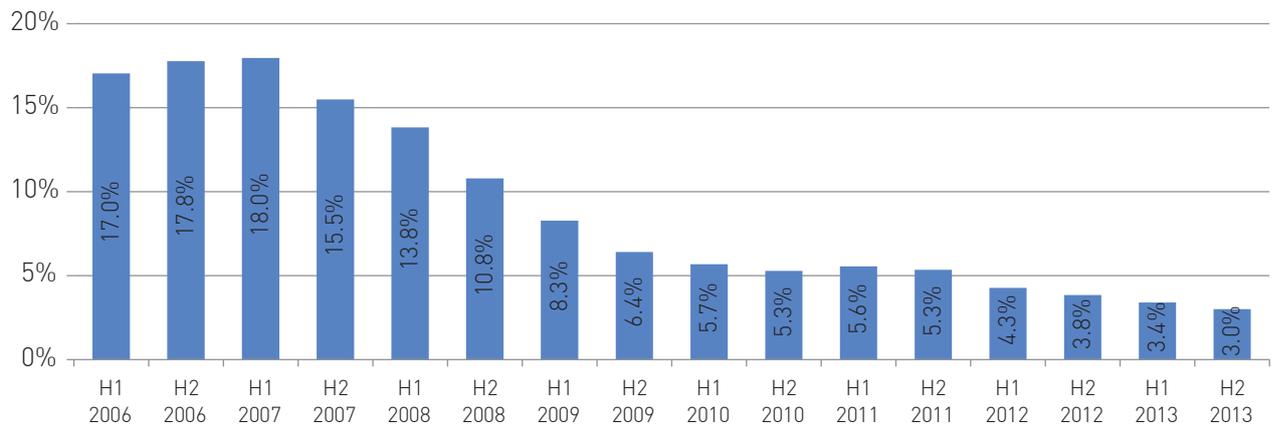


*at the end of the semester

Source: EETT (based on data provided by licensed operators)

Chart 1.40

Pre-selection lines as a percentage of OTE's PSTN and ISDN lines*



*at the end of the semester

Source: EETT (based on data provided by licensed operators)

1.2.3.2. Retail outgoing traffic

In 2013, the volume of the main call types (i.e. national fixed calls¹¹, calls to mobile and international calls), not including calls via cards, dropped by 3.2%. The respective traffic for OTE decreased by 7.2% compared to the previous year, resulting in its declining share for 2013 (49.6% compared to 51.8% in 2012) and thus being for the first time lower than that of OLOs' share¹² (Chart 1.41). Similar is the picture with respect to other call categories not including dial-up calls and calls via cards¹³.

The market share distribution for 2013, based on the volume of the main call types between OTE, the five largest alternative operators and the remaining operators is shown in Chart 1.42, whilst the progress of these shares over time is shown right after¹⁴ (Chart 1.43 and Table 1.6). Especially, as of 2011, OTE's main competitors seem to be the following (in alphabetical order): CYTA, FORTHNET, HELLAS ON LINE, ON TELECOMS and WIND.

Additionally, OTE's shares per call type were also reduced (Chart 1.44). In more detail, the share based on the volume of national calls to fixed lines was calculated at 50.3% for 2013 compared to 52.4% in 2012, whilst the respective share of calls to mobile phones dropped 5.3 percentage points and is estimated at 52% in 2013 compared to 57.3% in 2011. OTE's shares in the other call categories follow a similar downward trend, as those shown in Table 1.7, with the exception of international calls for which OTE's share increased from 28.2% in 2012 to 29.9% in 2013.

Chart 1.45 shows the progress of the fixed outgoing traffic volume over time and Chart 1.46 depicts the respective annual rate of change. Chart 1.47 demonstrates the decisive contribution of the main call types to the total traffic (and which make up 98% thereof). The almost negligible impact of dial-up traffic on total traffic can also be seen. Charts 1.48 and 1.49 show the progress of the fixed outgoing traffic volume per main call type and the corresponding annual percentage changes respectively. Furthermore, Chart 1.50 shows the distribution of the fixed outgoing traffic for the main call types over time. It should be noted that the 3% drop in traffic in 2013 compared to 2012 (see Chart 1.46) is mainly attributed to the drop in national calls to fixed lines, which over time comprises a consistently high percentage of total traffic, reaching approximately 86%. All of the aforementioned information pertaining to the progress of the fixed outgoing traffic volume is also shown in Table 1.8.

Charts 1.51 and 1.52 as well as Table 1.9 present the distribution of the outgoing traffic volume over time for the main call types between OTE and OLOs, and the annual percentage changes. In 2013, OLOs' retail outgoing traffic continued to increase at a declining rate than the previous years, in a time where total traffic continues its downward trend over time. In addition for 2013, only 3% of the OLOs' traffic originates from their indirectly connected subscribers (via Carrier Selection/Pre-selection), whilst the remaining traffic refers to the directly connected subscribers (mainly through LLU). Finally, it should be noted that based on the answers of operators, 10.3% of outgoing traffic from a fixed telephone for 2013 was managed VoIP¹⁵ (a percentage that corresponds to 1.9 billion minutes) whilst the respective percentage for 2012 is estimated to be 8.5% (1.6 billion minutes).

11. National fixed calls include local and long distance calls.

12. It should be noted that in 2013, the main operators that offered telephone services at a fixed location were the following: COSMOLINE, CYTA, FORTHNET, HELLAS ON LINE, ON TELECOMS, OTE, VOICENET and WIND.

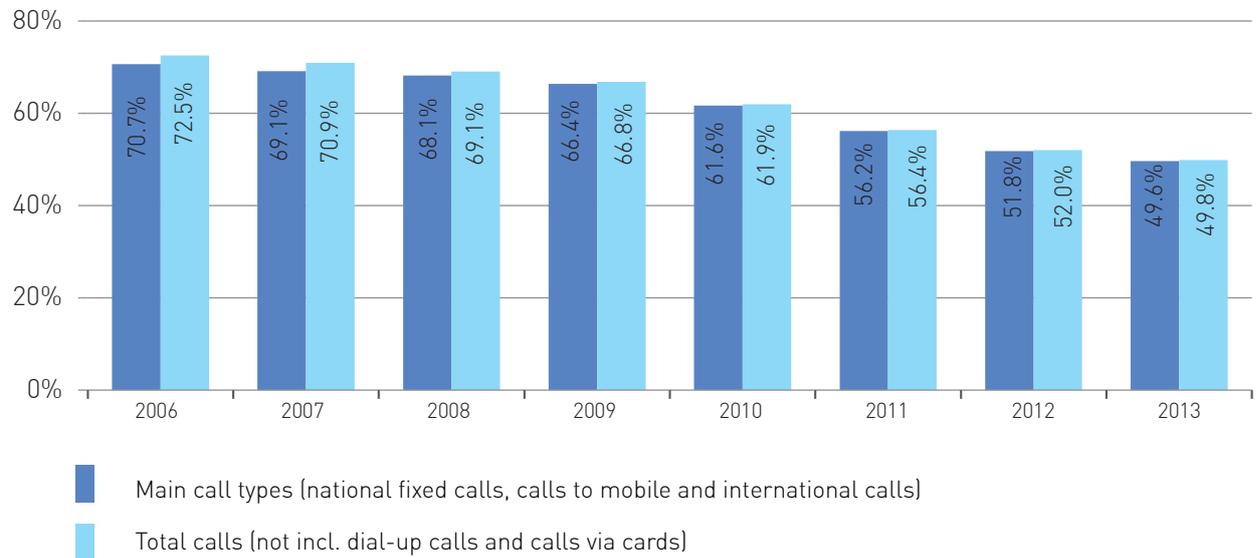
13. It should be noted that dial-up calls as of 2010-2011 make up a very small percentage of the total traffic.

14. In the case of mergers, acquisitions, etc. the cumulative share of the said providers is presented, even for the years prior to the year of merger, acquisition, etc.

15. The term "managed VoIP" refers to retail telephone traffic provided at a fixed location with the use of an IP protocol during which (a) call origination is done with the use of IP protocol and (b) the operator provides and/or controls the access line.

Chart 1.41

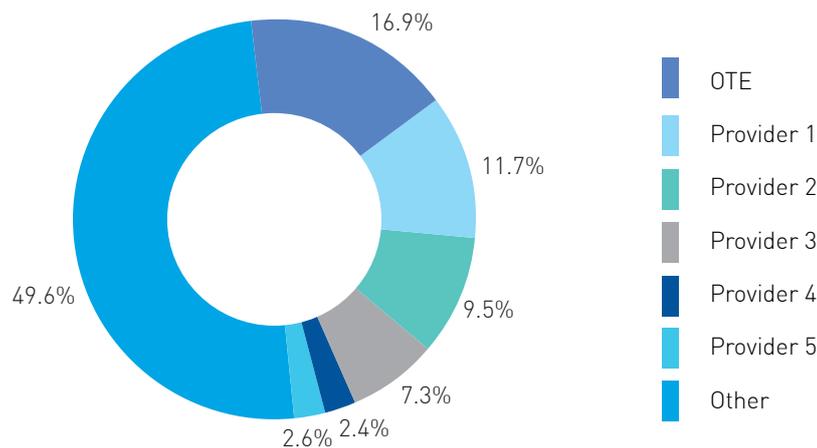
OTE's market shares (based on the volume of the main and total call types not incl. dial-up calls and calls via cards)



Source: EETT (based on data provided by licensed operators)

Chart 1.42

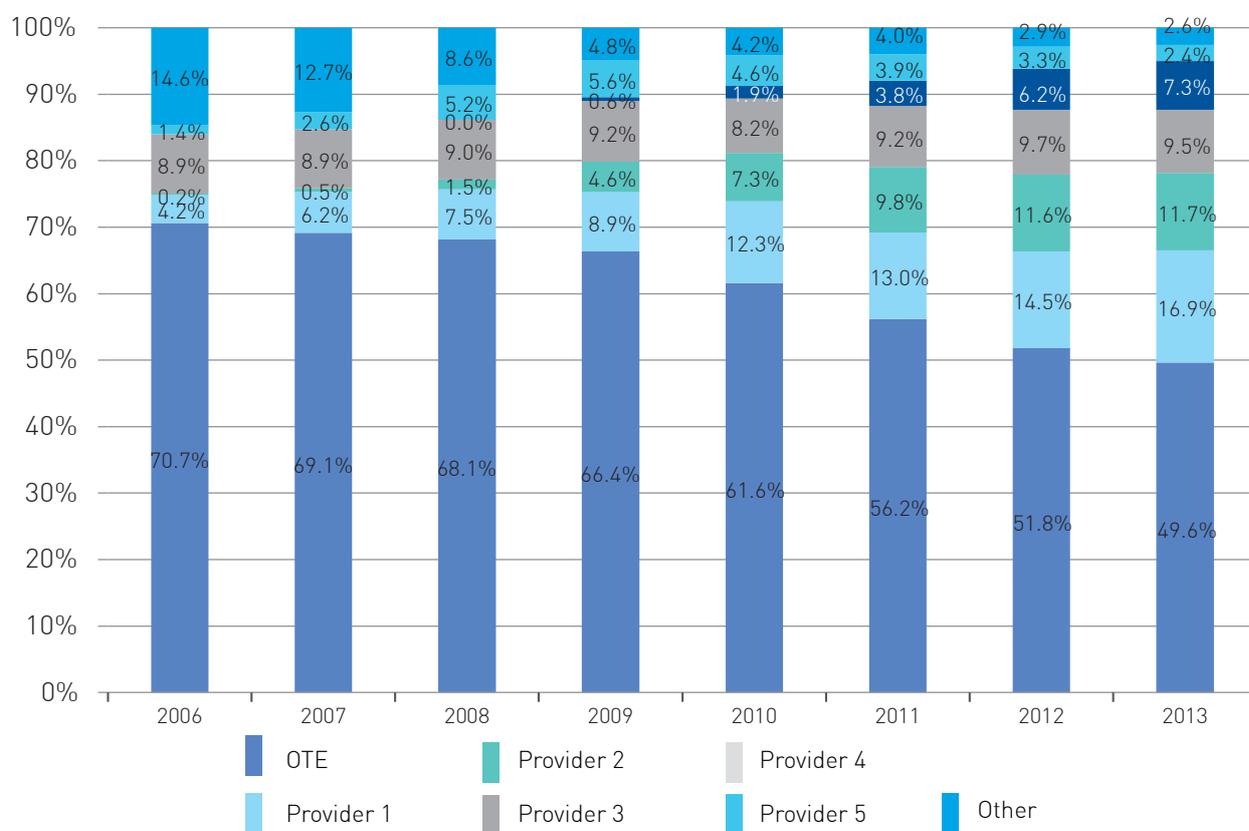
OTE and OLOs' market shares (based on the volume of the main call types) (2013)



Source: EETT (based on data provided by licensed operators)

Chart 1.43

OTE's and the five largest OLOs' market shares (based on the volume of the main call types)



Source: EETT (based on data by licensed operators)

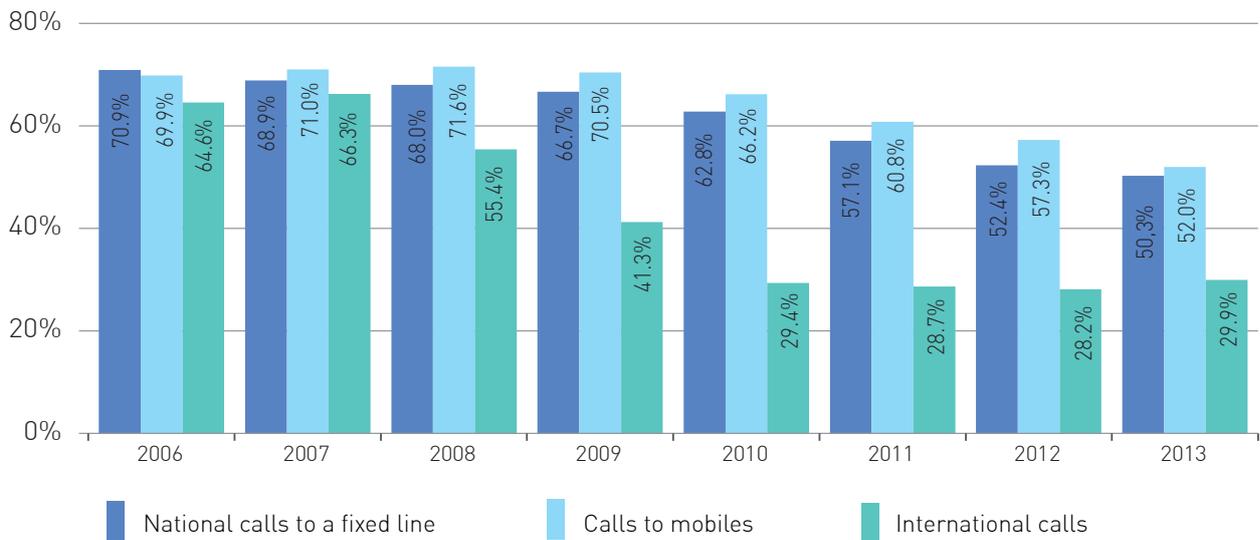
Table 1.6

Market shares of OTE, the five largest OLOs and other OLOs (based on the volume of the main call types)

	2006	2007	2008	2009	2010	2011	2012	2013
OTE	70.7%	69.1%	68.1%	66.4%	61.6%	56.2%	51.8%	49.6%
Provider 1	4.2%	6.2%	7.5%	8.9%	12.3%	13.0%	14.5%	16.9%
Provider 2	0.2%	0.5%	1.5%	4.6%	7.3%	9.8%	11.6%	11.7%
Provider 3	8.9%	8.9%	9.0%	9.2%	8.2%	9.2%	9.7%	9.5%
Provider 4	-	-	0.0%	0.6%	1.9%	3.8%	6.2%	7.3%
Provider 5	1.4%	2.6%	5.2%	5.6%	4.6%	3.9%	3.3%	2.4%
Other	14.6%	12.7%	8.6%	4.8%	4.2%	4.0%	2.9%	2.6%
Total	100.0%							

Source: EETT (based on data provided by licensed operators)

Chart 1.44

OTE's market shares per call type (based on volume)

Source: EETT (based on data provided by licensed operators)

Table 1.7

OTE's market shares per main call type (based on volume)

Type of call		2006	2007	2008	2009	2010	2011	2012	2013
Main types of calls	National fixed calls	70.9%	68.9%	68.0%	66.7%	62.8%	57.1%	52.4%	50.3%
	Calls to mobiles	69.9%	71.0%	71.6%	70.5%	66.2%	60.8%	57.3%	52.0%
	International calls	64.6%	66.3%	55.4%	41.3%	29.4%	28.7%	28.2%	29.9%
Other call types (excluding calls via cards)	Dial-up calls	99.3%	99.0%	98.9%	99.2%	99.5%	99.4%	99.2%	98.9%
	Calls to personal numbers (70 series)	-	-	-	-	90.6%	83.5%	90.9%	85.9%
	Call to toll-free numbers (800 series)	98.2%	95.2%	90.3%	83.3%	80.6%	76.8%	76.0%	75.0%
	Calls to shared cost services (801 series)	99.4%	98.5%	95.9%	91.5%	85.1%	76.2%	67.1%	67.0%
	Calls to short code services (3-digits, 4-digits, 5-digits)*	99.5%	95.0%	84.8%	81.7%	70.2%	64.4%	62.0%	59.5%
	Calls to value added services **	100.0%	98.6%	95.4%	91.2%	80.0%	74.3%	59.2%	54.1%
Total traffic for main types of calls		70.7%	69.1%	68.1%	66.4%	61.6%	56.2%	51.8%	49.6%
Total traffic excluding dial-up calls and calls via cards		72.5%	70.9%	69.1%	66.8%	61.9%	56.4%	52.0%	49.8%
Total traffic excluding calls via cards		79.9%	75.9%	72.3%	68.7%	62.8%	56.8%	52.2%	50.0%

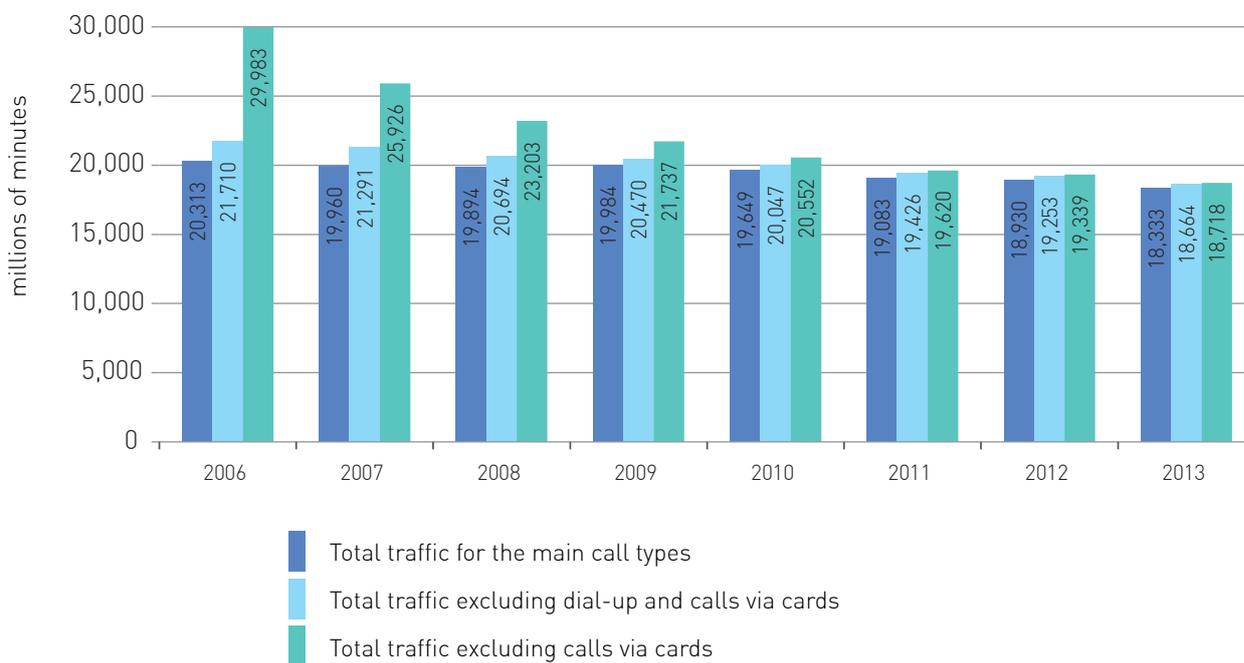
Source: EETT (based on data provided by licensed operators)

* Up till 2009, calls to short code services included short codes for value added services.

**Up till 2009, calls to value added services pertained only to 090 calls. As of 2010, they pertain to value added services including short codes for value added services.

Chart 1.45

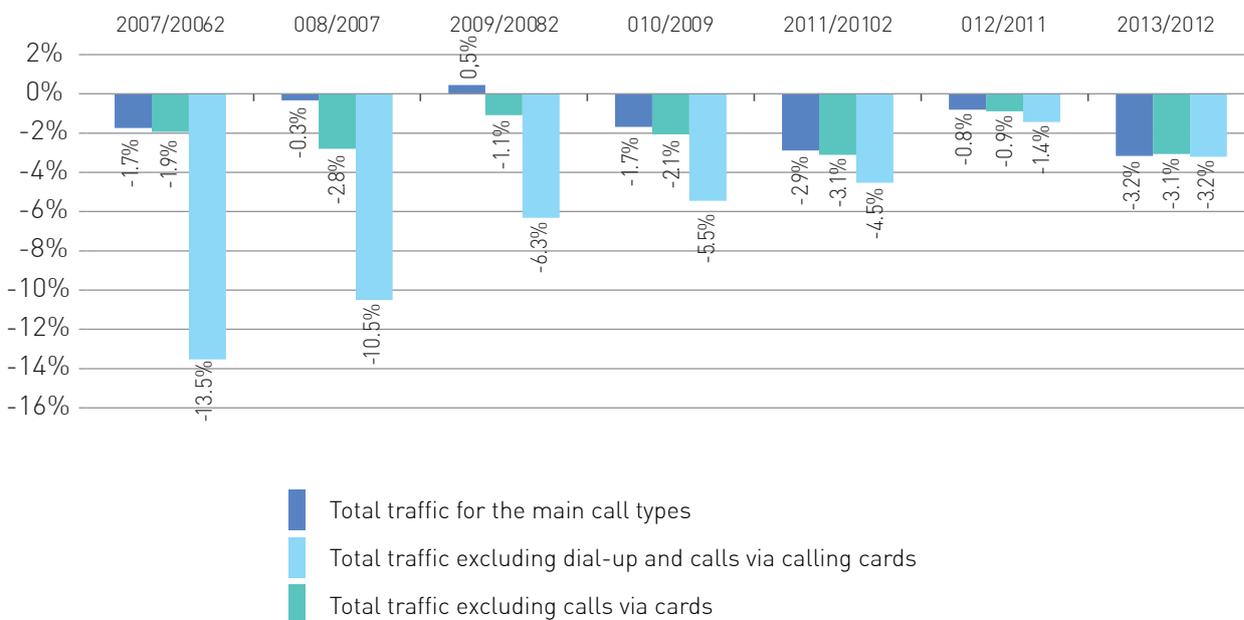
Progress of the fixed outgoing traffic volume



Source: EETT (based on data provided by licensed operators)

Chart 1.46

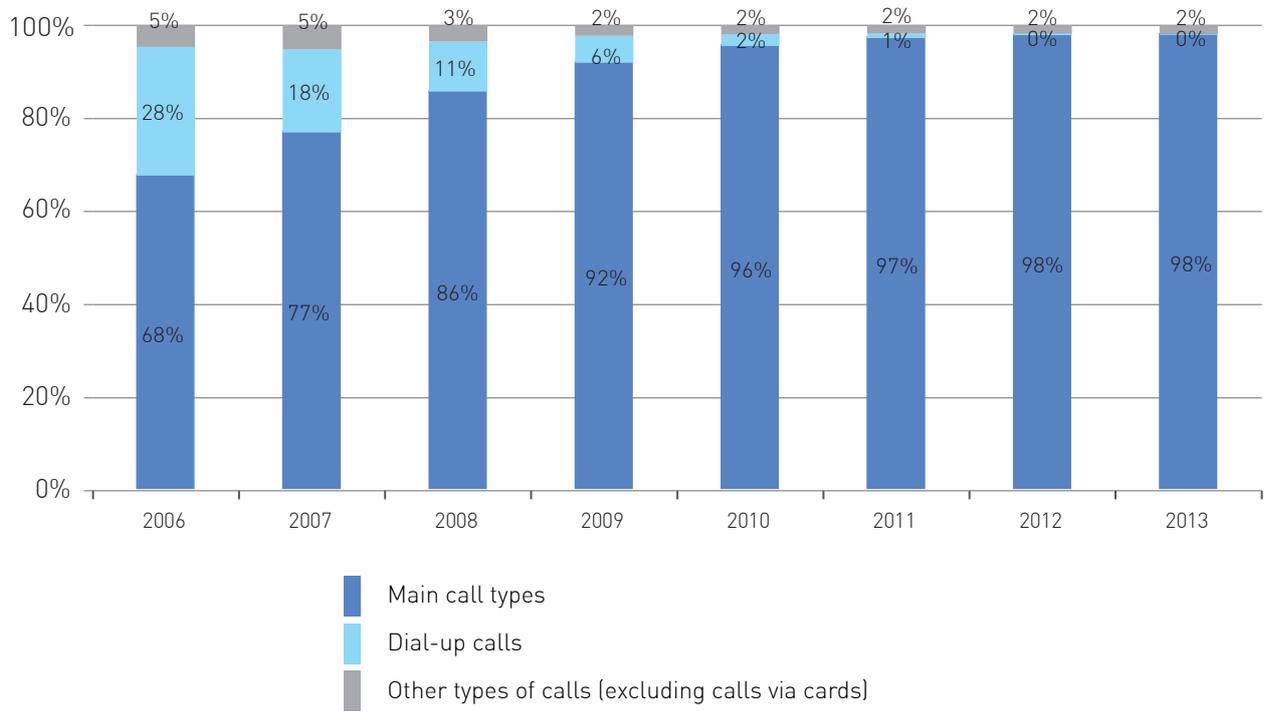
Annual change (%) of the fixed outgoing traffic volume



Source: EETT (based on data by licensed operators)

Chart 1.47

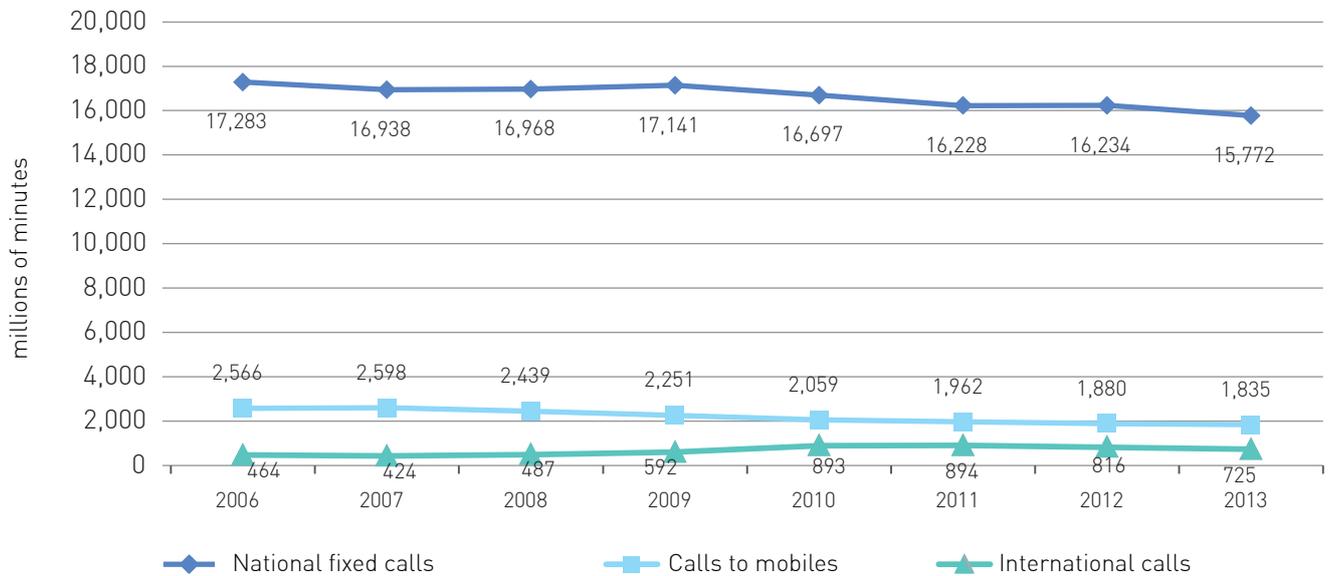
Distribution (%) of fixed outgoing traffic



Source: EETT (based on data provided by licensed operators)

Chart 1.48

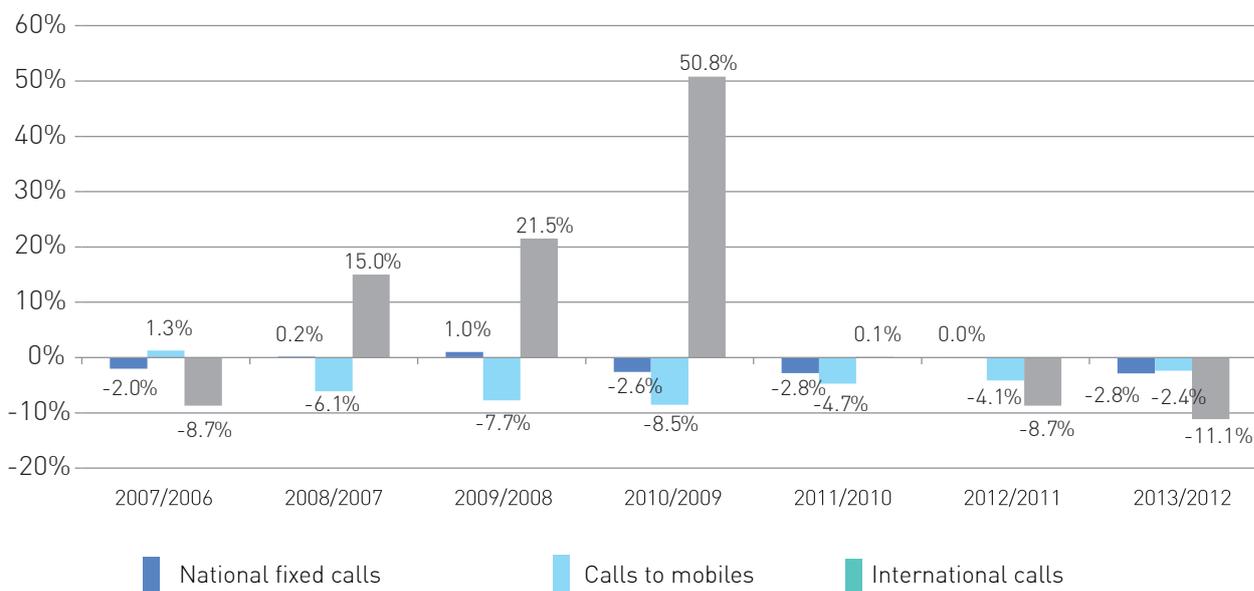
Progress of fixed outgoing traffic for the main call types



Source: EETT (based on data provided by licensed operators)

Chart 1.49

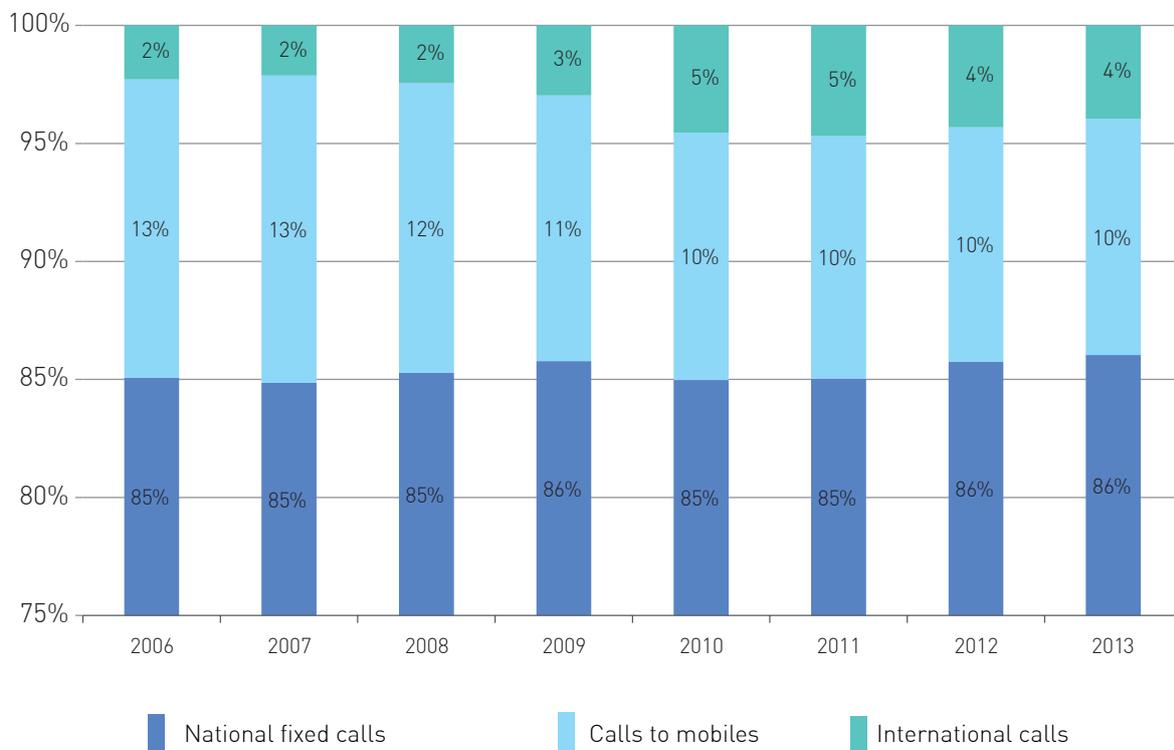
Annual change (%) of the fixed outgoing traffic



Source: EETT (based on data provided by licensed operators)

Chart 1.50

Distribution (%) of the fixed outgoing traffic for the main call types



Source: EETT (based on data provided by licensed operators)



Table 1.8

Volume per call type (in million minutes)

	Type of call	2006	2007	2008	2009	2010	2011	2012	2013
Main types of calls	National fixed calls	17,283	16,938	16,968	17,141	16,697	16,228	16,234	15,772
	Calls to mobiles	2,566	2,598	2,439	2,251	2,059	1,962	1,880	1,835
	International calls	464	424	487	592	893	894	816	725
Other call types (excluding calls via cards)	Dial-up calls	8,273	4,635	2,508	1,267	505	194	86	55
	Calls to personal numbers (70 series)	-	-	-	-	0,05	0,13	0,13	0,14
	Call to toll-free numbers (800 series)	56	46	37	30	24	23	23	26
	Calls to Shared cost services (801 series)	1,082	989	474	158	77	52	35	33
	Calls to short code services (3-digits, 4-digits, 5-digits)*	240	282	277	288	236	225	220	219
	Calls to value added services **	19	14	13	10	61	43	45	53
Total traffic for main call types		20,313	19,960	19,894	19,984	19,649	19,083	18,930	18,333
Total traffic excluding dial-up and calls via cards		21,710	21,291	20,694	20,470	20,047	19,426	19,253	18,664
Total traffic excluding calls via cards		29,983	25,926	23,203	21,737	20,552	19,620	19,339	18,718

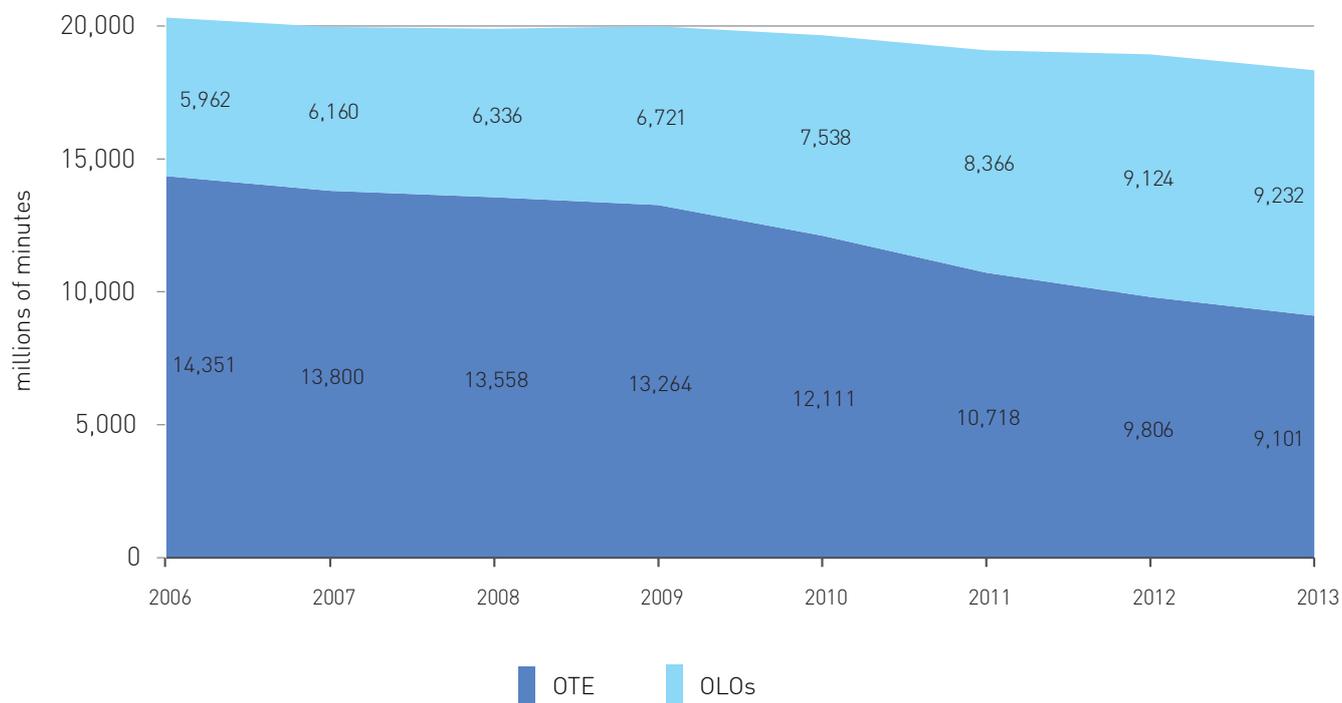
Source: EETT (based on data provided by licensed operators)

*Up till 2009, calls to short code services included short codes for value added services.

**Up till 2009, calls to added value services pertained only to 090 calls. Since 2010, they pertain to value added services including short codes for value added services.

Chart 1.51

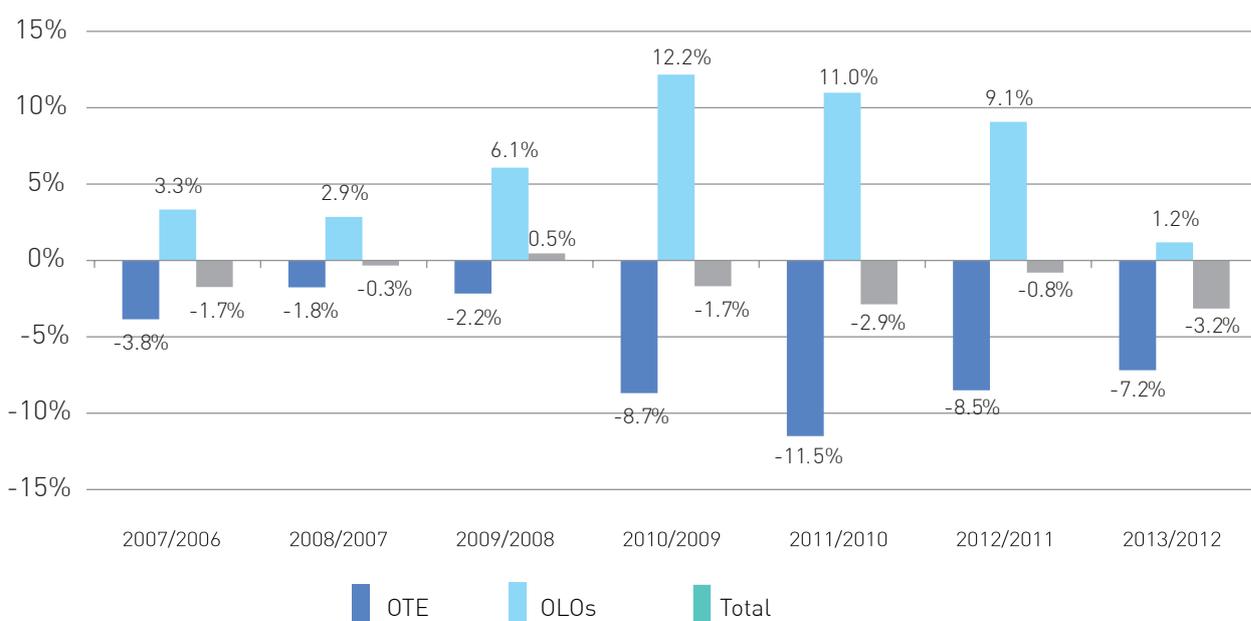
Progress of the outgoing traffic volume for OTE and OLOs



Source: EETT (based on data provided by licensed operators)

Chart 1.52

Annual change (%) of the fixed outgoing traffic for the main call types



Source: EETT (based on data by licensed operators)



Table 1.9

Volume distribution of the main call types between OTE and other operators by their directly and indirectly connected subscribers (millions of minutes)

		2006	2007	2008	2009	2010	2011	2012	2013
OTE		14,351	13,800	13,558	13,264	12,111	10,718	9,806	9,101
Alternative operators	Directly connected subscribers	350	1,038	3,184	4,939	6,462	7,573	8,668	8,959
	Indirectly connected subscribers	5,611	5,122	3,153	1,782	1,076	793	457	272
	Total	5,962	6,160	6,336	6,721	7,538	8,366	9,124	9,232
Grand Total		20,313	19,960	19,894	19,984	19,649	19,083	18,930	18,333

Source: EETT (based on data provided by licensed operators)

1.2.3.3. Retail revenues from delivering services to fixed access lines

The retail revenues from telephony, Internet and content services¹⁶ from a fixed location in 2013 are estimated at 1,553 million euro (Chart 1.53), decreased by 7% compared to 2012 (a loss of 117 million euro). OTE's respective share for 2013 is estimated at 61.3% from 61.6% in 2012. It should be noted that the revenues from telephony services¹⁷ include revenues both from access¹⁸ as well as all types of calls, excluding calls via cards.

For 2013, the retail revenues of fixed services from bundled services packages (namely excluding revenues from mobile communications services), as well as the most popular types thereof¹⁹, amounted to 1.072 million euros, thus dropping slightly compared to 2012 (Chart 1.54). The greatest part of the revenues (73%) came from standard 2-play packages (telephony access/calls and broadband access). It should be noted that the retail revenues of fixed services from bundled services packages correspond to approximately 71% of about the total telephony revenues (access and calls), broadband access and content services compared to the estimated 67% for 2012.

It should be noted that the term "bundled services packages" refers to products that combine two or more of the following services which are offered and invoiced together at fixed proportions and price:

- Access to telephony (i.e. access to telephone call services) at a fixed location.
- Telephone calls at a fixed location.
- Broadband access at a fixed location.
- Content services such as IPTV, VoD (Video On Demand), etc. at a fixed location.
- Mobile communications.

Taking into account the above definition, the way that each operator provides and invoices its services (bundled or individually) plays a key role in the revenues of the bundled packages.

16. IPTV, Video On Demand, etc.

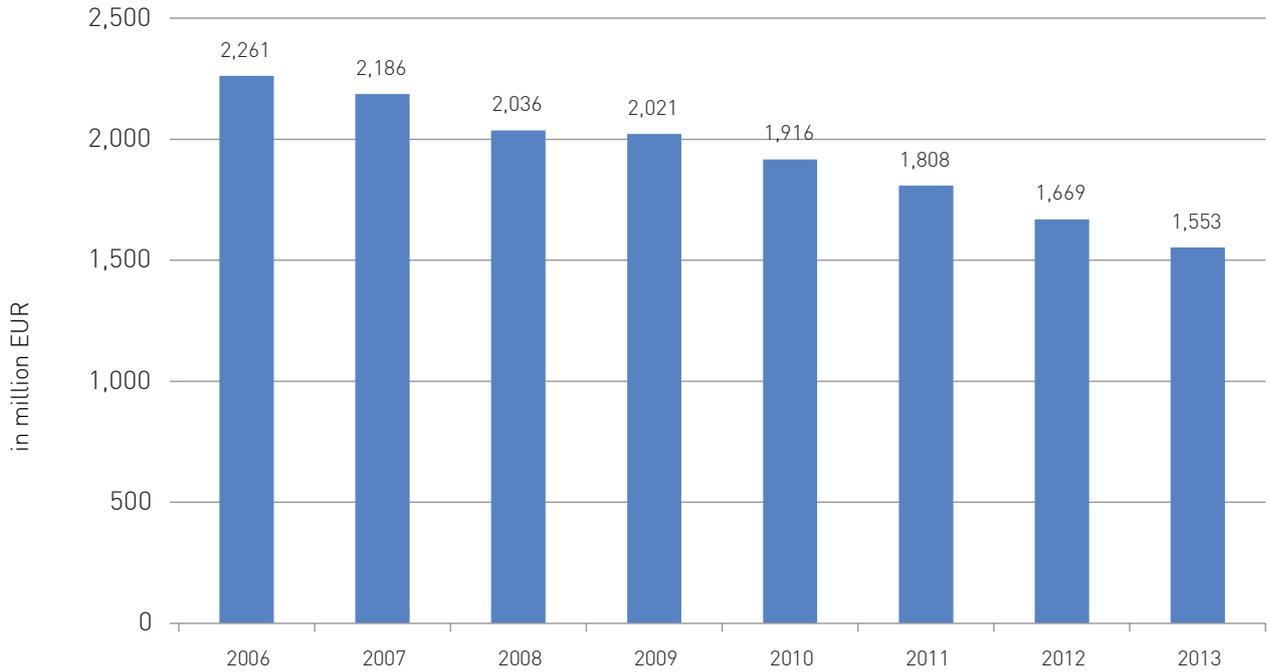
17. Revenues presented are before payments to third operators.

18. Such as the initial connection/installation fees etc., the monthly rental for the access line to telephony services, revenues from additional facilities.

19. It should be noted that each type of package refers to the services included in the monthly rental of the package.

Chart 1.53

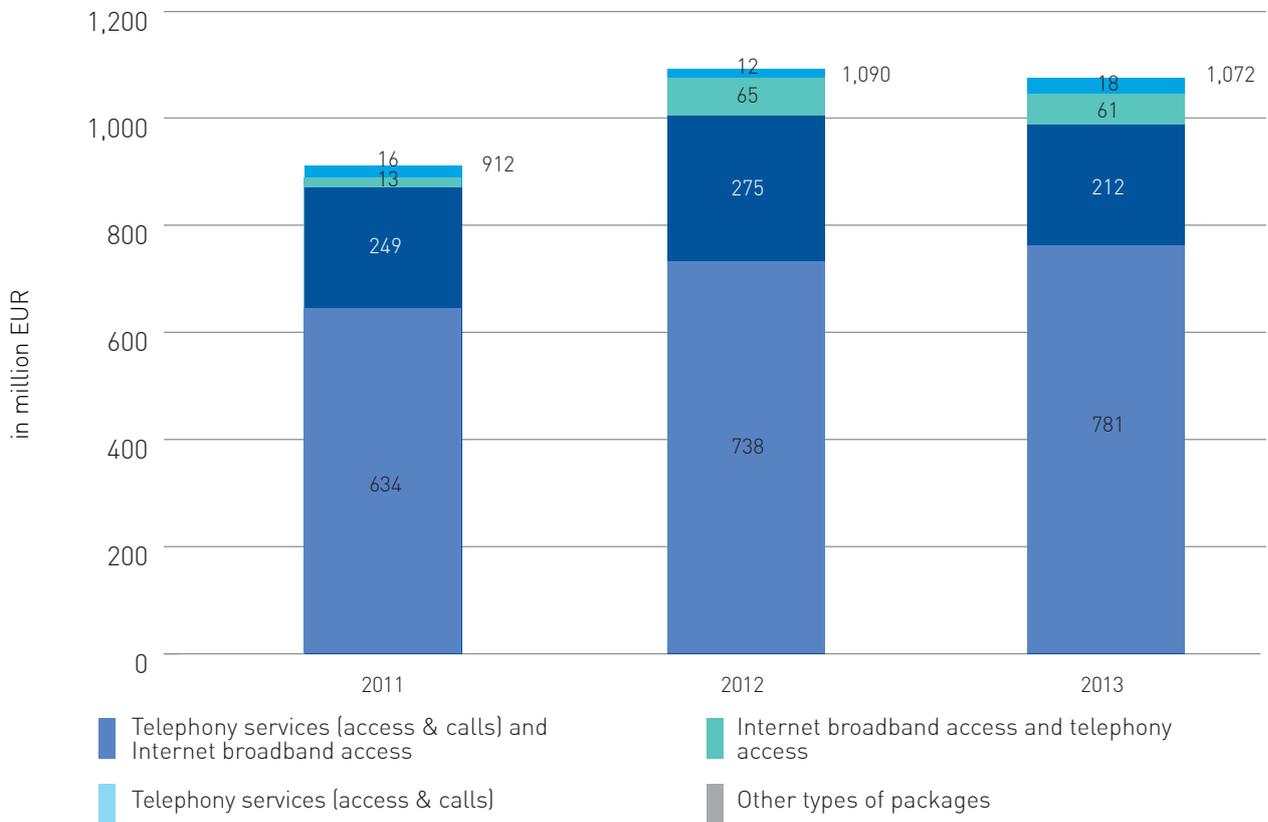
Retail revenues from the provision of telephony services, Internet and content at a fixed location



Source: EETT (based on data by licensed operators)

Chart 1.54

Retail revenues of the most popular types of fixed services bundled packages*



* It should be noted that package revenues include extra charges for calls not included in the monthly rental of the package, whilst fees related to the initial connection/installation are not included.

Source: EETT (based on data provided by licensed operators)



1.2.3.4. Homezone services

The number of subscribers to Homezone services rose for the third year in a row, reaching 160 thousands at the end of 2013 compared to 153 thousands at the end of 2012 (increased by 4.6%) (see Chart 1.55). It should be noted that subscribers are almost equally divided between COSMOTE and VODAFONE, which provide those services. Conversely, traffic is down by 8.3% compared to the previous year, amounting to 322 million minutes in 2013, compared to 351 million minutes in 2012 (Chart 1.56). From the above it is concluded that the average actual (real) traffic per Homezone subscription was reduced by approximately 13% compared to 2012.

Chart 1.55

Homezone subscriptions

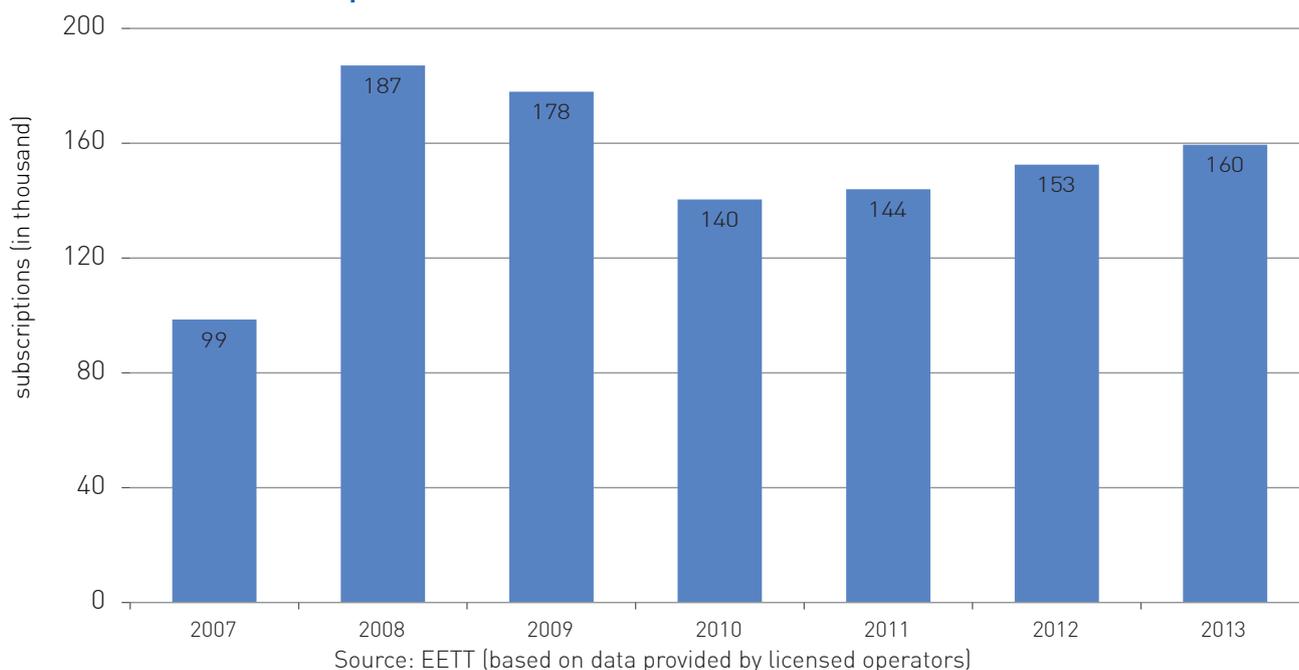
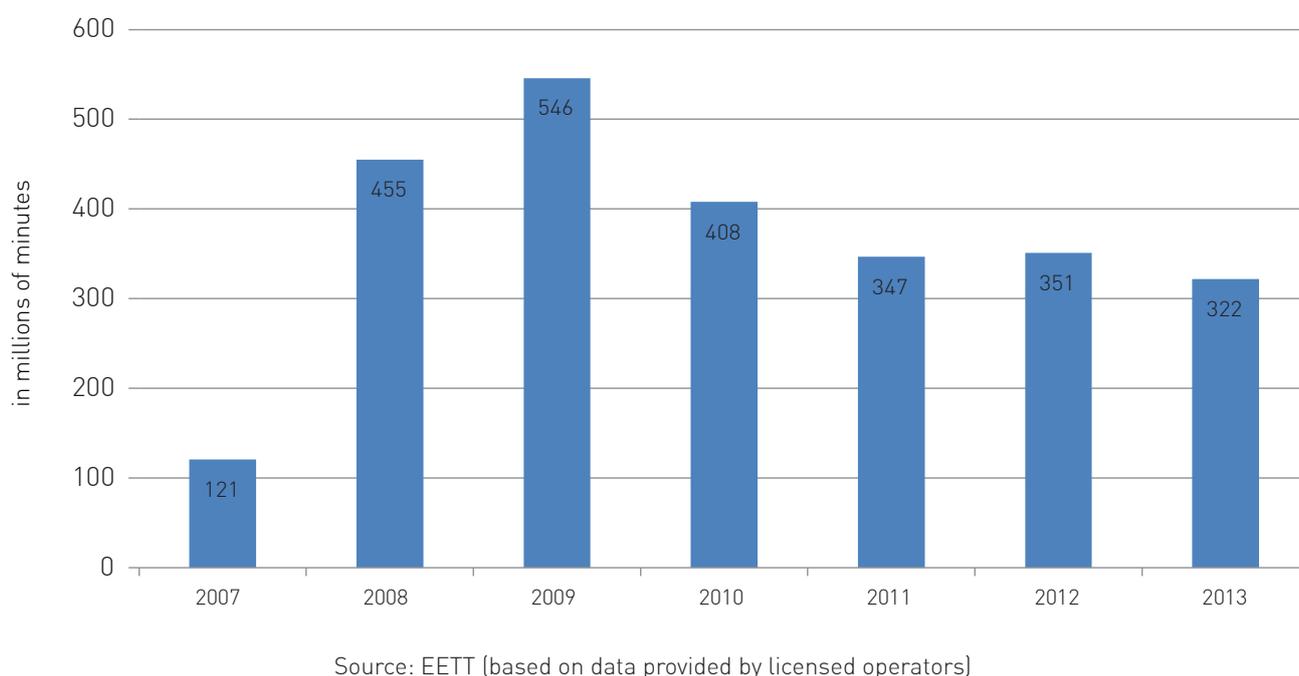


Chart 1.56

Outgoing traffic from the provision of telephony services within zone for Homezone packages



1.2.4. Mobile communications

1.2.4.1. Subscriptions

In 2013, mobile telephony connections²⁰ increased in total, however the number of active subscriptions/connections²¹ fell. The total number of connections, at the end of 2013, was 16.5 compared to 15.9 million subscriptions at the end of 2012, increased by approximately 4% (Table 1.10 and Chart 1.57).

The number of active connections fell from 13.4 to 13 million connections, falling by 2.7%. With respect to the various connection categories (Chart 1.58), postpaid connections appeared to drop slightly with a reduction of 1.6% (from 4.8 million at the end of 2012 to 4.72 million at the end of 2013), whilst total prepaid connections rose by 6.4% (from 11.1 million at the end of 2012 to 11.8 million at the end of 2013). However, the number of active prepaid connections fell by 3.3%, i.e. from 8.6 million at the end of 2012 to 8.3 million at the end of 2013.

As far as the MTOs' shares in the total subscribers' number are concerned, COSMOTE's share fell from 48.5% to 45.3% at the end of 2013, whilst VODAFONE's share increased (from 27.9% to 29.8%), as did that of WIND (from 23.5% to 24.9%).

The penetration of active mobile telephony subscriptions in the population of Greece, in October 2013, went from 120% to 123%, with the European average in 28 countries reaching 132% (Chart 1.60).

Table 1.10

Total and active connections/subscriptions

	12/2006	12/2007	12/2008	12/2009	12/2010	12/2011	12/2012	12/2013
Total connections	13,874,674	16,226,675	18,918,092	20,298,102	14,815,705	14,557,672	15,861,833	16,499,630
Active connections	11,097,515	12,294,912	13,799,340	13,295,093	12,292,716	12,127,985	13,353,707	12,999,790

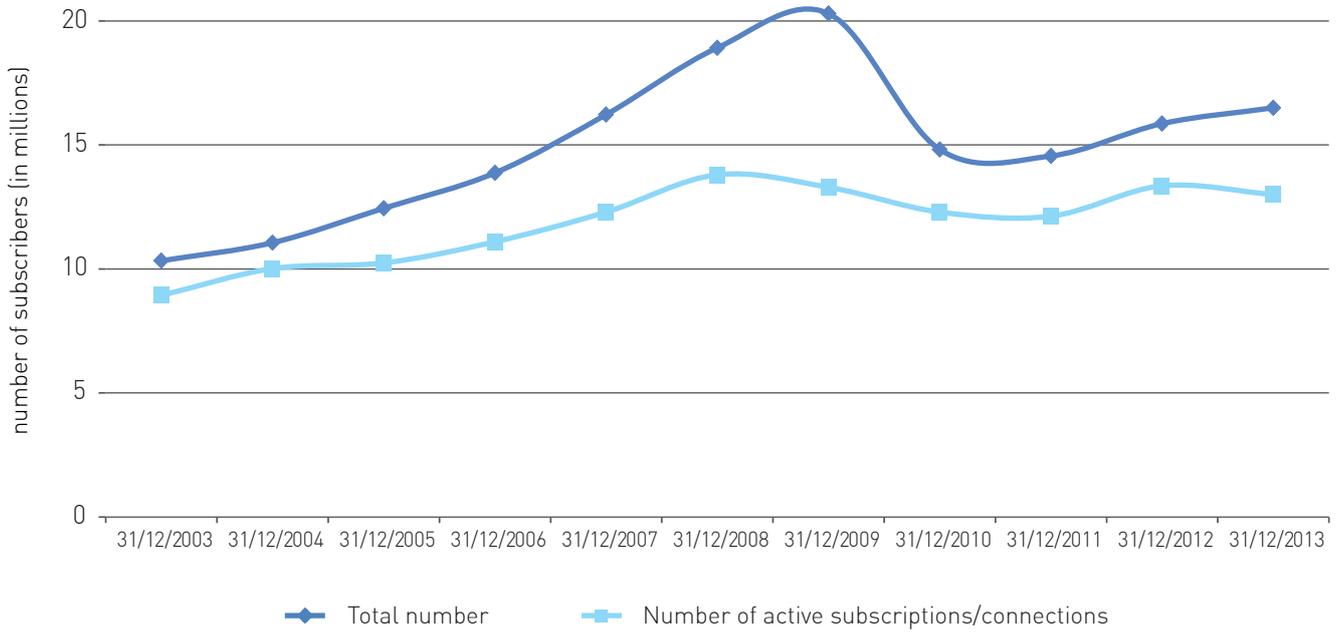
Source: EETT

20. The term used is "connection" or "subscription" instead of "subscriber". It is not the number of subscribers as individuals or legal entities that are recorded, but rather the total connections/subscriptions, as one subscriber may possibly have one or numerous subscriptions/connections.

21. "Active connections" or "active subscriptions" are defined as connections/subscriptions that have generated retail or wholesale income within the last quarter.

Chart 1.57

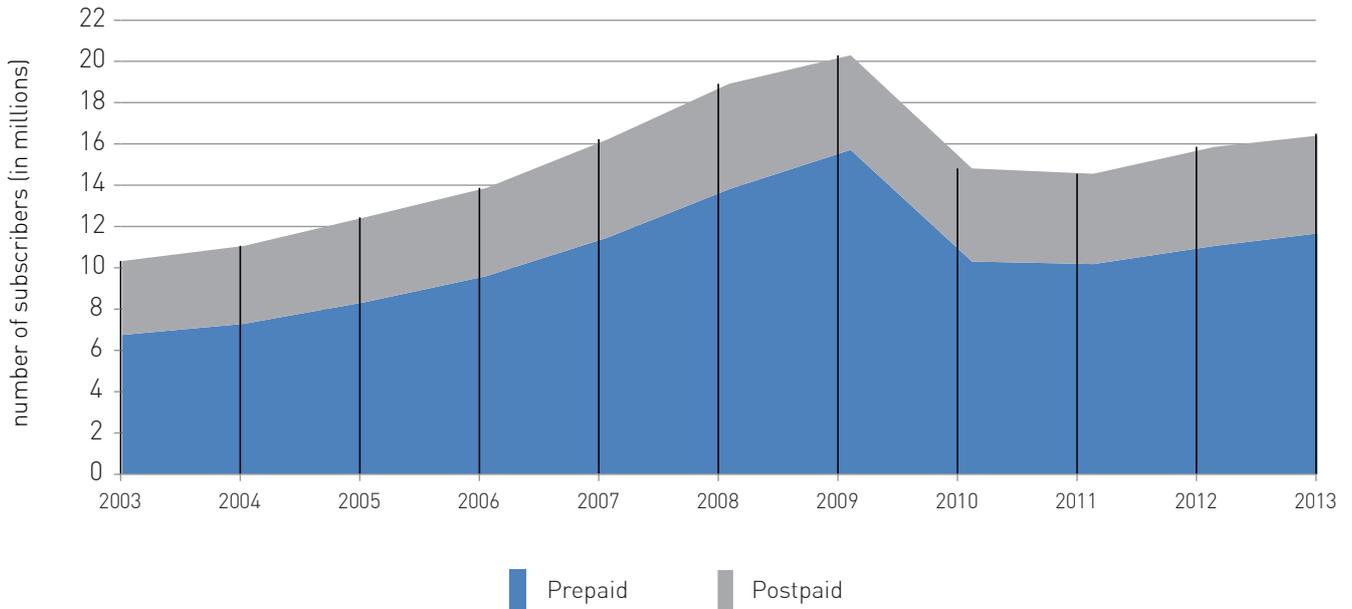
Mobile telephony connections/subscriptions



Source: EETT (based on data provided by licensed operators)

Chart 1.58

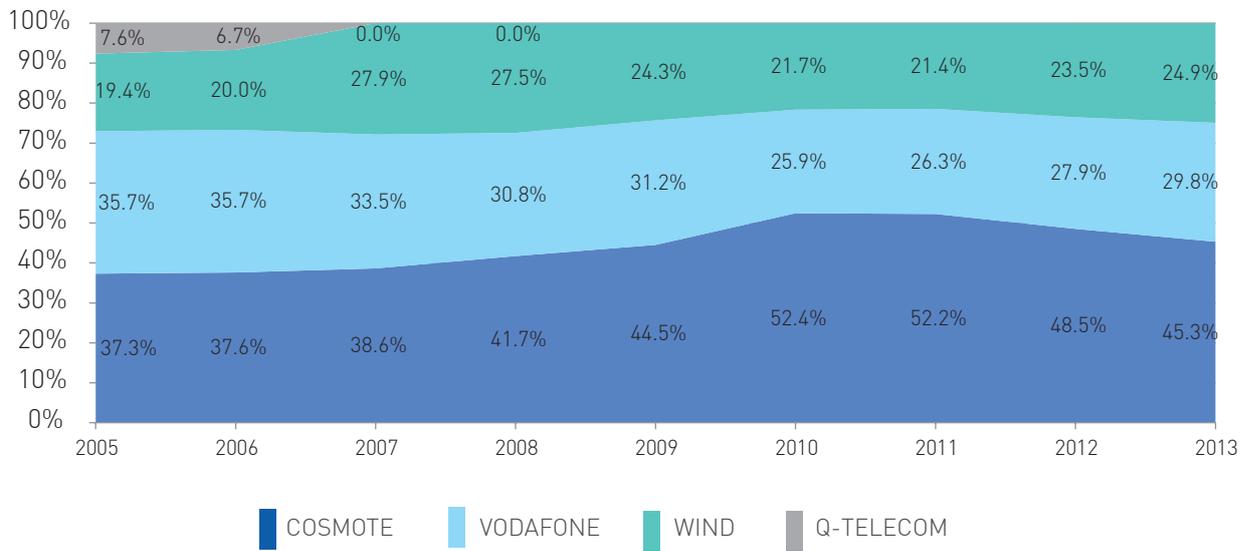
Progress of the mobile telephony subscribers' number (prepaid and postpaid)



Source: EETT (based on data provided by licensed operators)

Chart 1.59

MTOs market shares on the number of mobile telephony connections

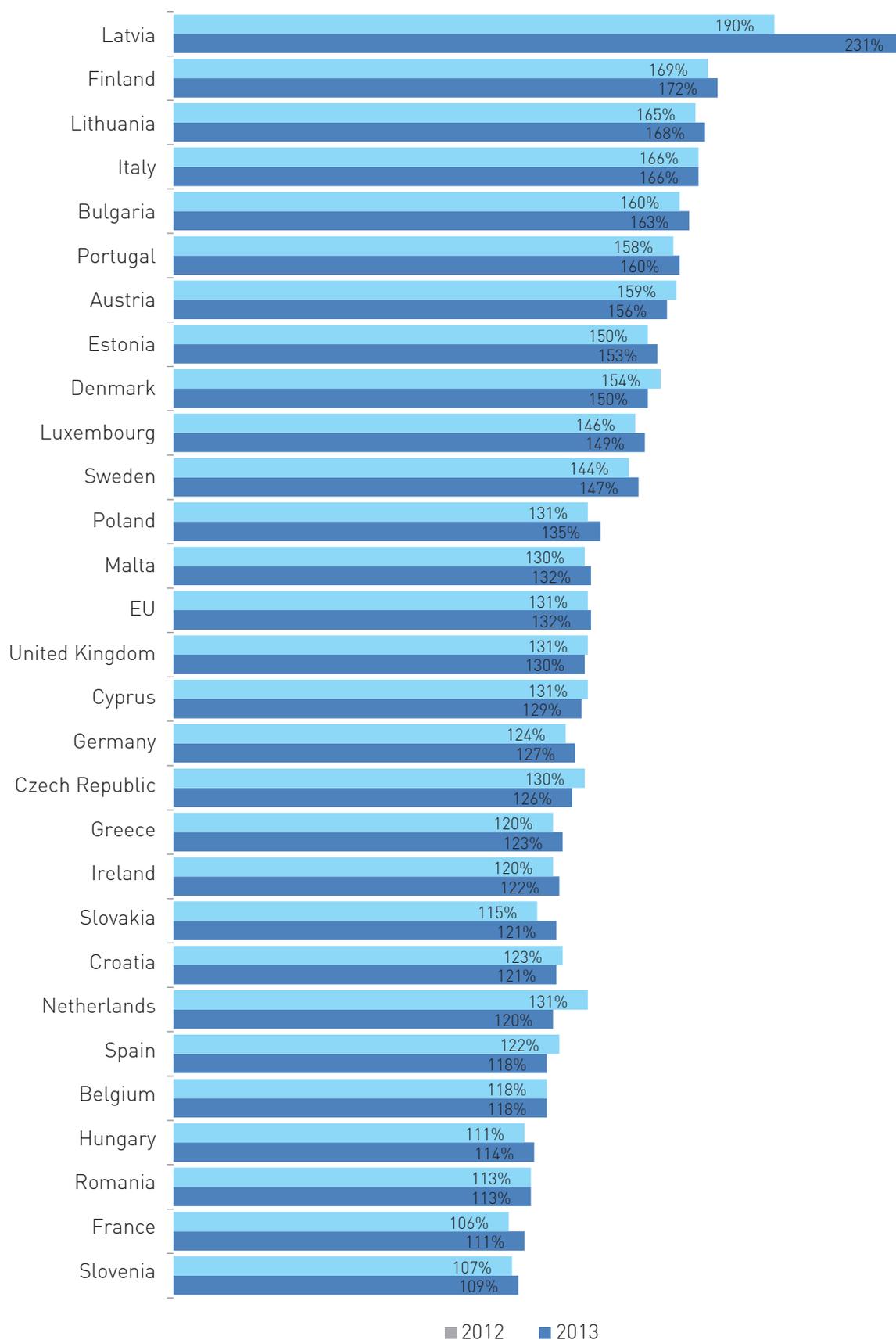


Source: EETT (based on data provided by licensed operators)



Chart 1.60

Mobile telephony penetration in the EU



Source: European Commission (DAS 2014)

1.2.4.2. The use of mobile telephony networks

The use of mobile telephony network continued to decline, given that with the exception of data services that were increased, the other categories (voice calls, short message services (SMS) and multimedia messaging services (MMS) declined.

Voice calls

- The volume of voice calls (based on wholesale interconnection) in 2013 amounted to 26.7 billion minutes in 2013, registering a marginal increase of 0.15% compared to 2012 (26.66 billion minutes) (Chart 1.61).
- The largest volume of calls was on-net traffic (between subscribers of the same network), which fell slightly from 19.9 to 19.3 billion minutes, but still constitutes 72% of the overall voice call volume, compared to 75% in 2012 (Chart 1.62).
- Both calls to off-net mobiles and fixed lines rose (21.6% and 1.9% respectively).
- International calls fell by 6.7% (Chart 1.63).

Chart 1.64 shows the volume of voice calls per user category, where for the first time pre-paid users fell below 50% (48.7%), followed by residential post-paid users (with a percentage around 37%) and business post-paid users (with a percentage of 14.2%).

Short message services (SMS)

- The total number of SMS fell - for yet another year - by 19% (5.9 billion in 2013 compared to 7.3 billion in 2012) (Chart 1.65).
- In 2013, the overwhelming majority of SMS were also on-net, which amounted to 82.1% (compared to 85.7% in 2012) whilst the number of off-net SMS increased (Chart 1.66).
- With respect to user category, SMS from pre-paid card users (that represent 65% of all SMS, compared to 73% in 2012), experienced the greatest drop, falling by 27.7%, amounting to 3.9 billion from 5.3 billion in 2012 (Chart 1.67).

Multimedia message services (MMS)

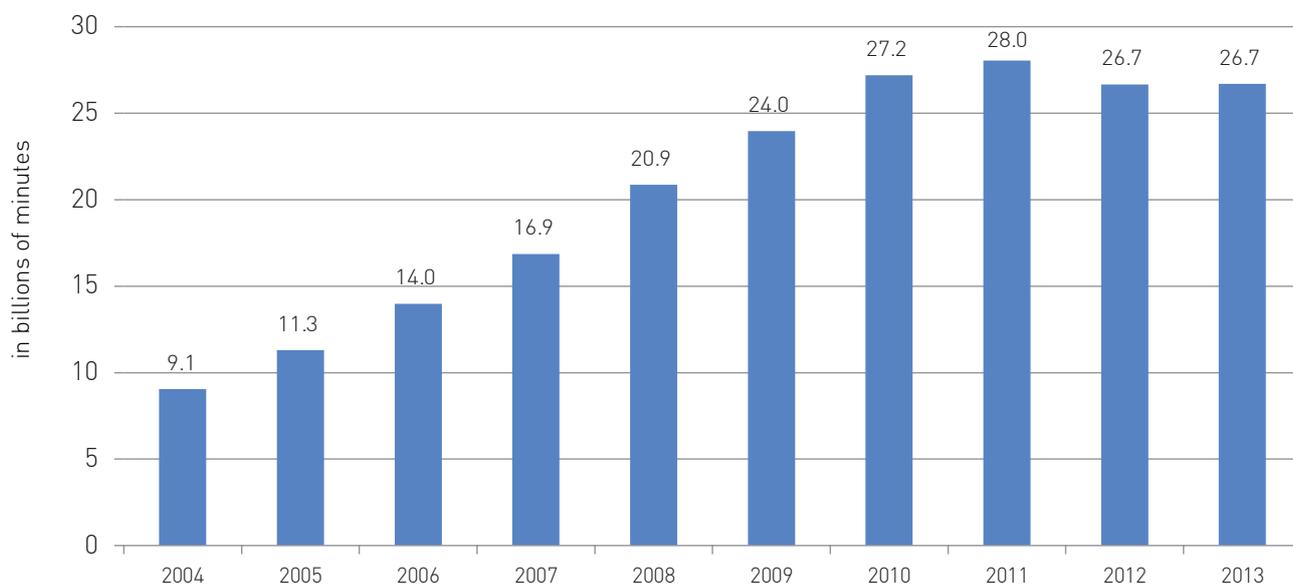
- MMS messages dropped significantly (17%) amounting to 16.8 million at the end of 2013 compared to 20.3 million in 2012 (Chart 1.68).
- For yet another year there was a new drop in MMS messages sent by pre-paid users, given that in 2013, 4.4 million MMS were sent compared to 5.7 million MMS (decreased by 17.2%) whilst the respective reduction for residential post-paid users was 18.1% (8.9 million MMS in 2013 compared to 10.8 million MMS in 2012) (Chart 1.69).

Data services

- Data services via mobile telephony networks increased significantly (up 35.8%) reaching 14.67 billion MB for 2013 compared to 10.8 billion MB in 2012 (Chart 1.70).
- Residential post-paid users accounted for 58%, pre-paid users for 27% and business post-paid users for 14%.

Chart 1.61

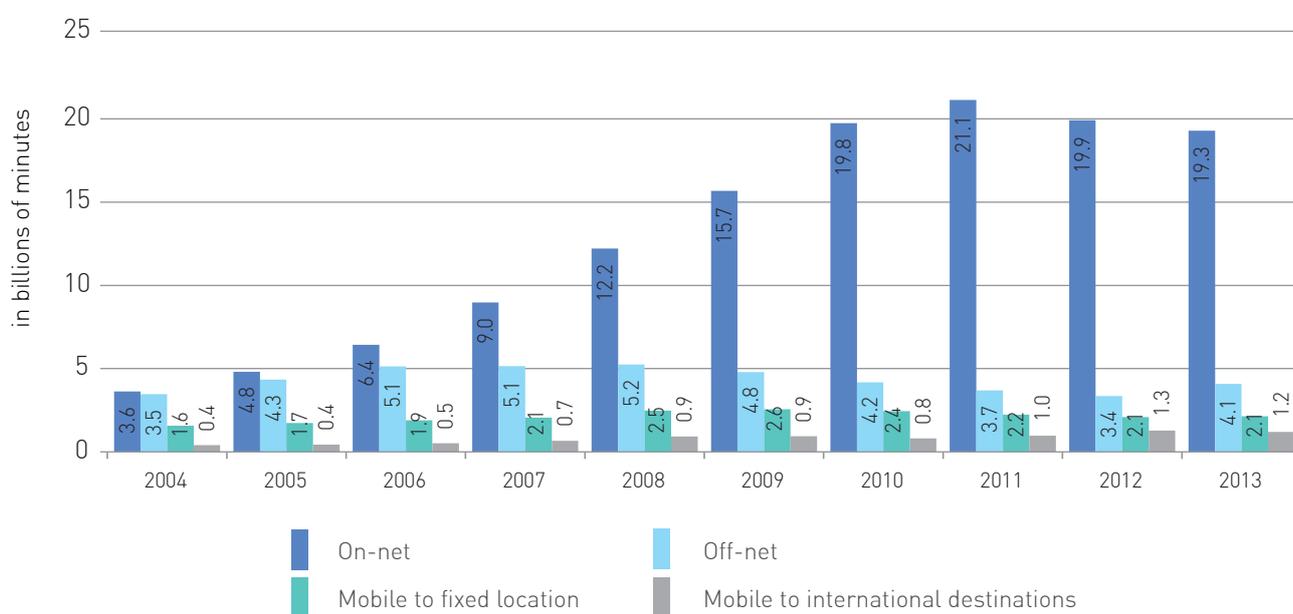
Volume of voice calls originating from mobile phones



Source: EETT (based on data provided by licensed operators)

Chart 1.62

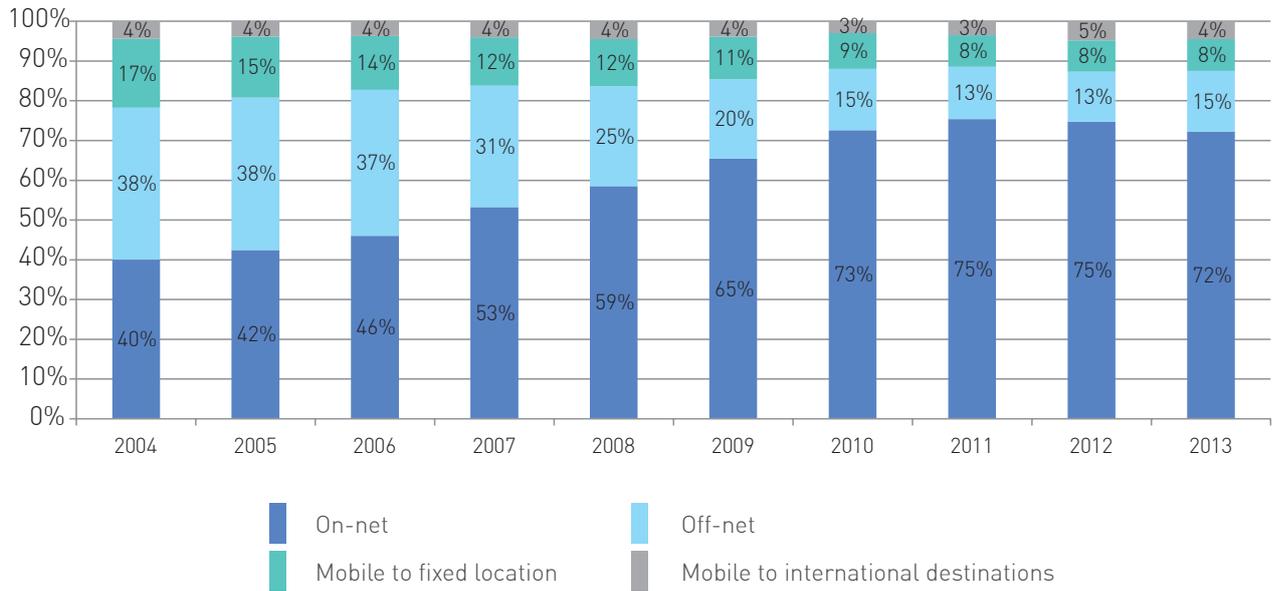
Volume of voice calls per category



Source: EETT (based on data provided by licensed operators)

Chart 1.63

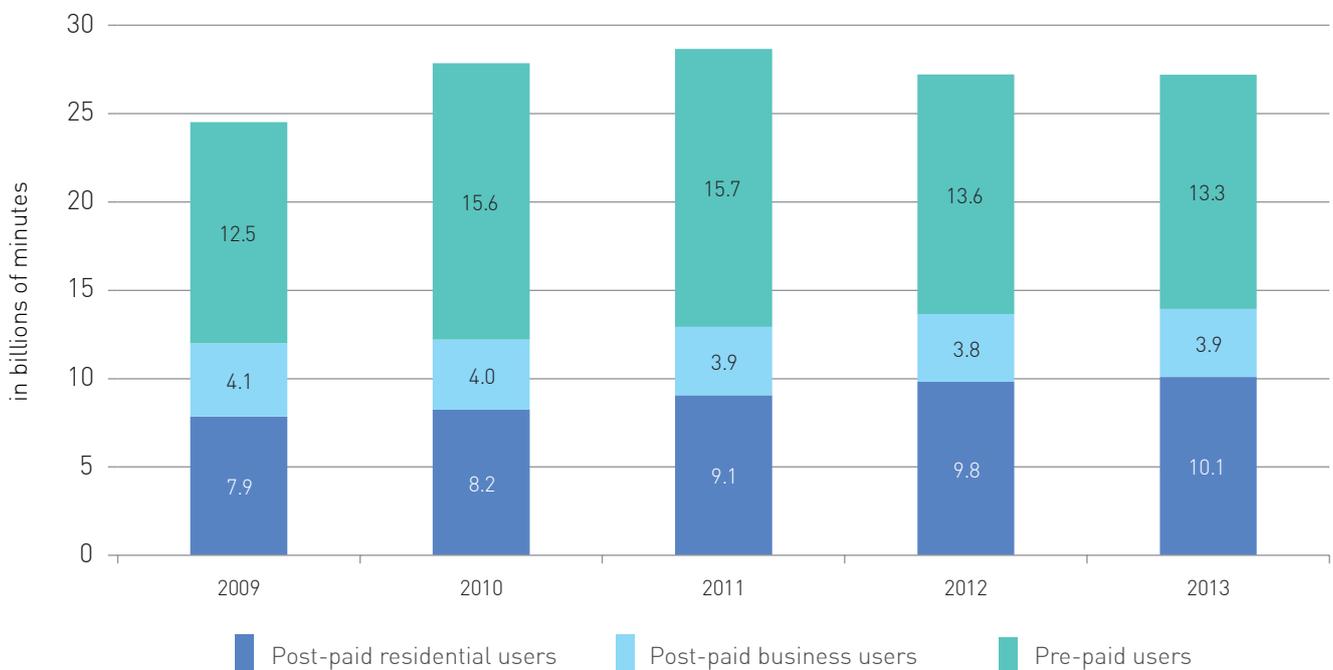
Percentage of voice calls per category



Source: EETT (based on data provided by licensed operators)

Chart 1.64

Volume of voice calls per user category

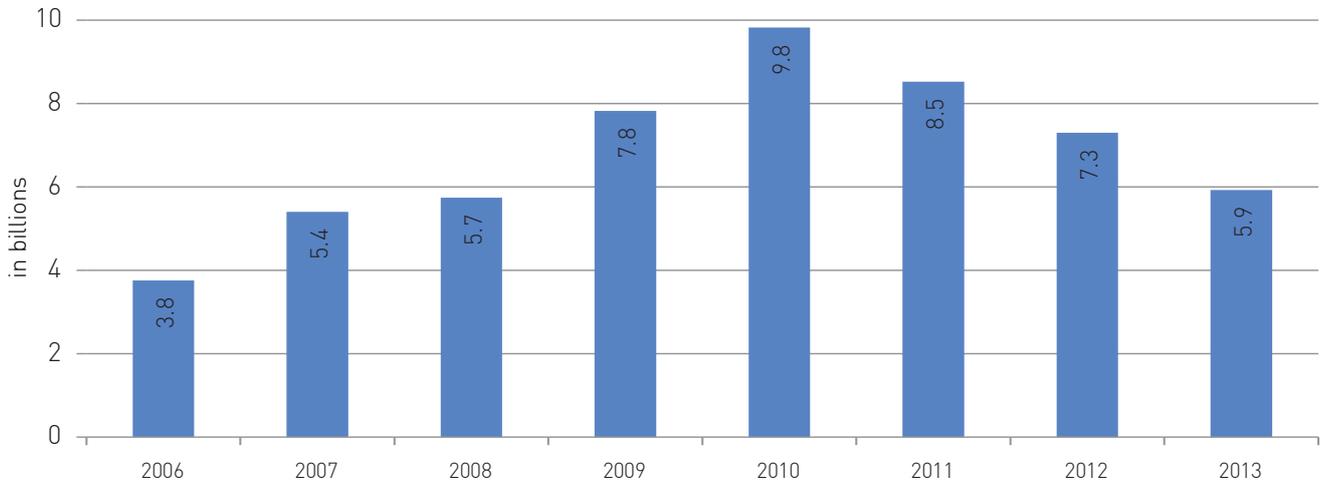


Source: EETT (based on data provided by licensed operators)



Chart 1.65

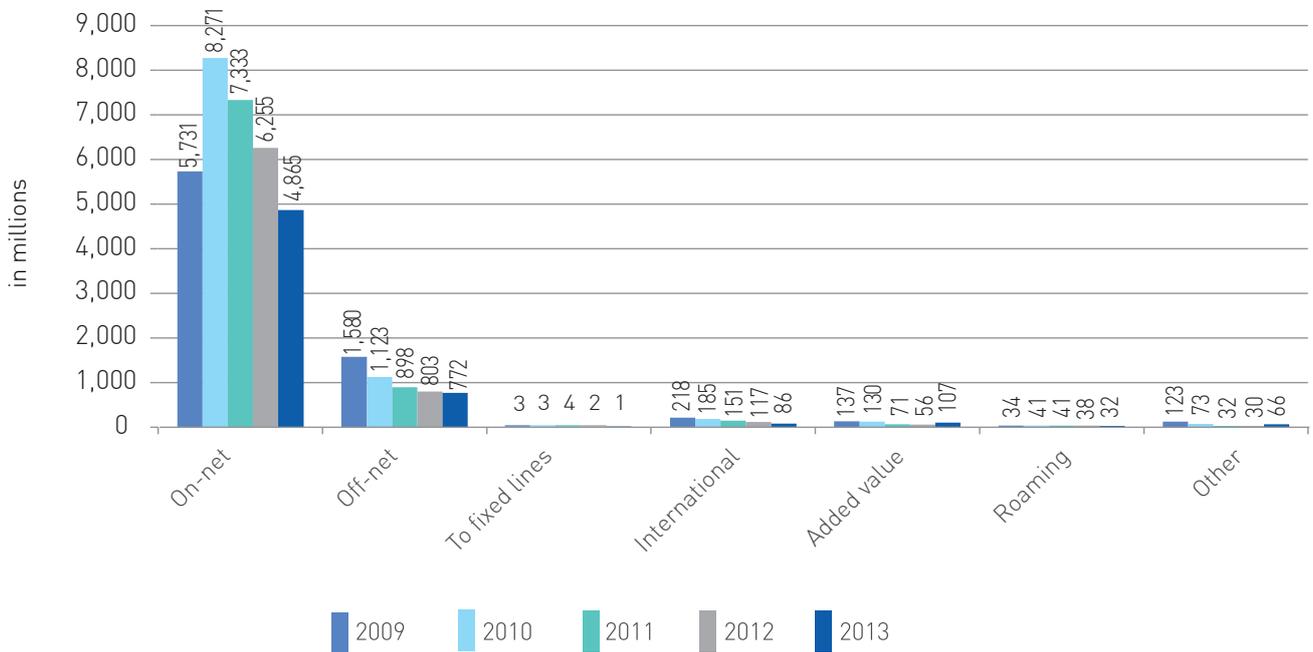
Total number of SMS



Source: EETT (based on data provided by licensed operators)

Chart 1.66

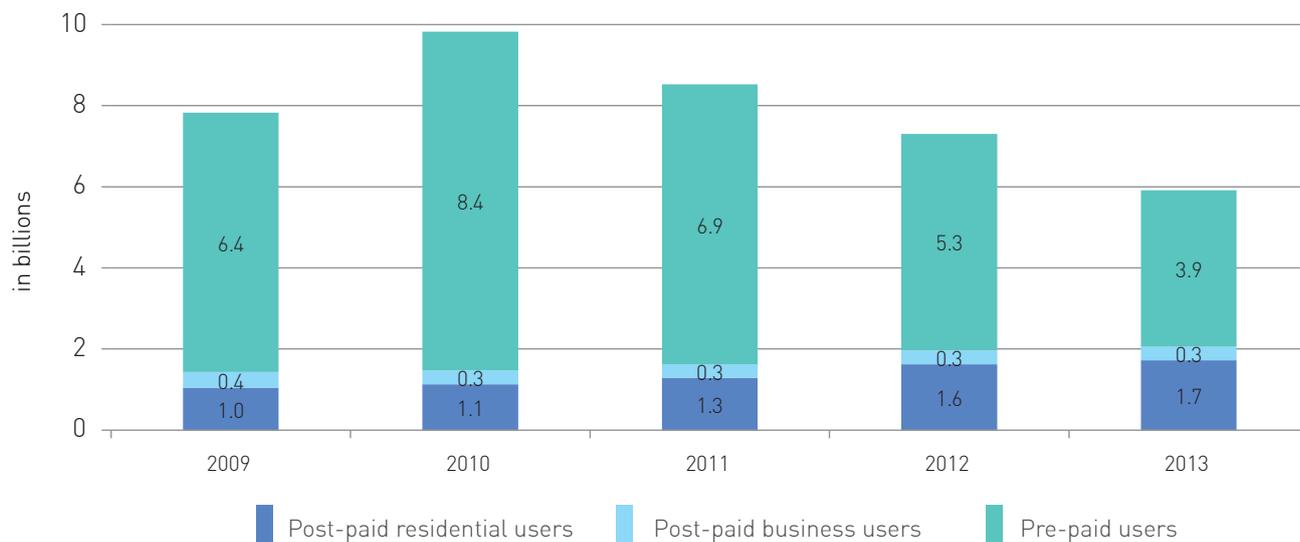
Total number of SMS per category



Source: EETT (based on data provided by licensed operators)

Chart 1.67

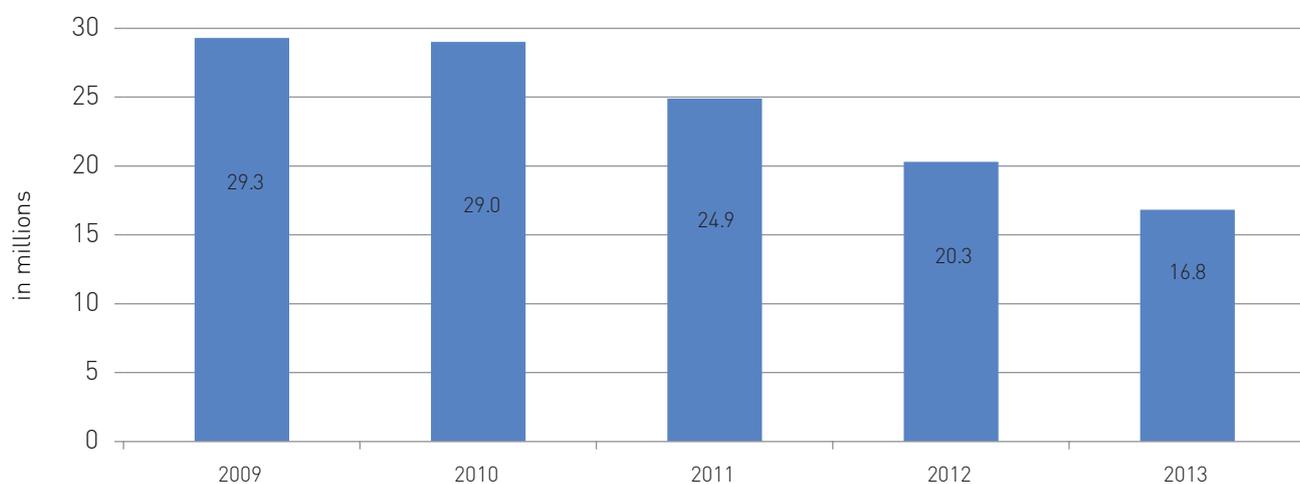
Number of SMS per user category



Source: EETT (based on data provided by licensed operators)

Chart 1.68

Total number of MMS



Source: EETT (based on data provided by licensed operators)



Chart 1.69

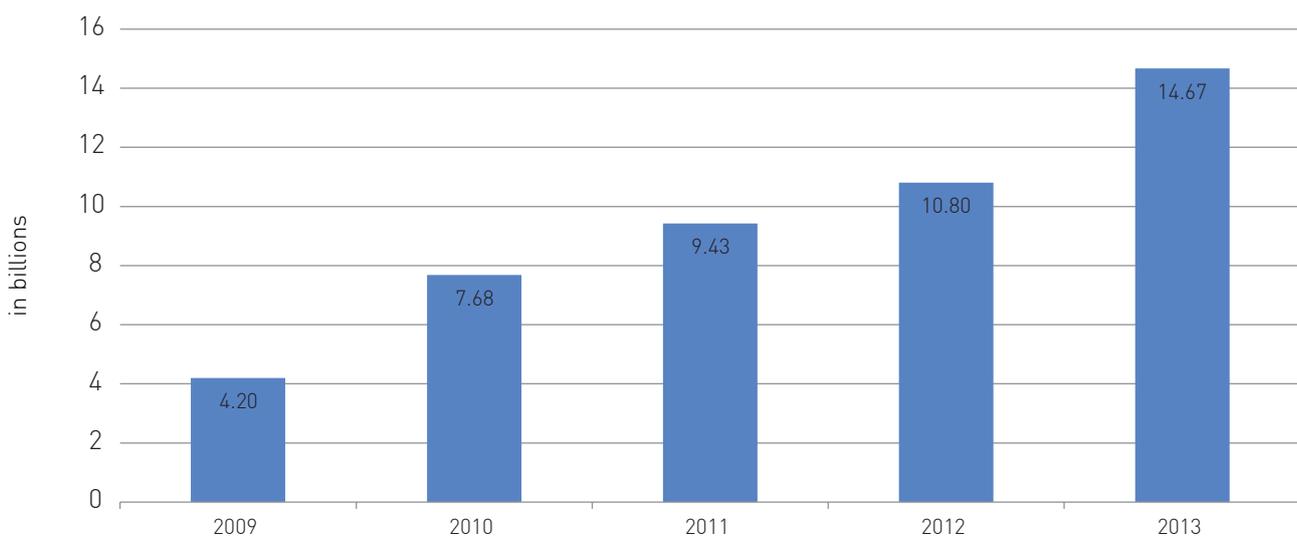
Number of MMS per user category



Source: EETT (based on data by licensed operators)

Chart 1.70

Total number of packet-switched data services (in MB) via mobile



Source: EETT (based on data provided by licensed operators)

1.2.4.3. Comparing traffic from fixed to mobile phones

The volume of calls from mobile phones, which since 2008 had exceeded the respective calls from fixed phones, did not change significantly [a marginal increase of 0.1% compared to 2012] and corresponded to 59% of total traffic (compared to 58% in 2012). Calls from fixed phones continued their downward trend and in 2013 amounted to 18.3 million minutes, compared to 18.9 million minutes in 2012 (down 3.2%). Charts 1.71 and 1.72 present traffic volume from fixed and mobile phones and the respective market shares, taking into account national fixed calls, to mobile phones, as well as international calls.

Chart 1.71

Volume of calls from fixed and mobile phones

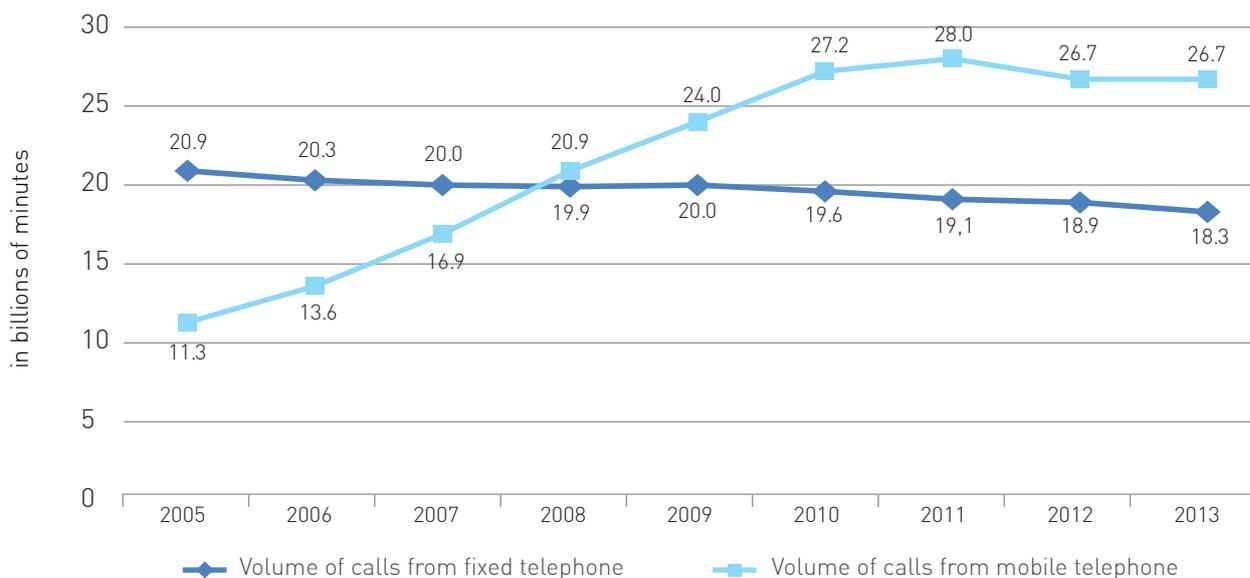
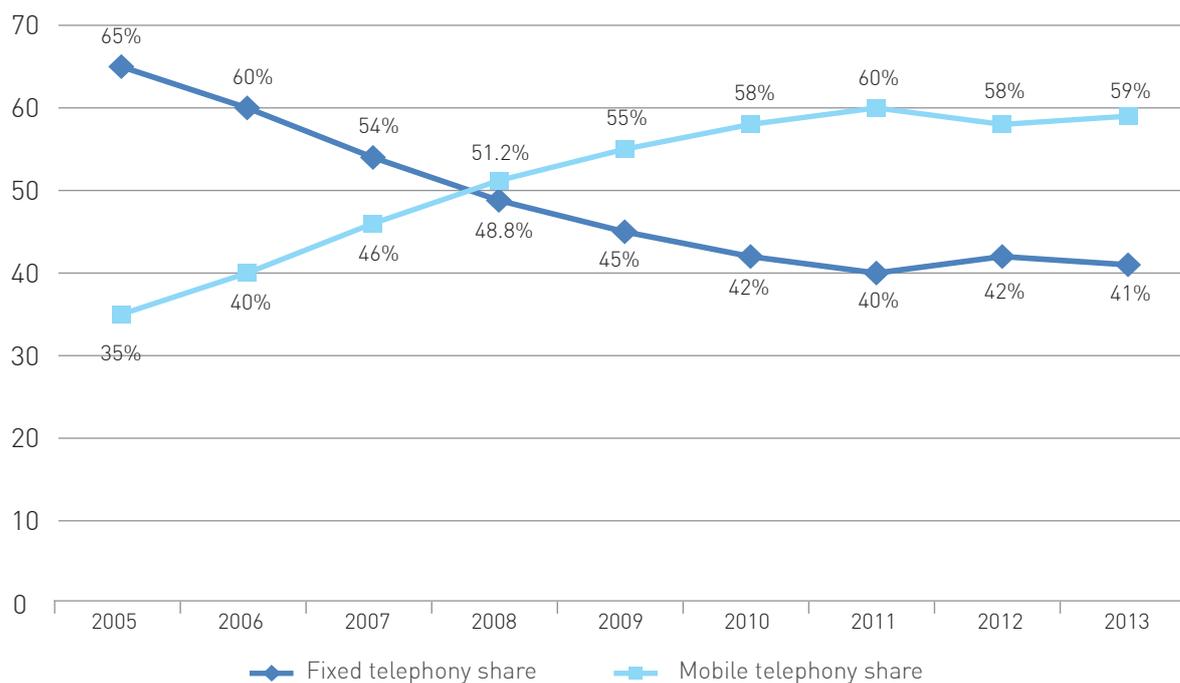


Chart 1.72

Market shares of fixed and mobile telephony



Source: EETT (based on data provided by licensed operators)



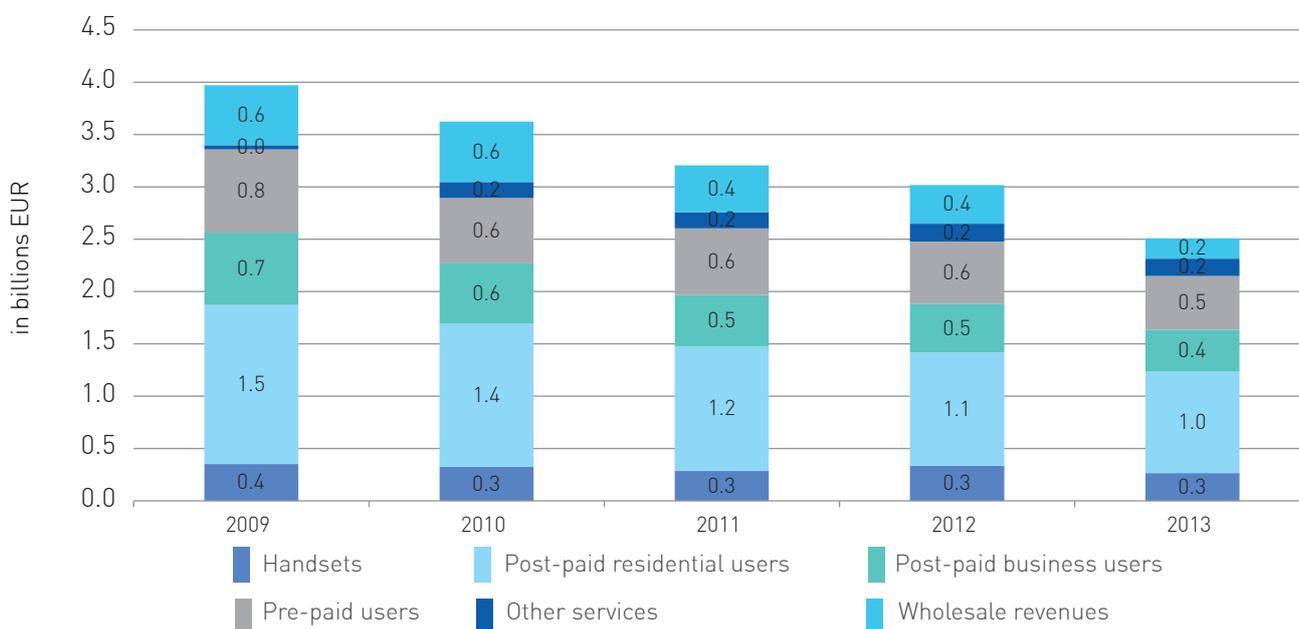
1.2.4.4. Mobile telephony revenues

Mobile telephony retail revenues per category (handsets, post-paid, pre-paid etc.) fell by 16.8% amounting to 2.5 billion euros (compared to 3 billion euro in 2012) (Chart 1.73). Individual revenue categories also shrank, with the largest drop experienced by wholesale revenues due to the reduction in termination rates (176 million euro), post-paid user revenues (174 million euro) and pre-paid (85 million euro).

The average revenue per post-paid and prepaid user amounted to 288 euro (decreased by 14.5%) and 61 euro (decreased by 17%) respectively, compared to the previous year (Chart 1.74). As regards the average revenue per mobile telephony user in the EU member states (2012 data), Greece with 168 euro (compared to 190 euro in 2012) continues to be below the EU average (187 euro) (Chart 1.75).

Chart 1.73

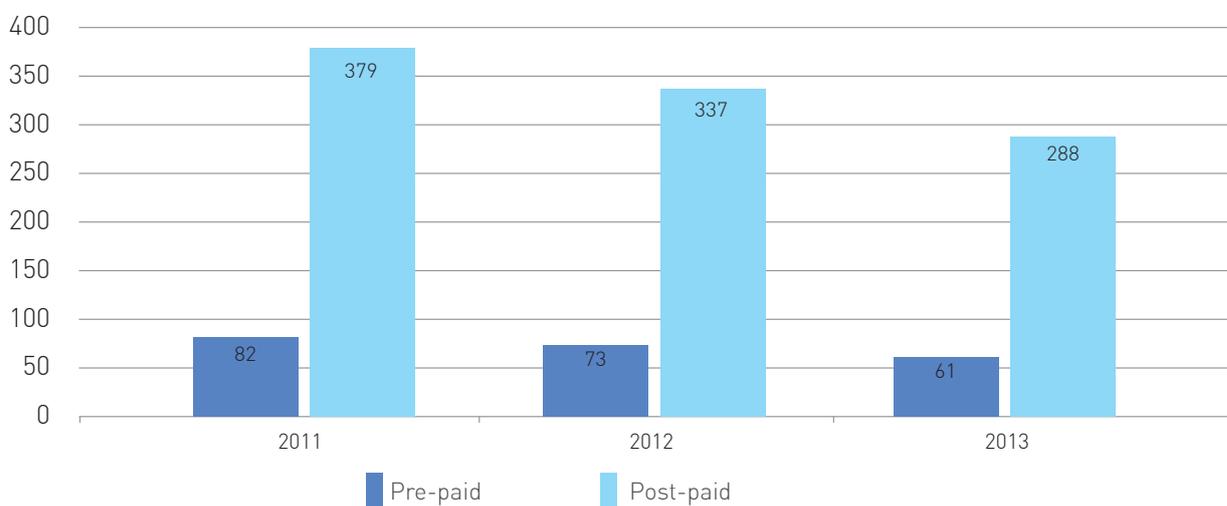
Mobile telephony retail revenues



Source: EETT (based on data provided by licensed operators)

Chart 1.74

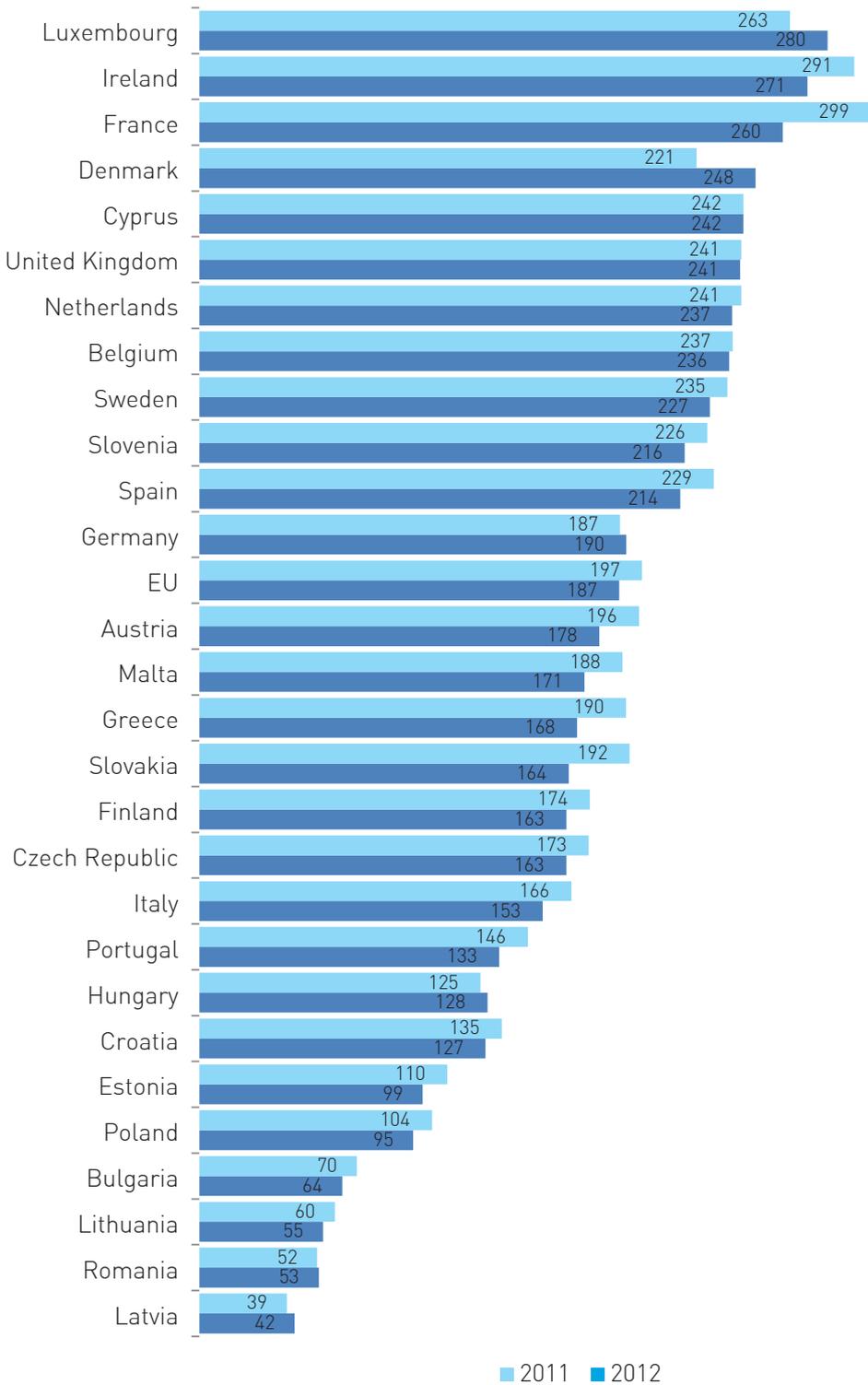
Average revenue per mobile user



Source: EETT (based on data provided by licensed operators)

Chart 1.75

Average revenue per user (ARPU) for mobile telephony in the EU



Source: European Commission (DAS)

1.2.5. Interconnection

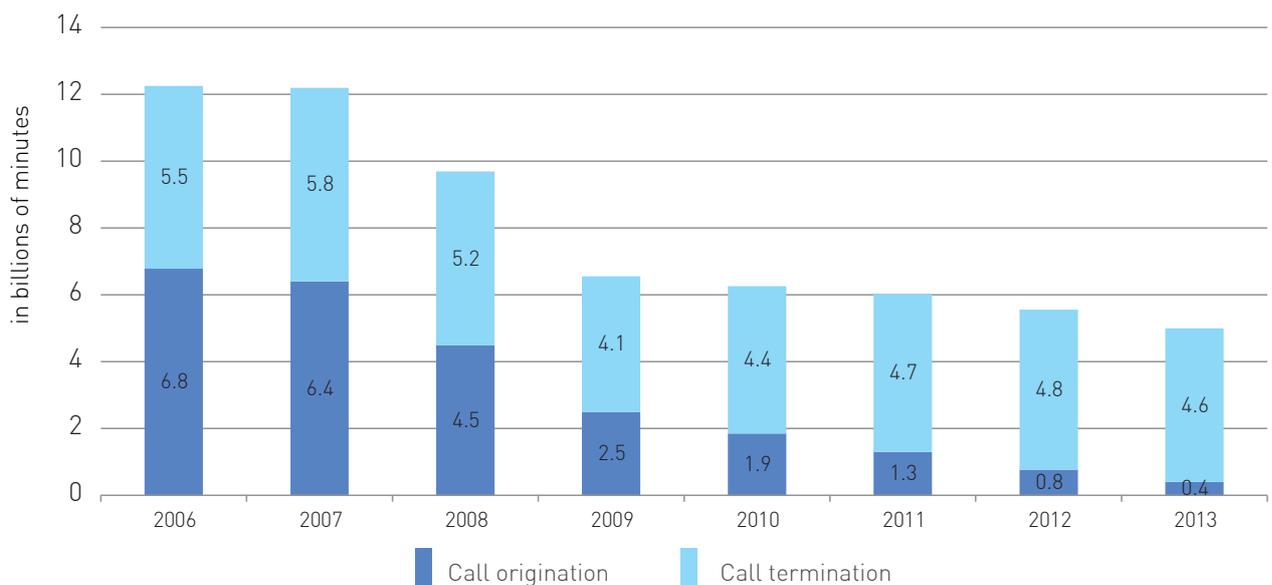
1.2.5.1. Fixed telephony

During 2013, call origination dropped by almost half compared to 2012 and amounted to 404 million minutes (decreased by 47% compared to 2012). Similarly, call termination was marginally decreased by 4% compared to 2012 (4.59 billion minutes compared to 4.79 billion minutes respectively). The reduction in the call origination volume is attributed to the significant growth of full LLU lines since, in this case, the subscriber is directly connected to the alternative operator's network without the interference of OTE's network and the call origination procedure is consequently rendered unnecessary. Chart 1.76, presents the annual progress of Interconnection traffic for the OLOs, including call origination and termination from/to OTE's network.

Charts 1.77-1.79 present the actual local, single and double termination fees in the EU member states, according to the Body of European Regulators for Electronic Communications (BEREC). The data show that Greece is among the countries with the lowest charges, given that at the end of 2013, it was ranked 11th for local fee, 9th for the single and 5th for the double fee, thus being in all three cases below the EU average.

Chart 1.76

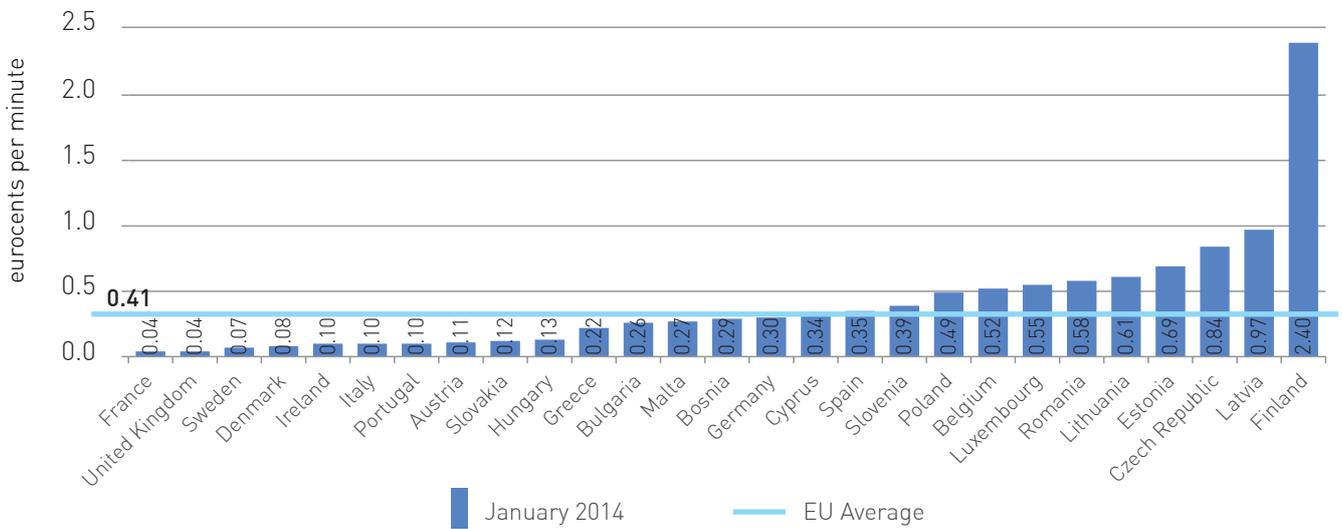
Interconnection traffic of alternative operators via OTE



Source: EETT (based on data provided by licensed operators)

Chart 1.77

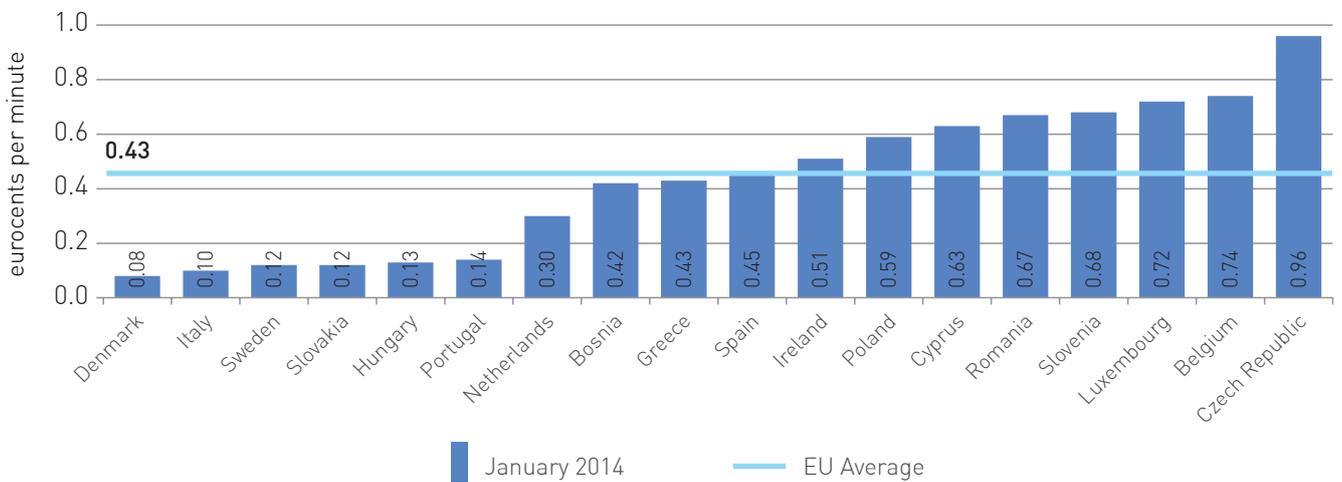
Actual local interconnection fees



Source: BEREC

Chart 1.78

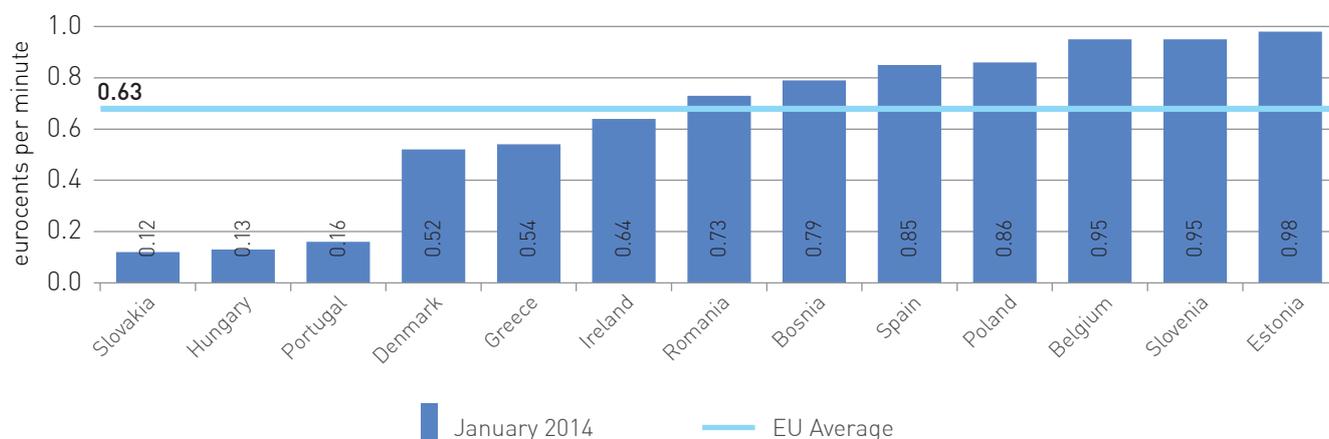
Actual single interconnection fees



Source: BEREC

Chart 1.79

Actual double interconnection fees



Source: BEREC

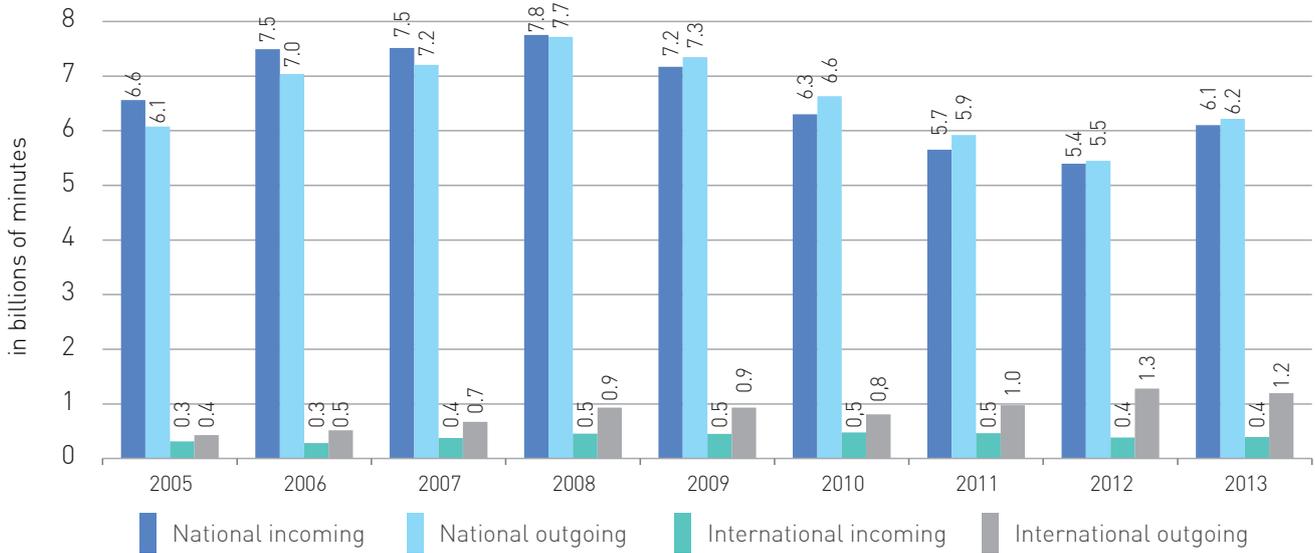
1.2.5.2. Mobile telephony

The Interconnection traffic for MTOs in 2013 increased significantly, as shown in Chart 1.80, which presents the national and international Interconnection (incoming and outgoing) traffic for the three MTOs. In total, the increase amounted to 11% compared to 2012, namely an increase of 1.4 billion minutes approximately on an annual basis. Additionally, national outgoing traffic increased by 14%, while national incoming traffic increased by 13%. In 2013 on-net traffic for the three MTOs amounted approximately to 19.3 billion minutes, a reduction of approximately 3.2%, compared to 2012 (approximately 640 million), accounting for 58% of the total Interconnection traffic (which includes both incoming and outgoing traffic)(Chart 1.81). At the same time, the gradual reduction of termination rates in the mobile telephony networks continued. Rates are now at 1.27 eurocents per traffic minute (Chart 1.82).

Chart 1.83 presents the Average National Termination Rate to mobile telephony networks for the 28 EU member states (comparing years 2013 and 2014). Greece, in the aftermath of the new reduction in termination rates (glide path) that took place on 01-01-2014, now ranks 13th, with an average termination rate of 1.19 cents per minute compared to the EU average of 1.80 (Chart 1.84).

Chart 1.80

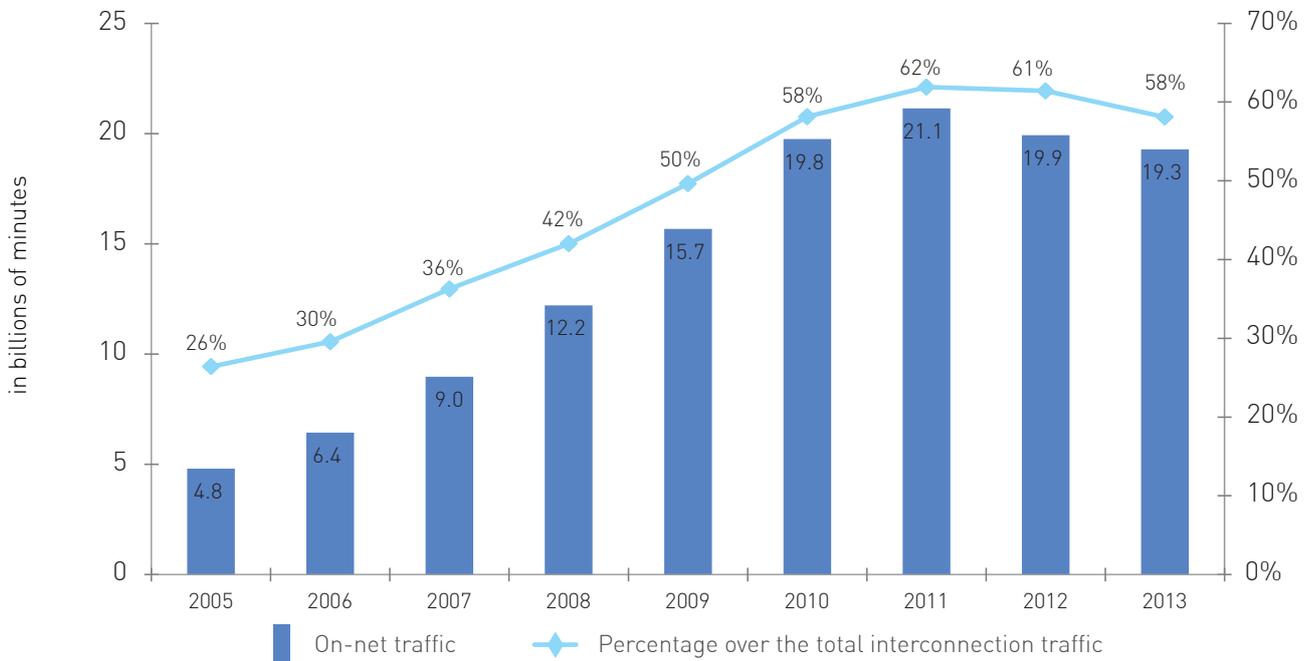
Interconnection traffic of the mobile telephony operators



Source: EETT (based on MTOs data)

Chart 1.81

On-net traffic of the mobile telephony operators



Source: EETT (based on MTOs data)



Chart 1.82

Reduction of mobile termination fees

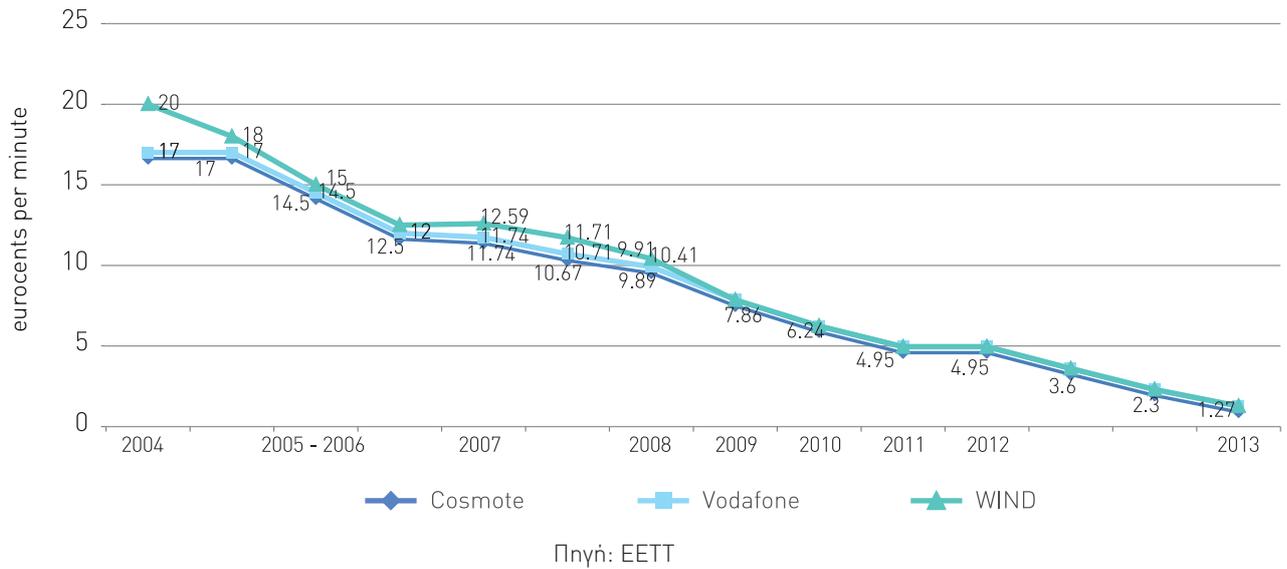


Chart 1.83

Average national termination fee from fixed to mobile phone

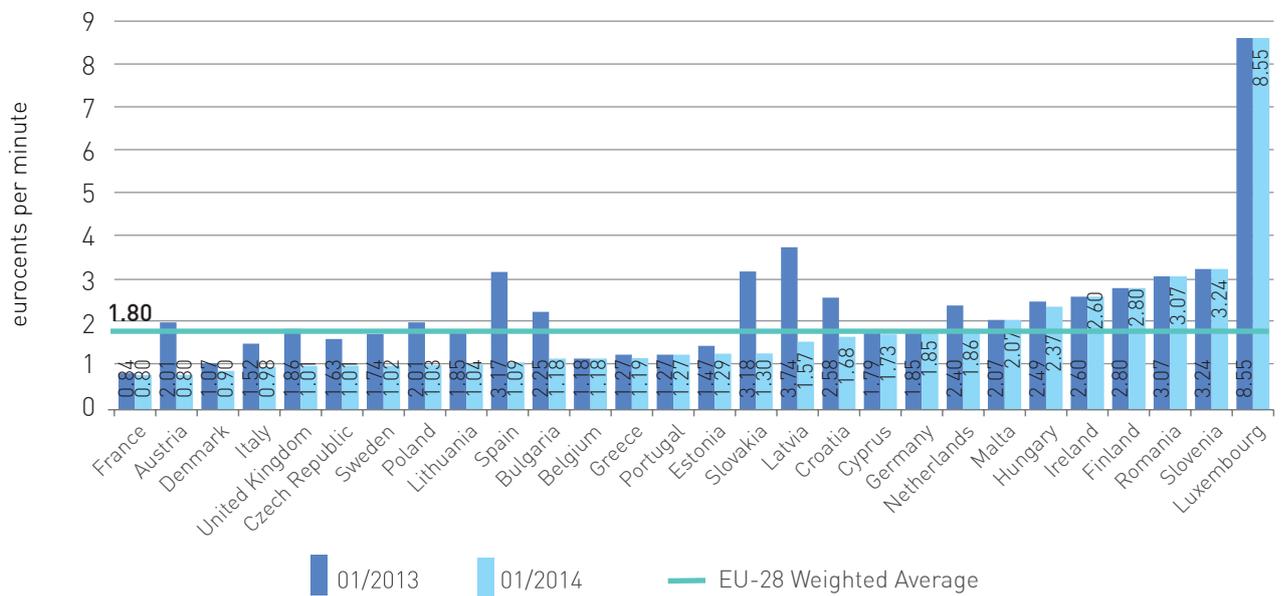
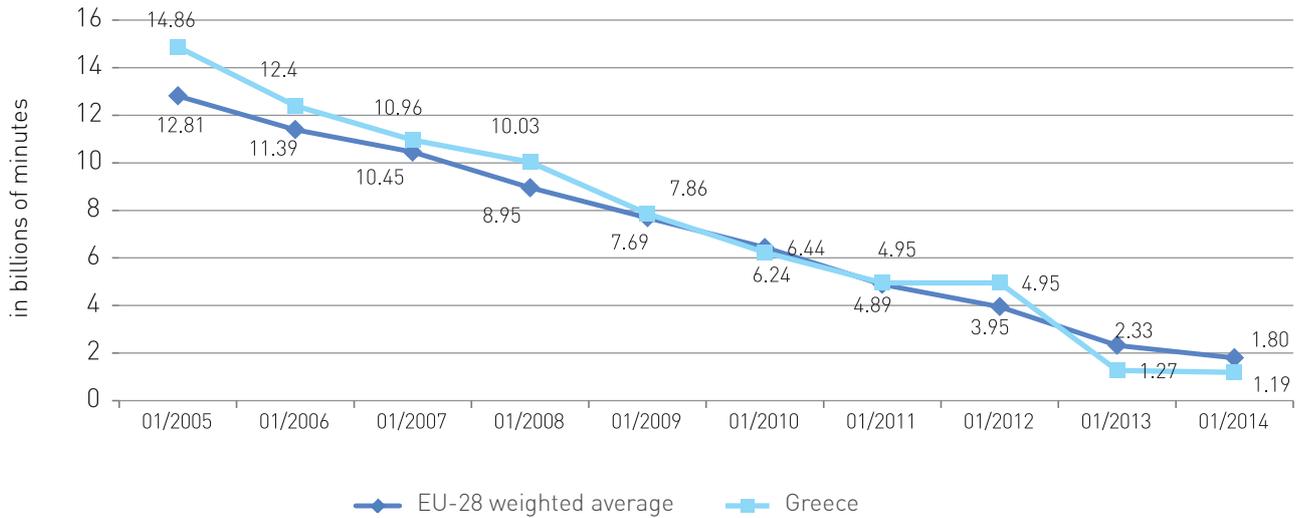


Chart 1.84

Average national termination fee from fixed to mobile phone



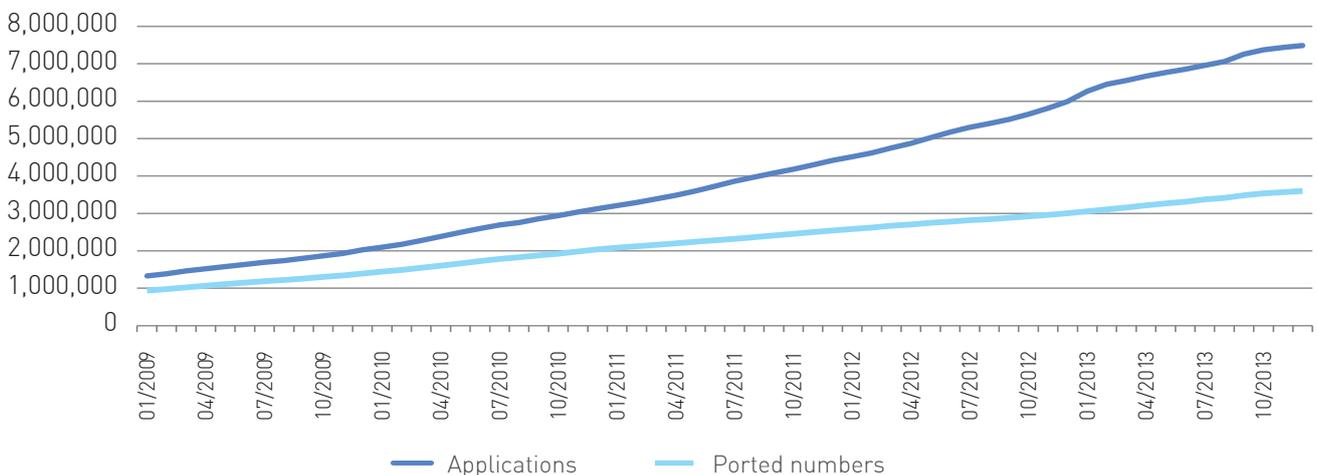
Source: BEREC

1.2.6. Number portability

Number portability continues to benefit consumers who wish to change operator, both in mobile and fixed telephony. During 2013, 1,497,198 applications for mobile telephony numbers were submitted (compared to 1,572,095 applications in 2012, in other words an increase of 4.8%) and 589,368 numbers were ported (increased by 28.1% compared to 2012). In fixed telephony, 1,214,209 applications were submitted (compared to 1,032,994 applications in 2012, in other words an increase of 17.5%) and 580,077 numbers were ported (increased by 10.2% compared to 2012). Charts 1.85 and 1.86 show the progress of applications and of ported numbers for mobile and fixed telephony, whilst Chart 1.87 presents the ported numbers per month.

Chart 1.85

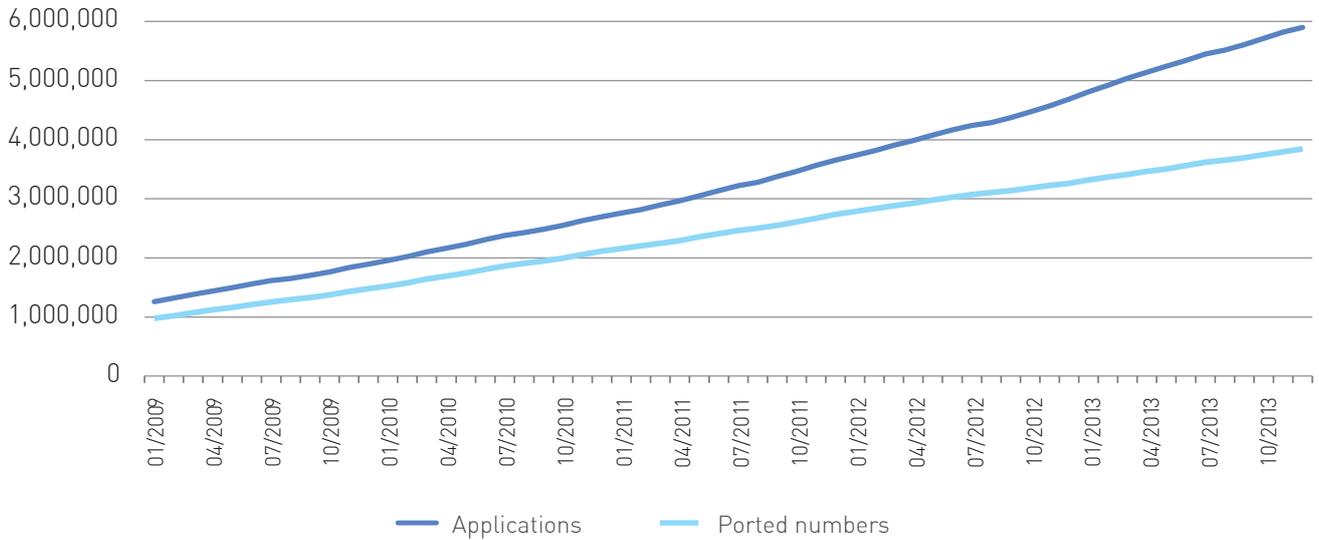
Number portability for mobile telephony



Source: EETT

Chart 1.86

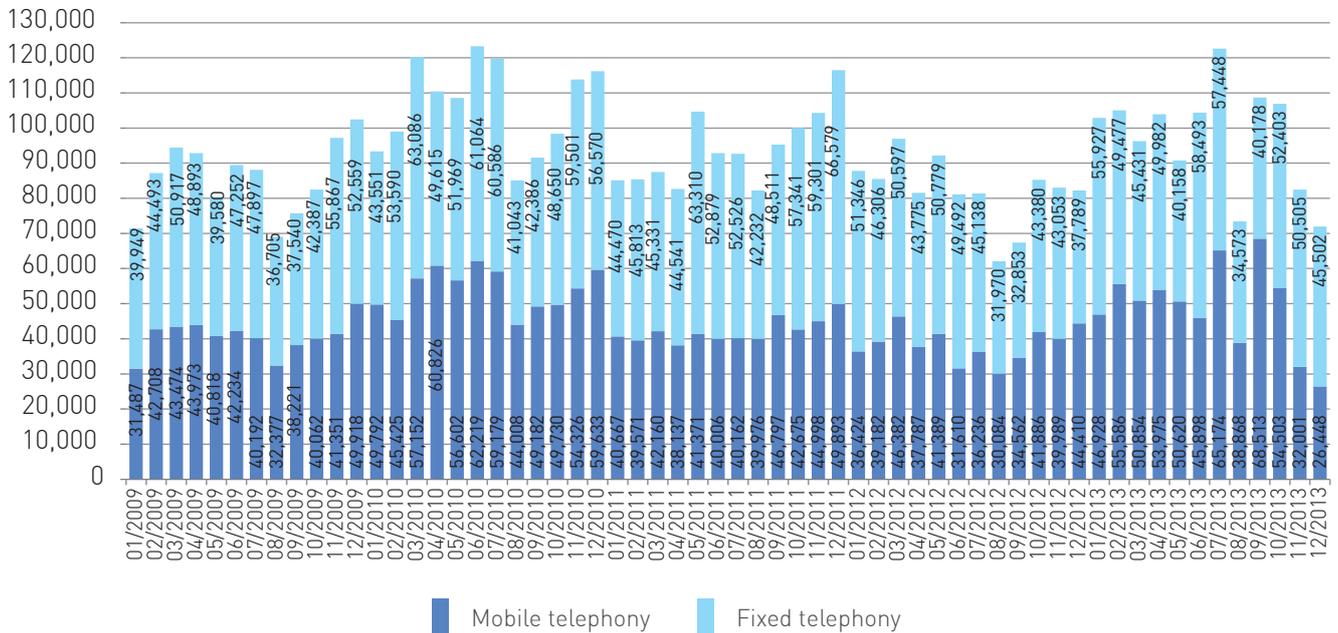
Number portability for fixed telephony



Source: EETT

Chart 1.87

Number portability: ported numbers per month



Source: EETT

Postal
Services
Market

2



Postal Services Market

2.1. The course of the postal market: trends, developments and prospects

2.1.1. Globally

In 2012 the total turnover of the global postal market reached 422.6 billion euro, increased by 2% with respect to the previous year. It should be noted that despite the above increase, revenues from letter mail dropped 1.6 billion euro.

Postal market financials vary significantly between emerging and developed markets. Specifically, the greatest increase in revenues was experienced in BRICS countries (Brazil, Russia, India, China and South Africa), a fact obviously linked to their higher growth rates, compared to Europe and America (as well as in Oceania). On the other hand, in 2012 in both N. America and Europe, postal revenues declined marginally compared to the previous year. A common characteristic in all markets is the increase in parcels handled and the reduction in letters. Nevertheless, and despite the continued decline in their volume, letter mail generates almost half the revenues of the global postal market (47.1%).

According to the annual report of the Universal Postal Union (UPU) for 2012, at a global level:

- 350 billion letters and 6 billion parcels were delivered,
- 83.5% of the world population was benefited from mail delivery to their homes, whilst 350 million people did not have access to postal services,
- 142 countries used post codes and 5.5 million people were employed by public postal companies,
- 55 different kinds of electronic services were offered by postal companies (such as SMS notification upon delivery, electronic printing, monitoring the delivery stage of the postal item on the Internet, purchasing postal services online, issuing and sending electronic bills and invoices, etc.).

The priorities for the next period, as reflected in UPU's international strategy are the following:

- improve the interoperability of the international postal networks;
- provide technical knowledge and expertise related to the postal sector;
- promote innovative products and services; and
- foster the sustainable development of the postal sector.

Moreover, it should be noted that a critical parameter with an important impact on postal services is the ongoing development of technology and the replacement of traditional modes of communication with emails and new web applications. E-commerce is expected to increase by 20% in 2014, exceeding 2 trillion euro. Therefore, the prospects for postal services that harness this new dynamic trend are extremely positive, as the delivery of the products by post is a critical step in the process and an important success factor for e-sales. Chart 2.1 shows that consumers attach a great deal of importance to issues related to product delivery.

Chart 2.1

Consumers' online shopping motivators



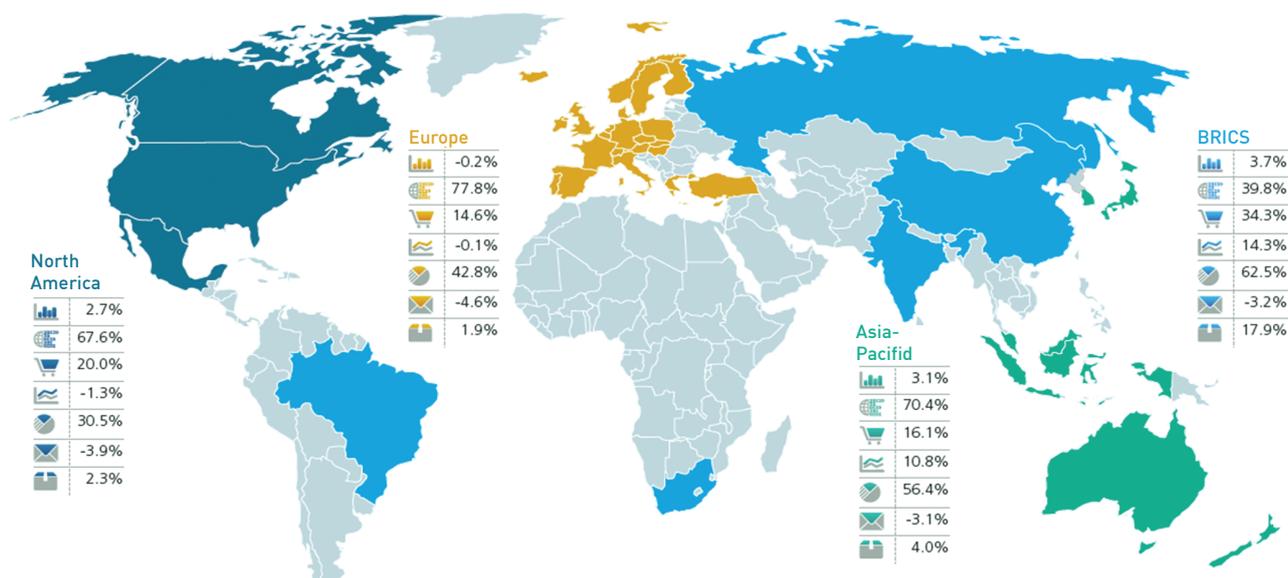
Source: "Same Day Delivery Consumer Survey", The Boston Consulting Group, May 2013

The trends that are expected to have a major impact on postal services are the following:

- increase in the use of mobile devices (smart phones, tablets) and online shopping through them; in 2014, the percentage of online shopping through mobile devices was on the rise for all product categories;
- increase in cross-border online shopping with a simultaneous increase in postal services and items sent abroad;
- multinational commercial culture development with a view to adjust to local habits, traditions and special features of individual national markets (e.g. celebrating national holidays in each country) with the purpose of boosting sales and shipping volume; and finally,
- increase of the number of brand names that have international online shops, as well as intensification of the competition and greater difficulty in establishing world positioning.

Image 2.1

Global statistics & postal data



Total Market			Postal Market		Postal Volume	
Economy	Digitisation	Electronic Commerce	Revenues	Diversification	Letter Mail	Parcels
GDP 2011-12	Internet users 2012	Online retail	Revenues 2011-12	Non mail revenue (%)	Volume 2011-12	Volume 2011-12

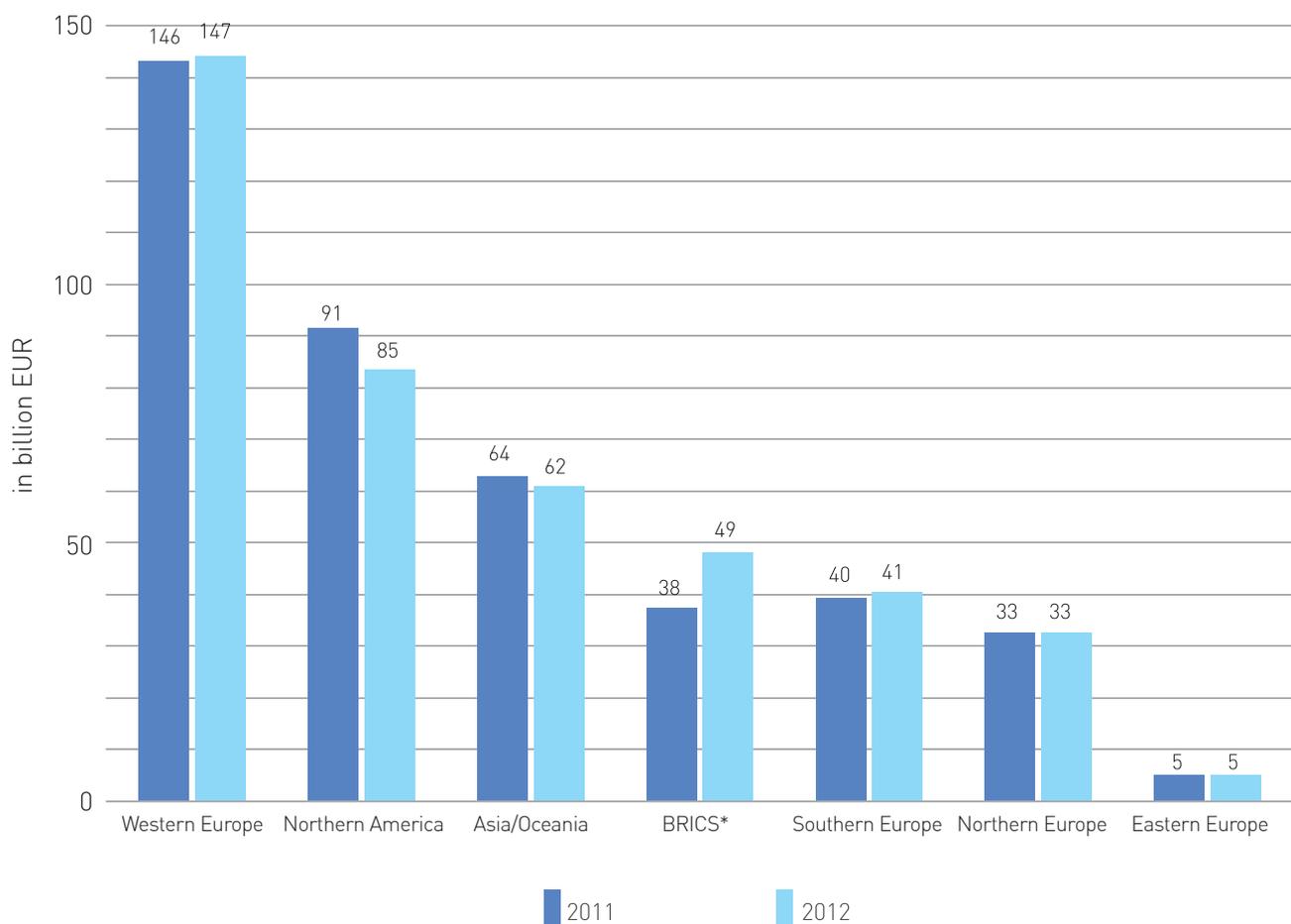
Source: IPC Global Postal Industry Report Key Findings December 2013 - © International Post Corporation, 2013, all rights reserved (processed by EETT)

2.1.2. In Europe

In 2012, according to recent data, Europe was placed in the first place internationally, both in terms of postal revenues, as well as in terms of revenues from e-commerce, which reached 301 billion euro, the second largest market being North America with 284 billion euro. Chart 2.2. demonstrates the revenues from the international postal market per geographical region.

Chart 2.2

Postal market revenues per geographical region



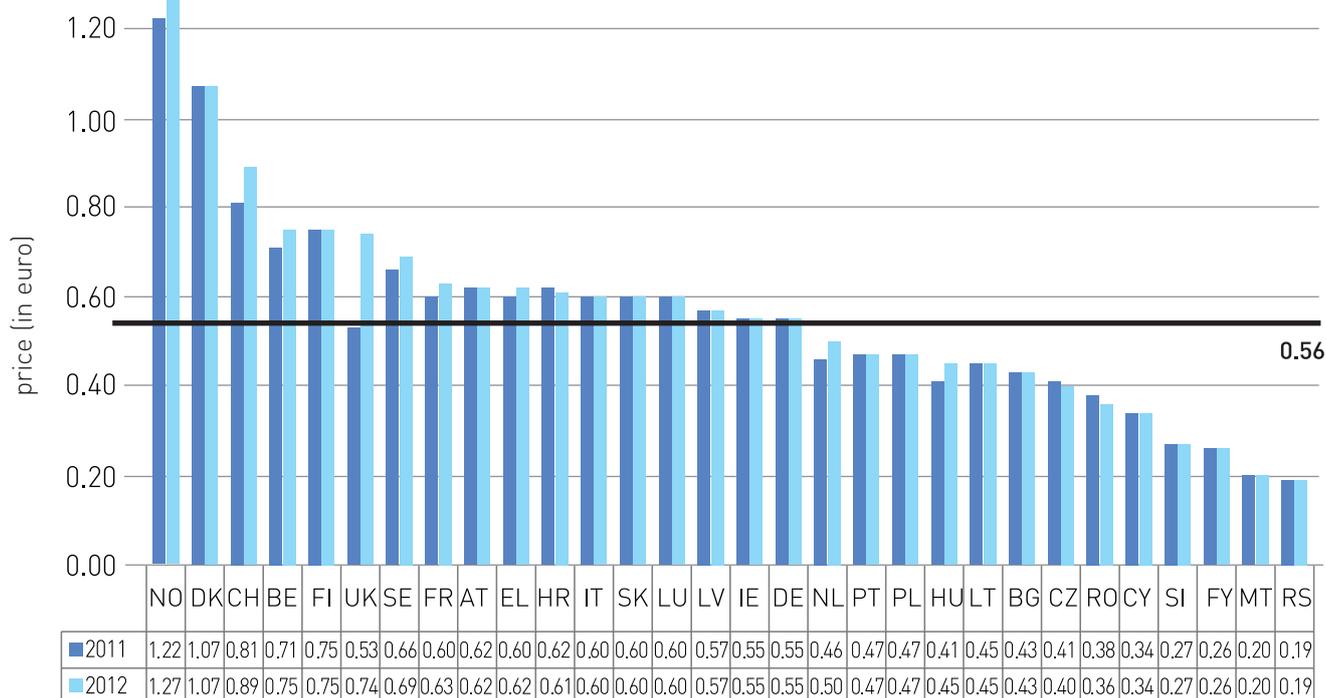
*Brazil, Russia, India, China and South Africa

Source: IPC Global Postal Industry Report Key Findings December 2013 - © International Post Corporation, 2013, all rights reserved (data processed by EETT)

Nevertheless, it should be noted that there are important differences amongst European countries in a range of issues related to postal services, the most important being the price/rate of posting a letter by standard post. In 2012, the average price for posting a priority letter mail was 0.56 euro. Norway was the country with the highest price (1.27 euro) in Europe, while Serbia was the country with the lowest price (0.19 euro). The rate for Greece was 0.62 euro, placing the country higher than the European average, whilst in mid 2013 the price rose to 0.72 euro. It should be noted that sending a postal item with the Universal Service Provider (USP) is not subject to VAT in any of the European countries shown in Chart 2.3, except from Sweden.

Chart 2.3

Price of domestic first priority letter weighing less than 20 gr (in euro)

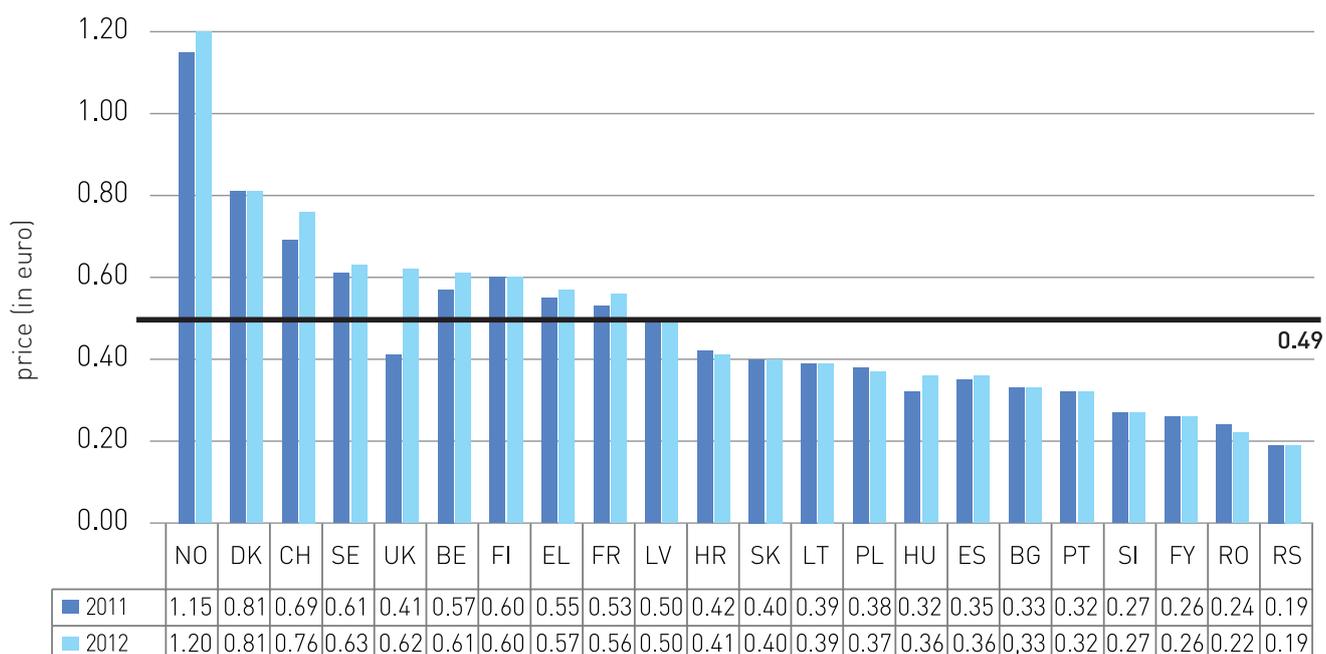


Source: ERGP Report on indicators on the postal market, May 2014

Similarly in the domestic non priority mail, Norway was the country with the highest price (1.20 euro), while Serbia was the country with the lowest (0.19 euro). The rate for Greece was 0.57 and was above the EU average (0.49 euro).

Chart 2.4

Price of domestic non-priority letter weighing less than 20 gr (in euro)

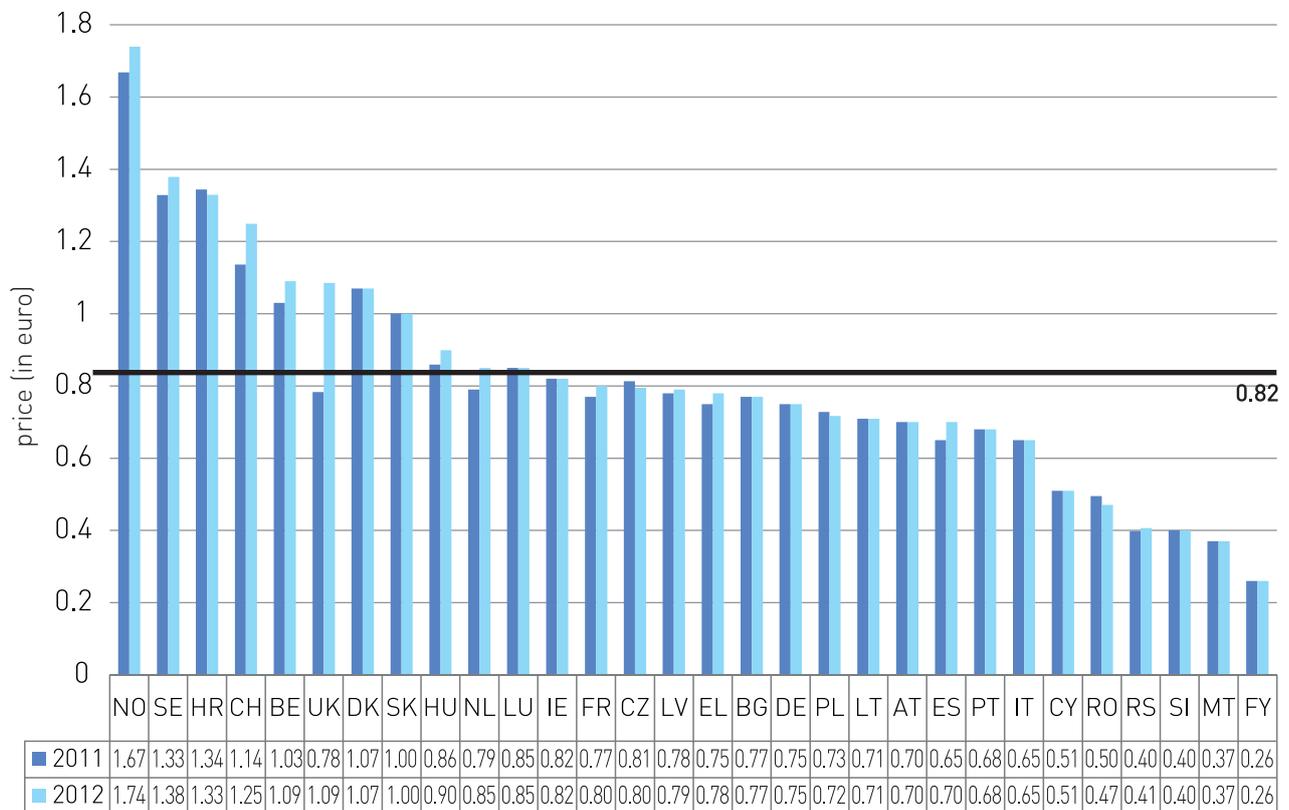


Source: ERGP Report on Indicators on the postal market, May 2014

International letter pricing presented a similar picture (Chart 2.5), with Norway, once again, having the highest price (1.74 euro), whilst the Former Yugoslav Republic of Macedonia (FYROM) the lowest price (0.26 euro). The average price of international letters was 0.82 euro, with Greece falling below the EU average with 0.78 euro.

Chart 2.5

Price of international letter weighing less than 20 gr (within Europe)

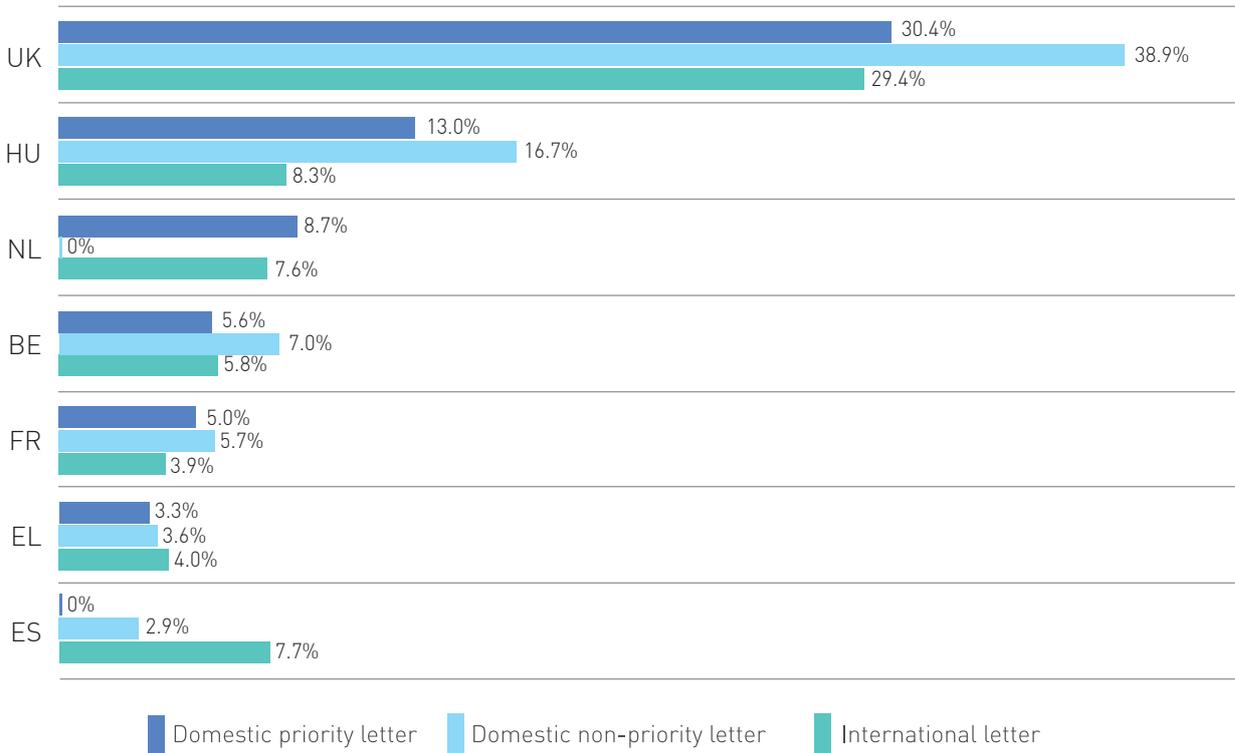


Source: ERGP Report on indicators on the postal market, May 2014

The letter mail prices in Europe remained overall stable in 2012 compared to the previous year. Prices increased only in seven out of 30 countries, including Greece (Chart 2.6).

Chart 2.6

Annual price increase for letters per country (2012)



Source: ERGP Report on indicators on the postal market, May 2014

2.1.3. In Greece

The postal market in Greece consists of two sectors:

- a) the universal services sector, with the USP and private companies holding Individual Licenses and
- b) the courier services sector, with companies under a General Authorisation.

The USP designated by the Greek state, by law, is Hellenic Post (ELTA).

Greece also followed the global trend, with an increase of parcels and reduction of letters. It should be noted that in 2013, for the first time after 2008, there were signs of a slowdown in the rate of reduction of the Greek postal market financials, while parcel post, both domestic and international, experienced an upturn. However, letters continued to count for the largest part of the market, both in terms of volume and revenues, influencing significantly the final figures. Overall, despite the aforementioned slowdown in the rate of reduction of its financials, the postal market, in terms of both volume and value, declined compared to the previous year.

Courier services' sales increased, for the first time since 2008, achieving revenues that almost reached those of the USP. Indeed, it appears that 2013 will be the last year where USP revenues will be higher than the corresponding revenues of couriers under a General Authorisation.

With respect to the individual service categories, the greatest improvement was noted in domestic parcels, i.e., those that were delivered within Greece, with an increase in both terms of volume and revenues. The figures for the whole postal market are given in detail in chapter 2.2.

2.2. Evolution of the main financials in the postal service market in Greece

2.2.1. Financial data

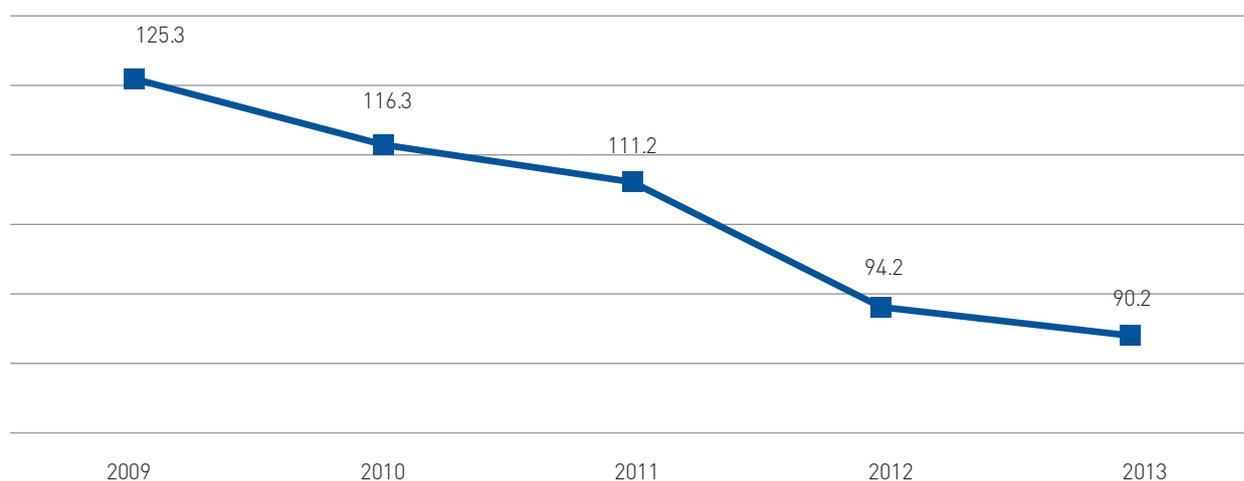
The following section presents the main financials of the companies operating in the postal market, according to the financial statements of the licensed operators, in 2013. As regards the courier sector, the figures provided are based on the eight major companies of the sector, as the majority thereof are not obliged to publish financial statements, since they are sole proprietorship companies.

2.2.1.1. Turnover

The postal service market follows the same negative trends which are prevalent in almost all the sectors of the economy. However, in 2013 the decrease rate was lower, compared to previous years, as indicated in Chart 2.7.

Chart 2.7

Evolution of postal market turnover index (base year 2005)



Source: HELLASTAT, Evolution of the turnover index in the service sector (March 2014)

Specifically, the turnover per postal market sector is presented in Chart 2.8. It is worth noticing that ELTA's turnover has been shrinking over the past five year period at a rate of 27%. On the other hand, postal service providers operating under General Authorisation and with Individual License have experienced a more stable course.

Chart 2.8

Turnover of postal service providers (in million euro)

Source: Annual financial statements

It is noted that the companies' turnover may include information from non postal activities, therefore there may be differences with respect to the level of revenues analyzed in the following chapters and concern the postal market exclusively.

2.2.1.2. Profitability

Table 2.1 sets out the main financials on the profitability of postal service providers.

Table 2.1

Main postal service providers' financials in million euro (2013)

	Turnover	Gross Profit	Gross Profit Margin	Net Profit	Net Profit Margin
Universal Service Provider	365.0	27.5	7.5%	-5.4	-1.5%
Courier companies	304.9	52.2	17.1%	7.2	2.4%
Companies with Individual License	3.4	0.9	27.3%	0.1	1.8%

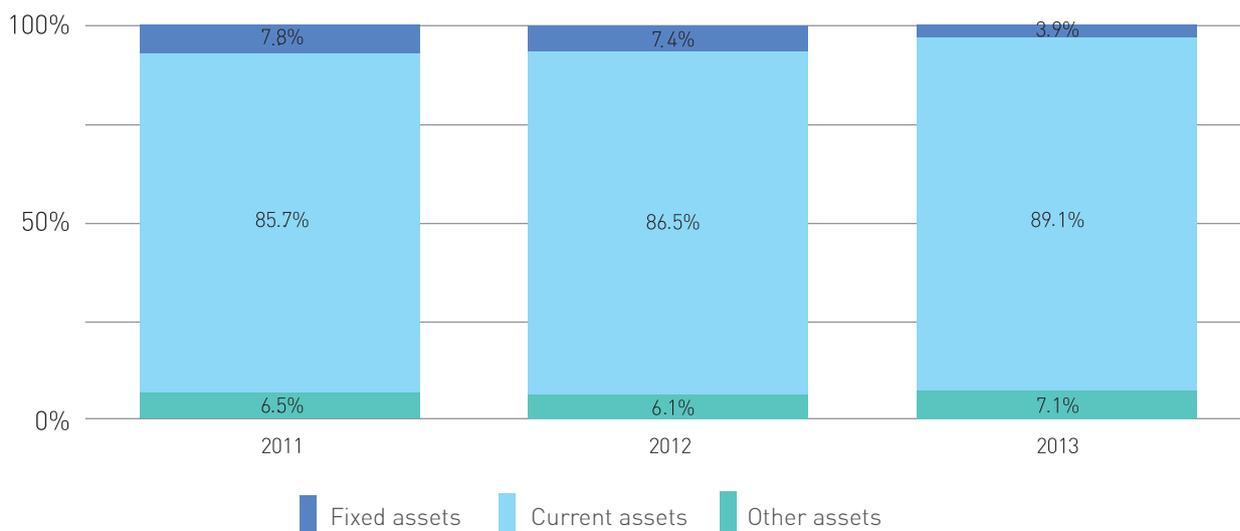
Source: Annual financial statements

It is clear that despite the high turnover, the gross profit margin is quite low, especially for ELTA.

2.2.1.3. Balance sheet analysis

Chart 2.9 presents the asset allocation regarding the three sectors. Courier companies and companies with an Individual License hold the majority of their capital (89% and 72% respectively) in liquid assets (current assets), whilst ELTA has 53% of its capital invested in fixed assets.

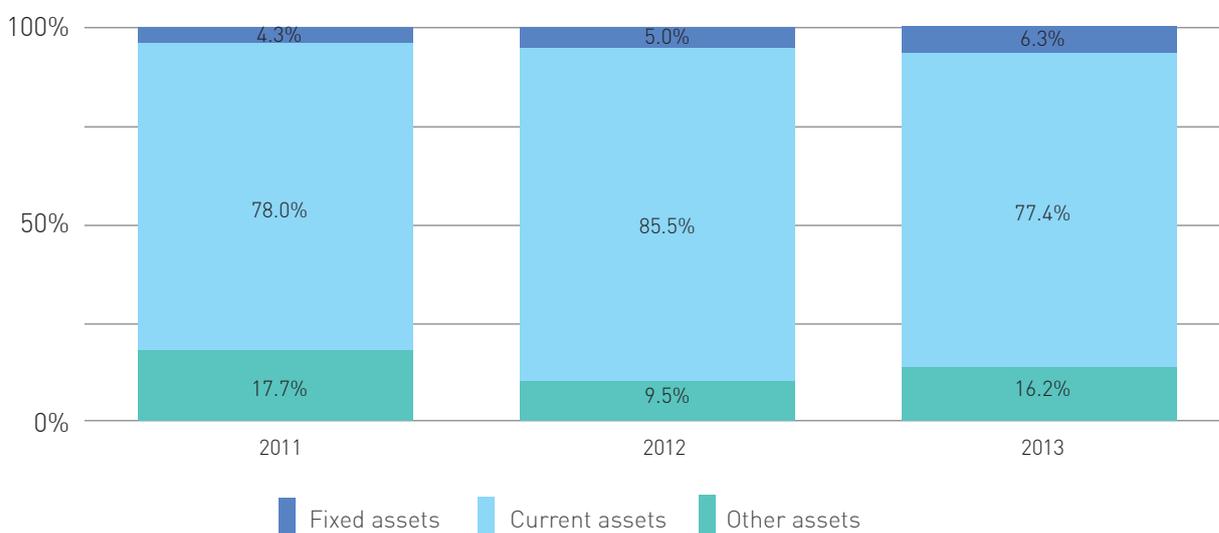
Chart 2.9
Assets allocation in the postal market



Source: Annual financial statements

As regards the structure of liabilities, ELTA obligations count for 92% of its liabilities. This percentage is significantly lower for courier companies and companies with an Individual License (Chart 2.10).

Chart 2.10
Distribution of liabilities in the postal market



Source: Annual financial statements

2.2.1.4. Ratio analysis

Table 2.2 sets out the main ratios, as these are derived from an analysis of the balance sheets of the postal service providers.

Table 2.2

Postal market financial indicators

	2009	2010	2011	2012	2013
Liquidity Ratio					
USP	0.89	0.92	0.94	0.93	0.86
Courier companies	2.27	2.16	2.16	2.16	2.11
Companies with Individual License	1.75	1.67	1.59	1.31	0.96
Turnover Rate					
USP	0.62	0.70	0.61	0.61	0.84
Courier companies	2.27	2.16	2.16	2.16	2.11
Companies with Individual License	1.75	1.67	1.59	1.31	0.96
Days Sales Outstanding					
USP	61.42	65.74	60.85	58.62	74.14
Courier companies	120.45	129.97	129.67	120.51	108.19
Companies with Individual License	138.78	139.15	153.90	176.01	235.29
Return on Capital					
USP	-0.19	0.02	0.03	0.03	-0.15
Courier companies	0.13	0.17	0.17	-0.45	0.31
Companies with Individual License	0.56	0.49	0.18	0.18	0.04

Source: EETT (based on the information given by the postal service providers)

The Liquidity Ratio for courier companies, even though declining over the five-year period, remains greater than one, which shows their ability to confront short term liabilities using current assets. The ratio is close to one for the companies with an Individual License and lower than one for ELTA, with a downward trend after 2011.

The Turnover Ratio, although declining over time, is greater than one for the courier companies and close to one for the companies with an Individual License, given that these companies are current asset intensive (mainly receivables). The corresponding USP ratio is below one, as ELTA has invested in fixed assets and on the other hand its turnover has been declining over time.

The Days Sales Outstanding Ratio for courier companies and companies with an Individual License is rather high, indicative of the liquidity problem of the sector, stemming from the economic crisis. Over the five-year period, this indicator has declined for courier companies. The USP has the lowest ratio.

The Return on Capital is especially low for the USP, due to profit margin squeeze of the postal service providers. Indeed, the USP ratio falls below zero in 2013, whilst courier companies' ratio is improved.

2.2.2. Volume and revenue of Postal Market

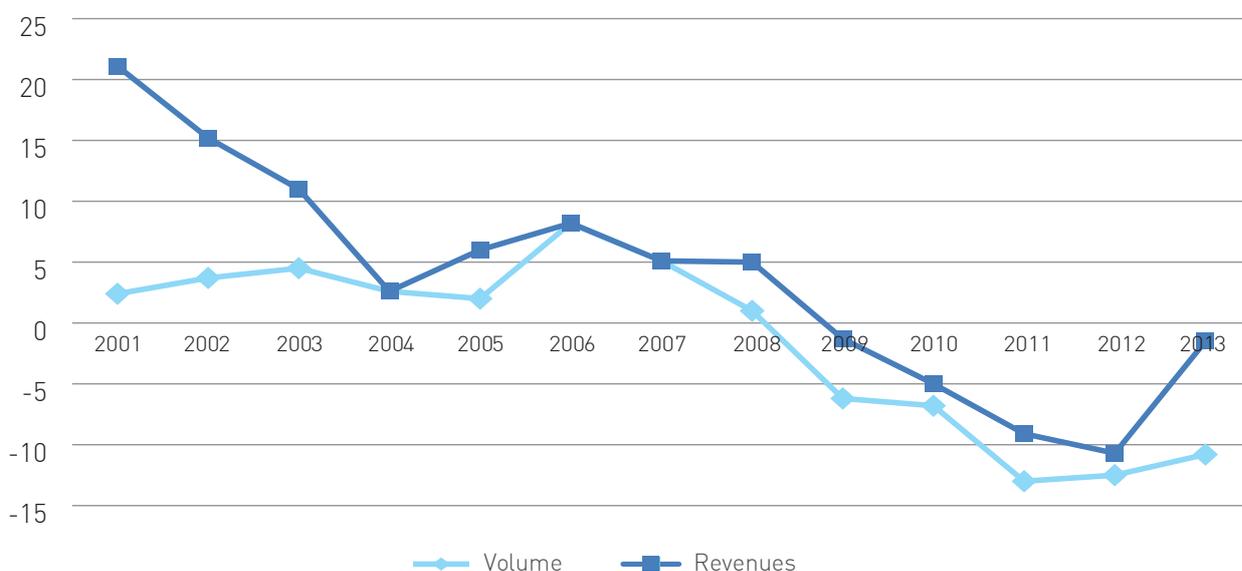
2.2.2.1. Total postal volume and revenue

In 2013, 460 million items were posted, generating revenues of 563 million euro. Compared to 2012, there was a 10.9% drop in the volume of postal items and 1.7% in related revenues.

The course of the postal market as of 2001 is depicted in Chart 2.11. As shown, there is a downward trend over recent years, due to the recession. Nevertheless, in 2013, there is an upturn, particularly for the sector's revenues.

Chart 2.11

Annual rate of change of postal volume and revenue (%)



Source: EETT (based on the information given by the postal service providers)

2.2.2.2. Volume and revenue per postal market sector

Tables 2.3 and 2.4 demonstrate the performance of individual sectors of the postal market in the crucial five-year period of the recession.

Table 2.3

Volume of postal items (in thousands items)

	2009	2010	2011	2012	2013	2013/12	Compound growth rate 2009-13
Universal Service Provider	671,669	622,526	531,343	461,361	402,818	-12.7%	-12.0%
Companies with Individual License	6,711	6,765	10,933	8,065	5,326	-34.0%	-5.6%
Courier companies	49,987	49,187	48,286	47,162	52,278	10.8%	1.1%
Total	728,367	678,478	590,562	516,588	460,422	-10.9%	-10.8%
Annual rate of change (%)	-6.2%	-6.8%	-13.0%	-12.5%	-10.9%	-	-

Source: EETT (based on the information given by the postal service providers)

Table 2.4

Postal revenues (in thousands euro)

	2009	2010	2011	2012	2013	2013/12	Compound growth rate 2009-13
Universal Service Provider	448,631	417,134	370,864	317,486	282,919	-10.9%	-10.9%
Companies with Individual License	2,549	2,498	4,066	3,486	2,471	-29.1%	-0.8%
Courier companies	291,907	286,149	266,612	251,814	277,628	10.3%	-1.2%
Total	743,087	705,781	641,542	572,786	563,018	-1.7%	-6.7%
Annual rate of change (%)	-1.3%	-5.0%	-9.1%	-10.7%	-1.7%	-	-

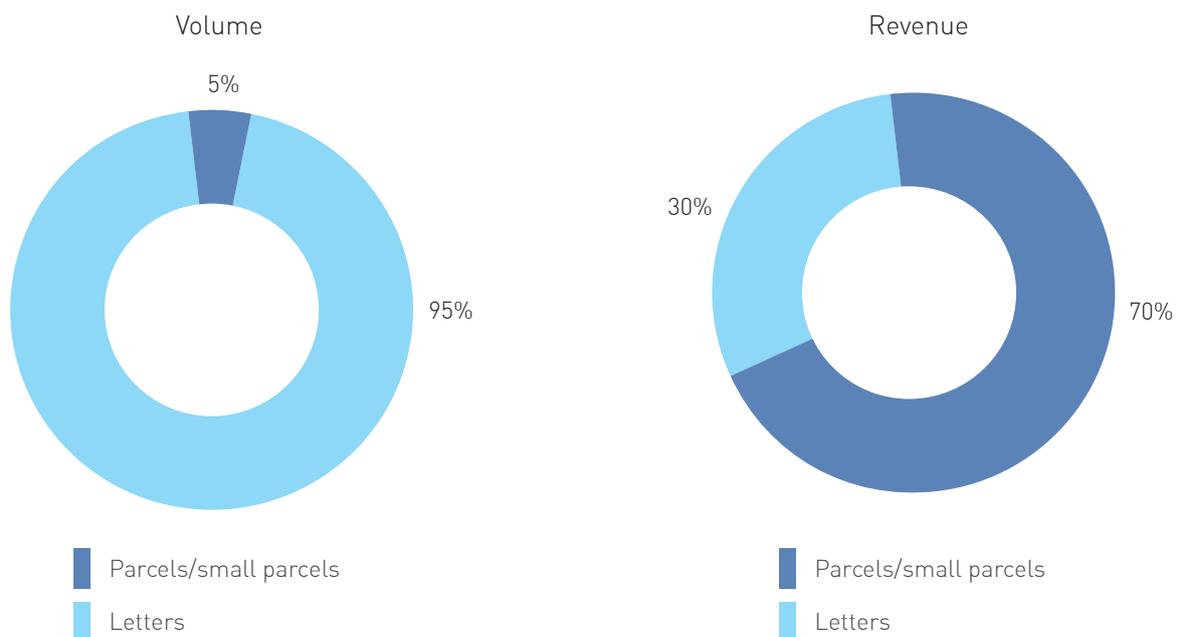
Source: EETT (based on the information given by the postal service providers)

It is obvious that the USP has been significantly affected by the economic crisis, with no signs of recovery. On the other hand, the courier sector experienced a significant improvement in 2013.

2.2.2.3. Volume and revenue per postal service

Postal items are classified into letters and parcels (including small parcels). Chart 2.12 demonstrates the distribution of postal items in the postal market.

Chart 2.12

Distribution of volume and revenue per postal service (2013)

Source: EETT (based on the information given by the postal service providers)

Although handling letters has been traditionally a key activity of postal service providers, the parcel market, which handles just 5% of postal items, generates 30% of total revenue.

Table 2.5 demonstrates the evolution of the postal market in terms of letters and parcels/small parcels during the five-year period 2009-2013.

Table 2.5

Volume (in thousands items) and revenue (in thousands euro) per postal market service

	2009	2010	2011	2012	2013	2013/12	Compound growth rate 2009-13
Volume							
Letters	706,603	656,266	568,239	494,601	437,211	-11.6%	-11.3%
Parcels/small parcels	21,764	22,212	22,324	21,987	23,211	5.6%	1.6%
Total	728,367	678,478	590,562	516,588	460,422	-10.9%	-10.8%
Revenues							
Letters	579,944	547,053	495,189	427,611	393,508	-8.0%	-9.2%
Parcels/small parcels	163,143	158,728	146,353	145,175	169,510	16.8%	1.0%
Total	743,087	705,781	641,542	572,786	563,018	-1.7%	-6.7%

Source: EETT (based on the information given by the postal service providers)

The letter mail market has been significantly affected by the switch from letters to electronic mails as a mean of correspondence for both individual individuals and companies due to e-governance. On the other hand, e-commerce development has significantly boosted the parcel market, which presents a considerable revenue increase in 2013, mainly due to the active contribution of couriers in parcels handling.

2.2.2.4. Volume and revenue per domestic – international service

Table 2.6 presents the past five-year trends, regarding the handling of postal items domestically and internationally.



Table 2.6

Volume (thousands items) and **revenue** (thousands euro) per domestic & international service

	2009	2010	2011	2012	2013	2013/12	Compound growth rate 2009-2013
Volume							
Domestically	648,915	607,049	524,936	457,198	406,642	-11.1%	-11.0%
Internationally	79,452	71,429	65,626	59,390	53,780	-9.4%	-9.3%
Total	728,367	678,478	590,562	516,588	460,422	-10.9%	-10.8%
Revenue							
Domestically	617,964	571,055	512,799	445,121	436,329	-2.0%	-8.3%
Internationally	125,123	134,726	128,743	127,665	126,689	-0.8%	0.3%
Total	743,087	705,781	641,542	572,786	563,018	-1.7%	-6.7%

Source: EETT (based on the information given by the postal service providers)

As shown in the above table, international services have not been affected as much as domestic ones, due to the increased number of parcels handled by courier companies.

Chart 2.13

Distribution of volume (in thousands) and **revenue of international parcels** (in thousands euro)

Source: EETT (based on the information given by the postal service providers)

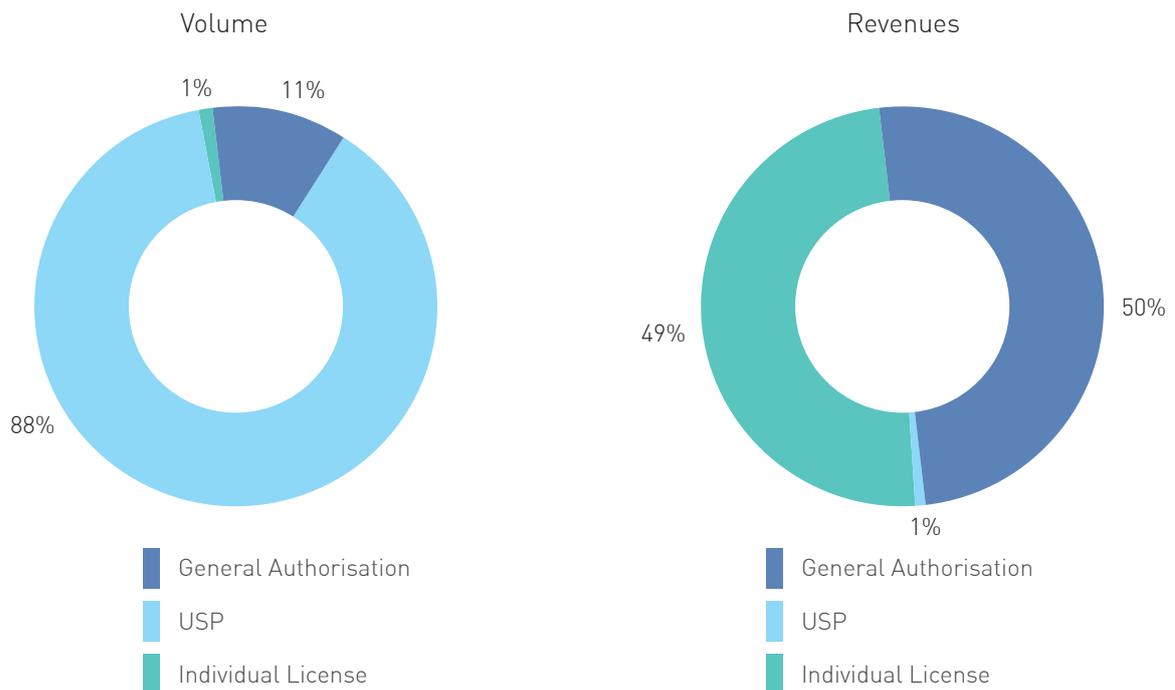
2.3. Postal market size

2.3.1. Market shares

In 2013 the USP held 88% of the total market share in terms of postal volume and 50% in terms of postal revenues (Chart 2.14).

Chart 2.14

Postal market shares in terms of volume and revenue (2013)

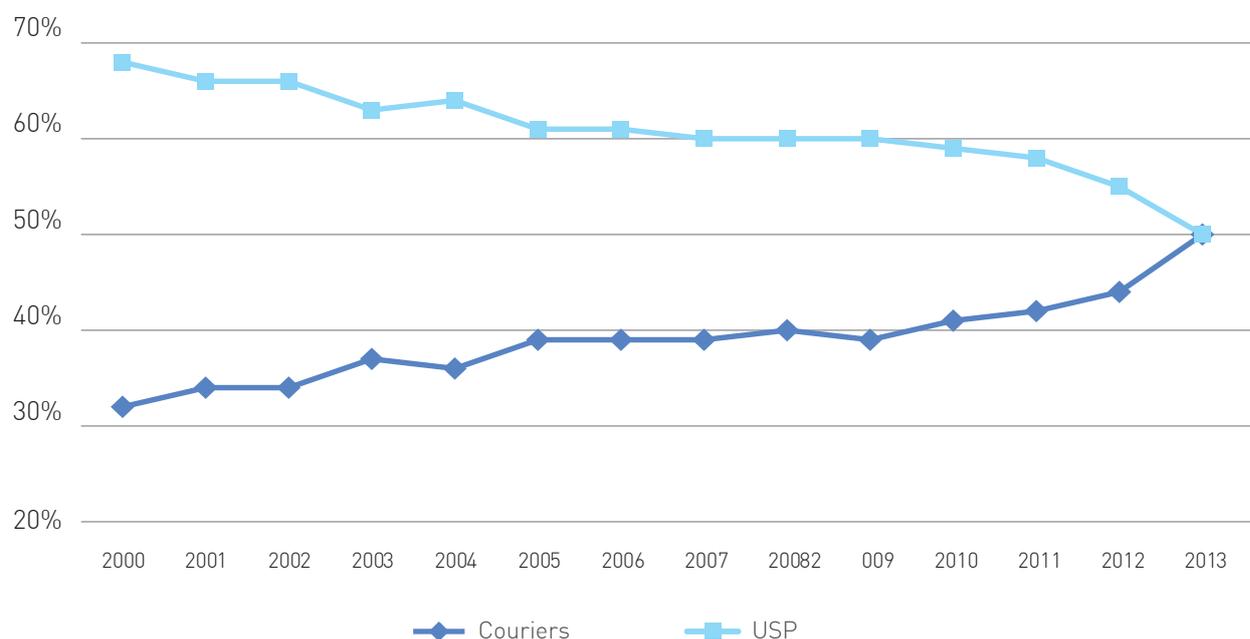


Source: EETT (based on the information given by the postal service providers)

In the above chart, a reduction is observed in USP shares, in terms of volume and revenues, as the courier sector gains ground. It should be noted that in 2013, the USP and courier services held almost the same market share in terms of revenue (Chart 2.15).

Chart 2.15

USP and courier market shares in terms of revenue



Source: EETT (based on the information given by the postal service providers)

As regards the offered services, Universal Service (USP and companies with Individual License) consistently predominates in letter post. Despite the fact that market shares in terms of volume do not change significantly, the courier companies' share in terms of revenue continuously grows, as the increasing need for rapid delivery is particularly profitable for these companies (Chart 2.16).

Διάγραμμα 2.16

Universal Service and courier market shares in terms of volume and revenue

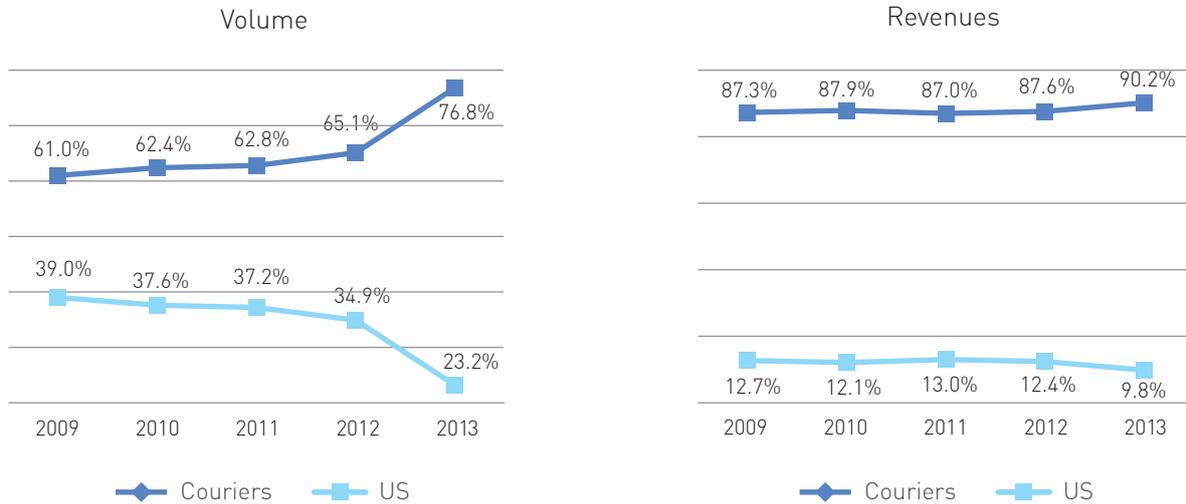


Source: EETT (based on the information given by the postal service providers)

The market share outlook radically changes regarding parcels, with courier companies dominating the for said market. The deviation in parcels' volume, is notably increased in 2013. The gap in revenues is opening at a slower pace, with courier companies holding 90% of market revenues (Chart 2.17).

Chart 2.17

US and courier parcels/small parcels market shares in terms of volume and revenue



Source: EETT (based on the information given by the postal service providers)

Since 2009, the USP market share fell by 40% in terms of volume and 23% in terms of revenue.

2.3.2. Positioning of postal services in the postal market

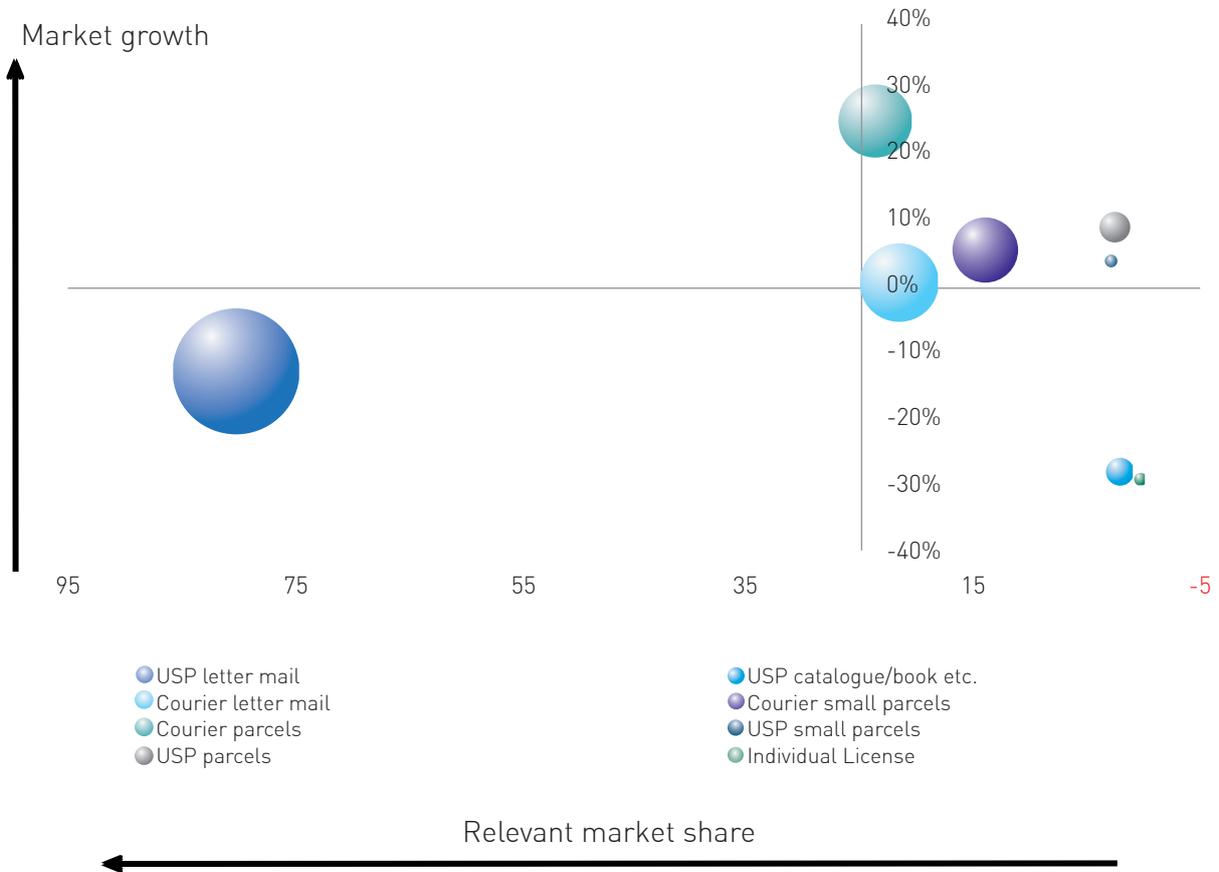
The competitiveness and the positioning of postal services in the postal market are presented in the Boston Consulting Group Matrix (BCG Matrix)²² below. The chart correlates the relative product market share (horizontal axis) with the growth of the related market (vertical axis). The size of the “bubbles” is indicative of the revenue generated by each service. The position on the chart points the dynamics of each service in the postal market.

As regards the USP, the services taken into account in the BCG Matrix plotting include letters, parcels, small parcels and direct mail/books-catalogues-magazines/newspapers. Regarding the courier companies, the services presented pertain to letters, parcels and small parcels, whilst the services of companies with an Individual License are presented in aggregate numbers, due to their very small size.

22. Boston Consulting Group, 1970.

Chart 2.18

BCG Matrix for postal services



The "bubble" representing the USP letter mail has a dominant position in Chart 2.18 and is placed in the lower left quadrant. This service generates 47% of the revenue of the market under consideration - it specifically provides the 89% of total USP revenue. Nevertheless, the gradual entry of new players in the recently liberalised market, in combination with the substitution of letter mail by email contribute to the decline of letter mail's revenue. The opening of the postal market is expected to shift the Individual License services "bubble" upwards, as the companies in the sector have already started to operate in letter distribution. It is clear that this specific "bubble", despite its size is placed next to the "bubble" of UPS catalogues/magazines/books. This is the least important market for the USP, which has already declined by 28% compared to 2012 and holds only 2% of the market under consideration. Finally, it should be noted, that for couriers' letter mail service makes up 19% of the total market, percentage slightly higher than previous year's. The case of the parcel and small parcel market is noteworthy, with all "bubbles" located in the upper right quadrant, as they belong to a market with strong potential, despite its current small market share. Specifically, the "bubble" pertaining to the courier parcel services is placed higher than the rest, due to the especially high revenues generated by the growth of e-commerce, holding 19% of the market under consideration.

Similarly, courier companies are in a better position than the USP in terms of small parcel services. This service, in spite of its small market share, is also growing, compared to 2012. Both the USP and courier services should take advantage of the opportunities that e-commerce offers for their services and enhance their position on the BCG Matrix.

As a result of postal market recession, there was no postal service in the top category, placed in the upper left quadrant which demands high market share and high market growth.

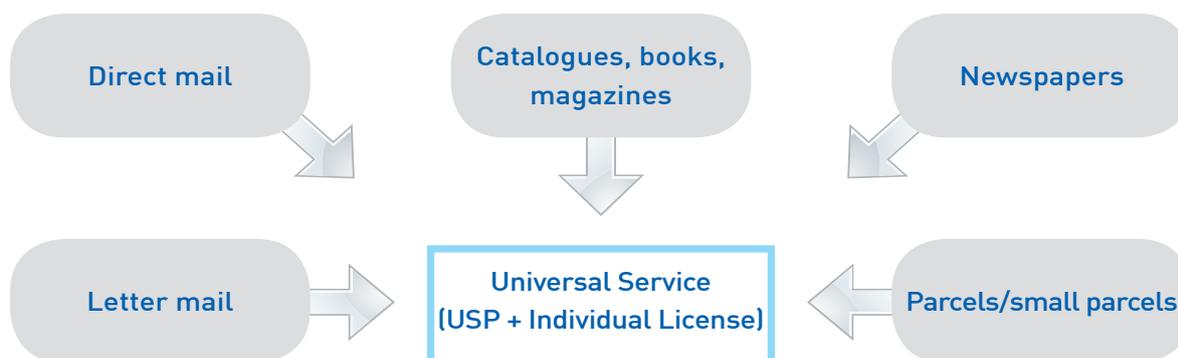
2.3.3. The Universal Service market

The USP and the companies with an Individual License operate in the Universal Service market. The USP is the dominant player in the market, counting for the 99% of volume and revenue alike.

The activities in the Universal Service market are illustrated in Chart 2.19.

Chart 2.19

Universal Service market activities



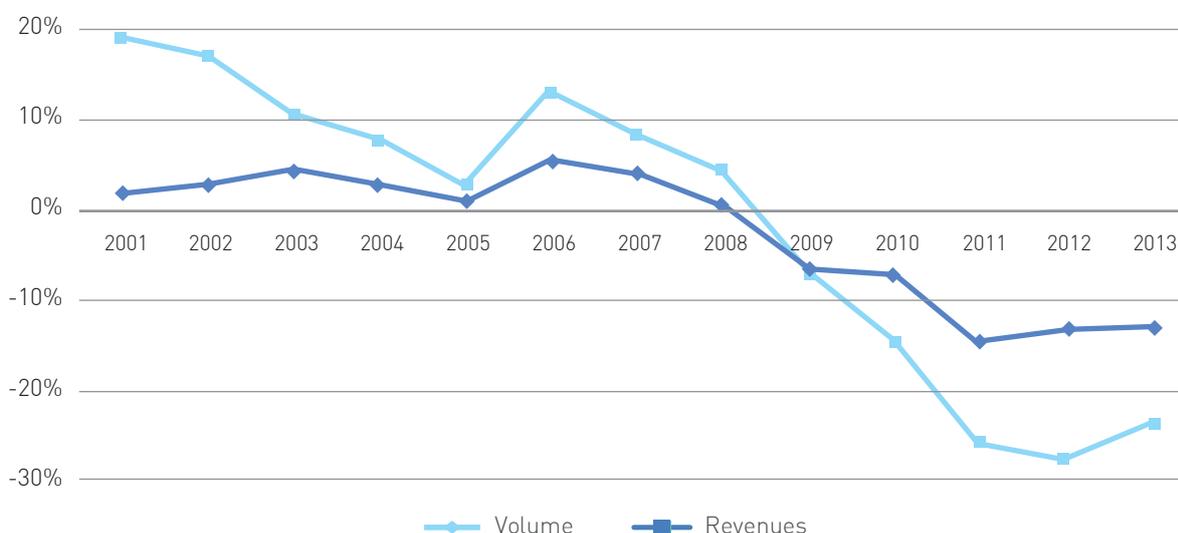
2.3.3.1. Universal Service Provider

In 2013, the USP remained the dominant player in the postal market, having handled 88% of the postal items and generated 50% of the related revenue.

However, factors such as the postal market liberalisation and the increasing competition, e-governance and the substitution of letter post by e-mail have affected the USP services, whose shares have significantly declined over the recent years, in terms of volume and revenue.

Chart 2.20

USP annual change in volume and revenue



Source: EETT (based on the information given by the postal service providers)



Within 2013, the USP lost 13% of letter mail volume and 11% of respective revenue, as well as 15% of parcel volume and 2% of respective revenue.

As regards services within the scope of US, as indicated in the table below, letter mail is the principal USP activity generating a quite high average revenue. Parcels and small parcels, despite the high average revenue generated, account for a very small part of USP activity.

Table 2.7

Distribution of USP volume and revenue and average revenue per service (in euro)

	Total items (%)	Total revenue (%)	Average revenue
Letter mail	92.9%	90.0%	0.68
Direct mail	3.4%	1.8%	0.36
Newspapers	1.8%	1.9%	0.76
Books/catalogues/magazines	1.6%	0.9%	0.38
Small parcels	0.1%	0.7%	4.08
Parcels weighing up to 20 kg	0.3%	4.8%	12.94
Total	100%	100%	0.70

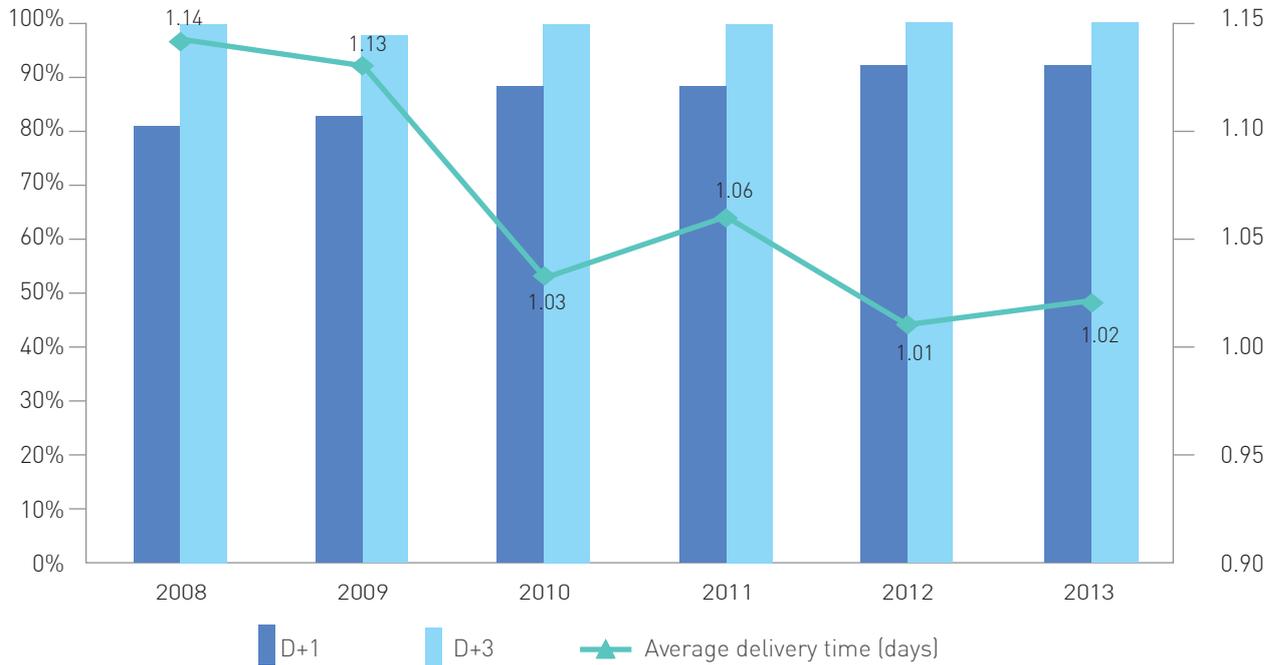
Source: EETT (based on the information given by the postal service providers)

The USP, according to L. 4053/2012²³, is obliged to always provide users, with postal services of a specific quality at affordable prices, regardless their location in the Greek territory. Chart 2.21 presents the results of quality measurements for the provision of Universal Service regarding domestic priority mail.

23. 066 Issue 44/A/07-03-2012. Regulation of the operation of the Postal market electronic communication issues and other provisions.

Chart 2.21

USP measurement results regarding domestic first priority mail



Source: "Measurement Results for the Handling Time of First Priority Mail", DIADIKASIA SA

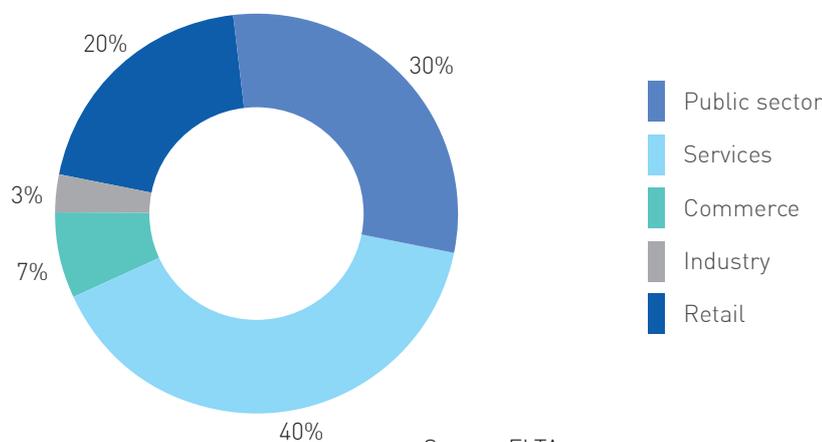
It should be noted that ELTA's delivery obligation under MD 58134/2275/2010 is 87% within one day and 98% within three days. The improvement of the average delivery time over five years is noteworthy.

As regards infrastructure issues²⁴, ELTA maintain 727 post offices and 726 network offices, numbers that have declined by 7% and 1% respectively, compared to 2012. Moreover, ELTA possesses²⁵ 887 cars and 2,010 motorbikes. In 2013 the number of employees²⁶ declined by 11% compared to 2012, to a headcount of 7,977 employees.

Finally, 83% of the USP clientele²⁷ holds a contract with the USP, the majority of whom being public sector and services (bank and insurance institutions, public utilities, telecommunications, etc.) (Chart 2.22).

Chart 2.22

USP clients (2013)



Source: ELTA

24. Source ELTA, Annual financial statements 2013.
 25. Source: EETT (based on the information given by the postal service providers).
 26. Source ELTA, Annual financial statements 2013.
 27. Source: EETT (based on the information given by the postal service providers).

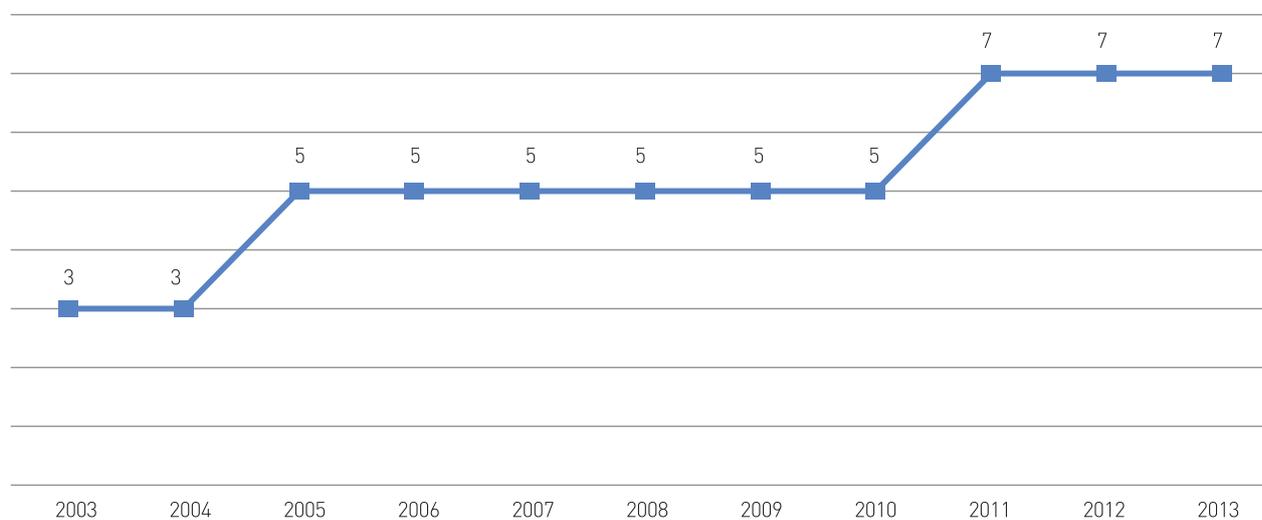
In order to confront fierce competition and retain its clientele, the USP has invested²⁸ in process automation systems of advanced technology and added value services for both wholesale and retail clients, such as smart phone applications, track and trace systems, processes for electronic orders and billing, web application for postages calculation, electronic transactions with the public sector, special systems to manage large companies, hybrid mail, etc.

2.3.3.2. Companies with Individual License

In the Universal Service market, i.e. standard mail, apart from the USP there are also seven companies operating with an Individual License. Chart 2.23 shows that the number of these companies has increased over the past three years, due to the forthcoming liberalisation of the market.

Chart 2.23

Number of companies with an Individual License



Source: EETT registry of postal service providers

Companies with an Individual License, having focused on a niche strategy, operate selectively in individual postal services, which they offer to a limited number of customers, mainly in wholesale, handling only 1.2% of postal items and generating correspondingly 0.4% of total revenue.

Specifically, two companies operate in letter mail, five in direct mail, one in newspapers, two in books/catalogues/magazines and one in parcels handling. It is worth noting that five out of seven companies provide only one service. The postal market liberalisation as of 01-01-2013 has attracted courier companies with a large market share. Some of them have already started to provide service in the standard post area.

Thus, although the main activity of companies with an Individual License (Table 2.8) is direct mail, which generates high revenue to these companies, letter post in 2013 accounted for 24% of their activity, offering a high average revenue.

28. Source: EETT (based on the information given by the postal service providers).

Table 2.8

Distribution of volume and revenue and average revenue for Individual License services (2013)

	Total items (%)	Total revenue (%)	Average revenue
Letter mail < 2 kg	24.5%	38.2%	1.38
Direct mail (addressed)	74.4%	58.0%	2.77
Newspapers < 2 kg	0.8%	2.8%	0.60
Books/catalogues/magazines	0.3%	1.0%	0.63
Parcels < 20 kg	0.0%	0.0%	0.35
Total	100%	100%	2.16

Source: EETT (based on the information given by the postal service providers)

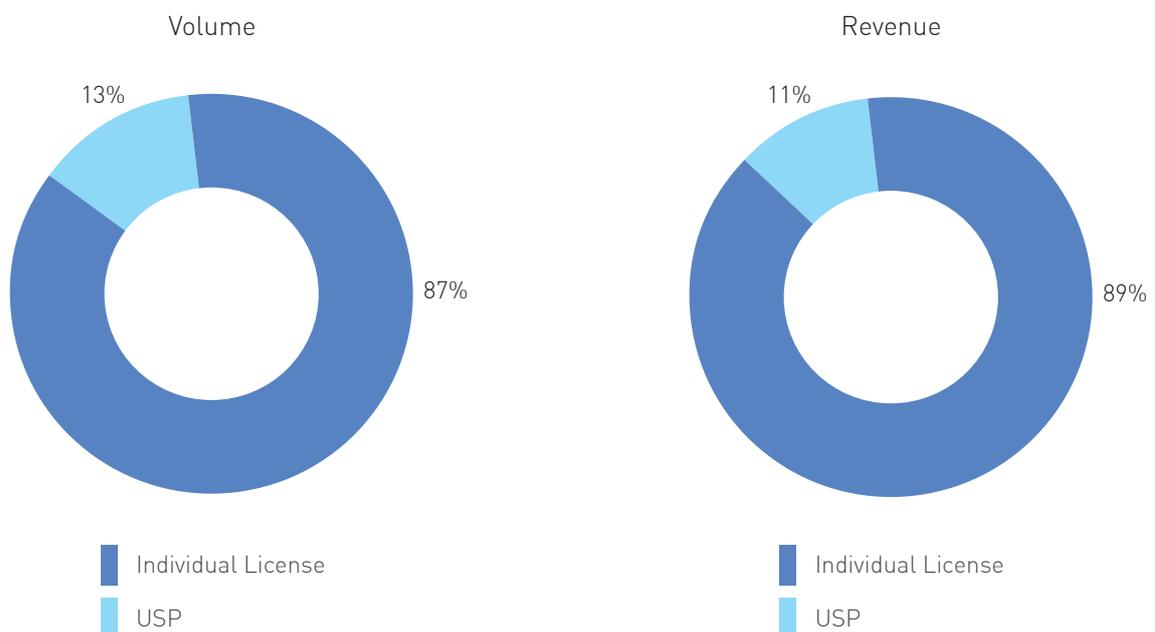
As regards infrastructure²⁹, companies with an Individual License possess 17 points of service and 96 network outlets. In 2013 a total number of 2,410 persons were employed.

2.3.3.3. Competition in the Universal Service market

In the Universal Service Area, the USP holds 99% in terms of volume and revenue. Nevertheless, in the small market of direct mail, catalogues/books/magazines and newspapers, companies with an Individual License hold a relatively important share, as shown in Chart 2.24.

Chart 2.24

USP share of services (direct mail, newspapers, books/catalogues/magazines) per volume and revenue (2013)



29. Source: EETT (based on the information given by the postal service providers). One postal service provider, who also operates under General Authorisation has not been included, as its points of service, network and employee number have been counted in the General Authorisation sector.

Table 2.9 presents market shares versus the market shares for the companies with an Individual License. It is obvious that letter mail of Individual Licence sector has dynamically entered the Universal Service market. It should be noted that two companies with Individual License are active in letter mail and the one distributes 82% of it.

Table 2.9

USP volume and revenue market shares (2013)

	Volume		Revenue	
	USP	Individual License	USP	Individual License
Letter mail	99.6%	0.4%	99.5%	0.5%
Newspapers weighing less than 2 kg	99.4%	0.6%	98.7%	1.3%
Direct mail (addressed)	77.2%	22.8%	77.3%	22.7%
Books/catalogues/magazines	99.7%	0.3%	98.9%	1.1%
Parcels/small parcels	100.0%	0.0%	100.0%	0.0%

Source: EETT (based on the information given by the postal service providers)

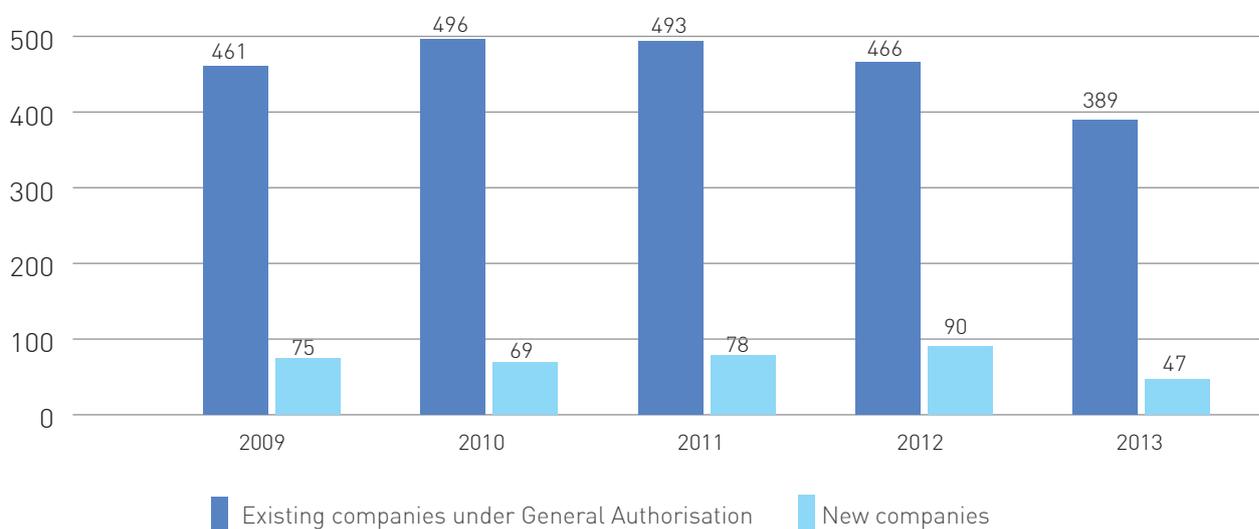
2.3.4. The market of courier services

The courier sector is a growing and competitive market, with significant activity in the parcel and small parcel area. These companies operate under General Authorisation and provide courier services meaning, express delivery of postal items, monitored in track and trace systems.

As shown in Chart 2.25, in 2013, 389 companies under General Authorisation operated in the postal market. The number of companies fell by 16% compared to 2012, due to the fact that in 2013, 130 companies were deleted by EETT for not complying with the regulatory framework. On the other hand, the number of new companies is increased by 30% compared to 2012, indicating recovery trend in the market.

Chart 2.25

Number of existing and new providers in the postal market



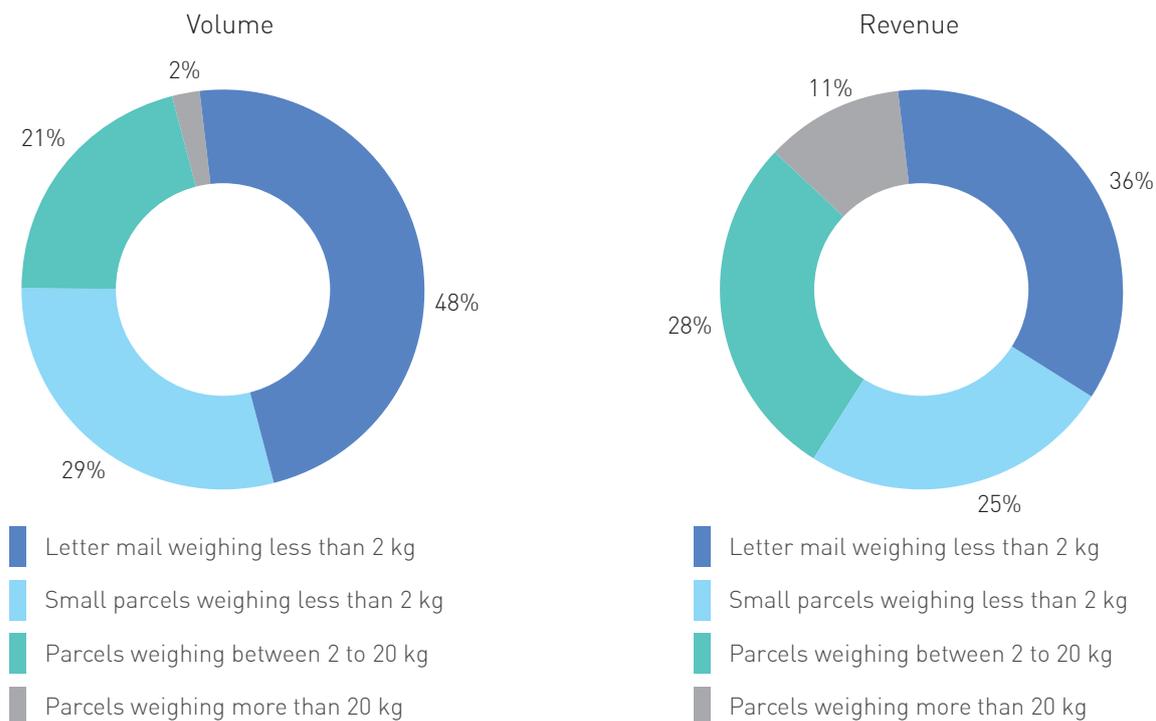
Source: EETT registry of postal service providers

Courier operations include the delivery of:

- letter mails weighing less than 2 kg;
- small parcels weighing less than 2 kg;
- parcels weighing between 2 to 20 kg; and
- parcels weighing more than 20 kg.

Chart 2.26

Volume and revenue distribution of courier postal services (2013)



Source: EETT (based on the information given by the postal service providers)

Although the volume of letter mail equals the volume of parcels/small parcels, letter mail obviously generates fewer revenue. Noteworthy is also the increased activity in the small parcel market and the very limited activity in the large parcel services (Chart 2.26).

Regarding postal items sent domestically or internationally, Chart 2.27 shows that the limited number of international postal items, for both letter mail and parcels, is conversely related to the generated revenue.

Chart 2.27

Volume and revenue distribution for domestic and international courier services (2013)



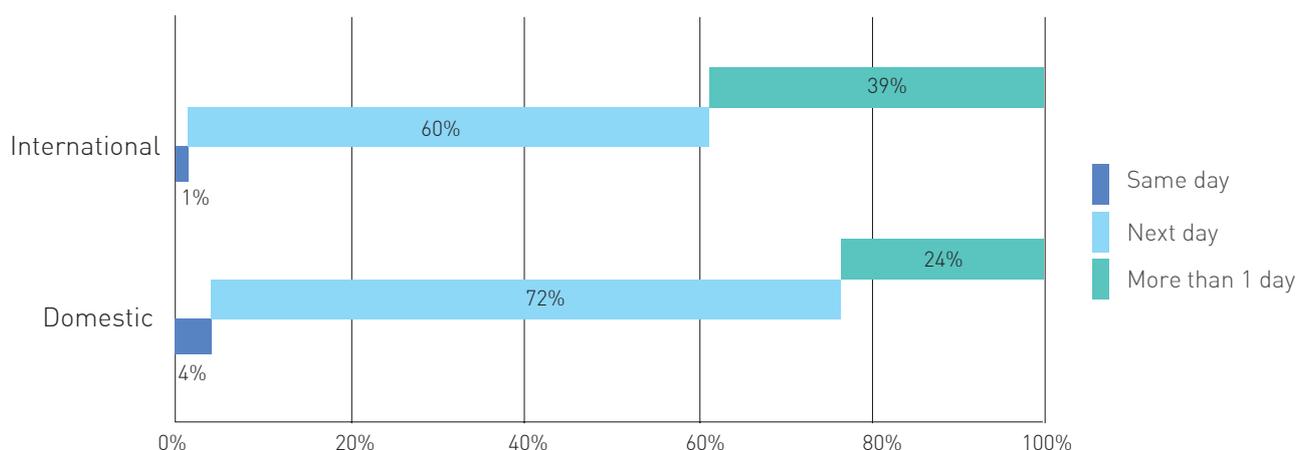
Source: EETT (based on the information given by the postal service providers)

As regards postal items, 94% are handled independently by a company and its network and only 6% are handled in a combined manner, in terms of being received by one courier company and delivered by another.

With respect to delivery time, the majority of both domestic and international postal items are delivered in one day (Chart 2.28).

Chart 2.28

Delivery time of postal items (2013)



Source: EETT (based on the information given by the postal service providers)

With respect to the average revenue of domestic and international services, as shown in Table 2.10, average revenues have been declining in the past five years, whilst compared to 2012, only the average revenue from domestic parcel and small parcel services has been increased. The average revenue from international parcels and small parcels have also dropped significantly.

Table 2.10

Average revenue per service (in million euro)

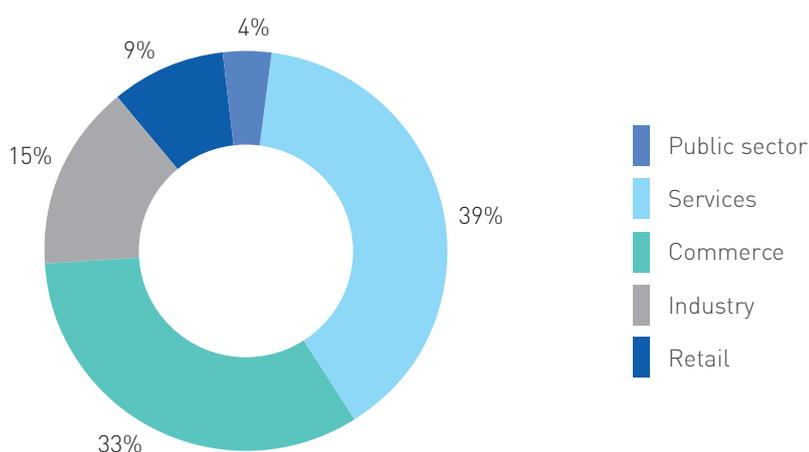
	2009	2010	2011	2012	2013	2013/12	Compound growth rate 2013/09
Domestic letter/mail	3.57	3.60	3.47	3.25	3.20	-1.6%	-2.7%
International letter/mail	23.09	23.29	24.47	17.46	16.71	-4.3%	-7.8%
Domestic parcels/small parcels	8.87	7.28	6.40	6.10	6.33	3.8%	-8.1%
International parcels/small parcels	56.50	38.37	35.99	50.50	41.36	-18.1%	-7.5%
Total	5.84	5.82	5.52	5.34	5.31	-0.5%	-2.3%

Source: EETT (based on the information given by the postal service providers)

As regards infrastructure³⁰ courier companies possess 198 branches and 1,156 network outlets, as well as 2,605 vehicles and 2,344 motorbikes. In 2013, 7,041 people were employed, 4.4% more compared to 2012, while 92% of them were employed on a full time basis.

The clientele list of courier companies³¹ is mostly made up by companies and less by consumers, as indicated in Chart 2.29. Main business clients include services and commerce. It should be noted that 89% of them are customers with a contract, generating 87% of the revenue.

Chart 2.29

Courier companies clientele

Source: EETT (based on the information given by the postal service providers)

30. Source: EETT (based on the information given by the postal service providers).

31. Source: EETT (based on the information given by the postal service providers).

The Herfindahl-Hirschman index³² (HHI) gives an indication of the degree of competition among courier companies. The index shows the level of market concentration, i.e. the degree in which a small number of companies represents a large part of the market. A high HHI index shows a high degree of market concentration in a small number of companies. Specifically, a HHI index between 1,000 and 1,800 indicates a moderate level of market concentration. In the extreme case of a monopoly, the HHI index equals 10,000.

Table 2.11

Herfindahl-Hirschman Index

	Letter mail	Comparison to previous year	Parcels/ small parcels	Comparison to previous year	Total	Comparison to previous year
2009	1,984	-	1,404	-	1,771	-
2010	2,077	4.7%	1,380	-1.7%	1,795	1.4%
2011	2,116	1.8%	1,370	-0.7%	1,796	0.1%
2012	2,166	2.4%	1,343	-2.0%	1,812	0.9%
2013	2,202	1.7%	1,439	7.2%	1,793	-1.1%

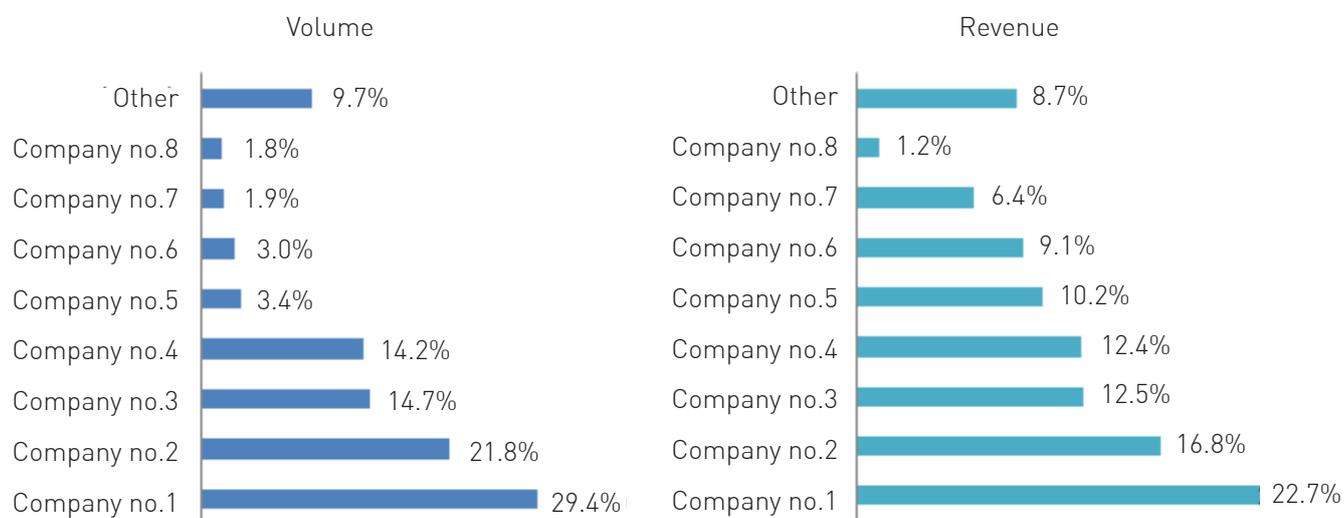
In 2013, the HHI index for the parcel/small parcel market of the courier sector was 1,439, which means that there is currently a moderate level of competition in the specific market. The 7.2% increase compared to 2012 indicates intensification of competition. The letter mail market presents a greater degree of concentration, with a slow and steady increase over recent years. Overall, through the years the courier market remains strongly concentrated.

Specifically, there are four companies handling 80% of the postal items and generating 59% of market revenue. The following charts present the market shares of the eight largest companies in the sector, in terms of volumes and revenue.

32. Source: Hirschman A. (1945), *National Power and the Structure of Foreign Trade*, Berkeley & Los Angeles: Publications of the Bureau of Business and Economic Research, University of California and Herfindahl, O.C. (1950), *Concentration in the U.S. Steel Industry*, Columbia University, unpublished Ph.D. thesis $HHI = \sum_{i=1}^n s_i^2$, where s stands for the market share of company "i" and n stands for the number of companies.

Chart 2.30

Courier companies market shares in terms of volume and revenue (2013)



Source: EETT (based on the information provided by the postal service providers)

Courier companies offer high added value services to customers, i.e. rapid delivery, the possibility to track and trace postal items throughout all phases, high level of customer service, as well as procedures such as delivery at a specified time and place, easy return process of postal items etc. As a result and with respect to parcels and small parcels, courier market shares continuously increased, gaining, thus, competitive advantage versus USP.

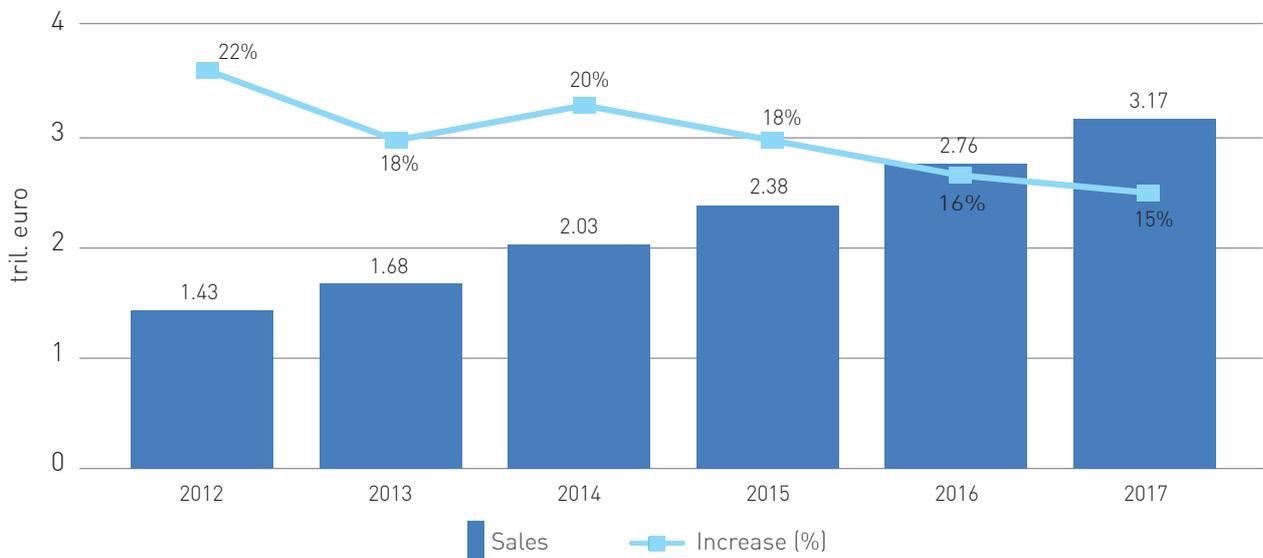
2.4. E-Commerce: the postal market's growth driver

E-commerce is one of the fastest developing sales medium worldwide. Revenues from companies' sales to end consumers (B2C) through e-commerce are expected to rise globally by 20.1%, exceeding 2 trillion euro, while already in 2012, global revenues were increased by 22% (Charts 2.31 and 2.32). The product categories with the largest sales volume contributing significantly to the increase of postal traffic globally are shown in Chart 2.33.



Chart 2.31

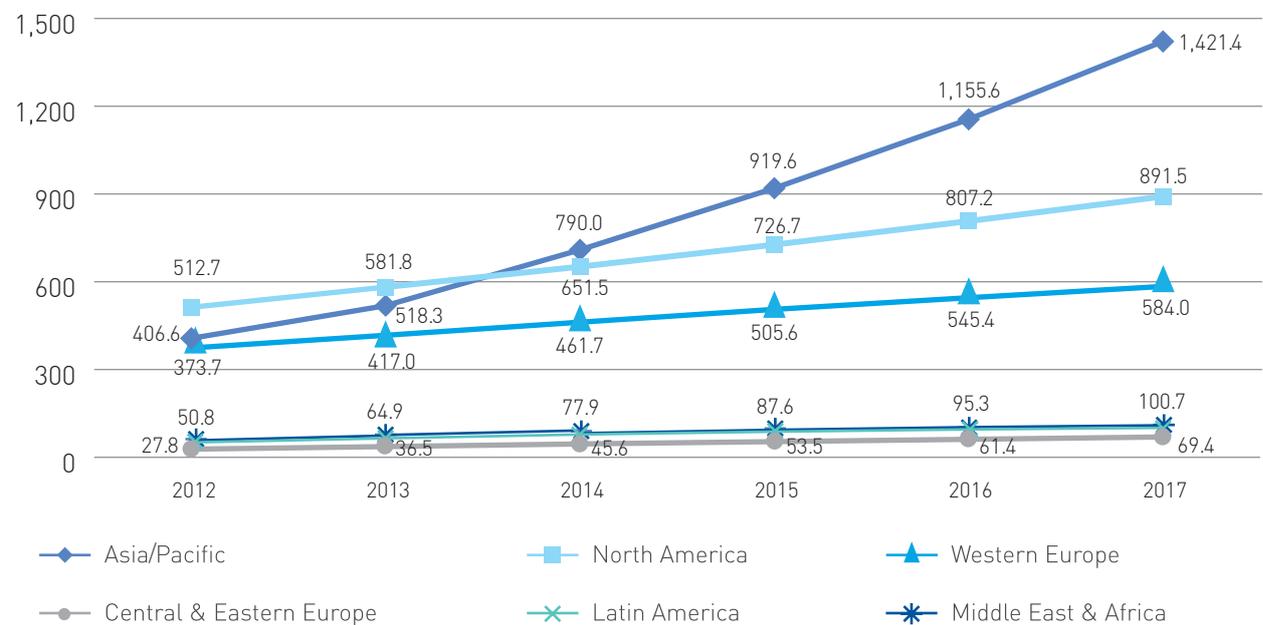
Worldwide e-commerce sales (B2C)



Source: eMarketer, January 2014

Chart 2.32

Revenues from e-commerce by geographic region (in billion euro)

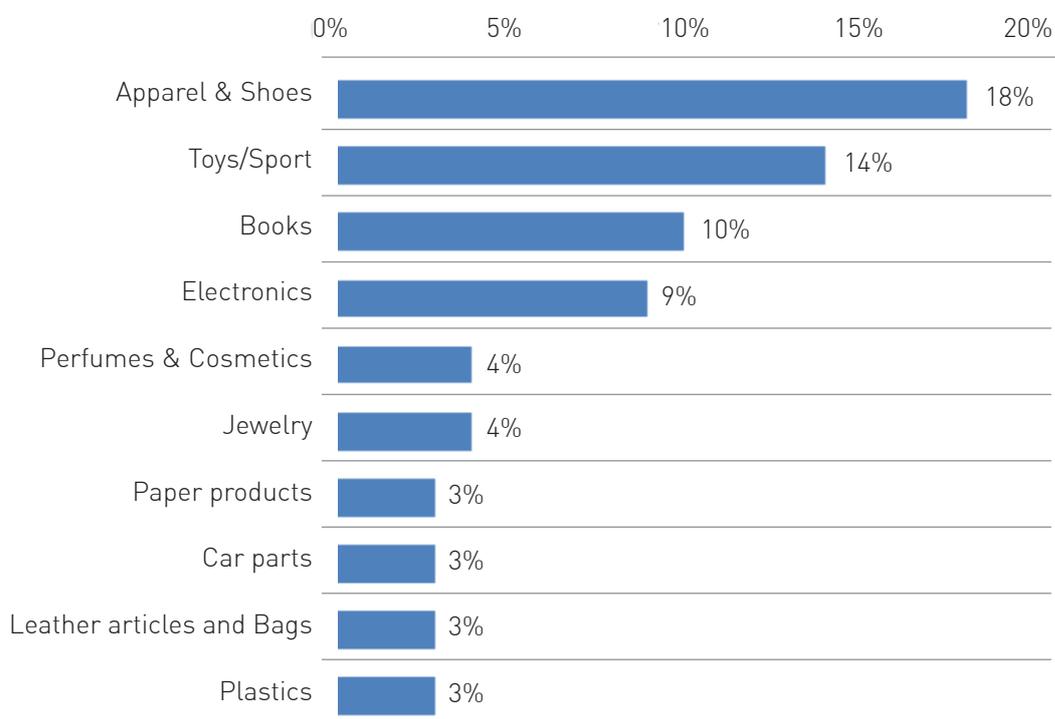


Note: includes products purchased online via any device (fixed or mobile) regardless of the method of payment (by card, payment into a bank account, cash on delivery or other).

Source: eMarketer, January 2014

Chart 2.33

Product categories with the largest volume of online sales (excluding services)



Source: UPU, 2013

In 2012, Europe’s total GDP reached 16 trillion euro, whilst e-commerce turnover corresponded to 3.5% of the European GDP, a percentage expected to double by 2016 and triple by 2020.

The rapid growth of e-commerce is estimated to have created directly or indirectly 2 million new jobs in Europe alone. Company website pages selling goods over the Internet amounted to 550,000 at the end of 2012. In 2012 the largest e-commerce markets in Europe were: United Kingdom (96 billion euro), Germany (50 billion euro) and France (45 billion euro). However, the fastest growing countries in terms of e-commerce are those of Central and Eastern Europe, with a growth rate higher than 30% in Greece, Turkey, Ukraine, Hungary and Russia.

Postal services play a crucial role in e-commerce, because end-customer satisfaction depends on consistent, fast and secure product delivery. A recent survey³³ shows that e-shoppers rate highly aspects such as low delivery prices, delivery to the home address, tracking and tracing delivery and ease of return.

33. “e-commerce and delivery”, Copenhagen Economics, July 2013.

Appendix

A. Glossary

TERM	EXPLANATION
Acid Test Ratio	Reflects the quantitative ratio of assets that can be liquidated immediately divided by the short term obligations of the provider. This is a more stringent measurement of the ability of the provider to respond to his current obligations. Values greater than one are considered satisfactory for this specific index.
Gross Profit Margin Ratio	Presents the operating efficiency of a company, as well as its invoicing policy. The higher the Ratio, the better is the company's position, in terms of profit, given that its can easily deal with an increase in the cost of its product. It should be noted that even though a company may have a low profit margin, it can, however, increase its turnover, through a dynamic sales policy, offsetting the low profit margin.
Equity to Total Liabilities Ratio	This ratio is used to see whether a company has over-borrowed. Therefore, it gives an indication of whether this is a safe company for its creditors. When the ratio is greater than one, the company's bodies/shareholders have contributed more capital compared to its creditors.
Activity Ratios	These reflect the efficient utilization of a provider's assets. Specifically, the average collection of receivables is the time period that goes by for the provider to collect receivables. Correspondingly, the average time for paying obligations reflects the number of days that the provider's obligations remain unpaid. In the event that the first ratio is smaller than the second, the obligations of the provider are settled at a slower pace than the provider collects receivables. Therefore, the provider does not need to maintain large amounts of cash available, a fact that so far has been true for fixed and mobile telephony operators.

General Consumer Price Index (GCPI)	<p>The Index is calculated on a monthly basis by the Greek National Statistical Authority (HELSTAT) and is used as measure of the general price level of goods and services procured by an average household and is revised at regular time periods. It should be noted that according to the latest revision, the baseline for GCP is 2005. GCPI is made up of various indices (Sub-indices) that reflect the level of prices for specific categories of goods and services. The Communications Sub-index comprises almost solely (99%) the expenses for telephone services of fixed and mobile telephony. The remaining 1% covers postal services (0.5%) and telephone equipment (0.5%).</p>
National incoming traffic	<p>It is the total traffic entering the network of each MTC originating from the networks of other domestic MTCs and the domestic fixed telephony providers (OTE and alternative providers)</p>
National outgoing traffic	<p>It is the total traffic routed through the network of each MTC towards other domestic MTCs and the domestic fixed telephony providers (OTE and alternative providers).</p>
On-net traffic	<p>It is the traffic between subscribers of the same mobile telephony network and comprises a significant part of the traffic of each MTC. In parallel, this is a substantial source of revenues, which is not affected by the Interconnection agreements with other suppliers.</p>
Universal Service (US) (in the Postal Services sector)	<p>Universal Service (US) refers to the conventional postal service. It is the right granted to Postal services users, irrespective of their location within Greece, to permanently and affordably enjoy high quality Postal services. According to the new Law 4053/2012, US includes the following individual services, for domestic and cross-border post: (a) the collection, transportation, sorting and distribution of postal items up to 2 kg, (b) the collection, transportation, sorting and distribution of postal parcels up to 20 kg, and (c) services of registered mail and deliveries with a declared value.</p>
Turnover	<p>It refers to the total turnover during the financial year and includes information on licensed providers for which balance sheets are available.</p>
Average Revenue per User-ARPU	<p>ARPU is calculated based on the retail revenues declared by the mobile telephony companies per category (excluding revenues from handsets and VAT) divided by the number of active subscribers at the beginning and end of the year divided by two.</p>

Average Revenue per per Minute-ARPM	<p>ARPM is calculated on the basis of the revenues from mobile voice communications declared by the mobile telephony companies excluding wholesale revenues, as well as revenues from SMS, MMS, data, content and handset) divided by the total actual minutes or retail traffic.</p>
Gross Profit	<p>It is the difference between turnover and the cost of sales. It is more difficult to depict, given that the majority of financial statements of listed providers, operating expenses (administrative, marketing, research and development) are not included in the cost of sales, in contrast to OTE and COSMOTE.</p>
Bundled Services Packages	<p>This term refers to products combining two or more of the following fixed services which are offered and billed together in specific proportions and at a set price (additionally, mobile communication services may be included):</p> <ul style="list-style-type: none"> • Access to telephony (i.e. access to telephone services) at a fixed location. • Fixed telephony call services. • Broadband access services to the Internet at a fixed location. • Content services such as IPTV, Video on Demand, etc. at a fixed location. <p>It should be noted that based on the above definition combined packages are considered to be those that combine (i.e. include in their monthly flat tariff) both access to fixed telephony as well as fixed telephony call services. Conversely, when only internet broadband access is provided (single play), this is not considered to be a bundled service package.</p>
Total assets	<p>Total assets are the total economic resources possessed by a provider and include fixed assets (such as buildings, machines, etc) as well as the current assets (such as cash, receivables, inventory, etc.)</p>
Universal Service Provider - USP (in the Postal services sector)	<p>The operator designated by the Greek state as having the obligation to ensure provision of the Universal Service (US) for Postal services. The current USP is Hellenic Post (ELTA).</p>

B. Abbreviations

ADSL	Asymmetric Digital Subscriber Line
B2C	Business to Customer
BCG	Boston Consulting Group
BEREC	Body of European Regulators for Electronic Communications
EETT	Hellenic Telecommunications & Post Commission
ELTA	Hellenic Post
EU	European Union
FTTx	Fiber to the x
GCPI	General Consumer Price Index
GDP	Gross Domestic Product
HELSTAT	National Statistical Service of Greece
HHI	Herfindahl-Hirschman
IFRS	International Financial Reporting Standards
IPTV	Internet Protocol Television
ISDN	Integrated Services Digital Network
ITU	International Telecommunications Union
L/E	Local Exchange
LLU	Local Loop Unbundling
LTE	Long Term Evolution
MMS	Multimedia Messaging Service
MTCs	Mobile Telephony Companies
NRA	National Regulatory Authorities
OTE	Hellenic Telecommunications Organisation
PSTN	Public Switched Telephone Network
SMS	Short Message Service
UPU	Universal Postal Union
US	Universal Service
USP	Universal Service Provider
VAT	Value Added Tax
VDSL	Very High Speed Digital Subscriber
VOD	Video On Demand
VoIP	Voice over Internet Protocol



Γ. Index of Tables & Charts

I. Charts

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