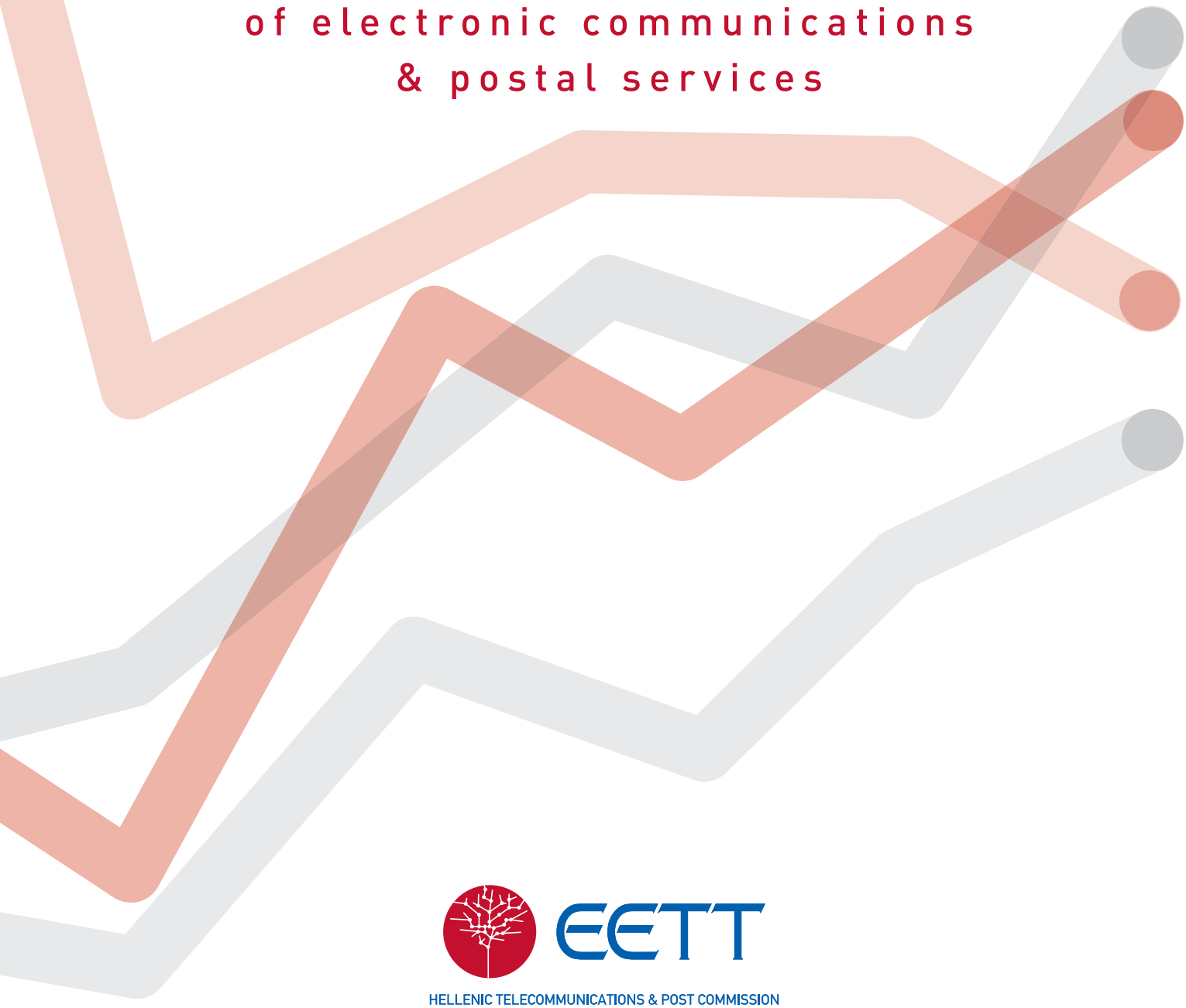
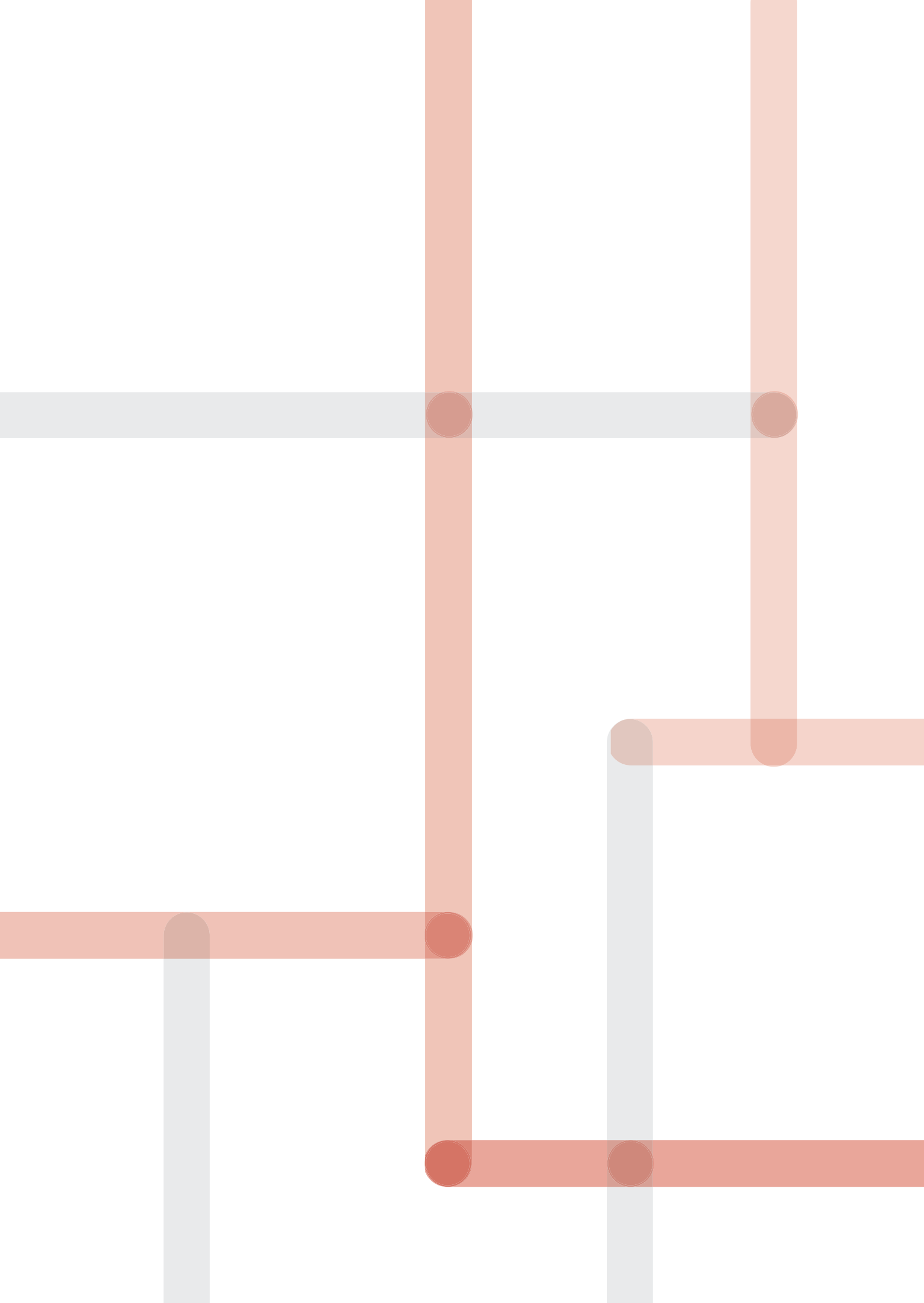
2015 market review

of electronic communications & postal services



EETT

HELLENIC TELECOMMUNICATIONS & POST COMMISSION



This report was prepared by EETT,
presenting statistical data and information regarding the course of the electronic communications and postal services markets for the year 2015 in Greece.

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Summary

(a) Electronic communications

2015 was an interesting year for the Greek telecommunications market. The turbulent financial environment has significantly influenced the market, turning providers' focus to the so-called bundles, to mobile broadband products and to differentiated solutions including pay TV services. Despite that, the contribution of the telecommunications industry in GDP is gradually shrinking and was decreased by two percentage points compared to 2014 (2.8% instead of 3%). Although consumption expenditure for the purchase of specific telecommunication services is not changing in absolute terms, its share in total household expenditure is increasing, mainly due to price reductions in other products and services (i.e., housing, transportation and clothing) compared to 2014.

Financial data

The telecommunications industry turnover keeps decreasing towards the level of five billion euros. Revenues from telecommunication services represent the vast majority of all revenues (~90%), while pay TV revenues are on the rise. Fixed telephony services generate 55% of all telecommunication services revenues, while 43% comes from mobile telephony services. Investments made by the providers amount to 13.3% of the total industry turnover. Gross profits are shrinking below 1 billion euros, while the largest fixed and mobile telephony providers have seen their profits before interest, tax and amortisations (EBITDA) going down by 12% compared to 2014.

Fixed communications

There has been a small reduction in telephone lines compared to 2014 (0.3%), while penetration reached 43.7% of the population. At the same time and after a long downside period, fixed telephony traffic has marked a 2% increase since the inclusion of national fixed calls and outgoing calls to mobiles into the call allowance of the offered packages has increased their volume. Despite the fact that OTE is still the incumbent operator with a 50% share of the telephony lines, its traffic share is much lower and does not exceed 46%. This is attributed to the fact that the alternative operators outperformed OTE in terms of both fixed to mobile traffic (by 25%) and fixed to fixed traffic. Retail revenues from the provision of telephony and Internet services at a fixed location reached 1.4 billion euros, decreased by 3.5% compared to last year. The respective share of OTE for 2015 is estimated at 61%.

Mobile communications

In 2015, the number of mobile telephony connections reached 15.4 million, slightly decreased (0.8%) compared to 2014. However, active connections rose by 3.5%, from 12.1 to 12.6 million due to an increase in active prepaid connections by 5.4%.

As regards the share of Mobile Telephony Operators in total number of connections, the share of COSMOTE increased in December 2015 to 45.2% (compared to 44.5% in December 2014), while VODAFONE's share marked a significant positive change to 35.1% (compared to 30.4% in 2014). On the contrary, the share of WIND fell significantly from 25% to 19.5%.

The use of mobile telephony networks is characterised by the significant fall in the duration of international calls (voice minutes) and the big increase in the use of data services. The volume of voice calls marked an 8.7% reduction compared to last year, while 65% of these calls were on-net (compared to 68% in 2014). In 2015, mobile phone data services increased significantly by 69% thus reaching 35.9 billion MB, compared to 21.2% billion MB in 2014. Despite that, the mobile retail revenues (post-paid and pre-paid) decreased slightly by 4.7%, amounting to 1.66 billion euros. The average annual revenue per user (post-paid and pre-paid) was 287 and 56 euros (marking respectively a 3.6% and 6.2% reduction).

Bundled offers

The constant growth in the bundled offers, mainly of triple play services[1], is the key trend of 2015 due to the economic benefit that the subscribers enjoy compared to bying the same services separetely. There are currently 3.4 million bundled offer subscriptions, 60% of which corresponds to a double play package and 40% to a triple play package. Fixed telephony with fixed broadband Internet connection remains the most popular bundled offer (approximately 1.9 million) followed by fixed telephony, Internet and pay TV (approximately 715 thousand).

Broadband

At the end of 2015, the number of broadband lines increased by 9% reaching 3,439,034. Local Loop Unbundling (LLU) lines reached 2.05 million, marking a 1.5% increase, while VDSL lines make up 5.1% of the total broadband lines (approximately 175 thousand). The majority of broadband lines (77.4%) corresponds to nominal (download) speeds over 10Mbps, while a small percentage of approximately 5.5% corresponds to speeds over 30Mbps.

(b) Postal services

The consumer shift to electronic communications media combined to

1. Fixed telephony, fixed broadband Internet connection and mobile services or mobile telephony, Internet and pay satellite TV.

the global expansion of e-commerce call for changes in the existing postal business model. At the same time, increased competition and the continued substitution of traditional correspondence pose a pressing need in the postal industry for new services and new growth possibilities.

In 2015, the postal market in Greece showed signs of recession, contrary to 2014, where stability trends prevailed. In fact, revenues were decreased by 8.1% compared to 2014; a total of 542 million euros was collected for the transportation of 400 million items or 17.2% less than in 2014.

The Universal Service Provider's (USP) revenue share fell in 2015 to 42% (compared to 46% in 2014), while at the same time, the share of courier operators went up to 55%. Despite the fact that letters continue to account for the lion's share of the market, both in volume (91%) and in revenues (59%), the share of parcels/small parcels was increased in 2015, mainly due to an increase in e-commerce and to the substitution of letter mail by e-mail.

In 2015, in addition to the USP, there were 13 operators with Individual License, handling 8% of the total number of items of the Universal Service market. As regards the courier market, the number of operators under General Authorization was 447 or 72 more than in 2014. Nowadays, postal services in Greece, including the USP, are focusing on technology-based, customer-centric strategies and in the development of innovative products and services in their attempt to reach a higher market share.

1. Electronic communications

1.1. Trends in the electronic communications market

1.1.1. Globally

According to ITU's "Measuring Information Society Report 2015"[2], in 2015, the international electronic communications market was characterised by mixed trends. Fixed telephony and Internet penetration in the general population remains stable or decreases while mobile telephony shows strong increasing trends (especially 3G and 4G/LTE services), due to the continuing development of new networks, price reductions and the ever expanding use of smartphones and tablets. Overall in 2015, more than 45% of all households in the world and more than 80% of all developed country households had Internet access. This percentage is however significantly smaller in less developed countries, where a mere 7% of all households has Internet access. Similarly, mobile telephony subscriptions exceeded 7 billion.

Significant variations continue to persist both between developed and developing countries and between urban and rural areas. As an example, in 2015, 3G network population coverage is estimated at 89% in urban areas and only at 29% in rural areas.

Cloud computing is also dynamically growing, mainly driven by the vast data-storage capacities and the relevant services provided by apps and devices. The so-called Internet of Things (IoT) is now a reality driven by the continuing reduction of the price of IoT devices, the expansion of the use of IPv6 and a set of key innovations such as the Wireless Sensor Networks, the System on Chip, etc. It is estimated that, by 2020, the IoT eco-system will include 100 billion devices.

1.1.2. Europe

General trends

In Europe, the key features of 2015 were the continuing development of ultra-fast broadband access (focused on optic fibre networks) and the increasing demand for mobile broadband services (especially in 4G/LTE networks). There is however an overall market contraction, which in 2015 amounted to 216 billion euros compared to 237 billion euros in 2012, according to the European Commission's annual report entitled «Europe's Digital Progress Report 2016»[3]. Consumers continue to favour bundled service packages considerably since 50% of European households enjoy such services (Europe's Digital Progress Report 2016).

According to GSMA's report on mobile telephony[4] "data is helping recurring (service) revenues return to growth at the regional level for the first time this decade, with growth forecast from 2017 at an annual rate of around 1% to 2020". Although profit margins have been negatively impacted by competition and market regulation, they tend to stabilize. Investments in 4G networks, spectrum licensing and network expansion have raised capital expenditure levels from 15% at the beginning of the decade to 20% in recent years. Despite these stabilizing trends, cash flow margins remain below the historical avera-

2. http://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2015.aspx
3. https://ec.europa.eu/digital-single-market/en/download-scoreboard-reports
4. http://www.gsma.com/mobileeconomy/europe/

ges. This may raise questions over the industry's ability to finance the next phase of investment in 5G technologies.

The provision of Internet communication services (Over the Top) has been acquiring an ever increasing importance in the market, thus attracting the interest of the Body of European Regulators for Electronic Communications (BEREC) that has recently published a relevant study (BEREC Report on OTT services[5]).

Mergers and acquisitions

2015 was a year of intense activity in the field of mergers and acquisitions, whose worth exceeded 45 billion euros. Currently, the major market trend is the concentration of the mobile market in countries where there are four major mobile operators. It seems that the predominant practice is the so-called footprint-expanding merger & acquisitions[6], since these deals are approved faster and with fewer and less onerous conditions attached (i.e., the acquisition of cable operators in Germany and Spain by VODAFONE, the NUMERICABLE-SFR merger in France, etc.)

At the same time, similar deals have occurred in the United Kingdom (the HUTCHISON's proposed purchase of TELEFONICA's mobile telephony subsidiary in the UK), in Italy (the joint venture deal between HUTCHISON and VIMPELCOM) and in France (the offers by ALTICE and later by ORANGE for the acquisition of BOUYGUES TELECOM). The largest acquisition to date has taken place in the UK and it involves a convergence of fixed and mobile telephony: BRITISH TELECOM purchased the mobile telephony operator EVERYTHING EVERYWHERE, which was a joint venture of DEUTSCHE TELEKOM and ORANGE. This acquisition has been approved without any remedies by the Directorate-General for Competition of the European Commission.

European initiatives

The European Commission's initiative for the establishment of a Digital Single Market is still in progress. Currently the Commission is examining issues related to the operation of electronic communications market with particular emphasis on the European Regulatory Framework, as well as issues of wider interest such as digital intellectual rights, security issues, net neutrality and roaming issues (Roam Like at Home) etc. It is expected that by the end of 2016, the European Commission will notify its recommendations on the review of the Regulatory Framework and consult with the other European institutions (the European Parliament and the European Council).

1.1.3. Greece

In 2015, the number of licensed operators in the major electronic communications market sectors remained stable (691 compared to 633 in 2014) (Chart 1.1). The majority of these operators (70%) was offering services in the fields of voice telephony and fixed network development. As of the second quarter of 2015 there have been eight[7] mobile and fixed telephony operators in

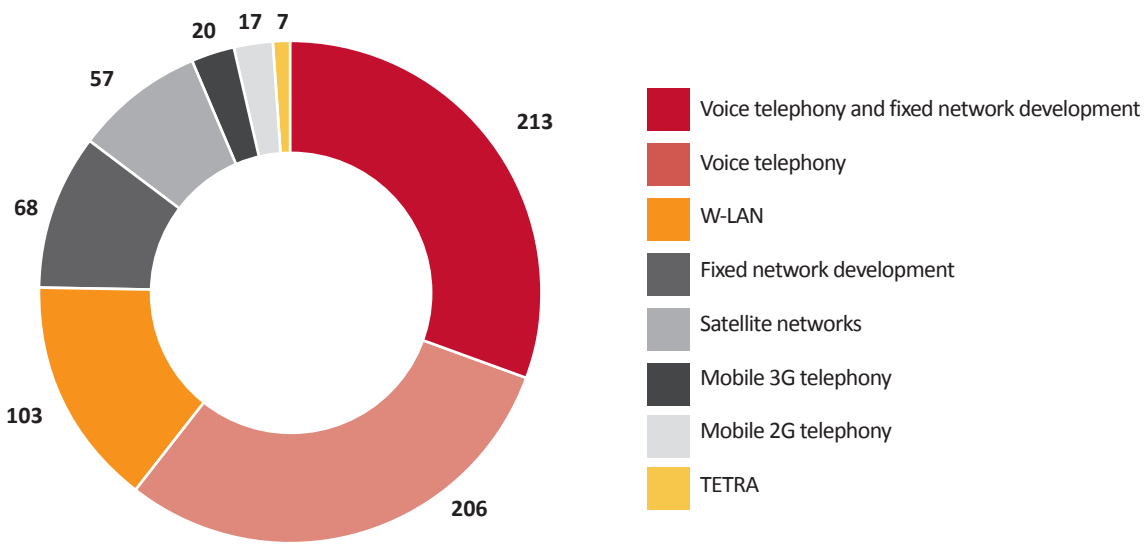
5. http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/5751-berec-report-on-ott-services
6. http://www.gsma.com/mobileeconomy/europe/
7. As of 2009 (following the acquisition of TELLAS), WIND is operating both in fixed and mobile telephony and therefore, the company is counted in both categories. The same is true for CYTA as of 2014, since the latter is also operating as Virtual Mobile Network Operator (VMNO).

Greece (out of which, six were engaged in fixed telephony and four in mobile telephony) (Table 1.1)[8].

The key financial figures of the sector (turnover[9], gross profits and assets) have slightly changed (Table 1.2). During the last decade, the contribution of the sector's turnover in Greece's GDP[10] has been constantly decreasing, falling to 2.8% in 2015 (compared to the peak rate of 3.9% in 2005). This is due both to a higher overall growth rate of the GDP compared to that of electronic communications (in fact, from 2005 to 2008, the average GDP growth rate was 5.8% compared to 1.2% of the sector's turnover) and to the extent of the reduction of the telecommunications' turnover compared to the GDP during the period 2009-2015. It should be mentioned that the average GDP reduction is 1.2% compared to 4.4% for the telecommunications turnover (Chart 1.2), which by itself demonstrates the impact the economic crisis had on the sector.

The number of employees in electronic communications exceeds 17 thousand, marking a 10% increase compared to 2014 (approximately 16 thousand), which is attributed to the absorption of OTE Plus's employees by OTE (Chart 1.3). It should also be mentioned that along with the revenues' reduction, there are other major factors influencing the number of employees in electronic communications during the last six years, including voluntary retirement schemes, as well as the establishment of a joint network management company by two mobile communications operators given that the employees of this new operator are not included in the total number of employees since the company is not licensed for the provision of electronic communications services by EETT.

Chart 1.1: Licensed operators (2015)



Source: EETT (based on operators' statements in EETT's registry)

8. It should be reminded that as of the end of the first quarter of 2015, ON TELECOMS is no longer present in the market. Similarly, HOL's absorption (acquisition) by VODAFONE was completed in 2016.
9. It should be noted that the sector's turnover has been calculated on the basis of the net revenues from electronic communications declared by active, licensed operators and not on the basis of their balance sheets that include revenues from other activities.
10. GDP-related data and components for the period 1995-2004 have been reviewed using 2010 as base year, according to Regulation EU 549/2013 (ESA 2010).

Lastly, the general cost trend for electronic communications services is reflected in the General Index of Consumer Prices over time, as shown in Charts 1.4 and 1.5. The Communications Sub-index shows no change during 2015, contrary to the General Index of Consumer Prices that follows the downward trend that commenced in March 2013. Although consumption expenditure for the purchase of specific telecommunication services may not change in absolute terms, its contribution to total household expenditure is increasing mainly due to the reduction of the price of other products and services (i.e., housing, transportation, clothing, etc.) compared to 2014.

Table 1.1: Active fixed & mobile telephony operators

Operators	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Fixed telephony	13	14	14	14	11	11	11	9	8	8	6
Mobile telephony	4	4	4	3	3	3	3	3	3	4	4

Source: EETT

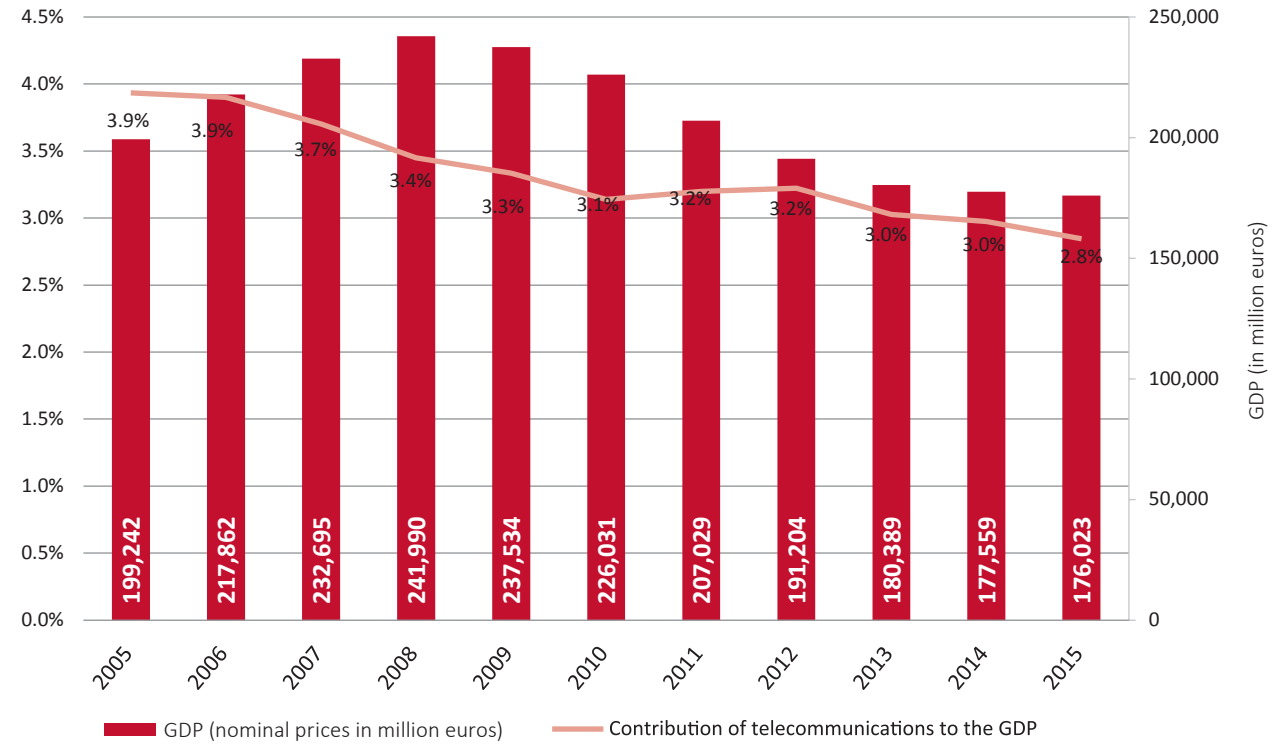
Table 1.2: Electronic communications operators financial figures (in billion euros)

	2009	2010	2011	2012	2013	2014	2015*
Turnover							
OTE	2.41	2.17	1.91	1.7	1.56	1.51	1.54
MTOs	4.27	3.58	3.23	2.99	2.51	2.37	2.17
Alternative fixed telephony operators (**)	0.47	0.57	0.62	0.63	0.58	0.55	0.81
Other operators (***)	0.78	0.77	0.86	0.84	0.81	0.85	0.49
Total	**7.92**	**7.1**	**6.62**	**6.16**	**5.46**	**5.28**	**5.01**
Gross profit							
OTE	0.35	0.14	0.20	0.06	-0.01	0.31	0.23
MTOs	1.04	0.73	0.75	0.64	0.48	0.49	0.46
Alternative fixed telephony operators (**)	0.03	0.01	0.05	0.09	0.09	0.07	-0.03
Other operators (***)	0.17	0.17	0.18	0.16	0.14	0.15	0.18
Total	**1.58**	**1.06**	**1.18**	**0.96**	**0.70**	**1.02**	**0.85**
Assets							
OTE	8.24	7.95	7.76	6.61	6.31	6.48	6.05
MTOs	8.35	7.11	6.81	6.94	6.10	5.98	5.79
Alternative fixed telephony operators (**)	1.32	1.41	1.12	0.92	0.85	0.85	0.77
Other operators (***)	1.82	1.69	1.62	1.54	1.53	1.25	2.14
Total	**19.73**	**18.16**	**17.31**	**16.01**	**14.78**	**14.59**	**14.74**

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

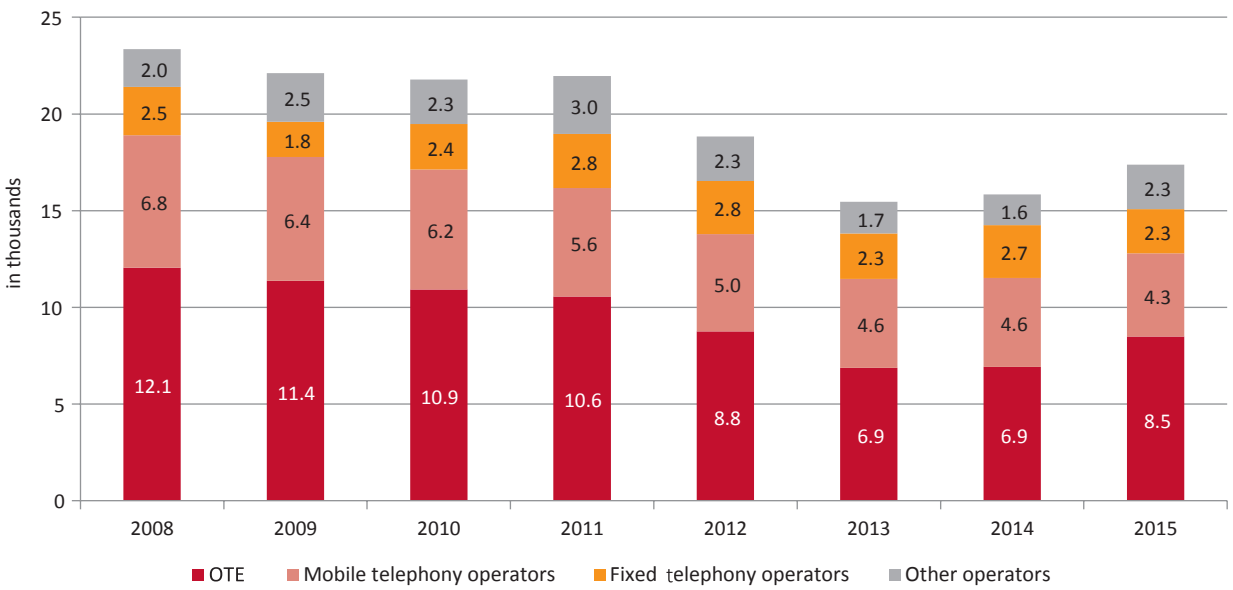
**Estimation*
***Includes all licensed fixed telephony operators*
****Includes all other active licensed operators*

Chart 1.2: Contribution of telecommunications to Greece's GDP (in million euros)



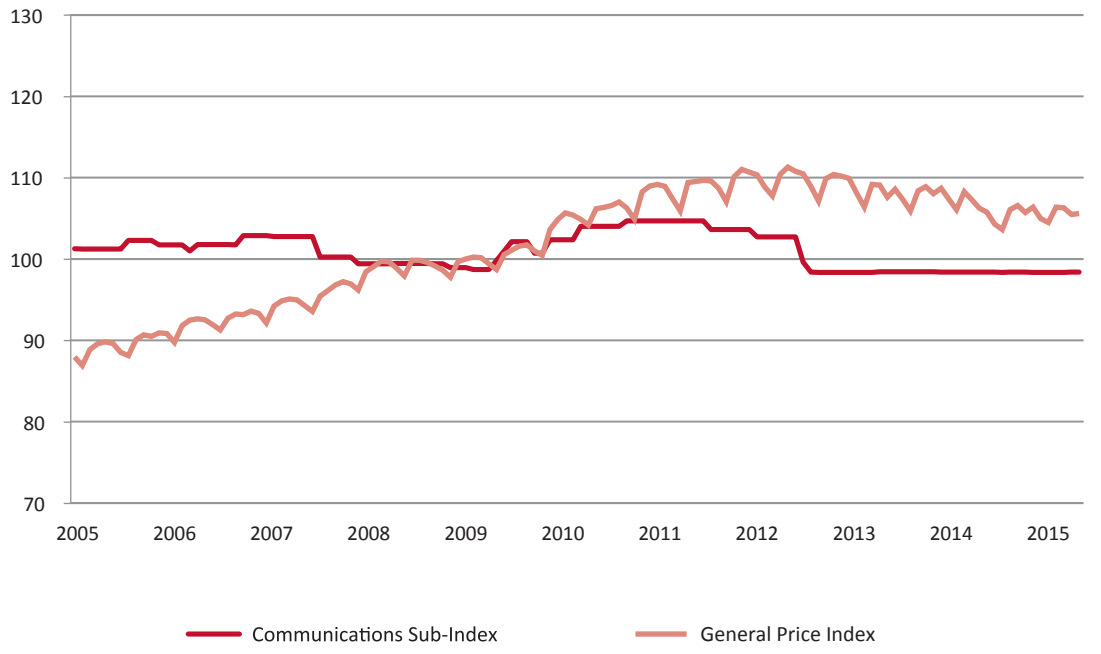
Source: EETT (based on questionnaires) and the Hellenic Statistical Authority/EUROSTAT

Chart 1.3: Number of personnel



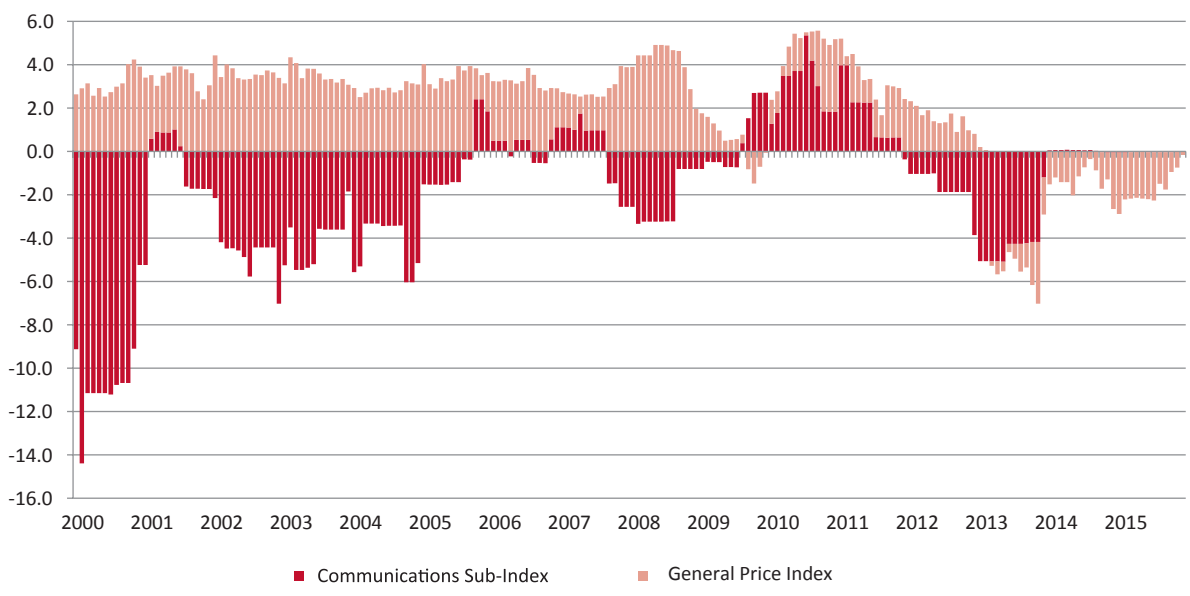
Source: EETT (based on data provided by licensed operators)

Chart 1.4: Progress of the Monthly Consumer Price Index (General Index – Communications Sub-Index)



Source: EETT (based on the Hellenic Statistical Authority data)

Chart 1.5: Change of the Monthly Consumer Price Index compared to the respective Index of the previous year



Source: EETT (based on the Hellenic Statistical Authority data)

1.2. Progress of the main financials in the electronic communications market

1.2.1. Financial data

This section presents the main financials of the electronic communications market based on data gathered by EETT from licensed operators, on a semi-annually basis, regarding their turnover, investments, etc. In this context, the listed revenues relate to fixed and mobile communications, telecommunications equipment and pay TV services provided by active, licensed operators with an annual turnover over 150,000 euros.

• In 2015, the telecommunications industry turnover exceeded 5 billion euros (Chart 1.6). OTE's turnover has increased by 1.6% due to an increase of the revenues from fixed and mobile telephony services (Chart 1.7).

• Revenues from telecommunications services account for the vast majority of the turnover (~90%). Revenues from pay TV services are also on the rise (Chart 1.9), mainly due to a significant increase of the subscriber base. It should be mentioned that in 2015, satellite TV subscribers were increased by approximately 170,000 (Chart 1.9).

• Revenues from fixed telephony services represent approximately 55% of the revenues from telecommunications services (Chart 1.10) and are generated by the provision of retail (telephony and Internet, including access to the telephone network, leased lines etc.) and wholesale telecommunications services (i.e. interconnection, wholesale access – LLU). Similarly, revenues from mobile telephony services include retail revenues from mobile telephony voice and data services, as well as wholesale interconnection, roaming and other revenues.

• Retail revenues from telephony and Internet services represent 73% of the total fixed networks' revenues, followed by the wholesale access services' revenues (10% of total revenues) (Chart 1.11). As regards mobile networks and services, retail revenues from voice and data services represent the vast majority of total revenues at 67% and 20% respectively (Chart 1.12).

• The total investments made by electronic communications operators (Chart 1.13) have decreased by 27%, representing 13.3% of the total sector's turnover. This is mainly due to the increased investments by MTOs in 2014 as a result of the radio frequency spectrum licensing. In 2015, investments are equally distributed between fixed and mobile telephony operators (49.2% and 50.8% respectively).

• In 2015, most of the investments made by electronic communications operators (Chart 1.14) were directed towards telecommunications' infrastructure and research and development (i.e., software, new services, etc.).

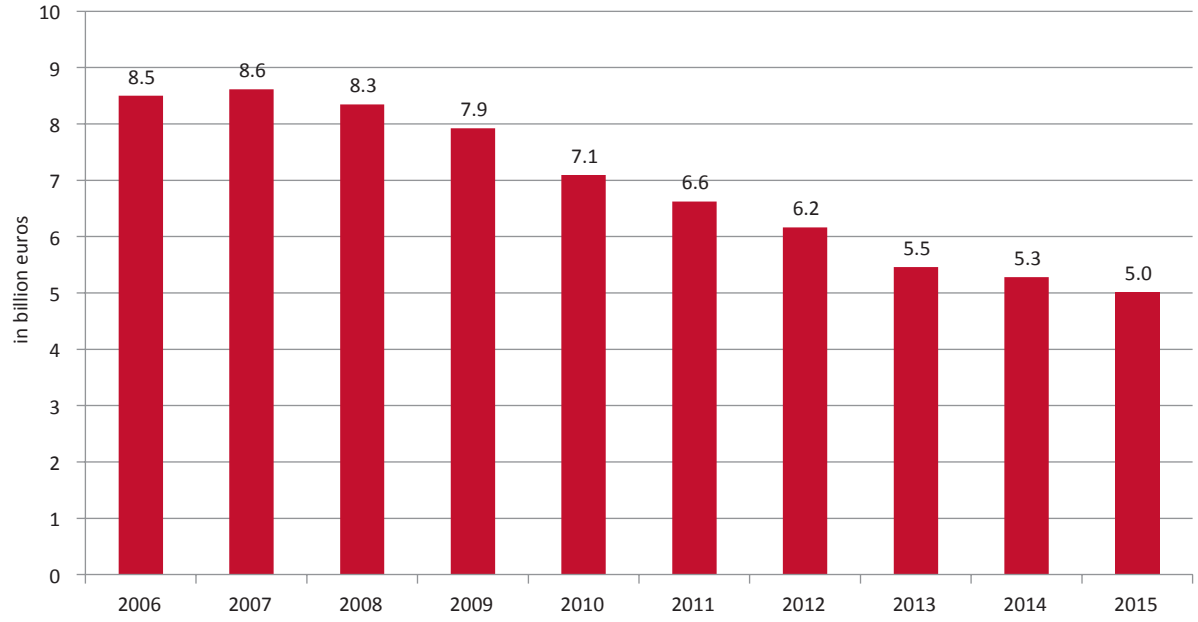
• The weighted average turnover's decrease of the period 2010-2015 is lower than the decrease in investments during the same period. This fact is also partly due to periodic radio frequency spectrum licensing (Chart 1.15). During the same period, things are different for each of the operators: OTE may have lost, on average, 6.7% of its revenues but has increased its investments by 1.8%.

• Regarding the largest fixed and mobile telephony operators, their investments represent 5% to 20% of the value of their total revenues[11] (Chart 1.16).

• The profits before interest, tax and amortisations (EBITDA) of the major fixed and mobile telephony operators have decreased by 12% compared to 2014. It is worth mentioning that compared to 2008 and taking into account the outcome of mergers and acquisitions, the EBITDA profitability index was decreased almost by half, from approximately 2 to 1.1 billion euros (Chart 1.17).

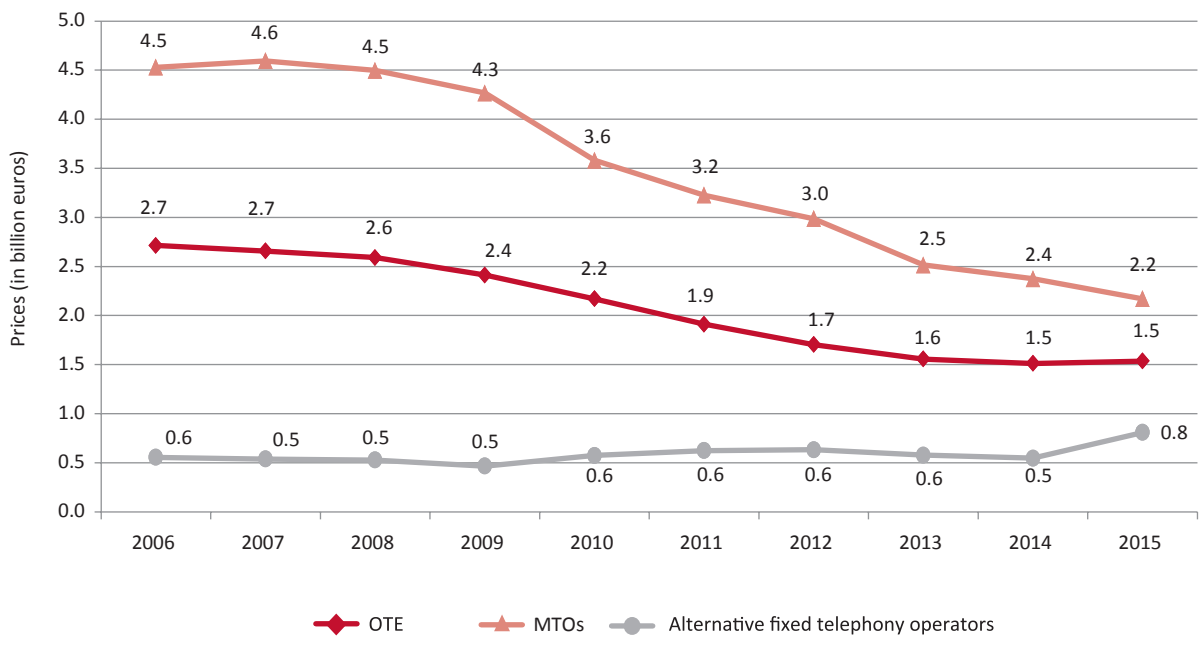
11. Based on the financial statements/balance sheets of the electronic communications providers.

Chart 1.6: Turnover of electronic communications operators



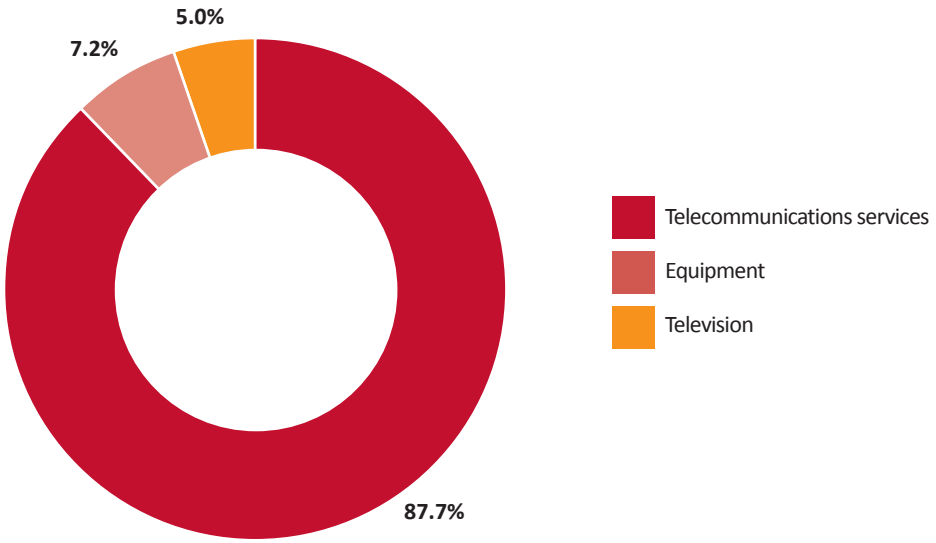
Source: EETT (based on data provided by the active licensed operators)

Chart 1.7: Turnover of fixed & mobile telephony operators



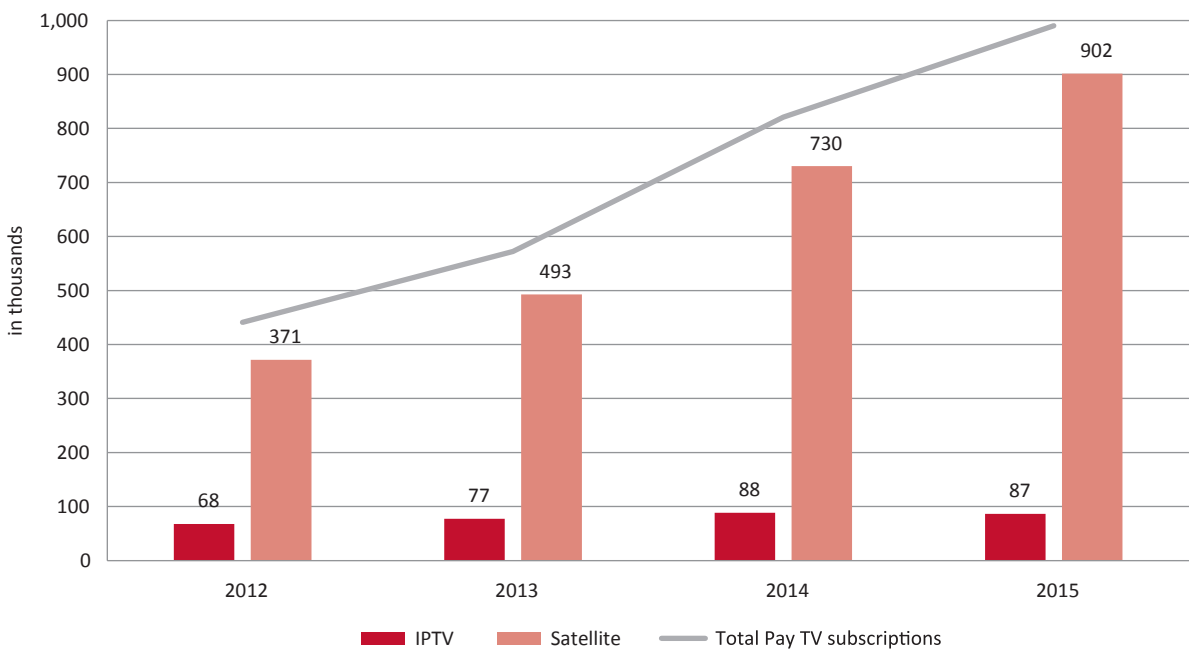
Source: EETT (based on data provided by the active licensed operators)

Chart 1.8: Turnover breakdown



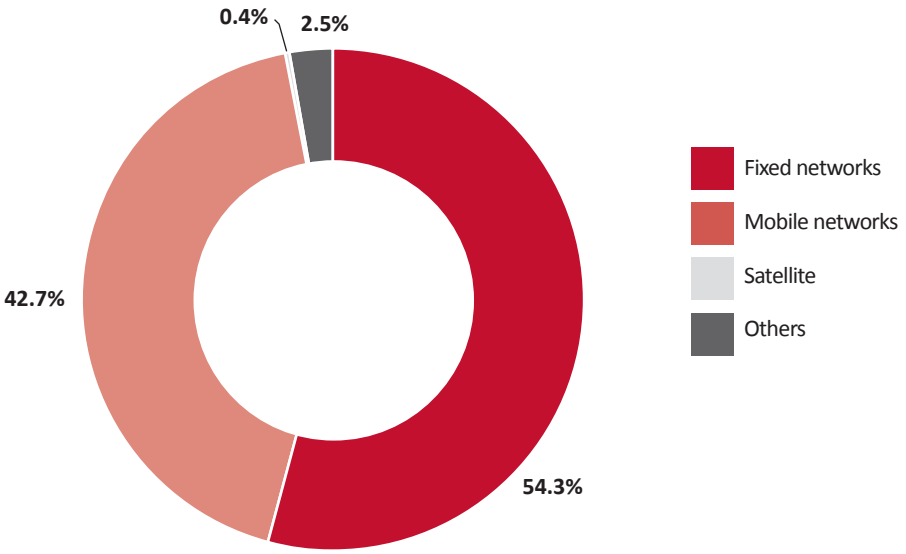
Source: EETT (based on data provided by the active licensed operators)

Chart 1.9: Progress of Pay TV subscriptions



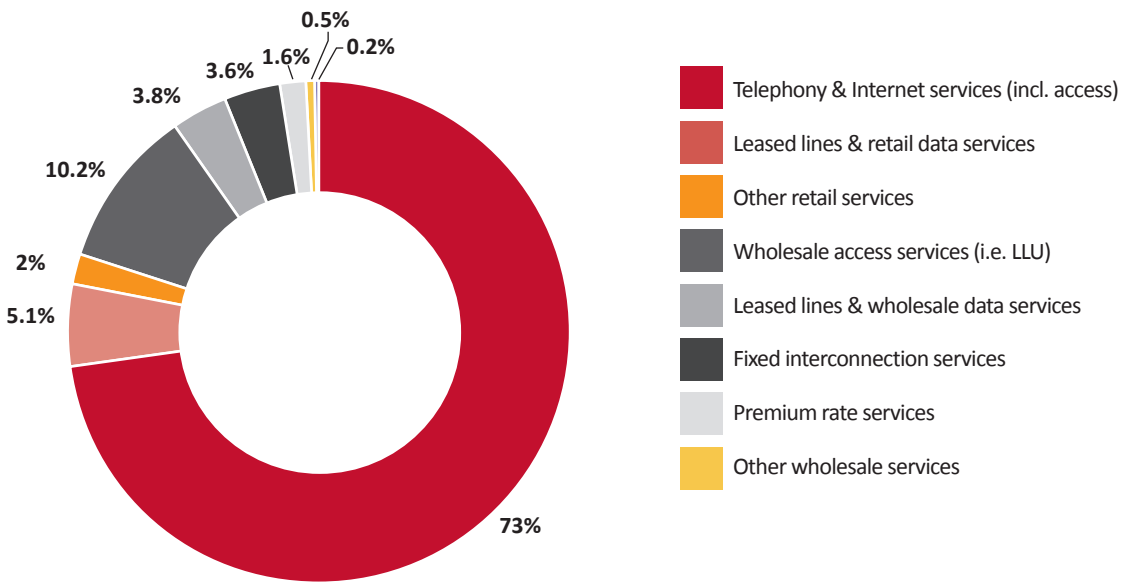
Source: EETT (based on data provided by the active licensed operators)

Chart 1.10: Telecommunication services breakdown



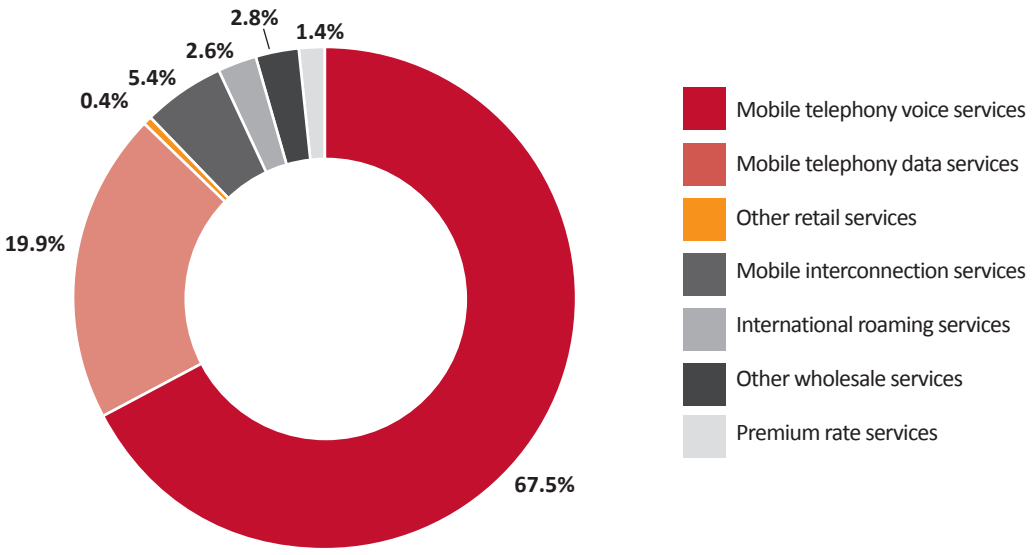
Source: EETT (based on data provided by the active licensed operators)

Chart 1.11: Fixed network revenues breakdown



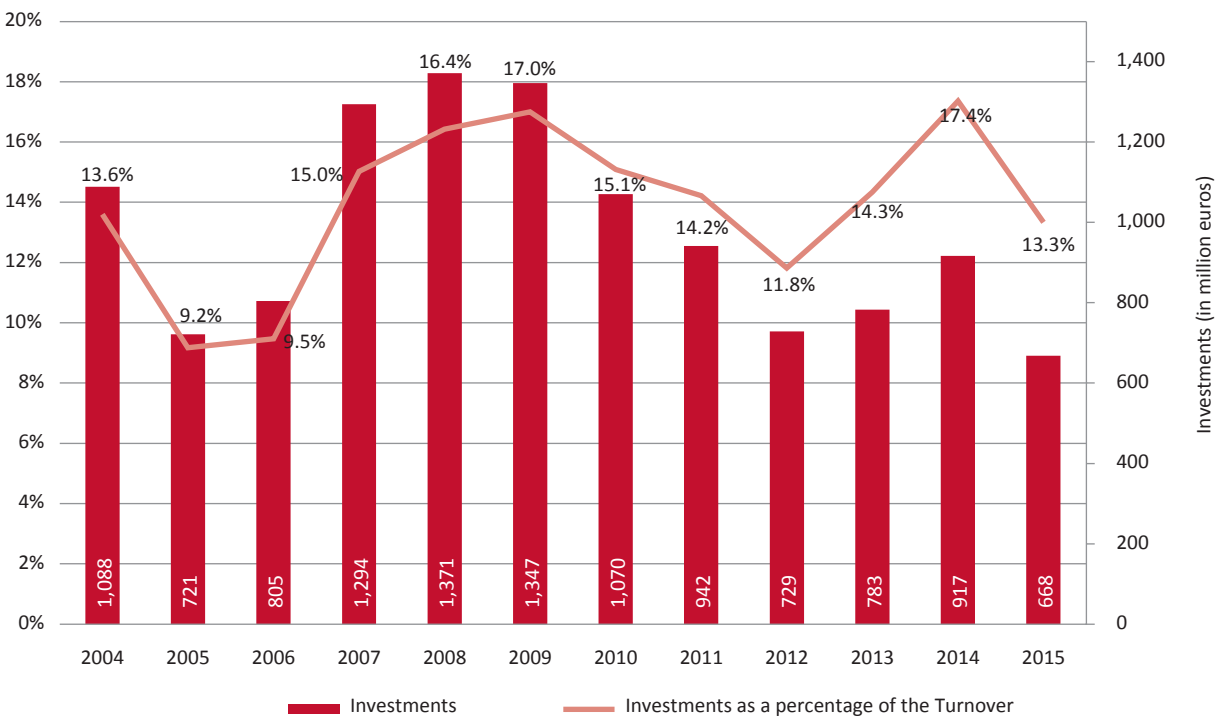
Source: EETT (based on data provided by the active licensed operators)

Chart 1.12: Mobile network revenues breakdown



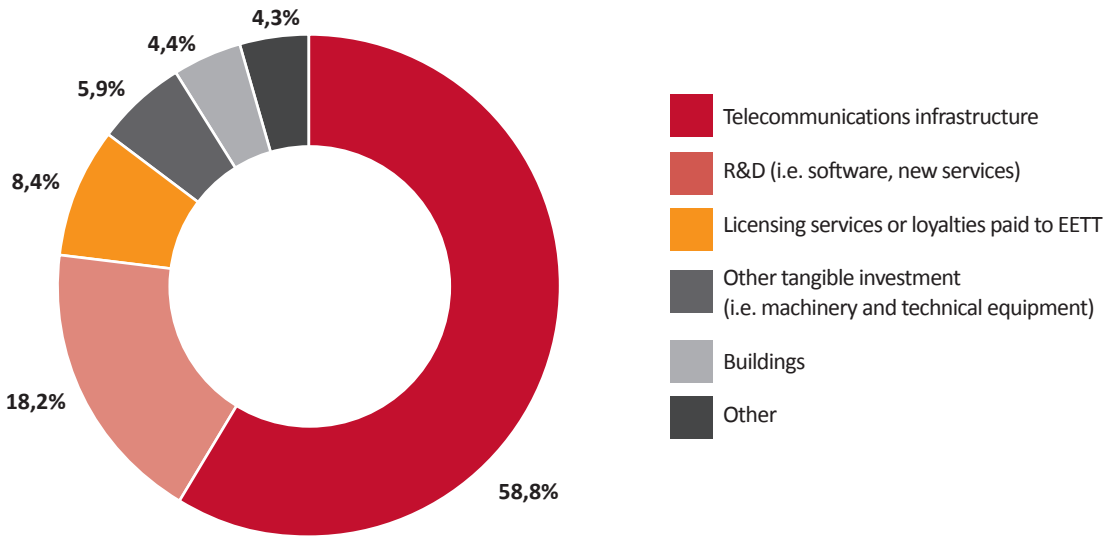
Source: EETT (based on data provided by the active licensed operators)

Chart 1.13: Investments from electronic communications operators



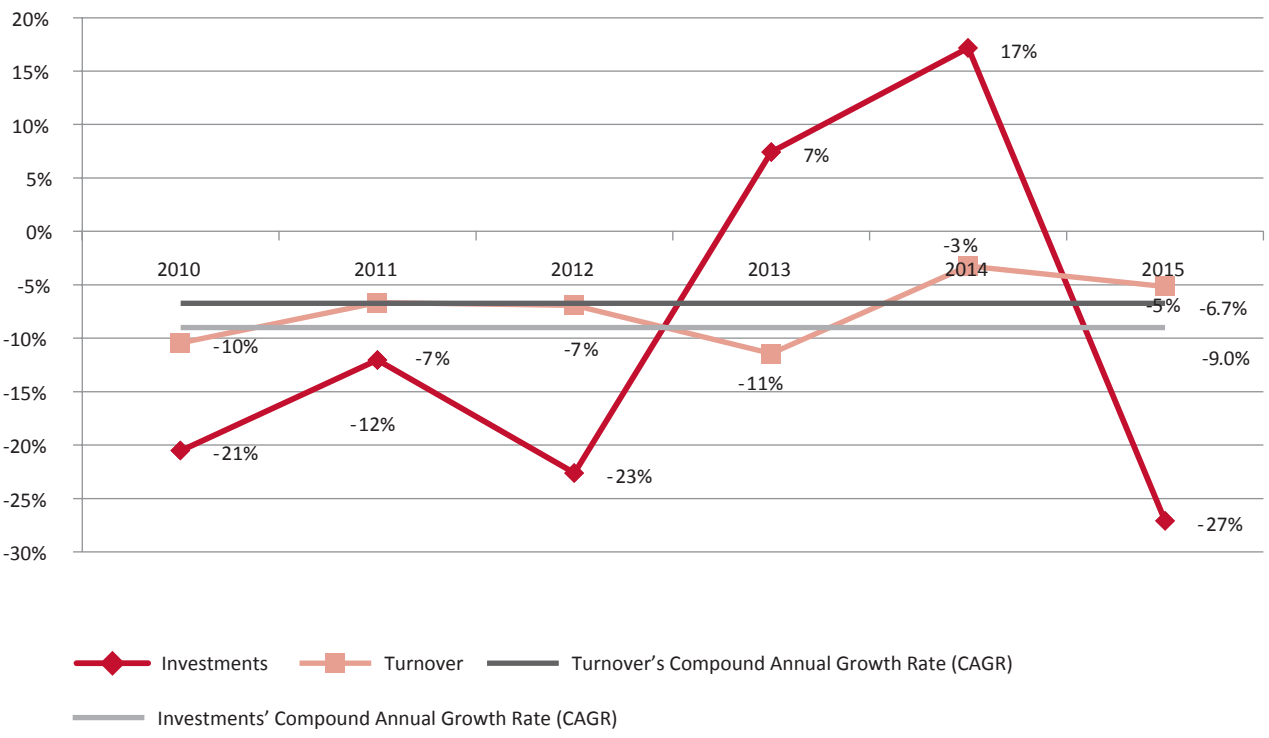
Source: EETT (based on data provided by the active licensed operators)

Chart 1.14: Electronic communications operators investments breakdown (2015)



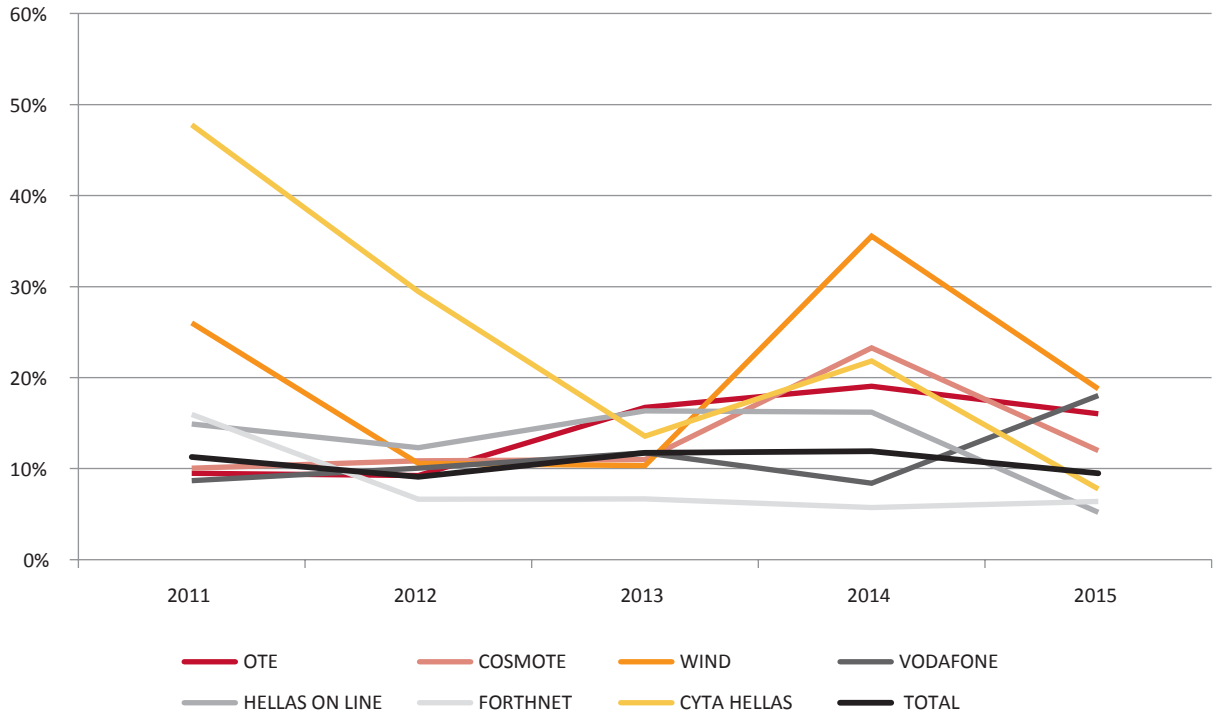
Source: EETT (based on data provided by the active licensed operators)

Chart 1.15: Growth Rate of Investments /Turnover



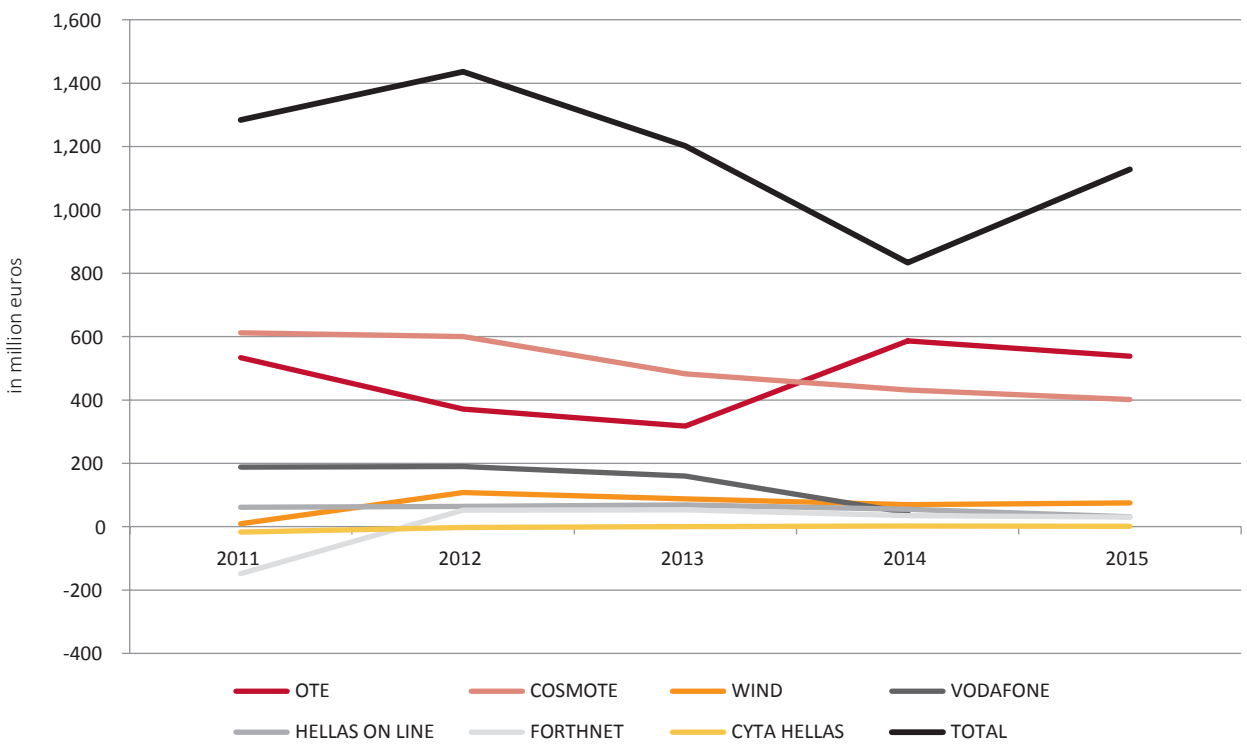
Source: EETT (based on data provided by the active licensed operators)

Chart 1.16: Investments / Turnover ratio



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

Chart 1.17: Earnings before interests, taxes, depreciation and amortization (EBITDA)



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

1.2.2. Fixed communications

Access and subscriptions

In December 2015, the number of access lines to the public telephone network at a fixed location was 4,748,802 (43.7% penetration over the general population), compared to 4,758,271 in December 2014 marking an additional small decrease of 0.3% and an overall decrease of 14% compared to the end of 2005 (5,518,683) (Chart 1.18). These lines include OTE's Managed VoIP, PSTN and ISDN lines as well as those of the alternative operators (Table 1.3).

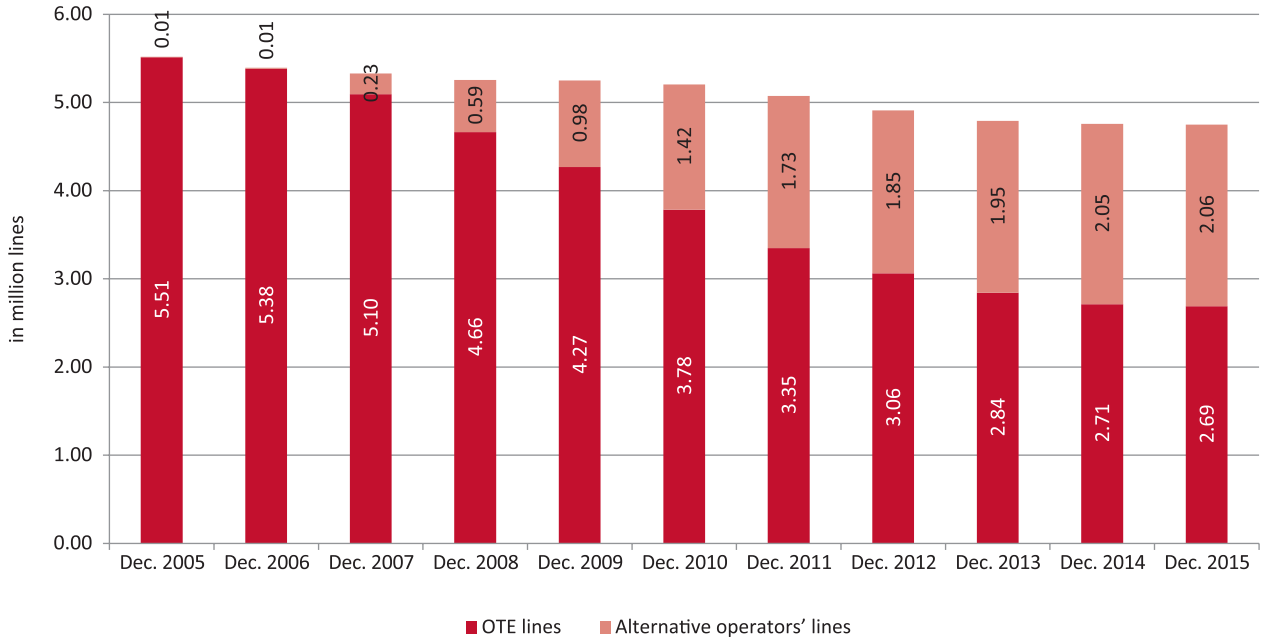
OTE's number of telephone lines decreased by 0.8% (26,991 lines) and its share at the end of 2015 was 56.6% compared to 57% in 2014. On the contrary, the number of telephone lines of alternative operators increased by 0.6% (12,078 lines). In absolute terms, this indicates that disconnections from the fixed network pertain mostly to OTE subscribers. On the other hand, in 2015, the capability of the alternative operators to add new subscribers to their networks (namely OTE's churn rate) was further limited standing now at a level that is almost below 15% of the respective numbers of 2014. At this point, it is worth noting that in 2015, 3% of OTE's lines seem to be Managed VoIP.

Table 1.3: Progress of telephony lines

	OTE lines					Alternative operators' lines					Total lines
	PSTN	ISDN BRA	Managed VoIP	ISDN PRA	Total	PSTN & ISDN BRA-no wholesale line leasing	PSTN & ISDN BRA –via wholesale line leasing	Managed VoIP	ISDN PRA	Total	
Dec. 2000	5,659,274	96,972	-	3,946	5,760,192	-	-	-	-	0	5,760,192
Dec. 2001	5,607,726	199,033	-	5,385	5,812,144	-	-	-	-	0	5,812,144
Dec. 2002	5,412,796	349,751	-	6,023	5,768,570	93	-	-	-	93	5,768,663
Dec. 2003	5,200,231	448,542	-	6,766	5,655,539	650	-	-	-	650	5,656,189
Dec. 2004	5,078,908	525,499	-	7,138	5,611,545	1,787	-	-	-	1,787	5,613,332
Dec. 2005	4,927,622	578,505	-	7,094	5,513,221	5,018	-	-	444	5,462	5,518,683
Dec. 2006	4,778,245	597,867	-	6,213	5,382,325	12,176	-	-	334	12,510	5,394,835
Dec. 2007	4,509,564	579,533	-	6,185	5,095,282	205,707	-	26,875	480	233,062	5,328,344
Dec. 2008	4,110,102	548,388	-	5,971	4,664,461	547,242	-	41,992	681	589,915	5,254,376
Dec. 2009	3,744,759	517,337	-	5,677	4,267,773	848,354	42,405	89,524	695	980,978	5,248,751
Dec. 2010	3,306,469	473,183	-	5,259	3,784,911	1,191,665	71,883	154,833	747	1,419,128	5,204,039
Dec. 2011	2,917,578	426,830	-	4,808	3,349,216	1,395,486	82,091	246,697	1,820	1,726,094	5,075,310
Dec. 2012	2,670,296	387,692	-	4,320	3,062,308	1,415,564	63,964	364,288	2,791	1,846,607	4,908,915
Dec. 2013	2,484,926	354,655	-	3,791	2,843,372	1,516,775	47,082	380,420	3,025	1,947,302	4,790,674
Dec. 2014	2,377,849	330,034		3,499	2,711,382	1,612,296	35,325	396,306	2,962	2,046,889	4,758,271
Dec. 2015	2,298,569	303,791	78,789	3,242	2,684,391	1,651,635	14,344	390,189	2,799	2,058,967	4,743,358

Source: EETT

Chart 1.18: Progress of telephony lines



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

Retail outgoing traffic[12]

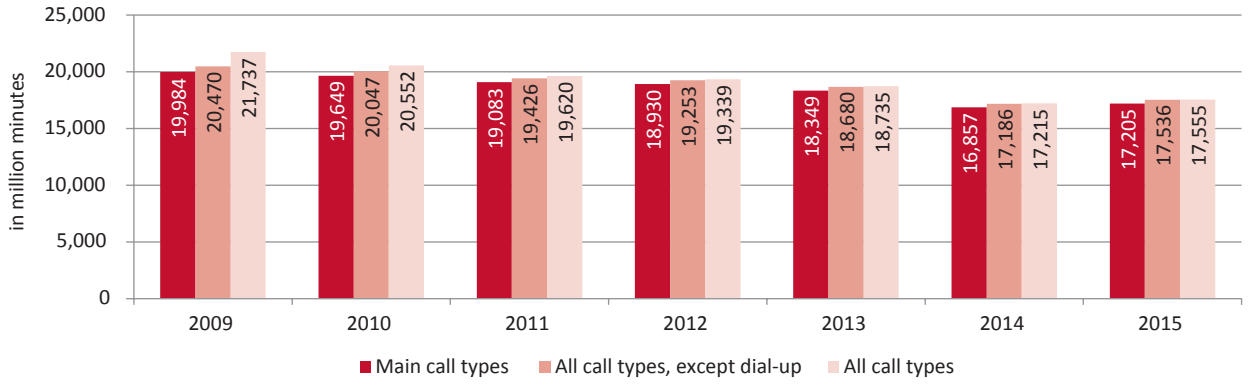
In 2015, the steadily decreasing fixed telephony traffic rose by 2%, reaching 17.5 billion minutes due to an increase in the volume of national fixed calls and of calls to mobiles (Chart 1.19). The duration of the fixed to mobile calls increased for the second consecutive year (12.8% in 2015 and 6.3% in 2014), due to the extended inclusion of these calls into the call allowance of the offered packages (Charts 1.20 and 1.21). It should be mentioned that the duration of the main call types represented 98% of the duration of all call types for the fourth consecutive year. Regarding the breakdown of the main fixed call types, 84% are national fixed calls, 13% calls to mobiles and the remaining 3% international calls. More information on the progress of traffic per call type over time is provided by Table 1.4.

Despite the fact that OTE's market share in lines is much higher than 50%, its traffic share is lower and does not exceed 46%, because the alternative operators outperformed OTE in increasing mainly fixed to mobile traffic (25%) as well as fixed to fixed traffic (Charts 1.22 – 1.23). Based on the progress of the operators' annual market shares for all main call types over time (Chart 1.24), the key feature is the accelarating increase of the market's concetration (following ON TELECOMS's closure in 2015), since almost 97% of the market share in 2015 is held by OTE and four alternative operators, namely in alphabetical order: CYTA, FORTHNET, HELLAS ON LINE and WIND.

At this point, it is necessary to underline the fact that the 2% increase of the fixed telephony traffic in 2015 compared to 2014 is attributed to the 9% increase of the traffic of all operators except OTE. During the same period, OTE's traffic shrinked by 5.1% (Chart 1.25).

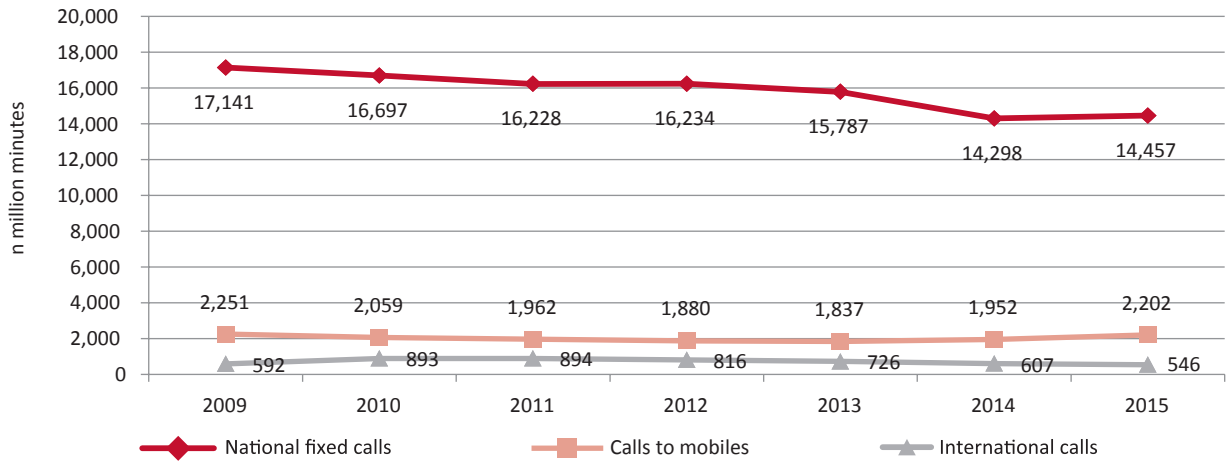
12. Please note that all the data presented in this report relate to subscriber services. Card telephony services (pre-paid services) are not included.

Chart 1.19: Progress of the fixed outgoing traffic



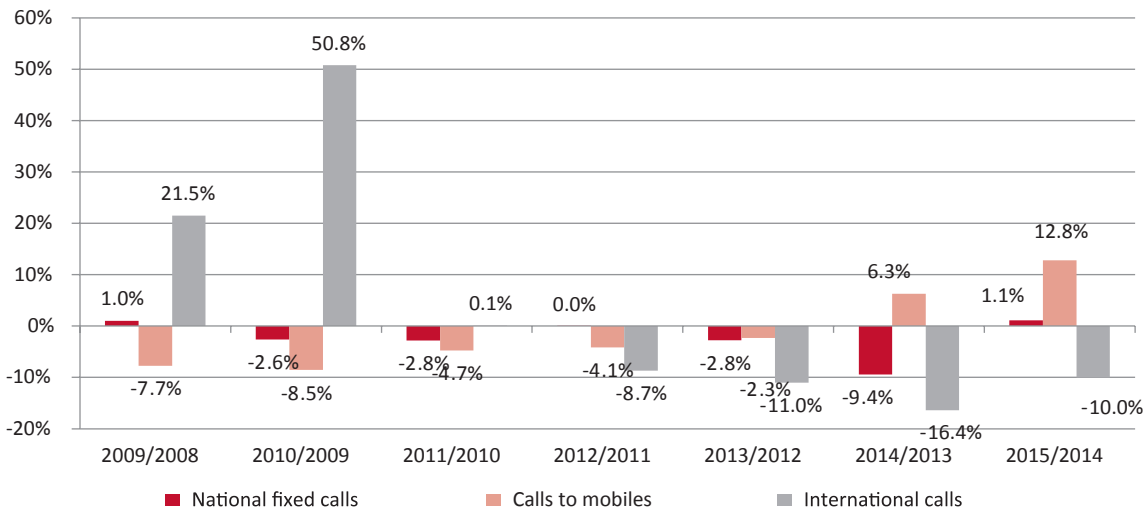
Source: EETT (based on data provided by licensed operators)

Chart 1.20: Fixed outgoing traffic for the main call types



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

Chart 1.21: Annual change of fixed outgoing traffic volume

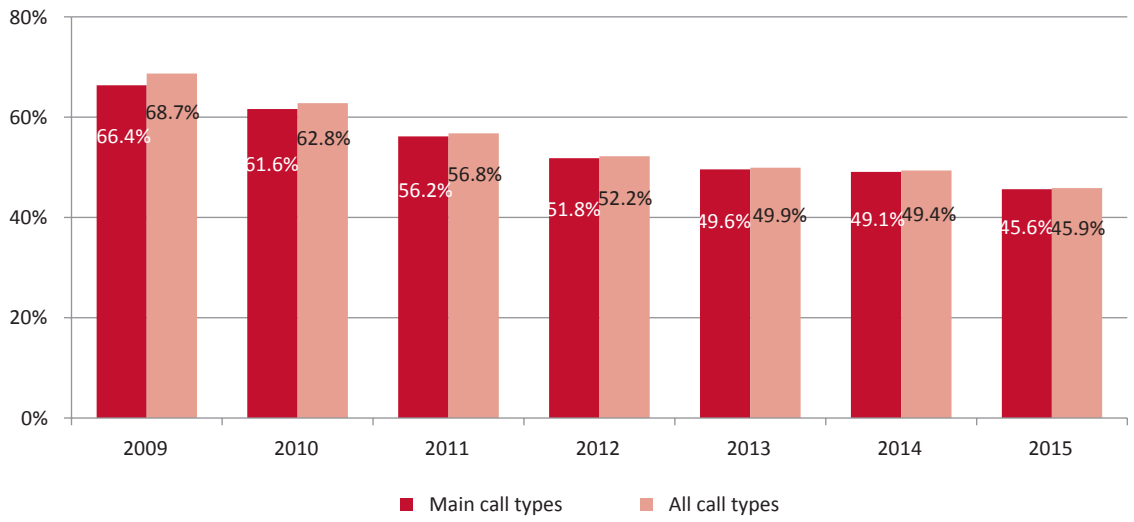


Source: EETT ((based on data provided by licensed operators)

Table 1.4: Volume per call type (in million minutes)

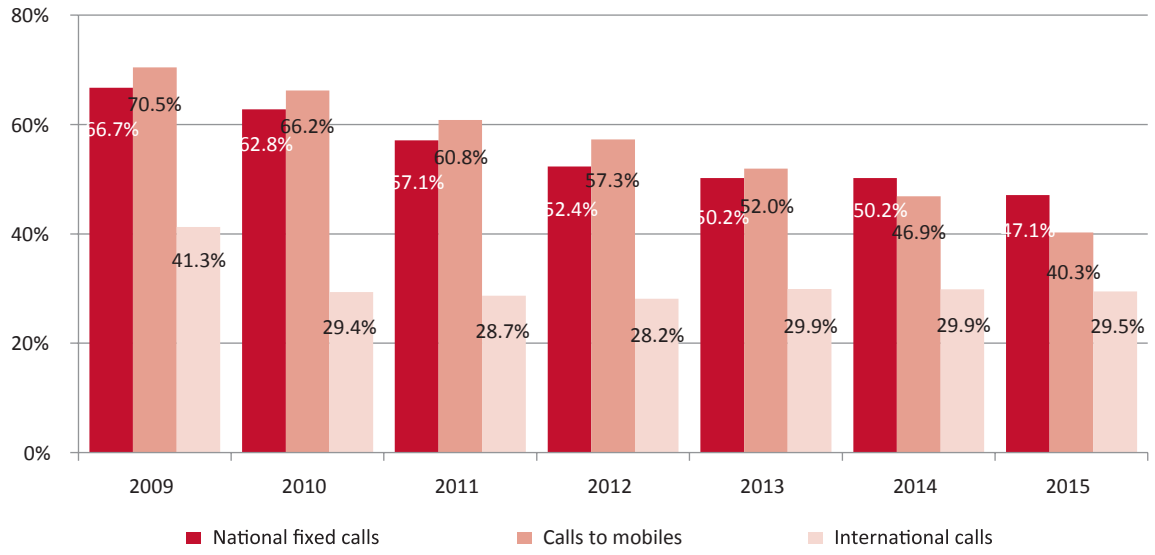
	Type of call	2009	2010	2011	2012	2013	2014	2015
Main call types	National fixed calls	17,141	16,697	16,228	16,234	15,787	14,298	14,457
	Calls to mobiles	2,251	2,059	1,962	1,880	1,837	1,952	2,202
	International calls	592	893	894	816	726	607	546
Other call types	Dial-up calls	1,267	505	194	86	55	29	19
	Calls to personal numbers (series 70)	0.00	0.05	0.13	0.13	0.14	0.14	not available
	Calls to toll free numbers- 800	30	24	23	23	26	31	58
	Calls to shared cost services- 801	158	77	52	35	33	31	0
	Calls to short code services (3-digit, 4-digit and 5-digit)	288	236	225	220	219	229	238
	Calls to value added services	10	61	43	45	53	37	35
Main call types		19.984	19,649	19,083	18,930	18,349	16,857	17,205
All call types (except dial up)		20.470	20,047	19,426	19,253	18,680	17,186	17,536
All call types		21.737	20,552	19,620	19,339	18,735	17,215	17,555

Chart 1.22: OTE's annual market shares (based on outgoing traffic)



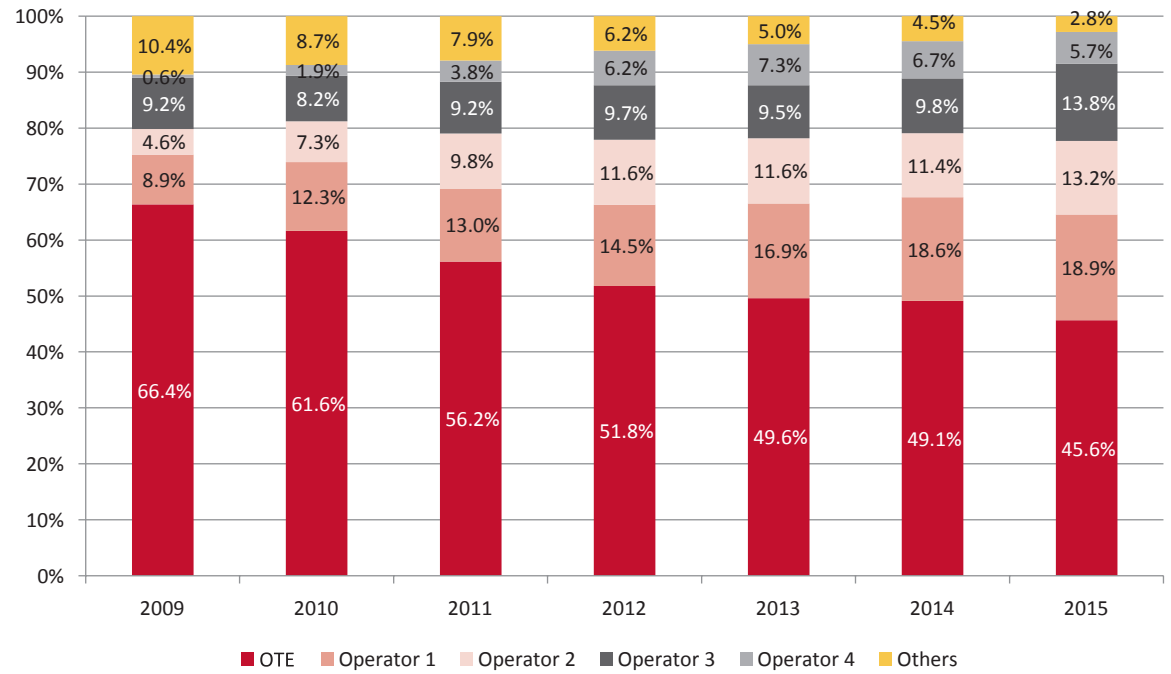
Source: EETT (based on data provided by licensed operators)

Chart 1.23: OTE market shares per main call type (based on traffic)



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

Chart 1.24: Market shares for the main call types (based on traffic)

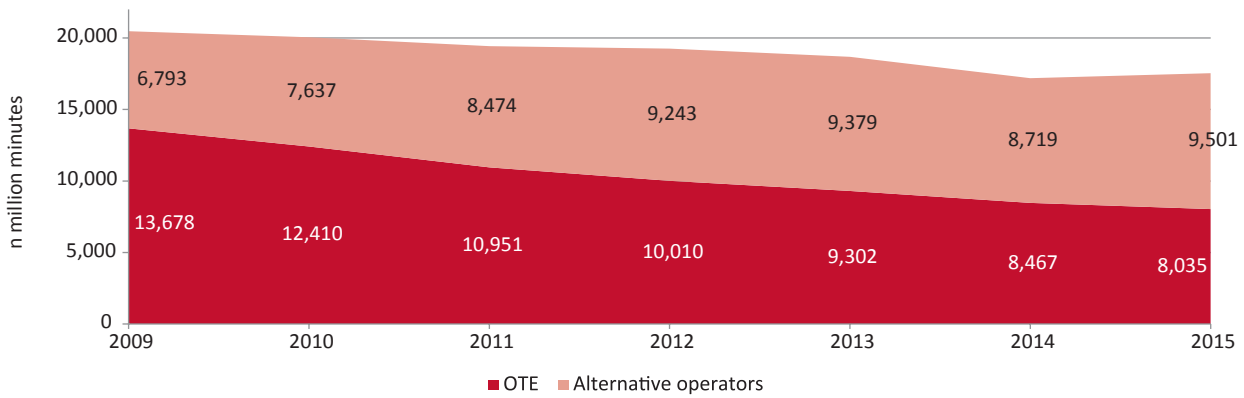


Source: EETT (based on data provided by licensed operators)

Table 1.5: Market shares for the main call types

	2009	2010	2011	2012	2013	2014	2015
OTE	66.4%	61.6%	56.2%	51.8%	49.6%	49.1%	45.6%
Operator 1	8.9%	12.3%	13.0%	14.5%	16.9%	18.6%	18.9%
Operator 2	4.6%	7.3%	9.8%	11.6%	11.6%	11.4%	13.2%
Operator 3	9.2%	8.2%	9.2%	9.7%	9.5%	9.8%	13.8%
Operator 4	0.6%	1.9%	3.8%	6.2%	7.3%	6.7%	5.7%
Others	10.4%	8.7%	7.9%	6.2%	5.0%	4.5%	2.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Chart 1.25: Outgoing traffic volume for OTE and the alternative operators (except dial-up)



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

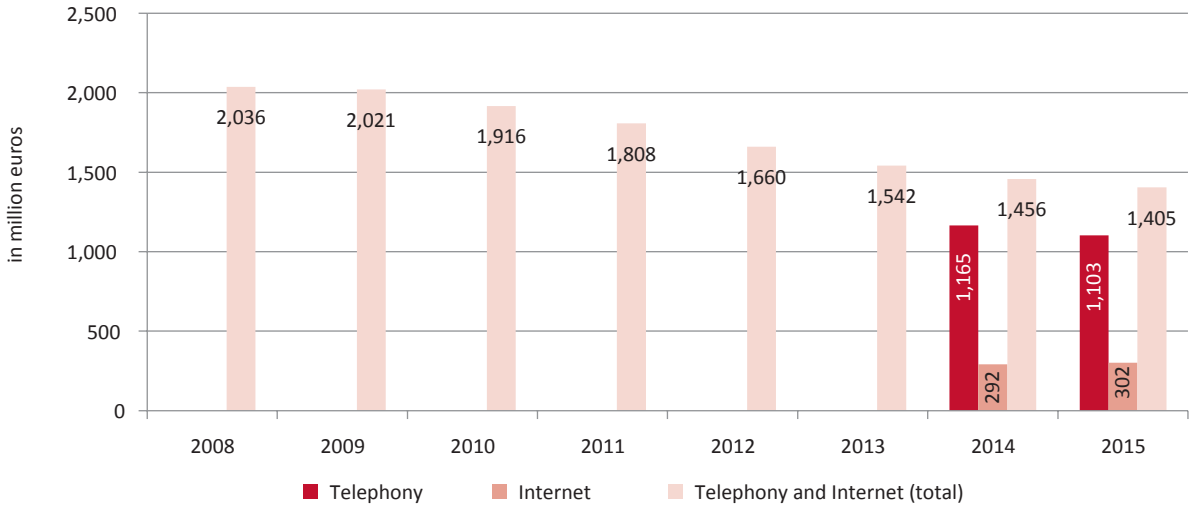
Retail revenues from rendering telephony and Internet services at a fixed location[13]

In 2015, the retail revenues from rendering telephony and Internet services at a fixed location are estimated at 1.4 billion euros, decreased by 3.5% compared to 2014 (Chart 1.26). Retail telephony revenues at a fixed location fell to 1.1 billion euros, marking a 5.3% decrease compared to the previous year. It should be mentioned that the revenues presented here are prior to any clearings with other third parties and the telephony revenues include revenues both from access[14] and from all types of calls. Further notice should be made to the fact that the data presented here and, in particular, the allocation of revenues to telephony and Internet revenues is based on estimations made by the majority of operators[15].

OTE's respective share for 2015 is estimated at 60.1% compared to 61.3% in 2014. During the last four years, OTE's aggregate share on the retail telephony and Internet revenues has been relatively stable (approximately 61%) (Chart 1.27).

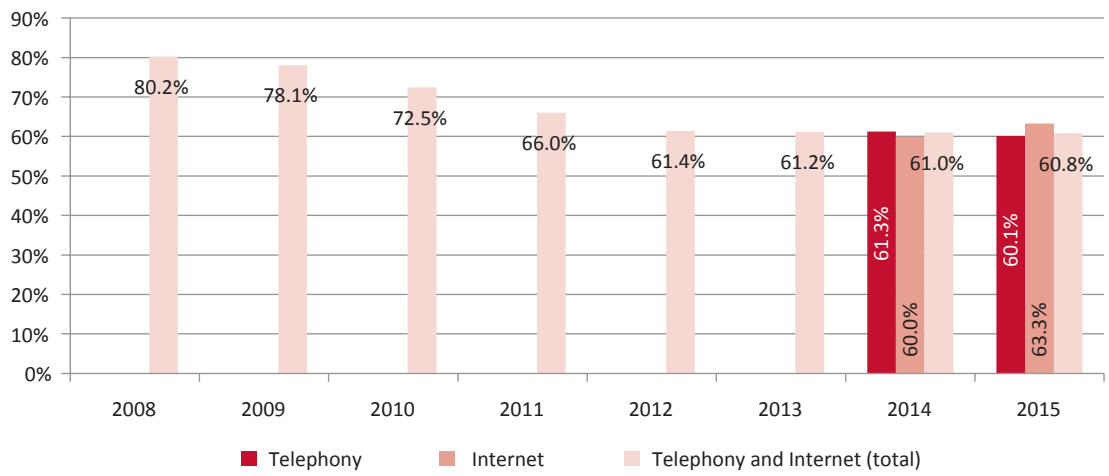
13. It is noted that all the data presented in this report relates to subscriber services. Pre-paid services are not included.
14. The data includes initial connection/installation fees, monthly rental for the access line to telephony services and revenues from additional facilities.
15. The expected launching of the fixed telephony subscriber charge may induce operators to review their policies in the light of the relevant regulatory interventions.

Chart 1.26: Retail revenues from the provision of telephony and Internet services at a fixed location



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

Chart 1.27: OTE's market share (based on retail revenues from telephony and Internet at a fixed location)

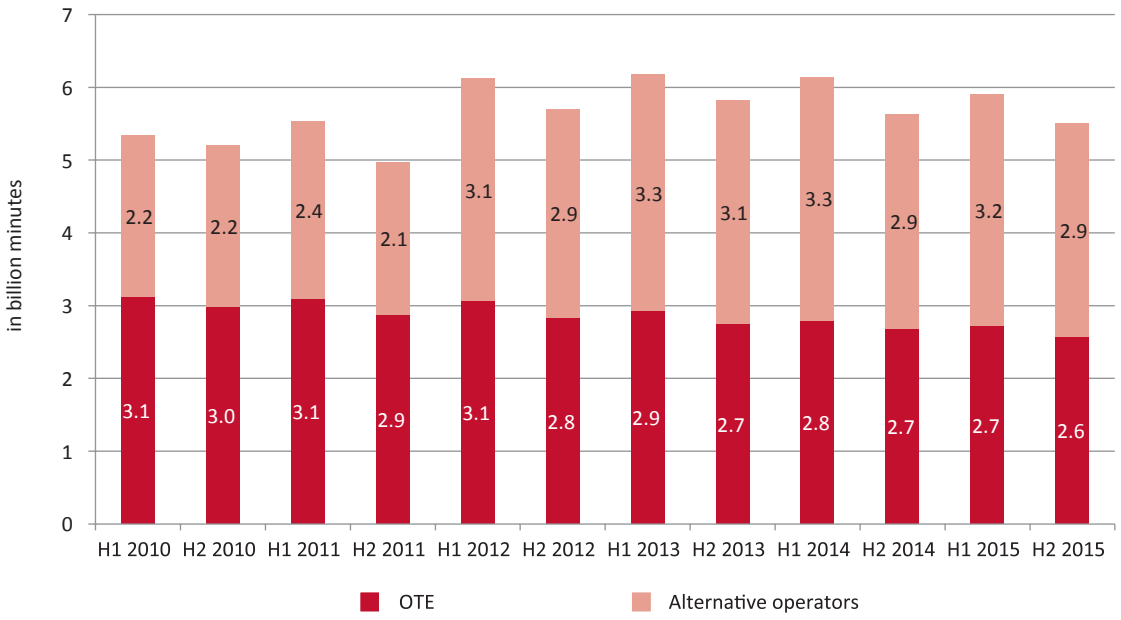


Source: EETT (based on data provided by licensed operators)

Fixed telephony interconnection

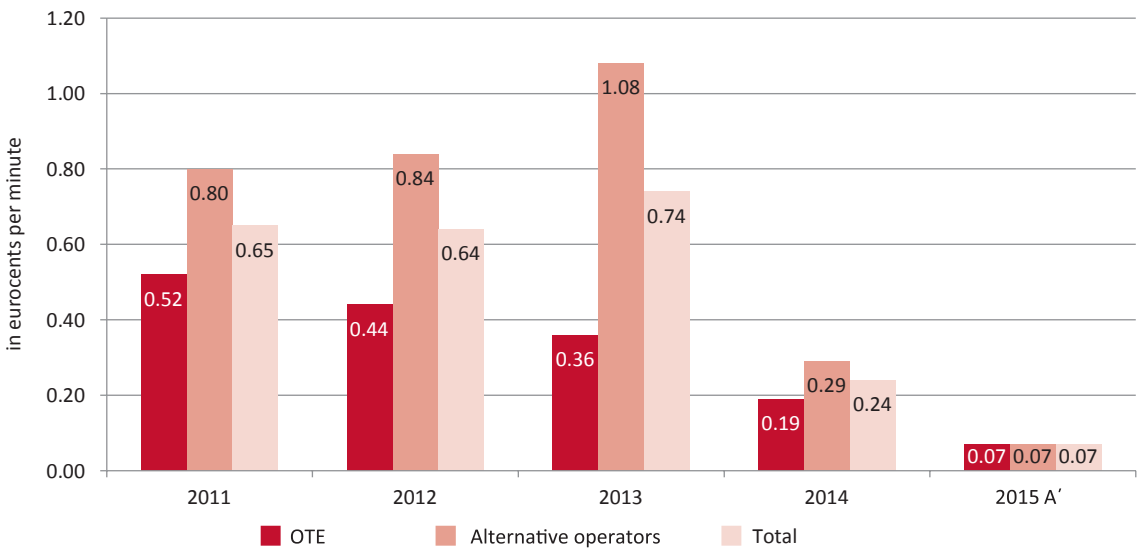
In 2015, call termination (Chart 1.28) followed up on the downward course of the past years reaching 5.51 billion minutes at the end of the year, decreased by 2% compared to the same period in 2014 (5.63 billion minutes). As of the second semester of 2012, the termination traffic to the alternative operators' fixed telephony networks exceeds that to OTE's network. The overall call termination traffic to fixed telephony networks has been slightly decreased in the past few years. Fully symmetrical termination fees for all fixed telephony operators will be implemented for the first time in 2015 (Chart 1.29).

Chart 1.28: Call termination traffic to fixed telephony networks (OTE – alternative operators)



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

Chart 1.29: Actual Interconnection fees

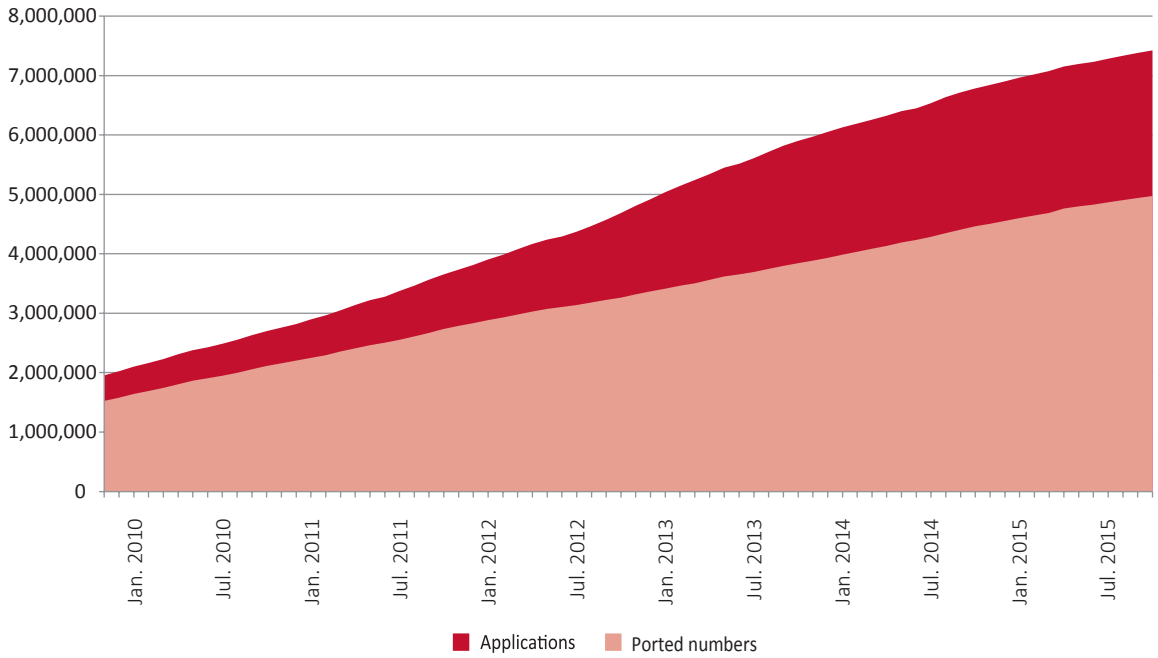


Source: EETT (based on data provided by licensed operators)

Number portability for fixed telephony

In 2015, 639,865 applications were submitted compared to 882,443 applications in 2014 (a drop of 27.5%) and 509,656 numbers were ported, marking a 17.9% drop compared to 2014 (Chart 1.30). This indicates that approximately 80% of the initial portability applications are seen through.

Chart 1.30: Number portability for fixed telephony



Source: EETT

1.2.3. Mobile communications

Subscriptions

In 2015, the total mobile telephony subscriptions[16] slightly dropped[17] by 0.8% to 15.4 million at the end of the year compared to 15.5 million subscriptions at the end of 2014. Conversely, the number of active subscriptions/connections[18] increased by 3.5%, from 12.1 to 12.6 million connections (Table 1.6 and Chart 1.31).

Both post-paid and pre-paid connections remained roughly at the same levels of 2014 (4.2 million post-paid subscribers and 11.2 million pre-paid users) (Chart 1.32). The number of active pre-paid connections increased by 5.4%, from 7.9 million at the end of 2014 to 8.4 million at the end of 2015.

Regarding the MTO's shares over the total number of subscribers (Chart 1.33), COSMOTE's share slightly increased (from 44.5% at the end of 2014 to 45.2% in 2015), VODAFONE's share rose considerably (from 30.4% to 35.1%), while WIND's share dropped proportionately from 25% to 19.5%.

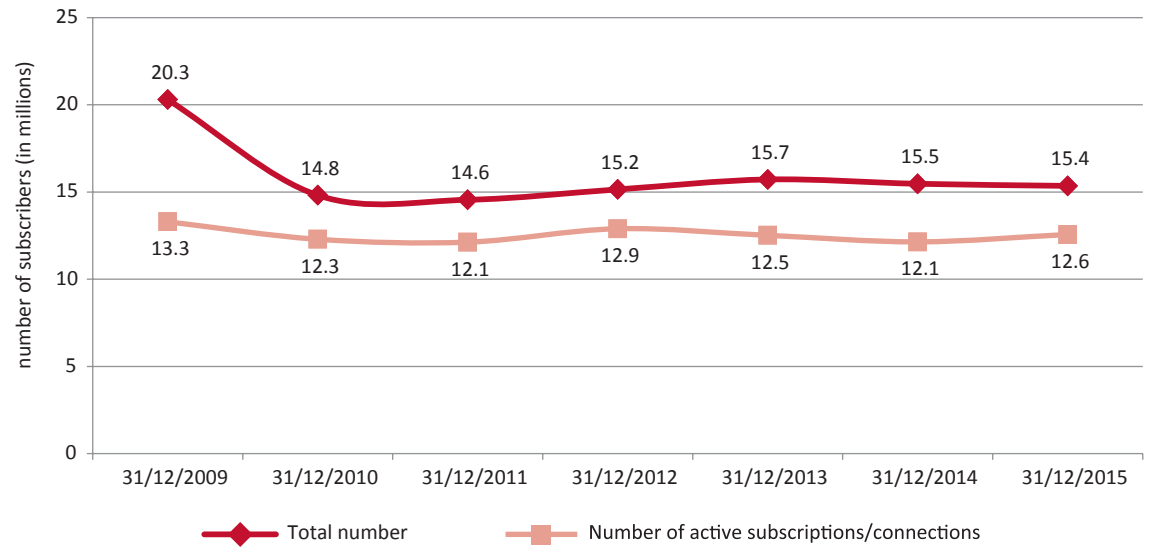
16. The term used is "connection" or "subscription" instead of "subscriber". It is not the number of subscribers as individuals or legal entities that are recorded, but the total connections / subscriptions, as one subscriber may possibly have one or more subscriptions / connections.
17. It should be noted that connection data for the period 2012-2014 have been revised to reflect exclusively mobile telephony users (excluding datacards and M2M) and establish consistency with data from previous years.
18. "Active connections" or "active subscriptions" are intended as connections/subscriptions that have generated retail or wholesale revenue within the last quarter.

Table 1.6: Total and active mobile telephony connections/subscriptions (excl. datacards)

	Dec. 2009	Dec. 2010	Dec. 2011	Dec. 2012	Dec. 2013	Dec. 2014	Dec. 2015
Total connections	20,298,102	14,815,705	14,557,672	15,151,742	15,722,476	15,473,683	15,353,553
Active connections	13,295,093	12,292,716	12,127,985	12,897,306	12,518,645	12,144,598	12,566,650

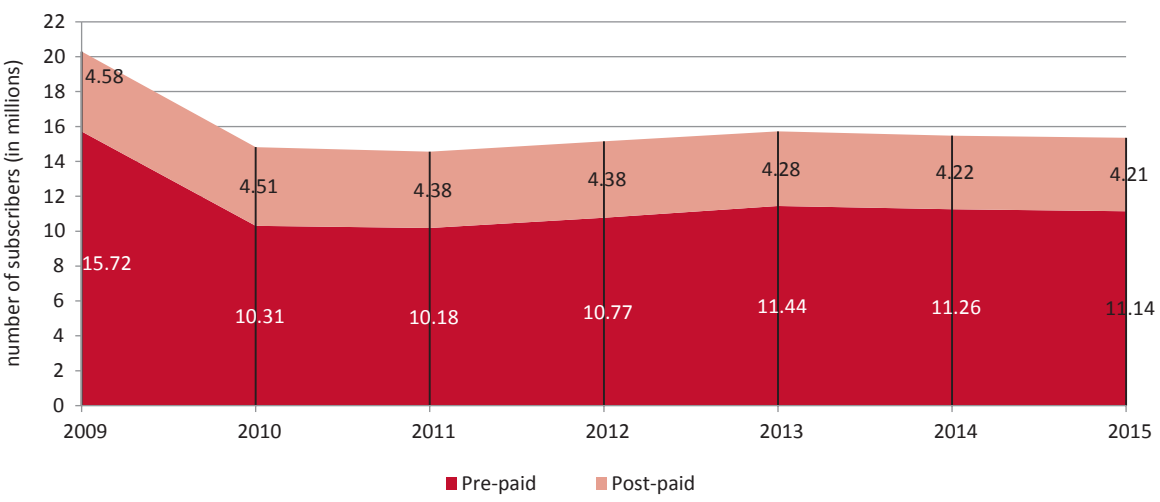
Source: EETT

Chart 1.31: Mobile telephony connections/subscriptions



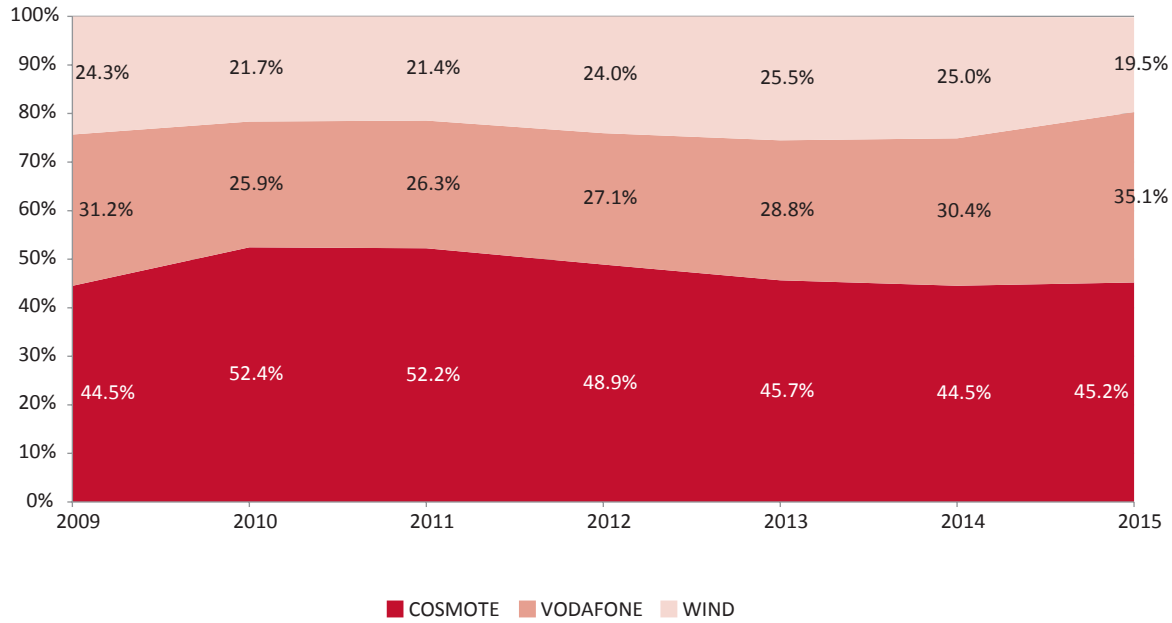
Source: EETT (based on data provided by licensed operators)

Chart 1.32: Progress of the mobile telephony subscribers (pre-paid and post-paid)



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

Chart 1.33: MTOs' market shares over the number of mobile telephony connections



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

The use of mobile telecommunications networks

The use of mobile telecommunications networks remained relatively stable with regard to voice minutes of national calls but was significantly decreased with regard to international calls (in voice minutes) and considerably increased with regard to data services. The use of SMS dropped slightly, while the use of MMS was marginally increased.

Voice calls

- In 2015, the volume of voice calls amounted to 25.9 billion minutes, decreased by 8.7% compared to 2014 (27 billion minutes) (Chart 1.34).
- The largest volume of voice calls was the on-net mobile traffic (between subscribers of the same network), which however marked a decrease from 18.3 to 16.7 billion minutes and currently represents 65% of the total voice call volume, compared to 68% in 2014 (Chart 1.35).
- The off-net mobile voice calls increased by 18.6% compared to 2014 (from 5.3 to 6.3 billion minutes), while mobile calls to fixed numbers remained stable (2.3 billion minutes).
- International calls were sharply decreased by 56%.

Chart 1.36 demonstrates the volume of voice calls per user category. Prepaid users are steadily at the top with 47.6% of total calls, followed by post-paid residential users with 37.4% and post-paid business users with 15%.

Short Message Services (SMS)

- The total number of SMS registered –yet again– a 17.6% fall (3.7 billion messages compared to 4.5 billion in 2014) (Chart 1.37).
- The vast majority of SMS in 2015 were on-net (71% compared to 75% in 2014), while the percentage of off-net SMS was increased.
- With respect to user category, SMS from pre-paid card users (currently representing 53% of all SMS compared to 58% in 2014) showed the sharpest decrease by 25%, reaching 2 billion compared to 2.7 billion in 2015 (Chart 1.38).

Multimedia Message Services (MMS)

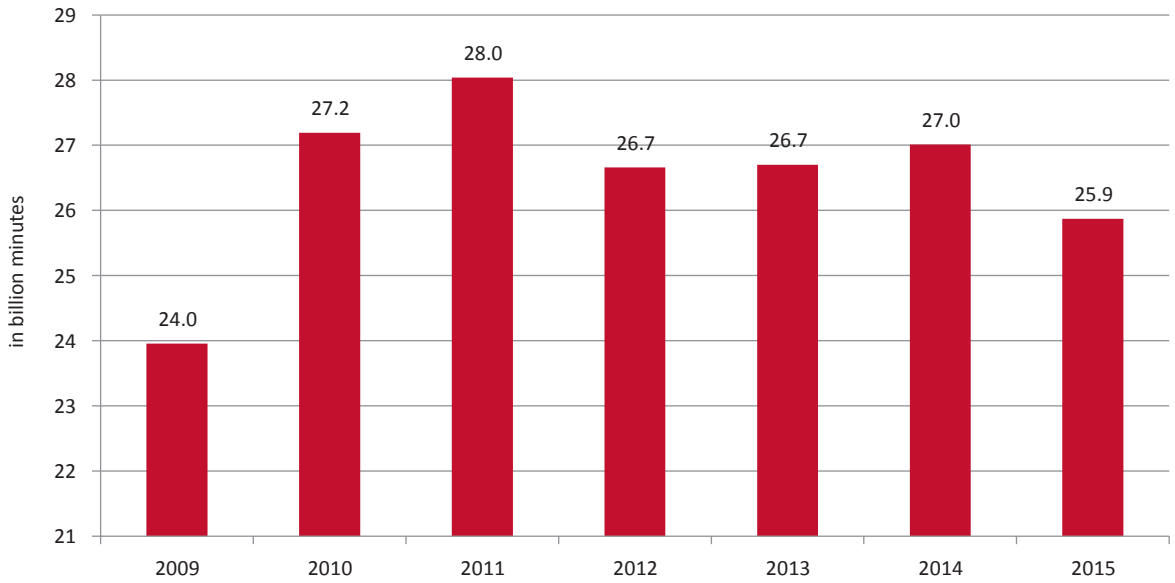
The number of MMS increased marginally (0.4%) reaching 14.9 millions at the end of 2015 but however has greatly decreased by 48.5% compared to 2010 (29 million) (Chart 1.39).

Data Services

- In 2015, data services via mobile telephony networks increased significantly by 69%, reaching 35.9 billion MB compared to 21.2 billion MB in 2014 (Chart 1.40).
- The majority of data was transferred via mobile phones (73%), while the remaining 27% was transferred via other portable devices using datacards.

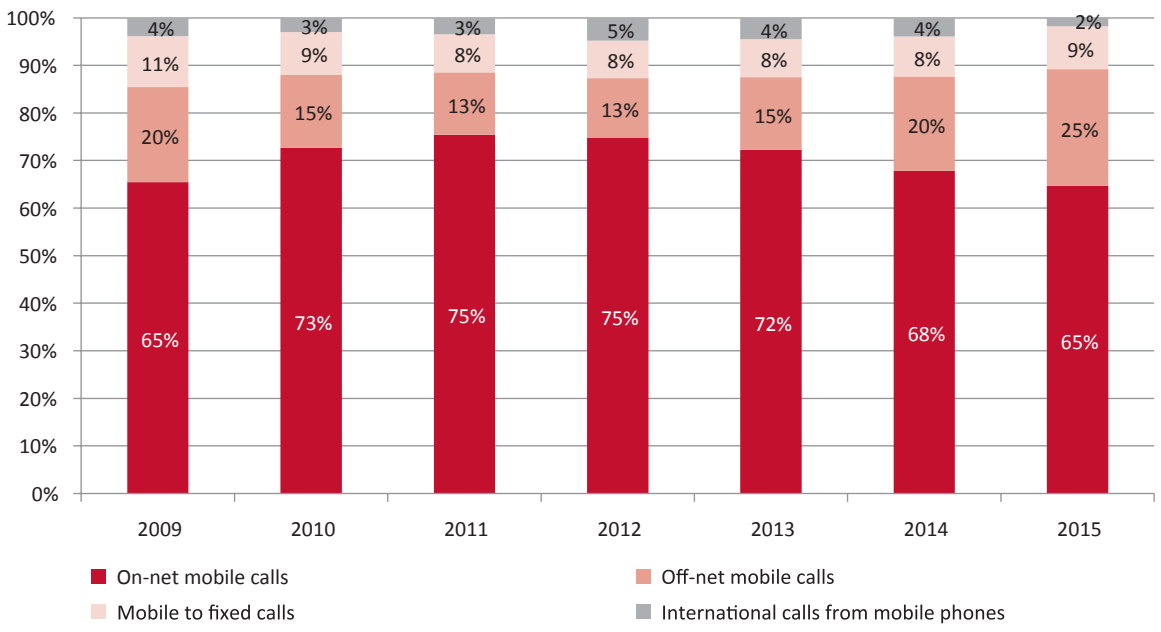
Chart 1.41 demonstrates the average use of data services from mobile phones in 2015 which jumped to 500MB per month during the second semester of the year compared to 400MB per month that was in the first one.

Chart 1.34: Volume of voice calls originating from mobile phones



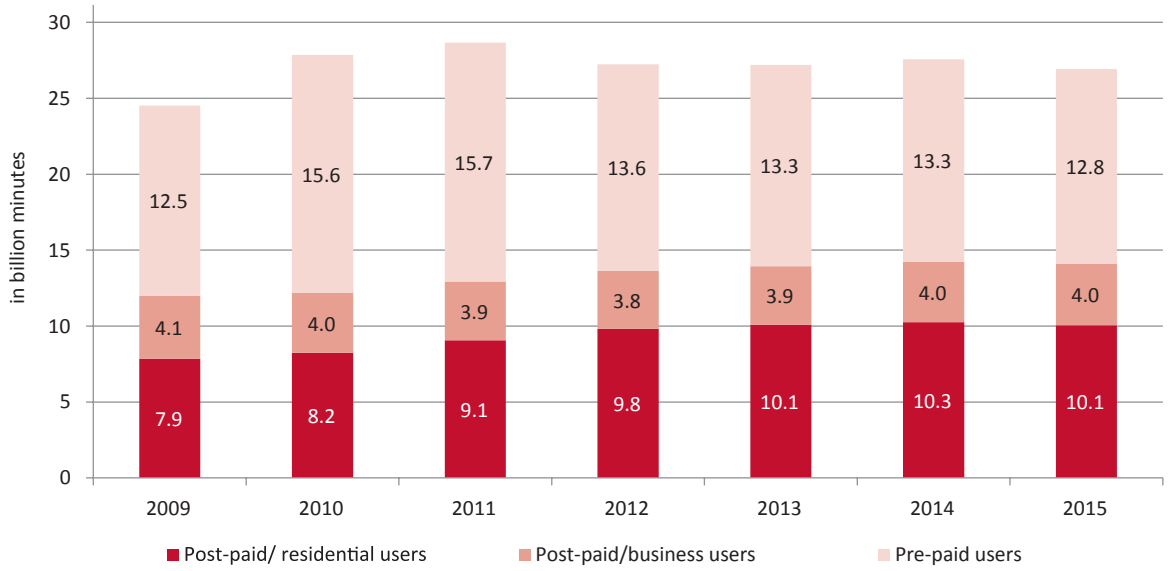
Source: EETT (based on data provided by licensed operators)

Chart 1.35: Voice calls per category (% of the total)



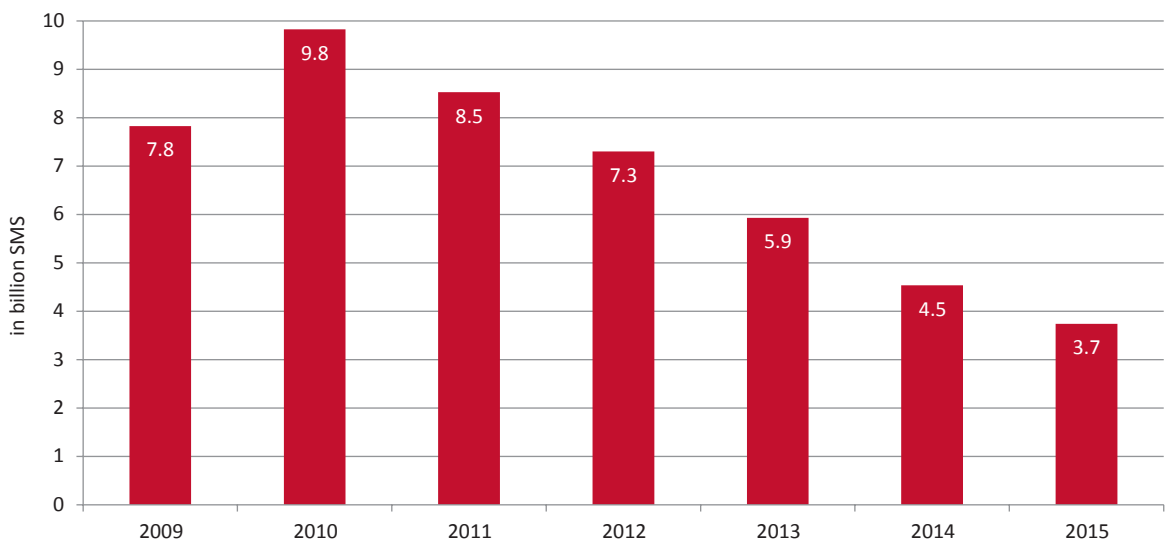
Source: EETT (based on data provided by licensed operators)

Chart 1.36: Voice calls per user category



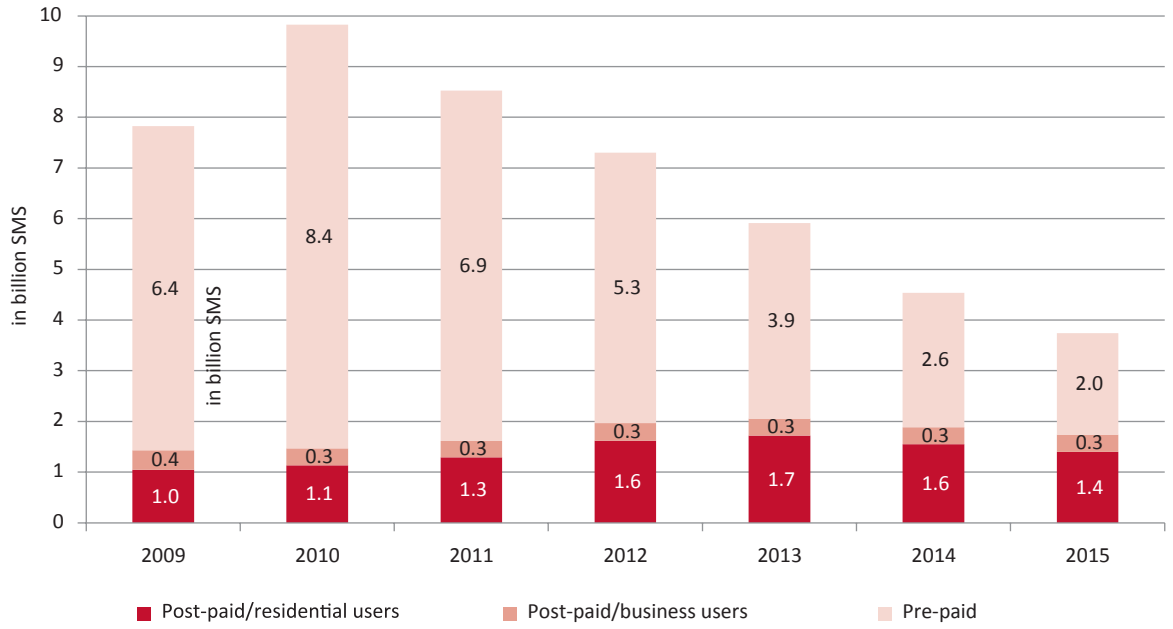
Source: EETT (based on data provided by licensed operators)

Chart 1.37: Total number of SMS



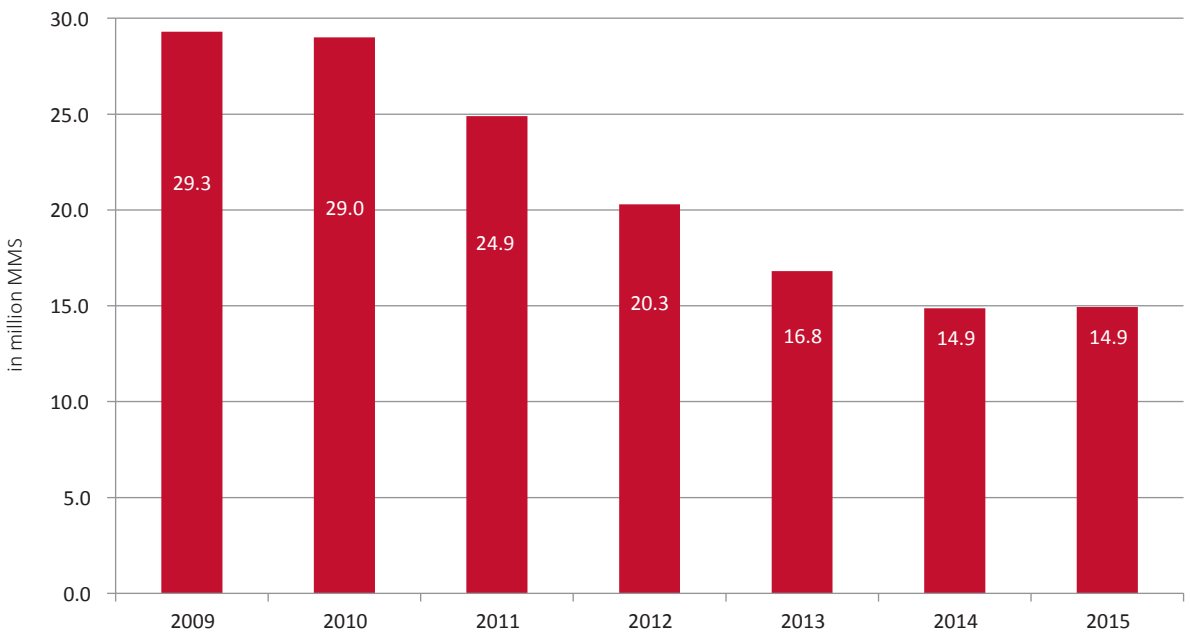
Source: EETT (based on data provided by licensed operators)

Chart 1.38: SMS per user category



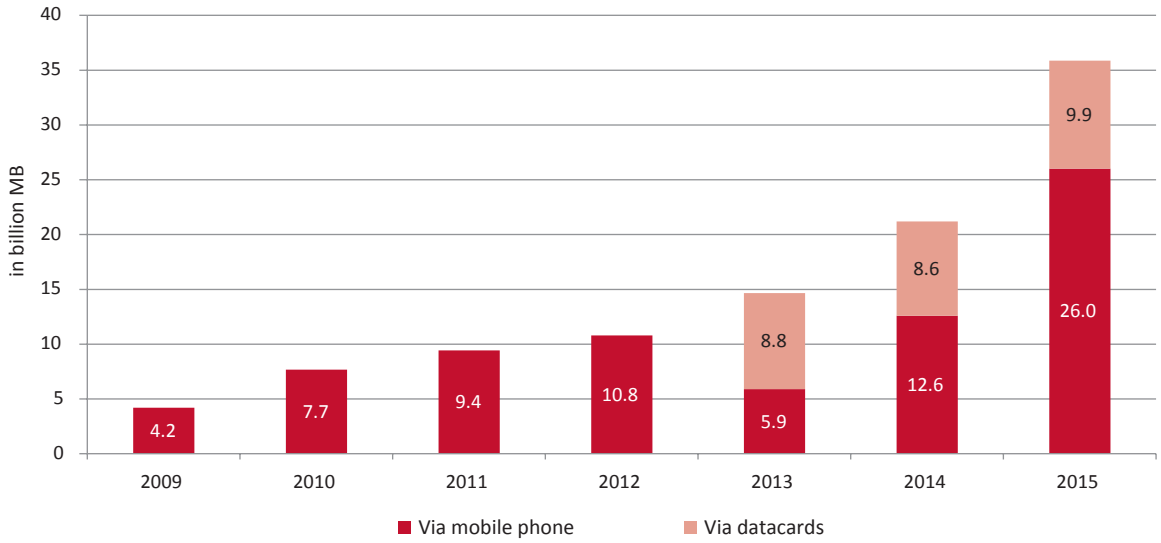
Source: EETT (based on data provided by licensed operators)

Chart 1.39: Total number of MMS



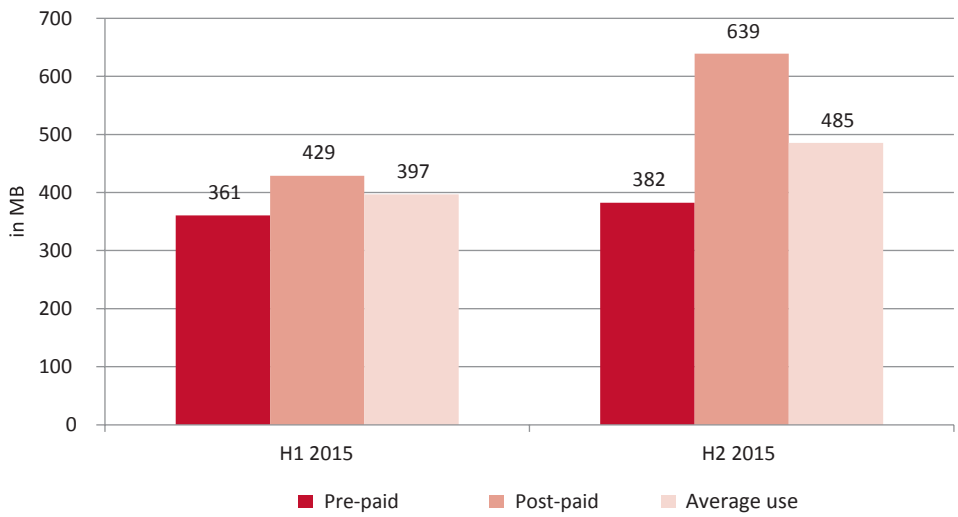
Source: EETT (based on data provided by licensed operators)

Chart 1.40: Total number (MB) of data services



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

Chart 1.41: Average use of data via mobile phones



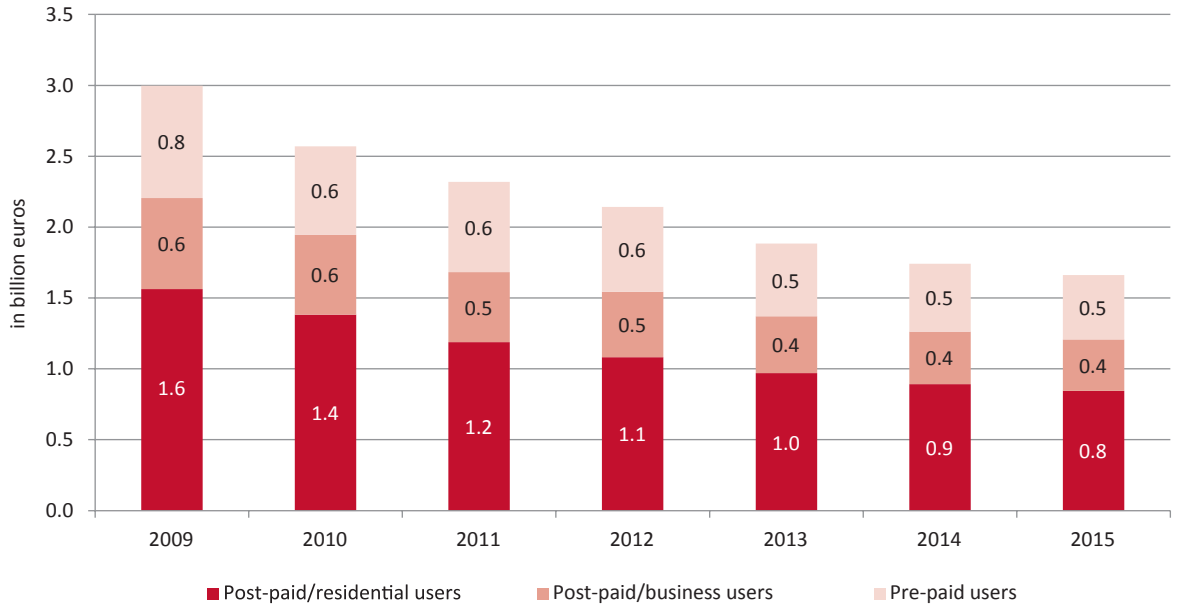
Source: EETT (based on data provided by licensed operators)

Mobile telephony revenues

In 2015, the mobile telephony retail revenues[19] (post-paid and pre-paid) decreased slightly by 4.7% and amounted to 1.66 billion euros (compared to 1.74 billion euros in 2014) (Chart 1.42). The majority of these revenues came from mobile telephony services (Chart 1.43). In line with international trends, the contribution of data services on total retail revenues continues to increase. A 5.5% decrease was registered both in the pre-paid user and in the post-paid/residential user category. The average annual revenue per post-paid and pre-paid user was 287 euros (down by 3.6%) and 56 euros (down by 6.2%) respectively (Chart 1.44).

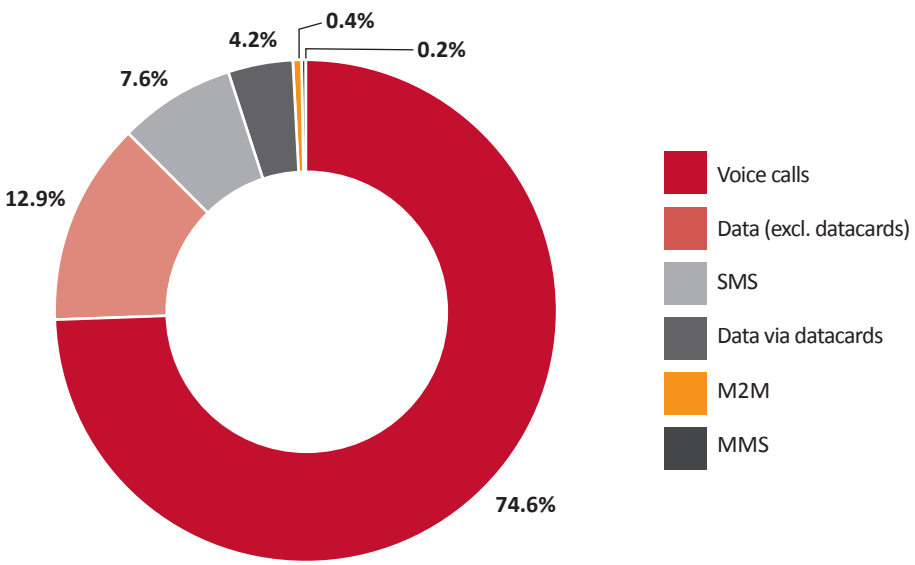
19. Revenues from the sale of handsets, wholesale or other services are not included.

Chart 1.42: Mobile telephony retail revenues



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

Chart 1.43: Mobile telephony retail revenues breakdown

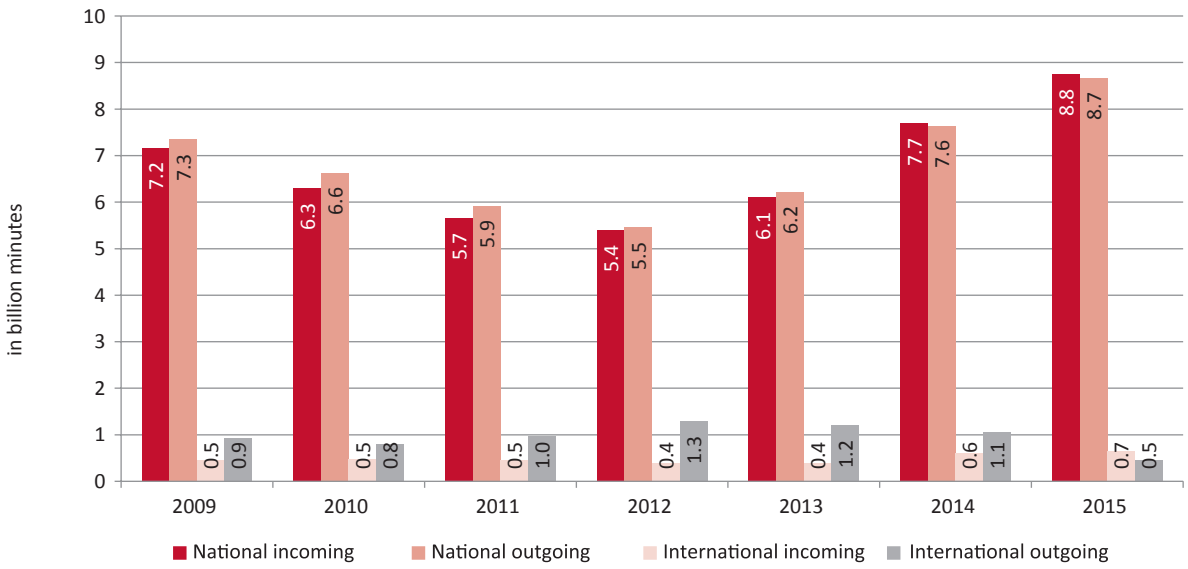


Source: EETT (based on data provided by licensed operators)

Chart 1.44: Average revenue per mobile user

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

Chart 1.45: Mobile telephony operators interconnection traffic



Source: EETT (based on data provided by OLOs)

Mobile telephony interconnection

The interconnection traffic for MTOs in 2015 increased, as shown in Chart 1.45, which presents the national and international interconnection (incoming and outgoing) traffic for the three MTOs and one Mobile Virtual Net Operator (MVNO). Compared to 2014, the overall rise was 9%, namely a total annual increase of approximately 1.55 billion minutes. Both national outgoing and incoming traffic were significantly increased by 14%.

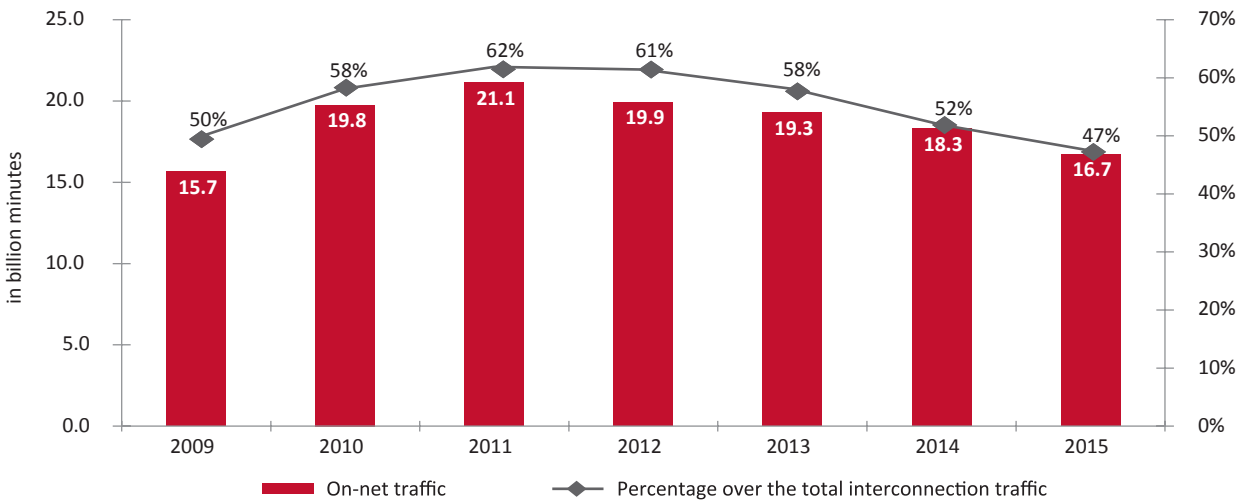
Chart 1.46 demonstrates the on-net traffic for the three MTOs and the one MVNO, which in 2015 was approxi-

mately 16.7 billion minutes, having decreased by 9% compared to 2014 (1.59 billion minutes approximately) and accounts for 42% of the totall interconnection traffic (that includes both incoming and outgoing traffic).

At the same time, the national traffic terminating to mobile networks has been relatively stable during the last five years. In 2015, in particular, national calls to mobile phones fell by 2%, amounting to 25,484 million minutes compared to 26,009 million minutes in 2014 (Chart 1.47).

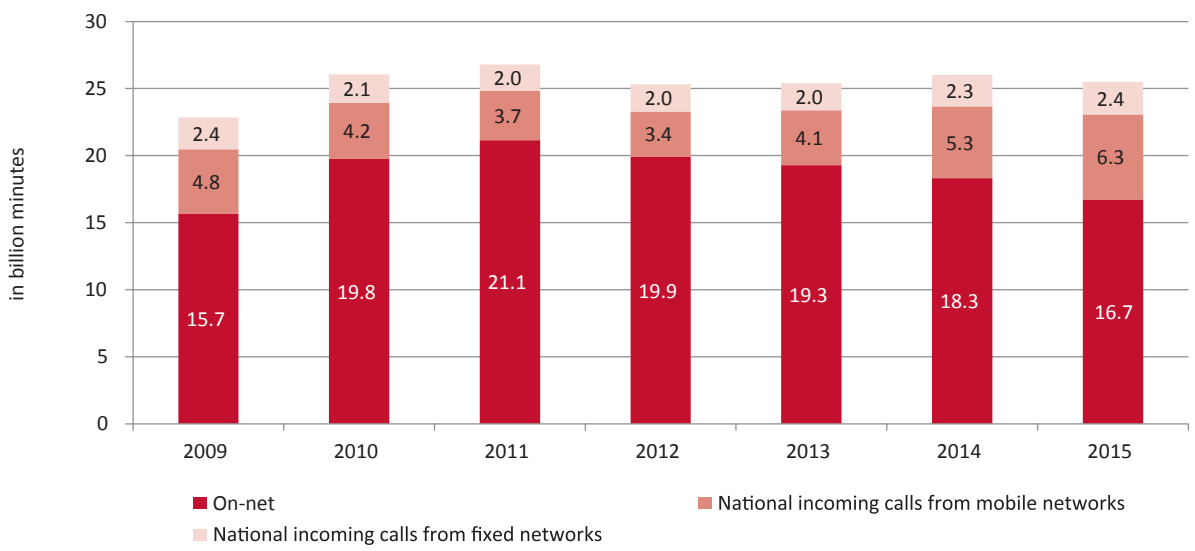
Furthermore, the gradual reduction of termination rates to mobile telephony networks continued and as of 1st January 2016, they stand at 1.08 eurocents per traffic minute (Chart 1.48).

Chart 1.46: MTOs' on-net traffic



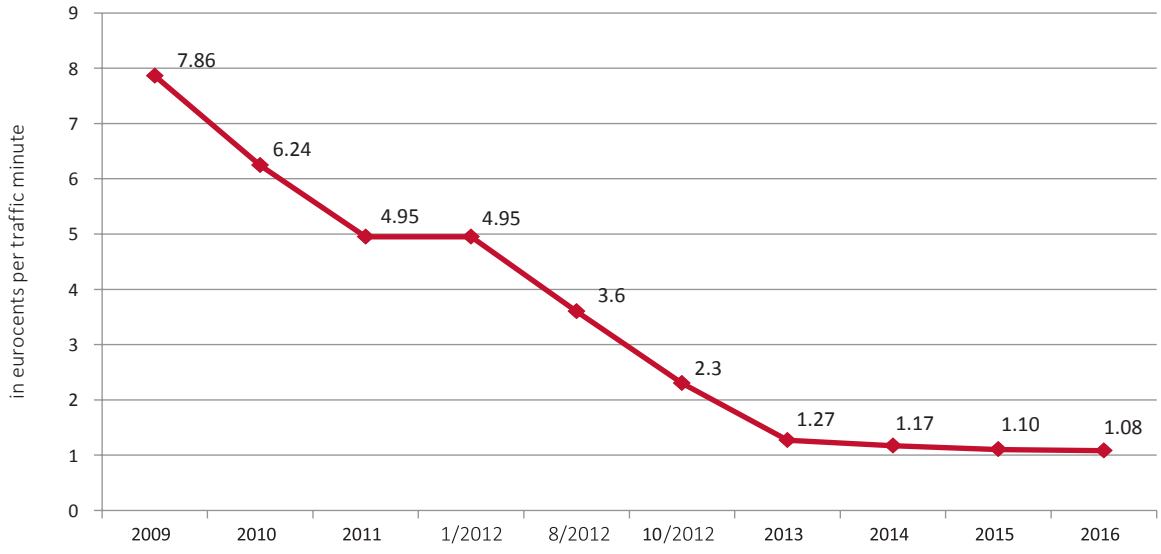
Source: EETT (based on data provided by MTOs)

Chart 1.47: Voice calls terminating to mobile phones in Greece



Source: EETT (based on data provided by MTOs)

Chart 1.48: Decrease in mobile call termination fees

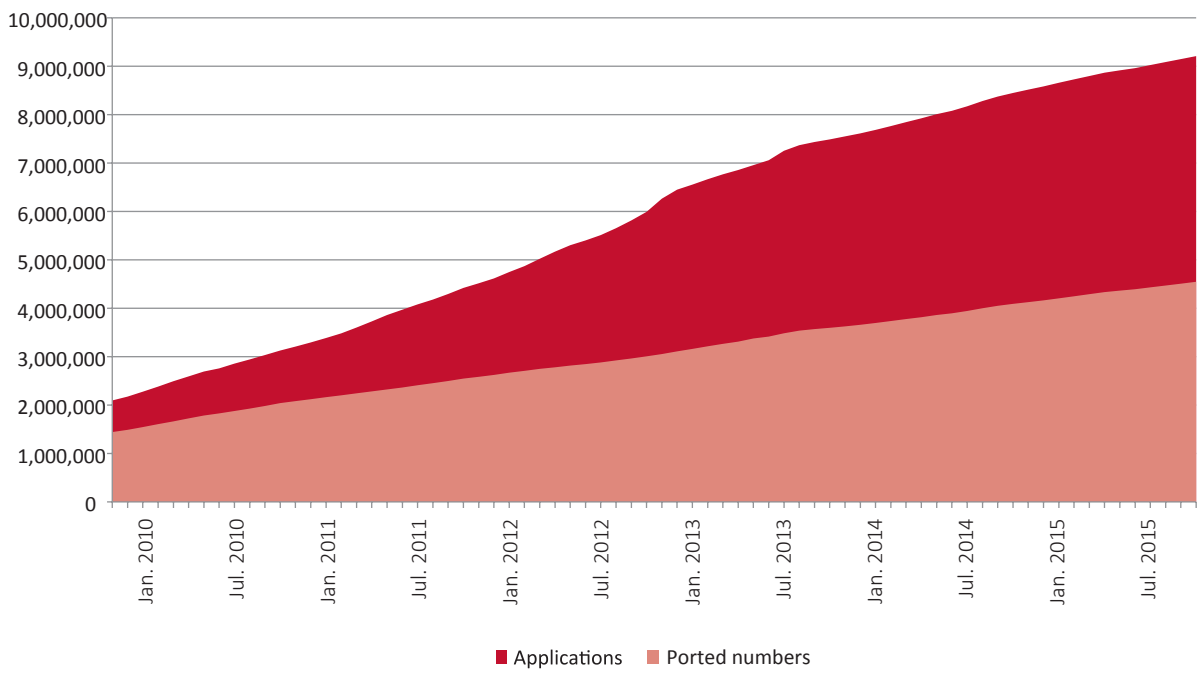


Source: EETT

Number portability in mobile telephony

During 2015, 761,908 portability applications for mobile telephony numbers were submitted compared to 959,362 applications in 2014, marking a 20.6% decrease compared to the previous year and 456,247 numbers were ported (a 7.8% decrease compared to 2014). This indicates that approximately 60% of the initial portability applications are seen through. Chart 1.49 presents the aggregate progress of portability.

Chart 1.49: Portability for mobile telephony



Source: EETT

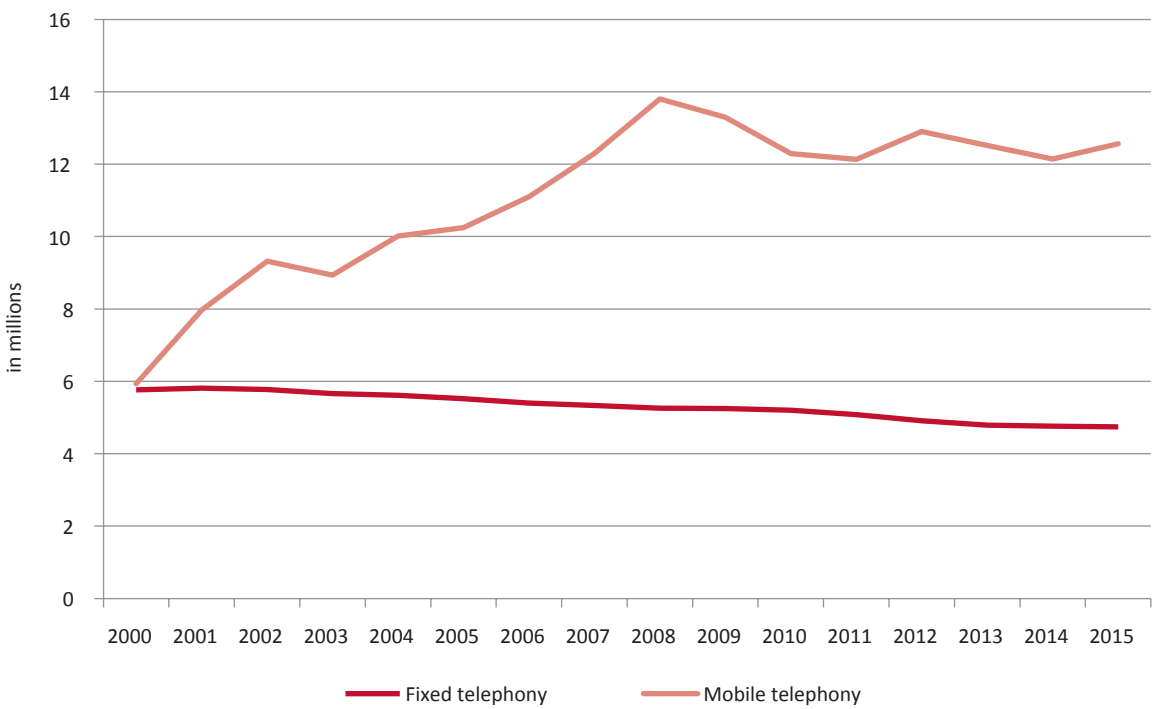
1.2.4. Comparing fixed telephony to mobile telephony

Fixed telephony connections continued to decrease, reaching 4.7 million in 2015, while mobile telephony subscriptions/connections increased by 3.5%, reaching 12.6 million. Fixed telephony connections represent slightly more than 1/3 of all mobile telephony connections (Chart 1.50).

Similarly, Chart 1.51 presents the progress of fixed and mobile telephony retail revenues for the period 2011-2015. Mobile telephony revenues have dropped faster during the last five years compared to fixed telephony revenues (8% and 6% respectively) amounting to 1.66 billion euros compared to 1.4 billion euros for fixed telephony. It should be mentioned that mobile telephony revenues include only the retail revenues from voice and data (SMS, MMS, Data) and not revenues from the sale of handsets or other services, while fixed telephony revenues are presented in aggregate form for the period 2011-2013 and as of 2014 include only the retail revenues from voice and Internet services.

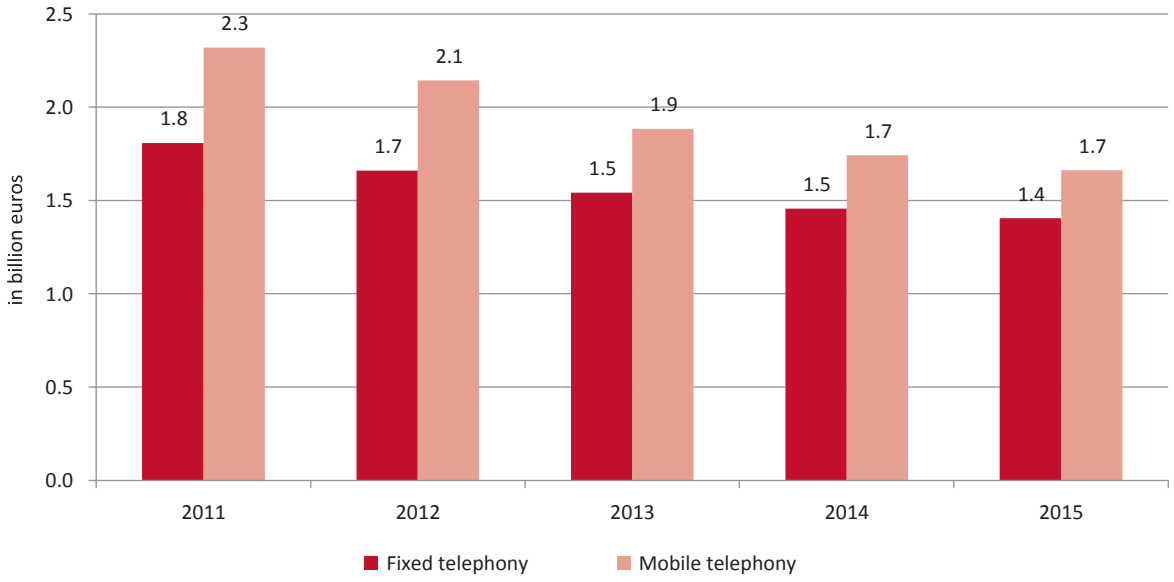
Mobile telephony calls fell by 4.2% compared to 2014 and currently account for 60% of the total traffic, compared to 62% in 2014. In 2015, calls from fixed phones increased by 2.1%, amounting to 17.2 million minutes, compared to 16.9 million minutes in 2014. Charts 1.52 and 1.53 present the progress of traffic volume from fixed and mobile phones respectively and the relevant market shares taking into account national fixed calls, calls to mobiles and international calls.

Chart 1.50: Connections/subscriptions for fixed and mobile telephony



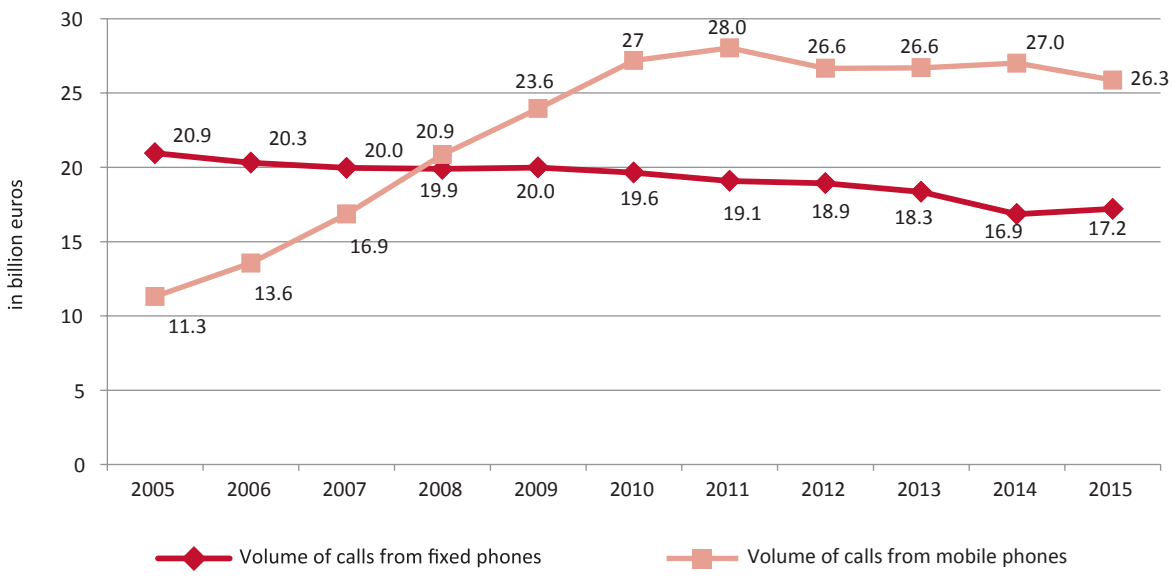
Source: EETT (based on data provided by the licensed operators)

Chart 1.51: Revenues from fixed and mobile telephony



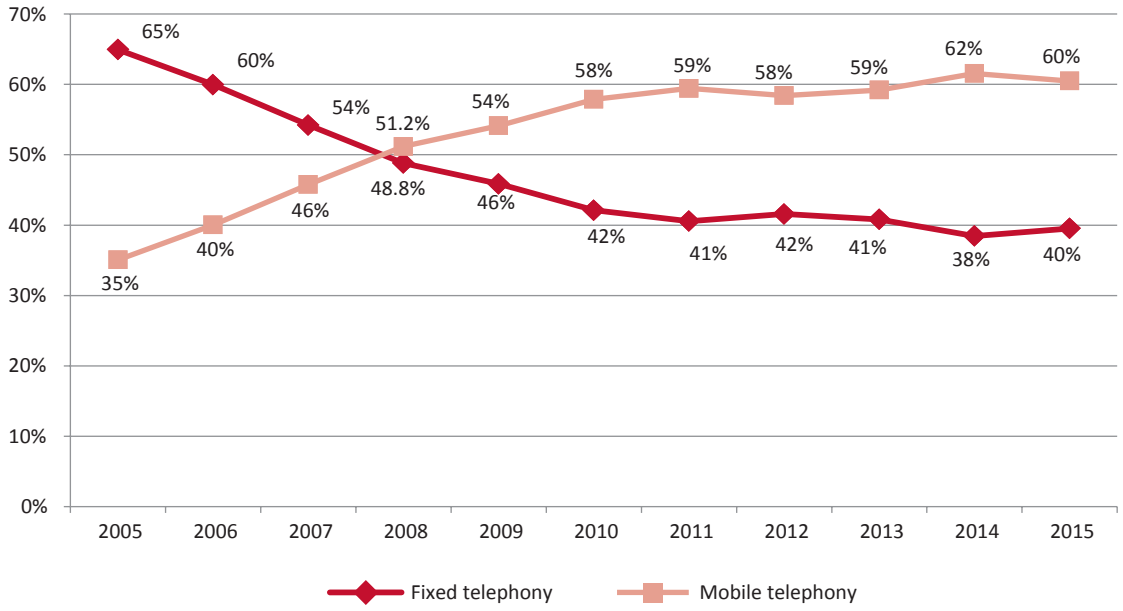
Source: EETT (based on data provided by the licensed operators)

Chart 1.52: Volume of calls from fixed and mobile phones



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

Chart 1.53: Market shares of fixed and mobile telephony



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

1.2.5. Bundled offers

The data presented in this section are based on the new definition of the term "bundled offer" proposed by BEREC and the European Commission, according to which: "bundled offers" are commercial offers provided by one or more operators for the provision of two or more of the following four services: "Fixed telephony", "Fixed Internet", "Pay-TV"[20] and "Mobile services"[21,22].

The key trend of 2015 is the constant growth of the bundled offers, mainly of triple play services[23], due to the economic benefit that the subscribers enjoy compared to buying the same services separetely (unbundled). The counting of bundled offers is based on fixed subscriptions (i.e. subscriptions for the provision of fixed services), given that every bundled offer includes at least one service provided at a fixed location, according to the aforementioned definition.

The exception to the rule is bundled offers that include mobile services. The counting of those services is based both on fixed subscriptions and SIM cards, given that a fixed subscription can be combined with more than one SIM card. For example, when three SIM cards (three mobile phones belonging to members of a family) are combined with a fixed bundled offer subscription (i.e. fixed telephony and fixed Internet), then we have one bundled offer based on fixed subscriptions and three based on SIM cards.

It is worth mentioning that bundled offers may include services provided by one or two operators on a basis of a relative cooperation or commercial agreement as well as products that are not provided exclusively under a single price, trade name or invoice

20. The term "Pay TV" relates exclusively to the provision of TV services via broadband and satellite connection.
21. The term "mobile service" relates to mobile telephony and/or mobile broadband Internet. There is no distinction between computer-based and handset-based access. Only the two aforementioned mobile communications services are taken into account but as a single service (whether the operator provide one or both of them).
22. It should be clarified that bundled offers may be either (a) pure bundles or (b) tied and tying service bundles or (c) mixed bundles, in which the operator or operators offer some kind of incentive to customers to entice them to select the bundled (combined) purchase of these services, usually under some kind of "permanent favourable terms" (i.e. favourable terms applicable for the entire duration of the bundled offer). These terms are not applicable when the customer purchases the services separately (not in bundled/combined form).
23. Fixed telephony, fixed broadband Internet and mobile services or mobile telephony, Internet and pay satellite TV.

form. Furthermore, a subscriber may enjoy services that fall within one or/and more bundled categories, for example a bundled offer for fixed telephony and Internet services provided by an operator plus an unbundled TV service by another operator (in which case, the first one falls within the double play category (fixed telephony and Internet), while the second one within the unbundled pay TV category).

Charts 1.54 and 1.55 present, generally and per specific category, the number of bundled offers for 2015 based on fixed[24] and unbundled subscriptions. Double play services represent the majority of bundled offers (approximately six out of ten). It seems, however, that triple play offers are gaining ground and have increased in a single semester by approximately 110 thousand (8.7%), while quadre play services are still at very low levels (approximately 21 thousand).

The combination of fixed telephony and fixed Internet connection remains the most popular bundled offer (approximately 1.9 million), followed by fixed telephony, Internet and pay TV (approximately 715 thousand). However, during the second semester of 2015, bundled offers combining fixed telephony, Internet and mobile communications services increased sharply by 11.8% (approximately 69 thousand), thus being the third most popular type.

During the second semester of 2015, bundled offers including fixed telephony services[25] have increased by 3% (96,685) amounting to 3,367,851 at the end of 2015, while, on the contrary, unbundled fixed telephony subscriptions decreased by 106,791 (7.4%). At the end of 2015, only 28.3% of the total fixed telephony subscriptions were unbundled. This percentage is 2.3% lower compared to that of mid 2015 (Chart 1.56). At the same time, approximately 70% of the total fixed telephony subscriptions was combined with fixed broadband Internet, while the sole bundling of telephony and Internet represented 40.3% of the total. Similarly, 16.4% of all fixed telephony subscriptions were bundled to pay TV, while 15.4% combined telephony with mobile services.

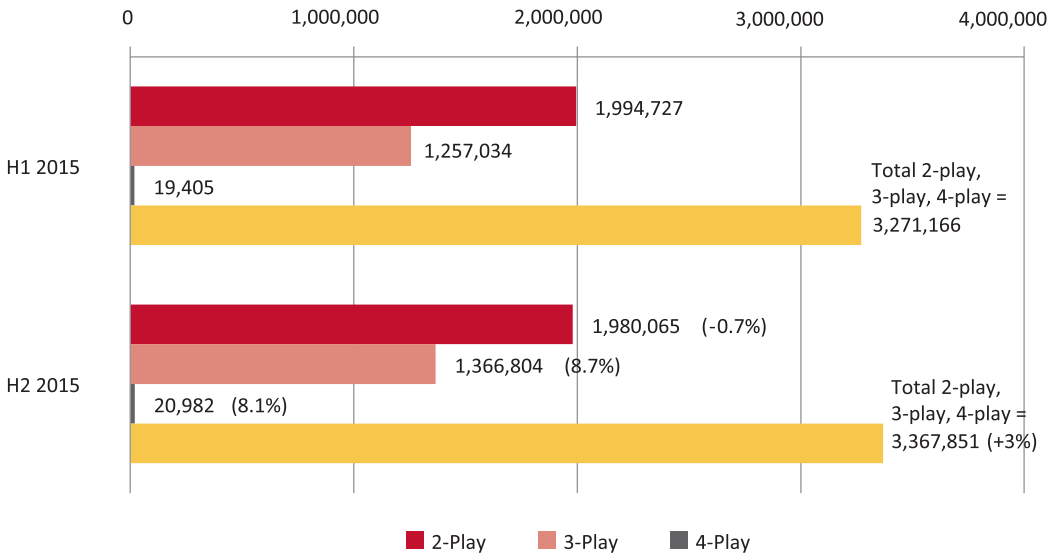
As far as the total subscriptions with Internet access are concerned (bundled and unbundled), their increase by 108,503 subscriptions (mid to end of 2015) is mainly attributed to bundled offers, which increased by 97,882 during the same period. Moreover, only 3.4% of fixed subscriptions have an unbundled Internet access service (Chart 1.57).

During the second semester of 2015, TV subscriptions increased by 5.3%, amounting to 988,218. The most popular bundled offer is that of triple play (telephony, Internet and TV) preferred by approximately 72% of all subscribers, while approximately 22.1% of the subscribers have unbundled pay TV services (Chart 1.58).

Lastly and with respect to bundled offers including mobile services, the ones bundling fixed with mobile services amounted to 722,594 at the end of 2015, increased by 10.4% compared to the middle of the year. Triple play services (telephony, Internet and mobile) account for 90% of those subscriptions. However and based on SIM cards, the fixed subscriptions amounted to 798,034 at the end of the year (up by 53,246 compared to the first semester of 2015)[26] (see Chart 1.59).

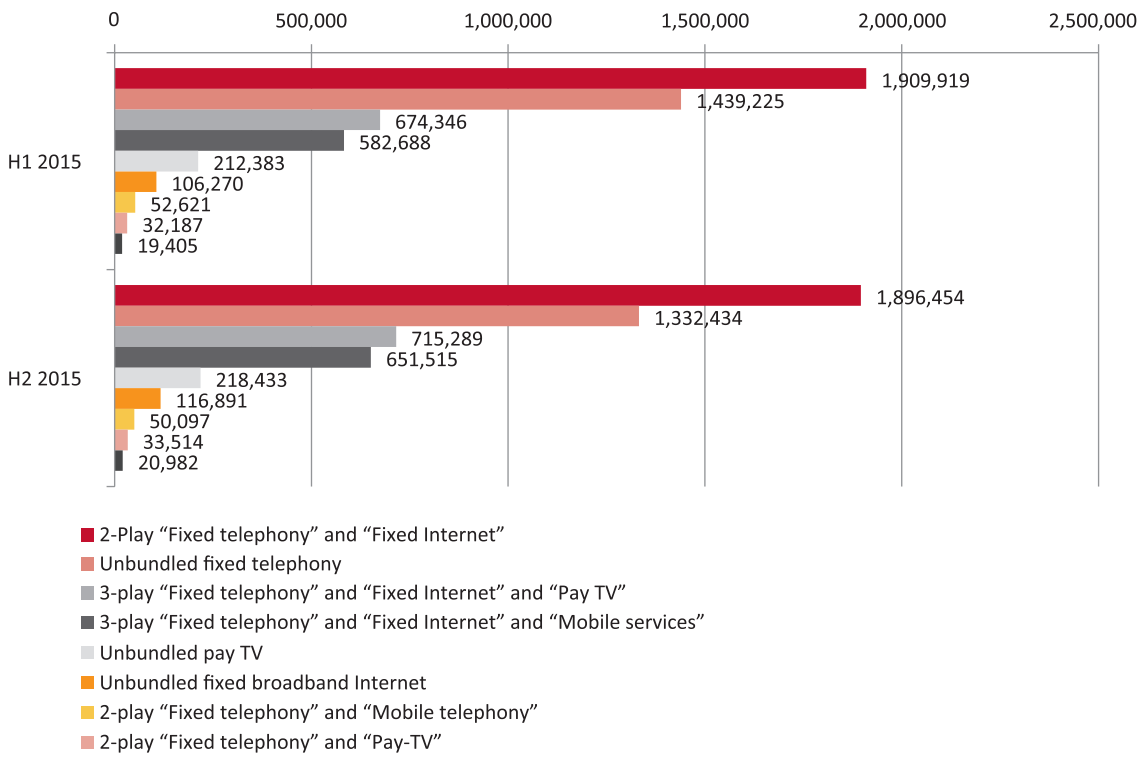
24. It should be noted that a fixed subscription may include more than one connection (lines).
25. Homezone and Officezone subscriptions are not included in fixed telephony subscriptions.
26. Please be reminded that, as mentioned above, a fixed subscription may be combined with more than one SIM card.

Chart 1.54: Bundled offers (per general bundling type)



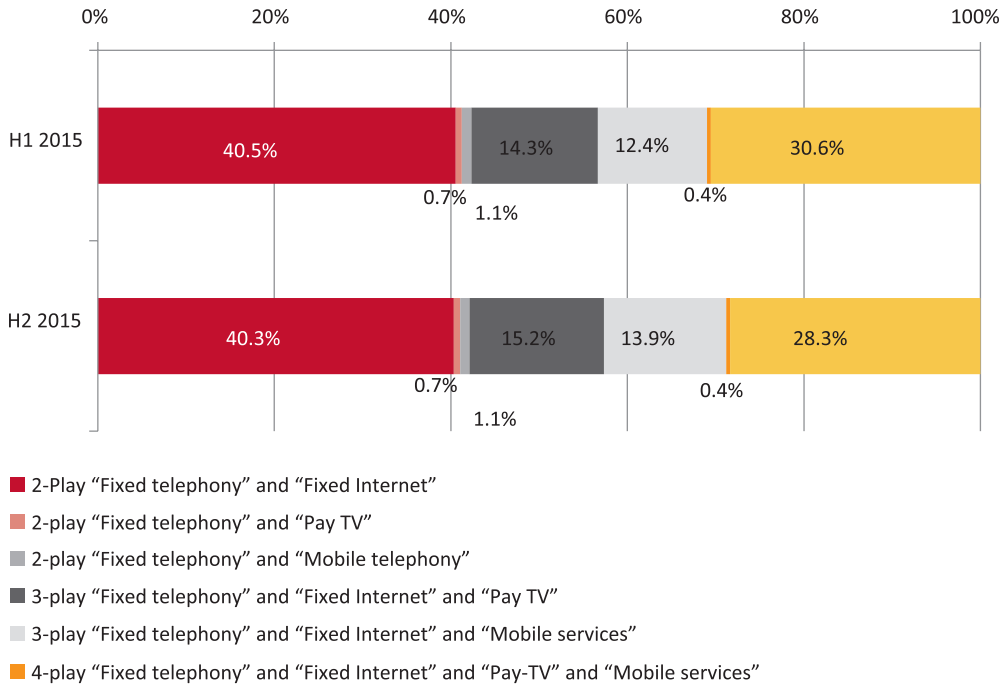
Source: EETT (based on data provided by the licensed operators)

Chart 1.55: Bundled (per specific type) and unbundled offers



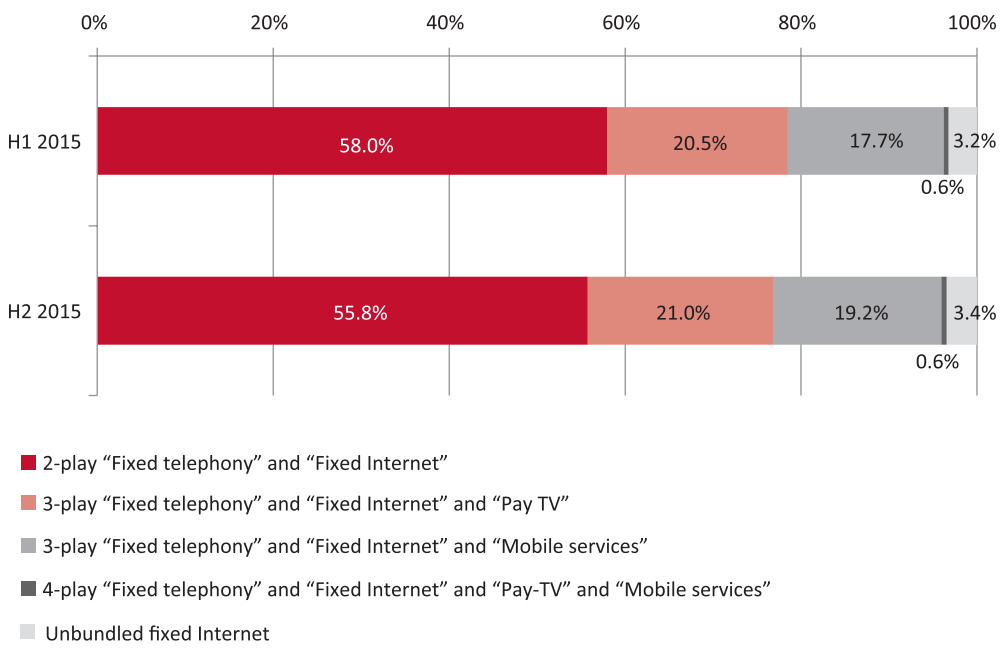
Source: EETT (based on data provided by the licensed operators)

Chart 1.56: Fixed telephony: Bundled (per specific type) and unbundled offers' breakdown



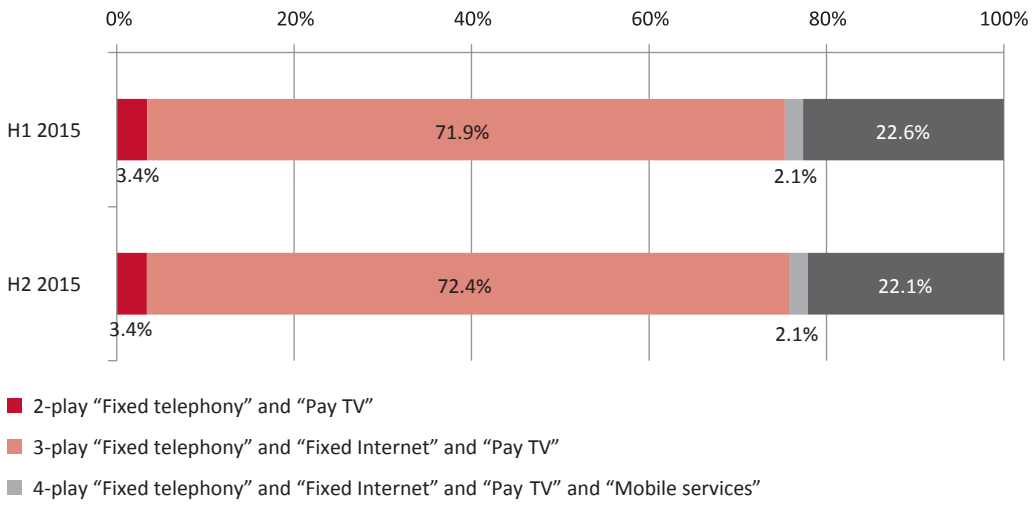
Source: EETT (based on data provided by the licensed operators)

Chart 1.57: Fixed broadband Internet: Bundled (per specific type) and unbundled subscriptions' breakdown



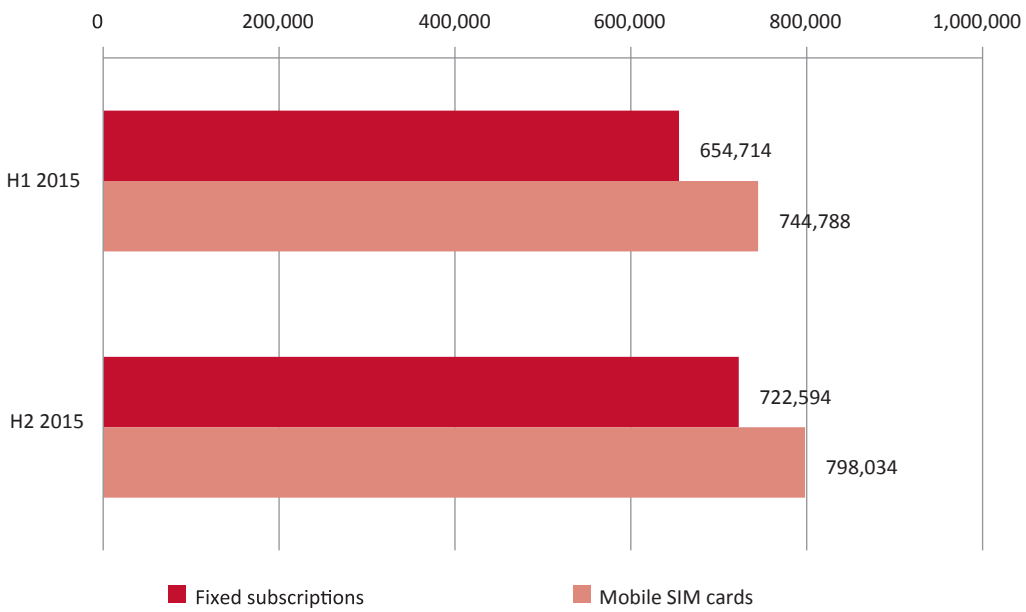
Source: EETT (based on data provided by the licensed operators)

Chart 1.58: Pay TV: Bundled (per specific type) and unbundled subscriptions' breakdown



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

Chart 1.59: Bundled subscriptions with fixed and mobile services (based on fixed subscriptions and mobile SIM cards)



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

Table 1.7: Number of bundled offers and unbundled subscriptions

A, Fixed services provider's perspective (based on fixed subscriptions)			H1 2015	H2 2015
Bundled offers	Double play	"Fixed telephony" and "Fixed Internet"	1,909,919	1,896,454
		"Fixed telephony" and "Pay TV"	32,187	33,514
		«Fixed telephony» and «Mobile services»	52,621	50,097
		Total double play	**1,994,727**	**1,980,065**
	Triple play	"Fixed telephony" and "Fixed Internet" and "Pay TV"	674,346	715,289
		"Fixed telephony" and "Fixed Internet" and "Mobile services"	582,688	651,515
		Total triple play	**1,257,034**	**1,366,804**
	Quadre play	"Fixed telephony" and "Fixed Internet" and "Pay TV" and "Mobile services"	19,405	20,982
		Total quadre play	**19,405**	**20,982**
		Total double play, triple play, quadre play	**3,271,166**	**3,367,851**
Bundled offers with one of these services (a)	"Fixed telephony"		3,271,166	3,367,851
	"Fixed Internet"		3,186,358	3,284,240
	"Pay TV"		725,938	769,785
	"Mobile services"		654,714	722,594
Unbundled subscriptions per service (b)	"Fixed telephony"		1,439,225	1,332,434
	"Fixed Internet"		106,270	116,891
	"Pay TV"		212,383	218,433
Subscriptions with each of these services (aggregate, i,e, (a)+(b))	"Fixed telephony"		4,710,391	4,700,285
	"Fixed Internet"		3,292,628	3,401,131
	"Pay TV"		938,321	988,218
B, Mobile services provider's perspective (i,e, based on mobile SIM cards)			**H1 2015**	**H2 2015**
Number of SIM cards combined with mobile telephony and/or mobile Internet services rendered as a bundled offer with at least one fixed service,			744,788	798,034

1.2.6. Broadband

Progress of broadband lines

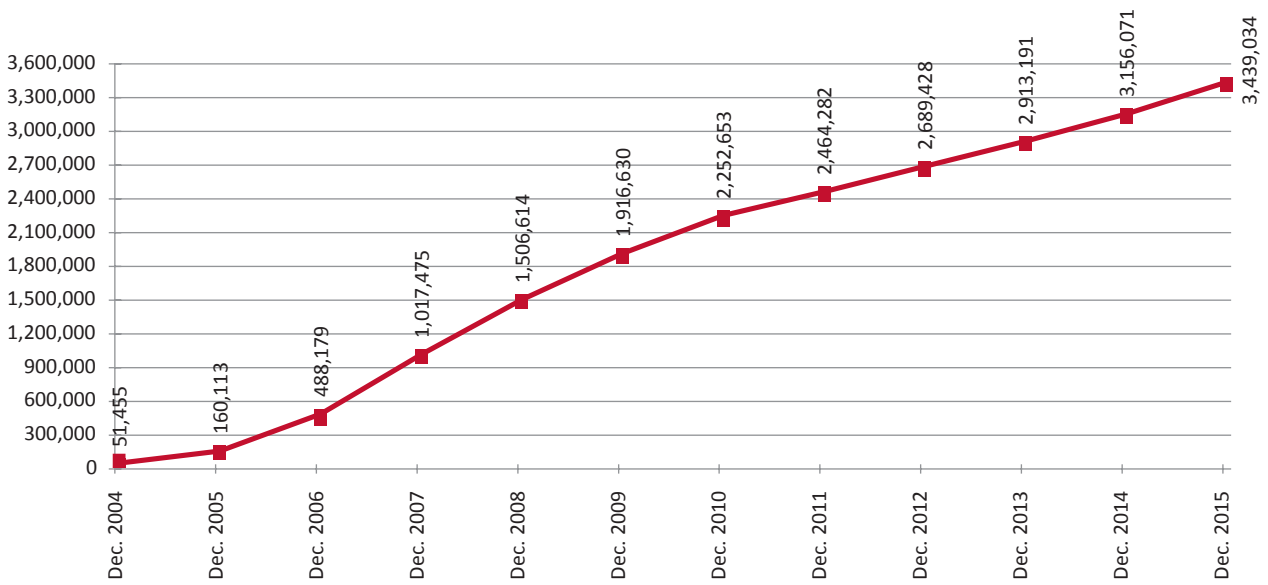
At the end of 2015, broadband connections amounted to 3,439,034 compared to 3,156,071 at the end of 2014, registering an annual increase of 8.9% (Chart 1.60) comparable to that of last year (8.3%). Broadband penetration in Greece reached 31.67% in the population compared to 28.7% in 2014.

Local Loop Unbundling (LLU)

LLU continued to increase in 2015 (Chart 1.61) reaching 2.047.268 at the end of the year, compared to 2.015.940 at the end of 2014 (1.5% compared to 5.7% in 2014)[27]. This increase is entirely attributed to the full LLU lines that amounted to 2,041,824 at the end of the year, compared to 2,008,602 at the end of 2014 (1.65% increase) as opposed to shared LLU lines, whose number continued to drop (5,444 lines at the end of the year compared to 7,338 at the end of 2014).

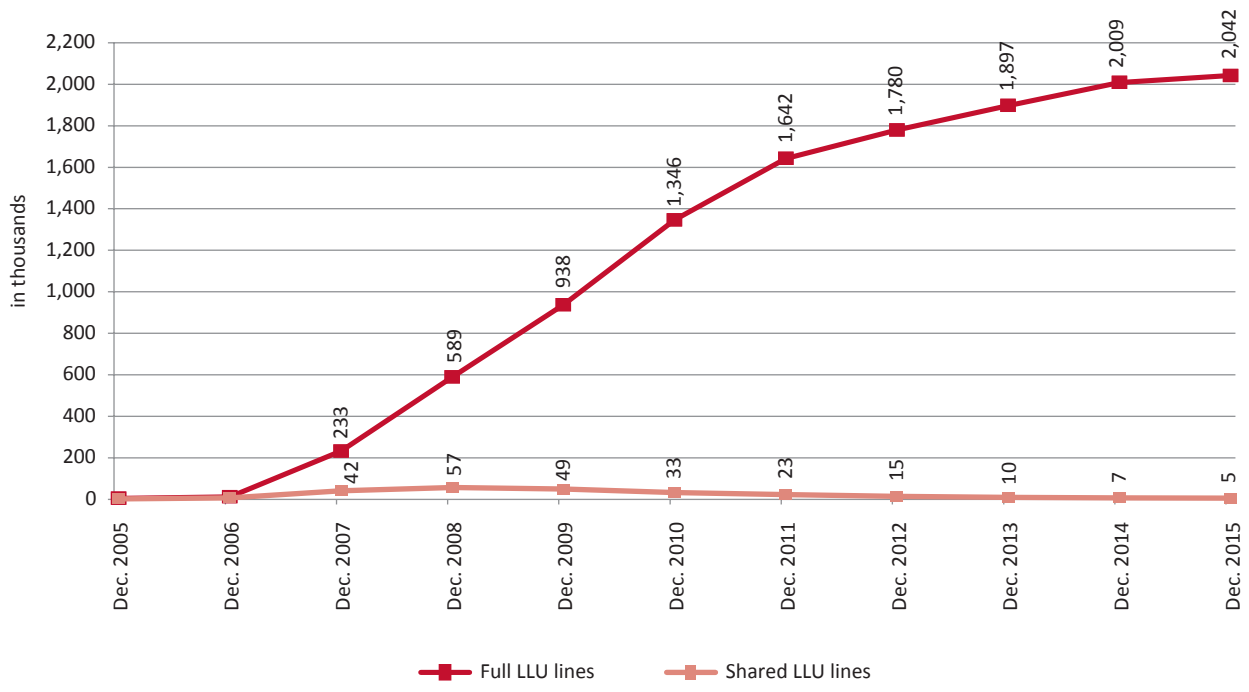
27. The access lines via LLU are a superset of broadband lines via LLU, since they also include telephony only lines.

Chart 1.60: Progress of broadband lines



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

Chart 1.61: Progress of LLU lines



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

ADSL / VDSL lines

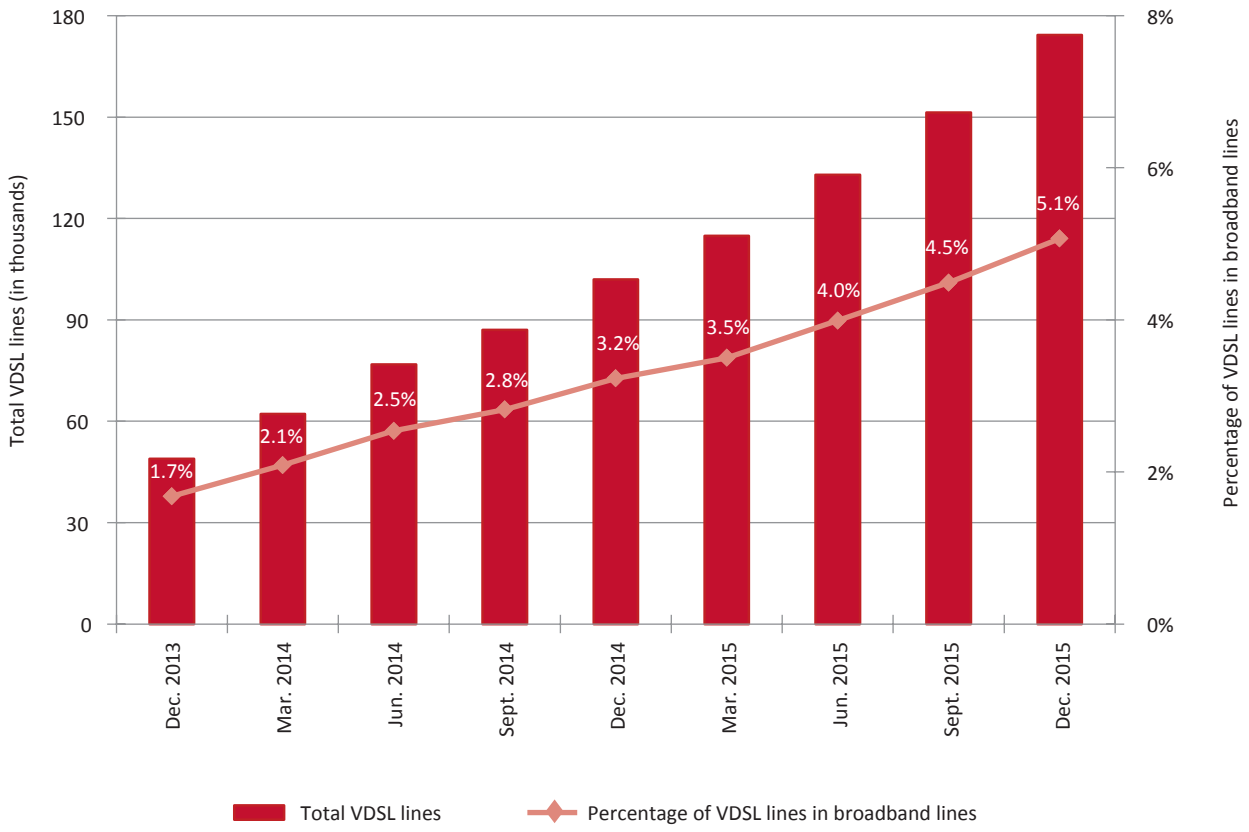
VDSL lines reached 174,266 at the end of 2015 compared to 101,934 in December 2014 (annual increase 71%) making up 5.1% of total broadband lines. Their penetration in the population remains low, around 1.6% compared to 0.93% at the end of 2014 (Chart 1.62).

Broadband lines per technology at a fixed location

The individual shares of broadband lines per technology are the following (Charts 1.63–1.64).

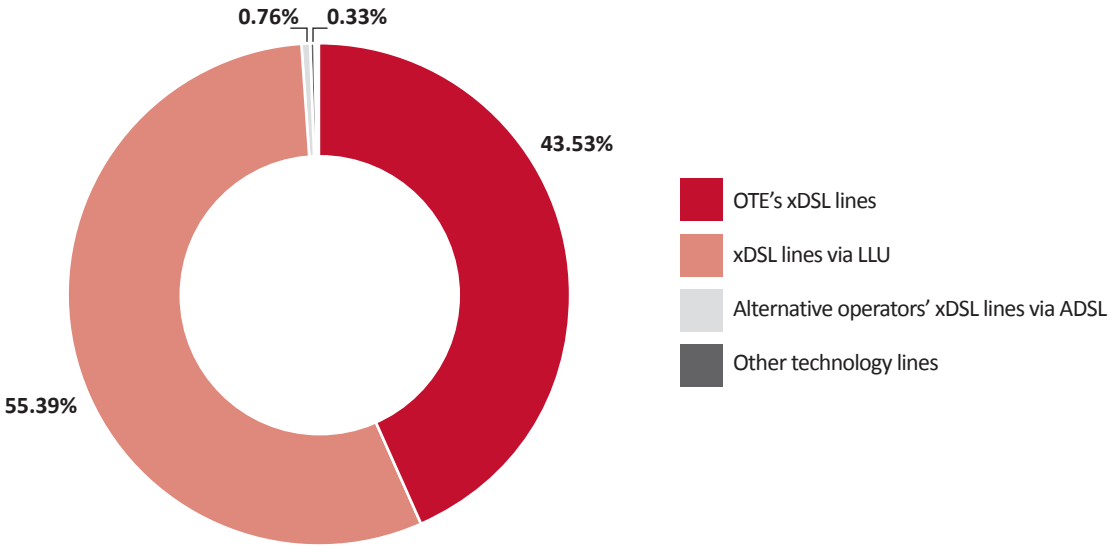
- xDSL access through LLU increased to 1,904,716 lines at the end of 2015 (compared to 1,767,466 at the end of 2014) accounting for 55.4% of the total broadband lines (56% in the previous year).
- OTE's retail xDSL lines increased to 1,496,886 lines in December 2015, compared to 1,357,878 in December 2014, thus increasing their share in the total broadband lines from 43.02% to 43.53%. From the total number of OTE's xDSL lines, 174,266 lines (i.e. 5.1% of all broadband lines) are VDSL lines.
- The number of ADSL lines amounted to 25,970 (0.76% of the total broadband lines) compared to 22,483 in December 2014. The lines of other technologies remain at very low levels (approximately 0.3%).

Chart 1.62: Progress of VDSL lines



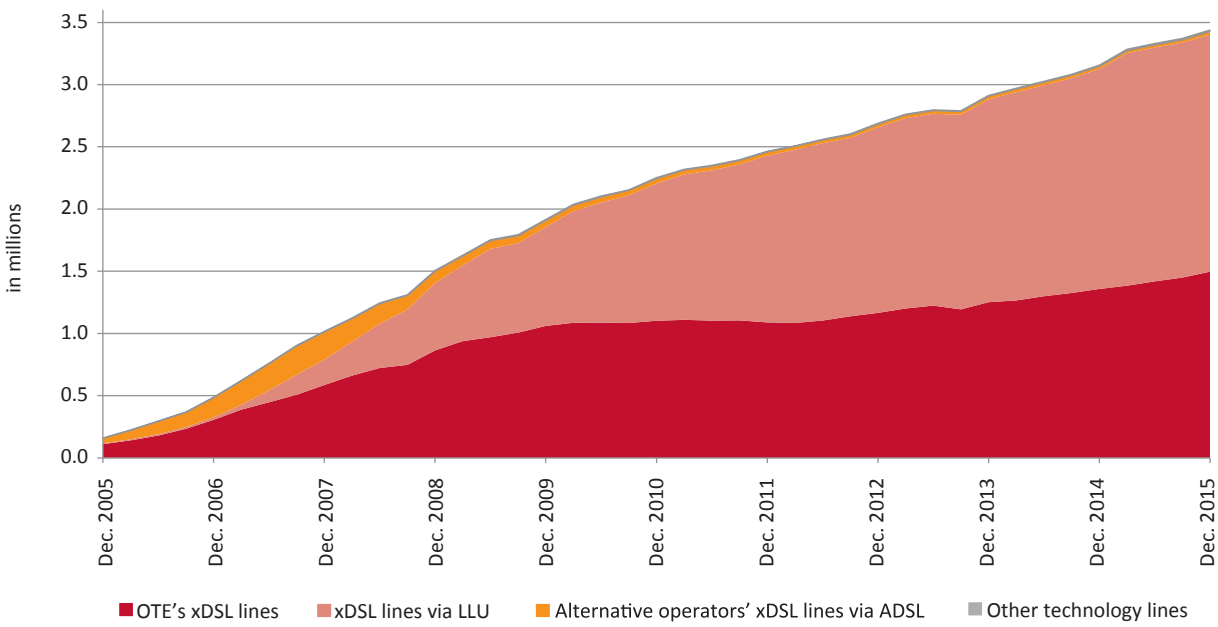
Source: EETT (based on data provided by the licensed operators)

Chart 1.63: Distribution of broadband lines per technology (December 2015)



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

Chart 1.64: Progress of broadband lines per technology (number of lines)

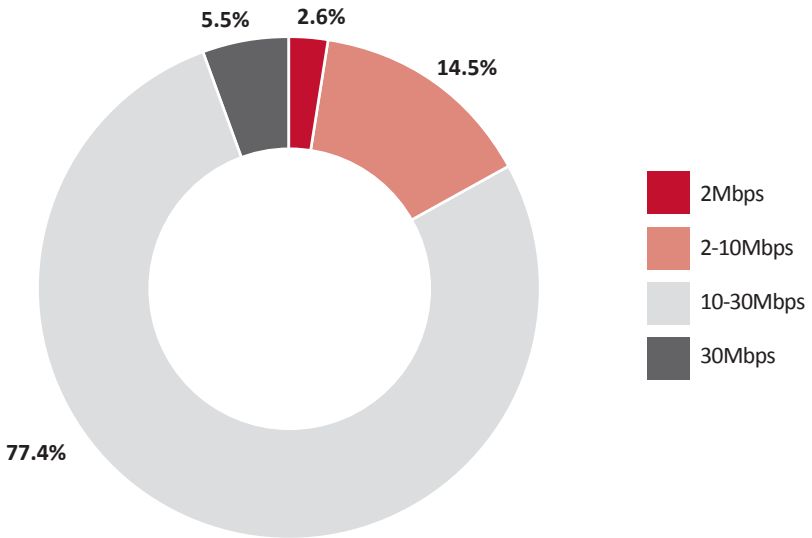


Source: EETT (based on data provided by the licensed operators)

Broadband line speed

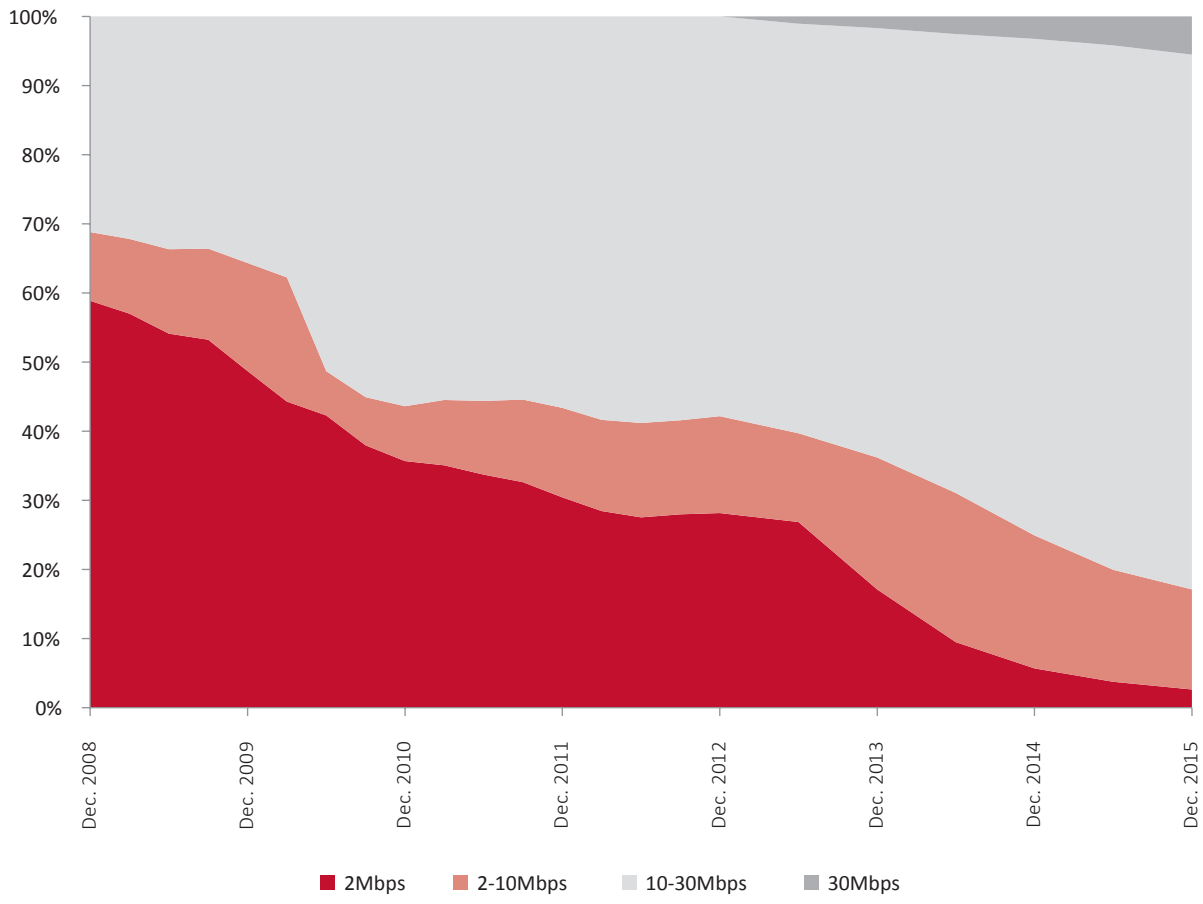
The majority of broadband lines (77.4%) corresponds to nominal (download) speeds above 10Mbps, while a small percentage of approximately 5.5% corresponds to speeds above 30Mbps, compared to 3.3% at the end of 2014 (Charts 1.65 and 1.66). The average speed of ADSL lines (wholesale and retail) reached 20Mbps (Chart 1.67) due to the decrease of low speed lines and the increase of VDSL lines.

Chart 1.65: Distribution of broadband lines speeds (December 2015)



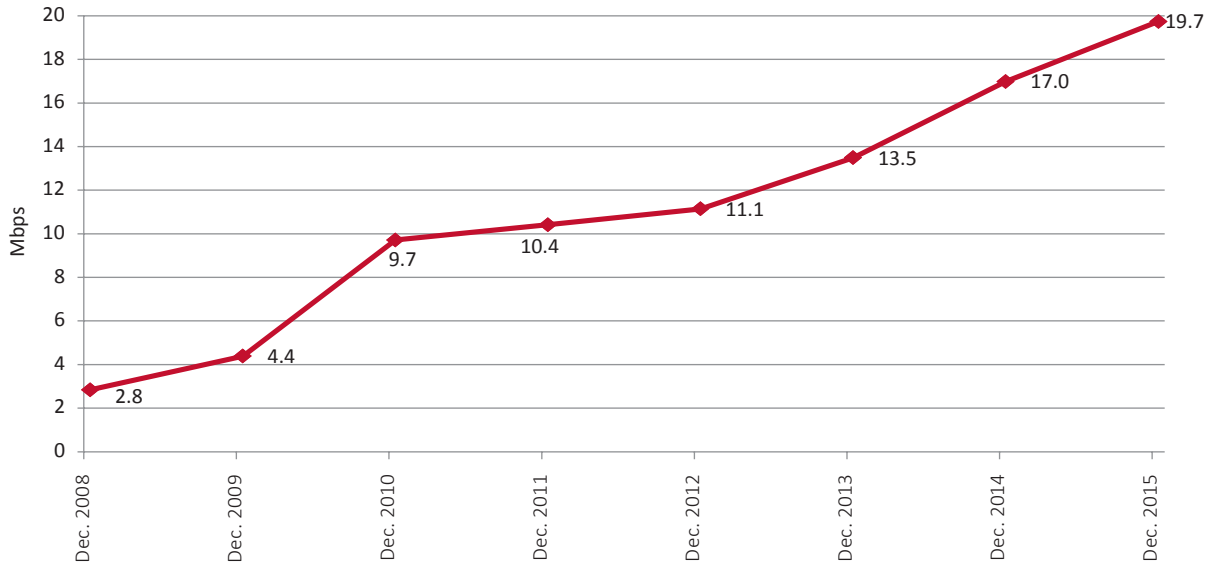
Source: EETT (based on data provided by the licensed operators)

Chart 1.66: Progress of broadband lines nominal speeds



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

Chart 1.67: Progress of the average access speed of retail and wholesale ADSL lines

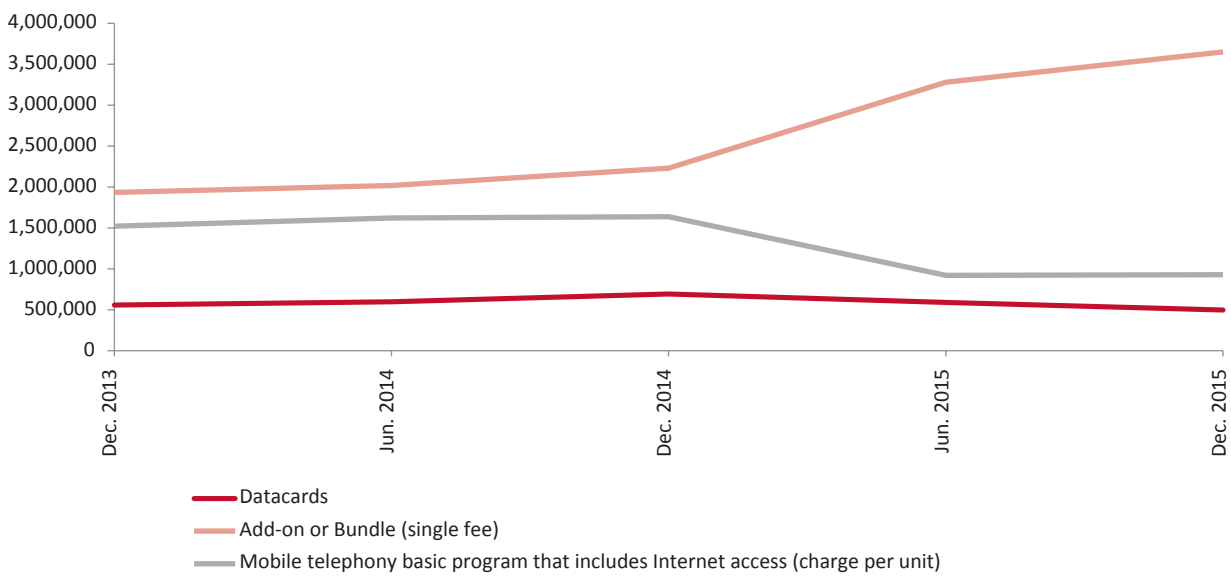


Source: EETT (based on data provided by the licensed operators)

Mobile broadband

The total active mobile subscribers that used Internet data services were 5,078,741 at the end of 2015 compared to 4,559,958 at the end of 2014 (Chart 1.68), marking an 11.5% increase. The majority of those subscribers (4,580,308) either used an add-on package or used Internet data services via mobile bundled programs that include, among others, Internet access at a single fee. Furthermore, 929,345 subscribers used Internet data services via mobile packages that include, inter alia, Internet access (charge per unit), while 498,433 accessed the Internet via datacards.

Chart 1.68: Mobile telephony subscribers that used the Internet

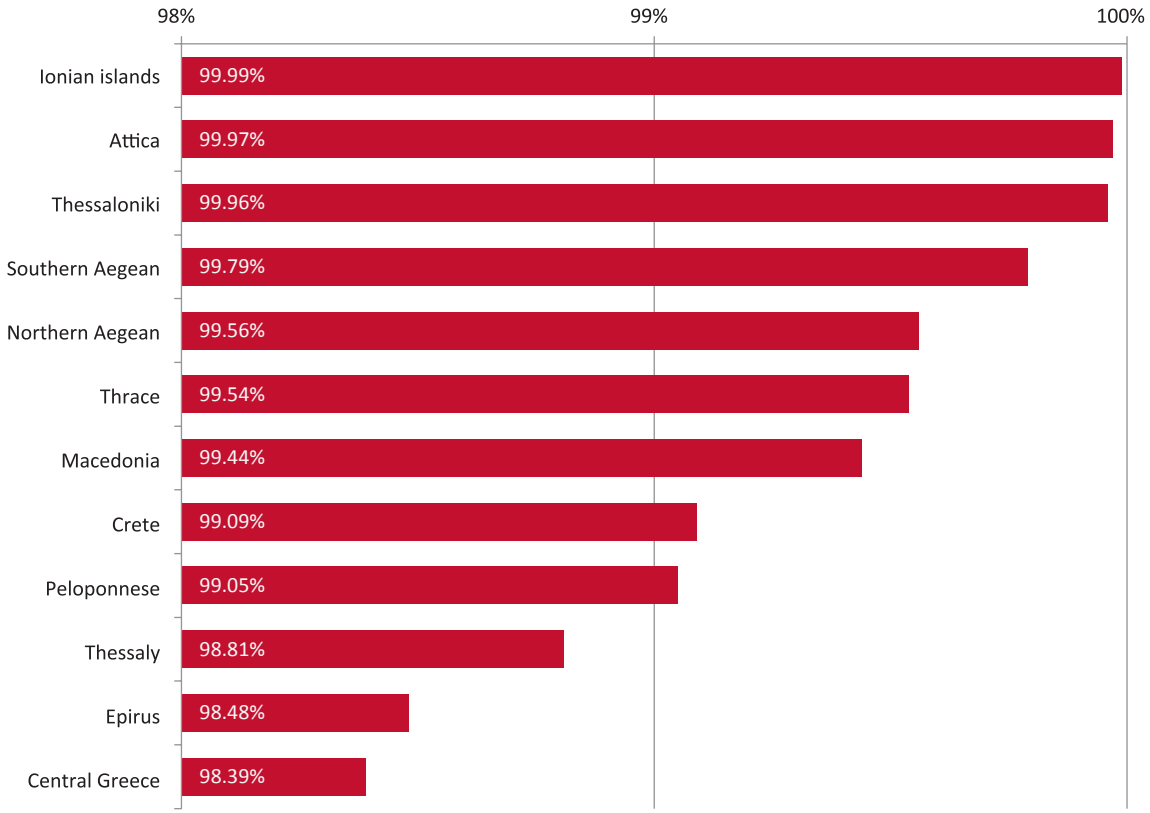


Source: EETT (based on data provided by the licensed operators)

Broadband availability data

Broadband availability[28] is high for the majority of Greece's population (Chart 1.69). In fact, with respect to the broadband availability currently provided by the alternative operators' co-locations to OTE local exchanges (broadband availability via LLU lines), it varies between 52% and almost 100% for the prefectures of Attica and Thessaloniki (Chart 1.70). At the same time and while almost 100% of the Greek population enjoys 3G network coverage, 4G mobile networks are also expanding very fast and currently cover 83% of the population (Chart 1.71).

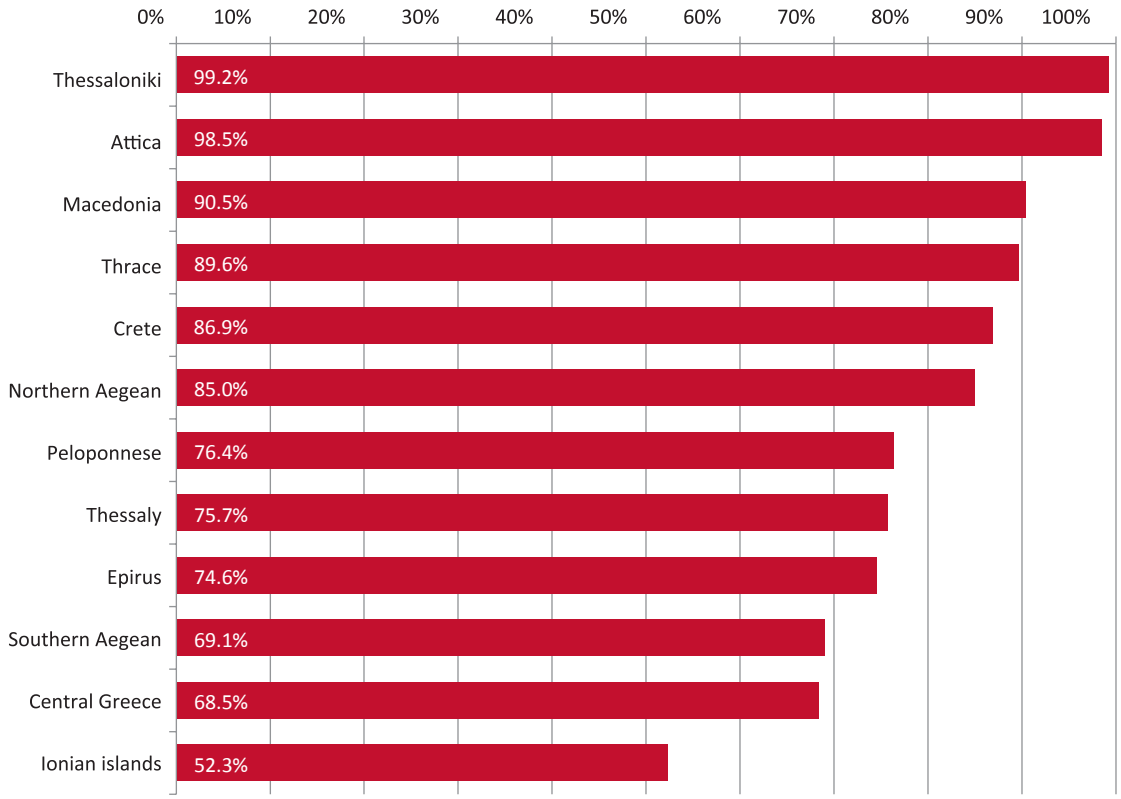
Chart 1.69: Broadband availability per geographic region



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

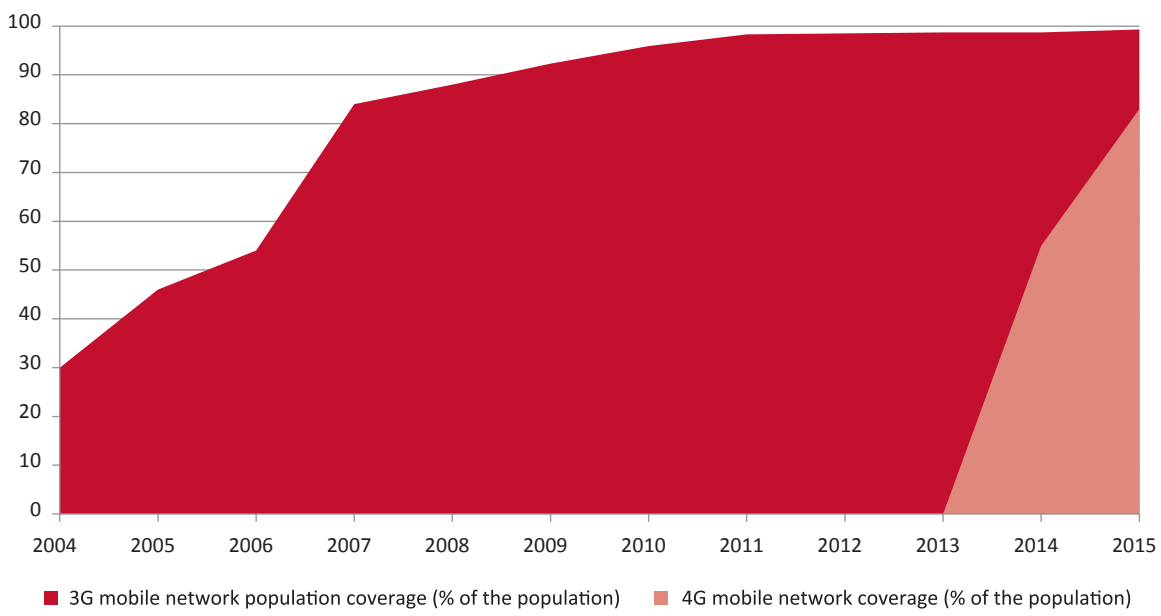
28. Broadband connection capability via (a) LLU operator line (b) retail OTE ADSL line and (c) wholesale ADSL line by other operators.

Chart 1.70: LLU availability per geographic region in Greece (December 2015)



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

Chart 1.71: Mobile network population coverage

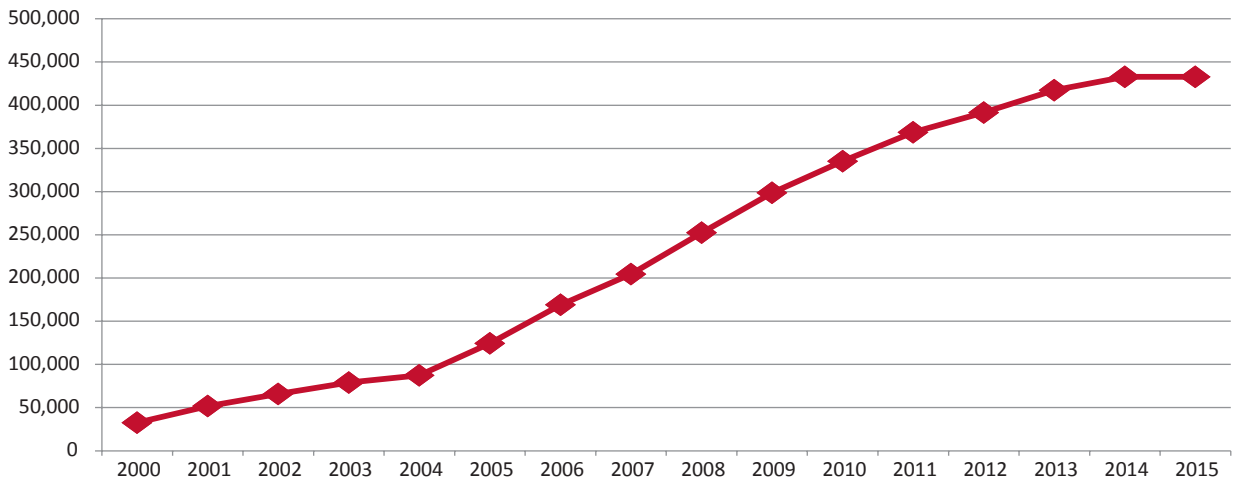


Source: EETT (based on data provided by the licensed operators)

1.2.7. Domain names in [.gr]

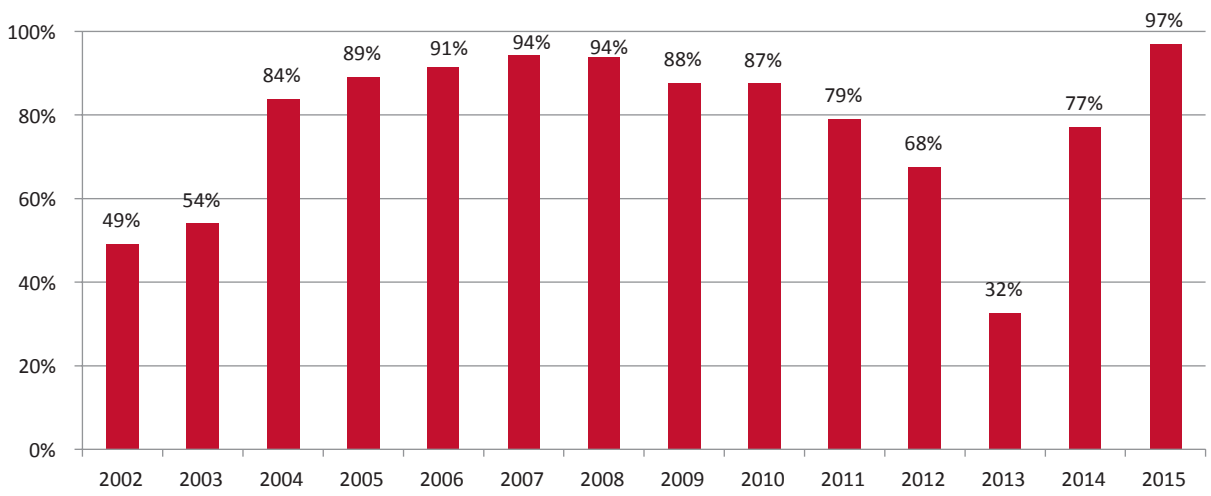
In 2015, the total number of [.gr] domain names, including the sub-domains (i.e. com.gr) amounted to approximately 433,000[29], roughly at the same levels as 2014. Chart 1.72 presents the progress of the total number of domain names over time. Chart 1.73 presents the annual progress of the average assignment percentage over the submitted applications for the period 2002-2015[30], that reached 97% in 2015 compared to 77% in 2015.

Chart 1.72: Number of domain names



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

Chart 1.73: Average assignment percentage



Source: EETT

29. It should be noted that the information on the total number of domain names for the last years has been corrected, so as to reflect the "net" total number of active domain names.
30. Please be reminded that the low percentage of 2013 was due to the automatic submission by the applicants of multiple applications for the same domain name so that the applicants could ensure that the requested domain name would be assigned as soon as the previous license expired. Following a recommendation to the assignees to reduce the number of submitted applications, things are now almost back to normal.

1.2.8. Premium Rate Services (PRS) and Directory Services

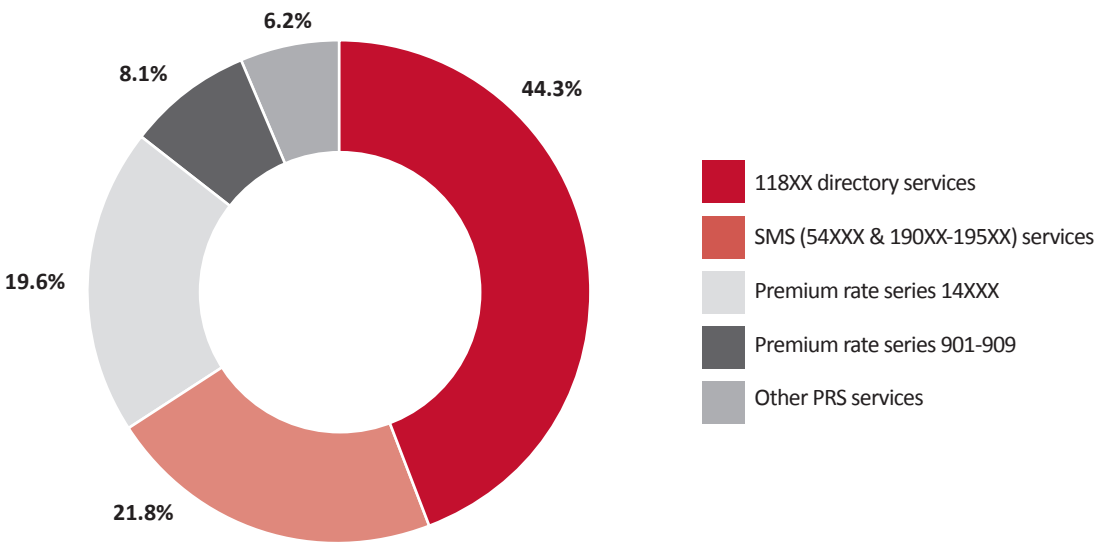
This section presents the main traffic and revenues' figures of telephony operators that provide Premium Rate and directory services in Greece for 2015 based on data from 29 active operators out of a total of 60 licensed operators. The total invoiced traffic was 72.8 million minutes and 83.5 million calls and/or messages, generating revenues amounting to 124.2 million euros. Revenues from 118XX directory services amounted to 55 million euros and represented 44.3% of the total market share. Revenues from SMS (SMS 54XXX and 19XXX-195XX) came second in line, representing 21.8% of the total market value and amounting to 27 million euros, followed by revenues from premium rate telephone numbers 14XXX representing 19.6% and with an estimated absolute value of 24.4 million euros (Chart 1.74).

1.2.9. Greek and European market indicators

Mobile telephony

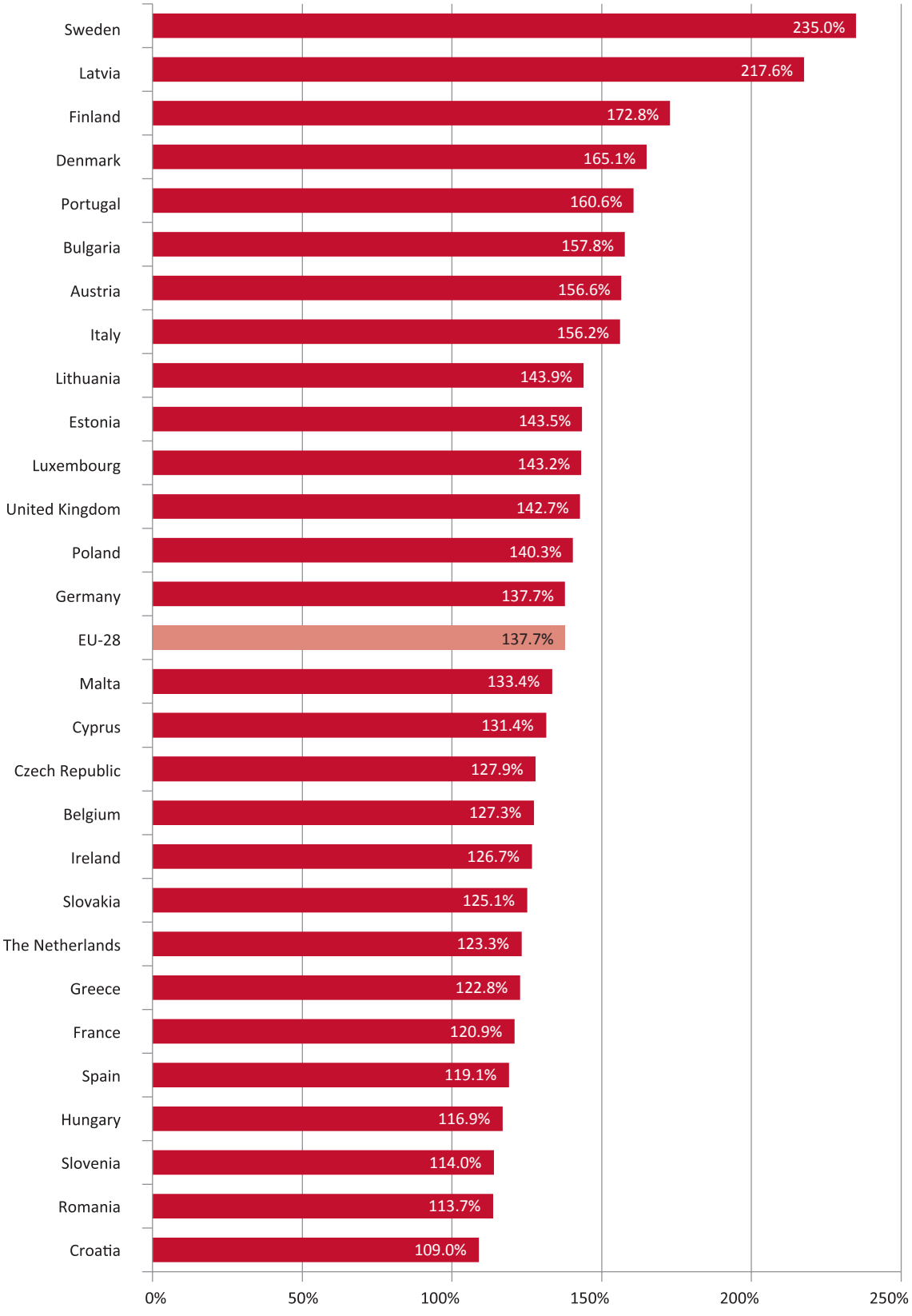
The penetration of active mobile telephony connections in the Greek population was 122.8% in June 2015, compared to 137.7% in EU-28 (Chart 1.75). Chart 1.76 demonstrates the average expenditure per mobile telephony user in EU member states (2014 data) where Greece with 136 euros (compared to 143 euros in 2013) continues to be below the European average (162 euros). At the same time, only 34.1% of Greeks access the Internet via their mobile phones when the respective European percentage is 53.9% (Chart 1.76).

Chart 1.74: PRS and Directory services shares based on the respective revenues



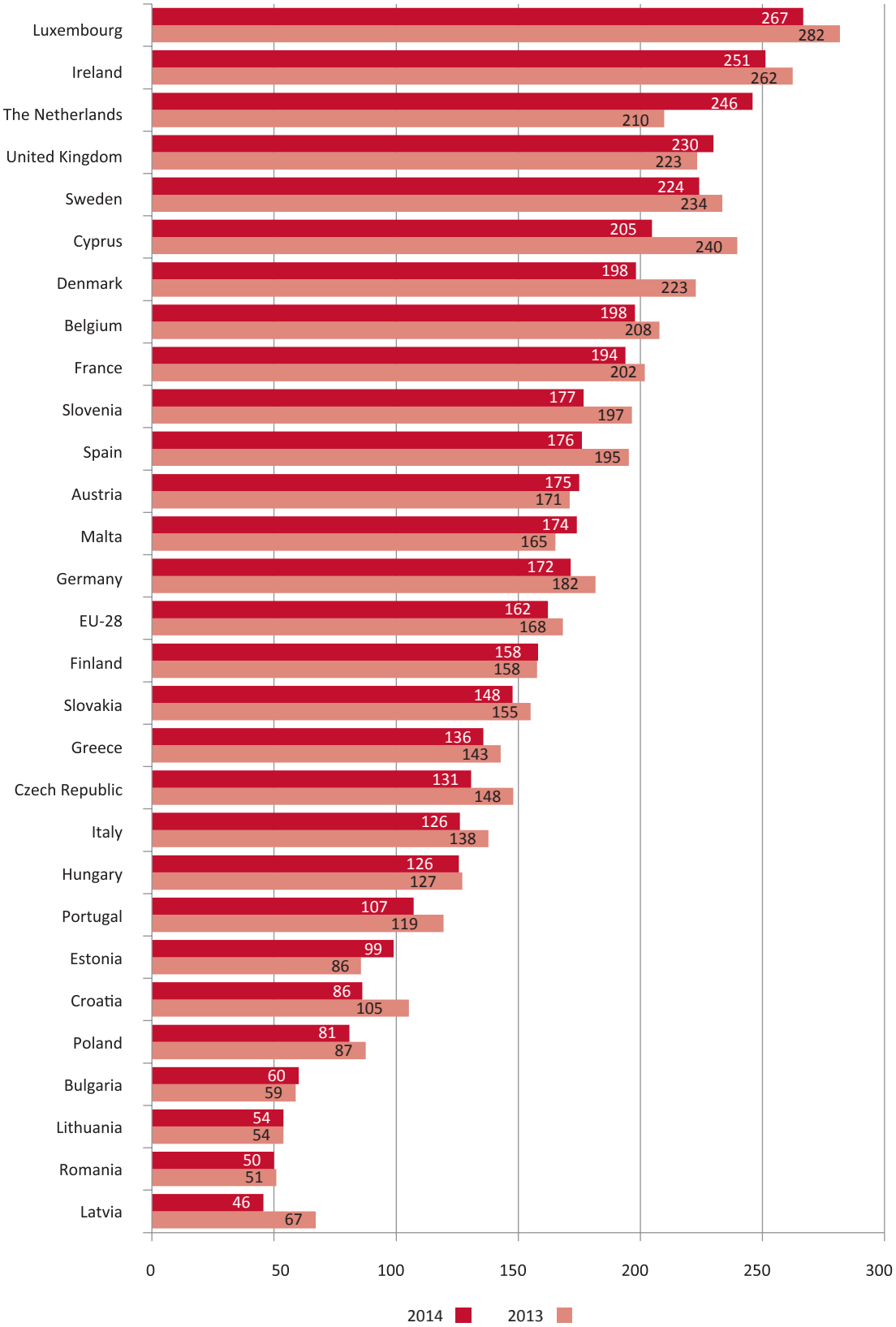
Source: EETT (based on data provided by the licensed operators)

Chart 1.75: Mobile telephony penetration in the EU



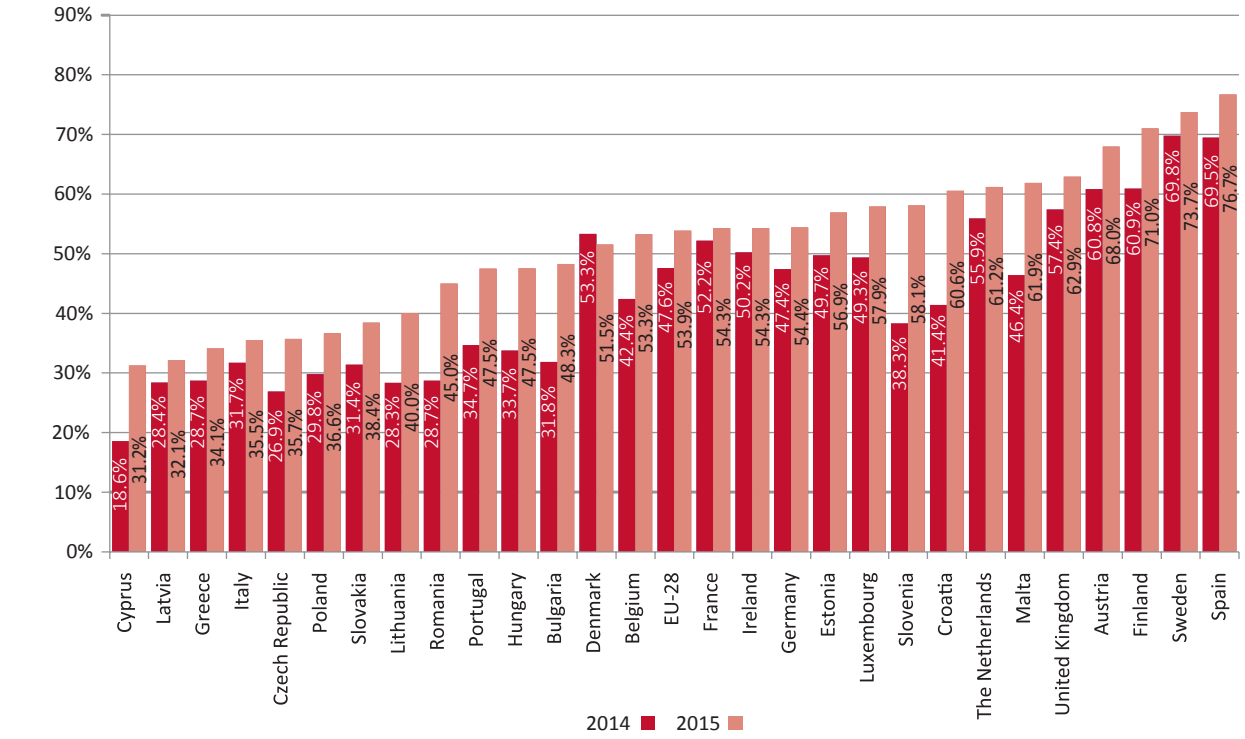
Source: EETT (based on Digital Economy and Society Index data)

Chart 1.76: Average revenue per mobile telephony user in the EU (in euros)



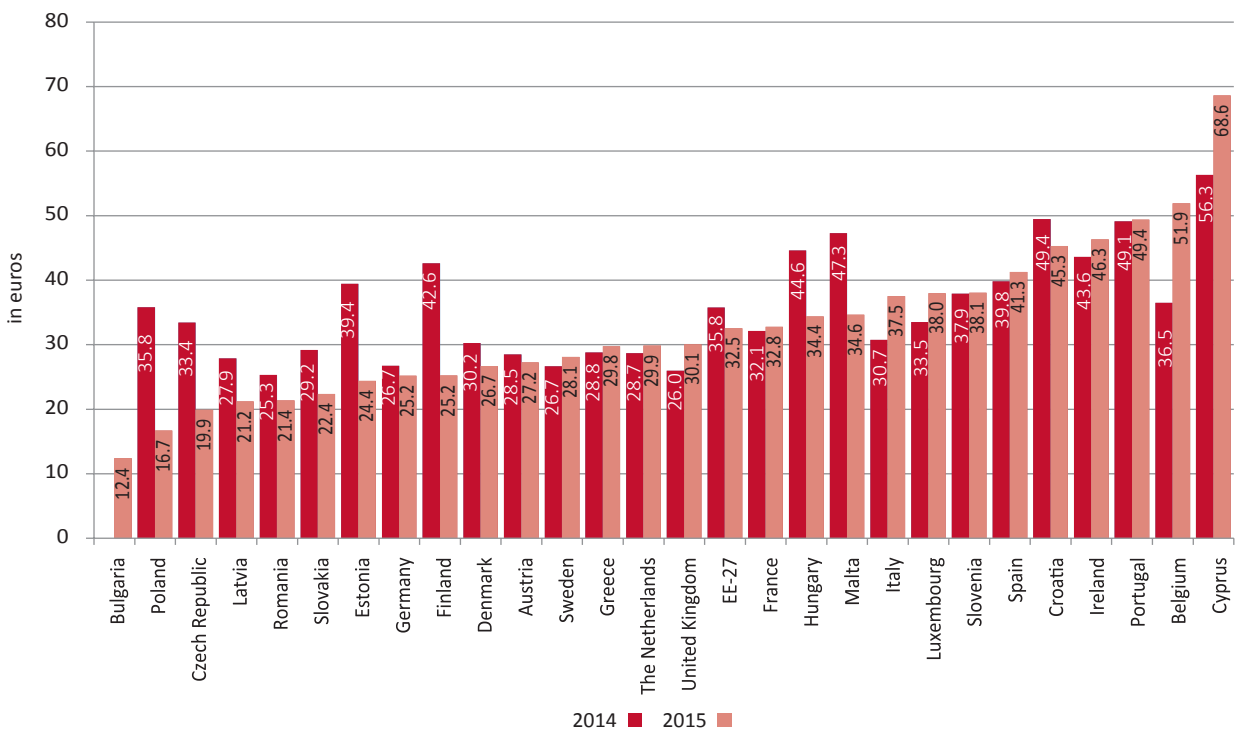
Source: EETT (based on Digital Economy and Society Index data)

Chart 1.77: Internet access via mobile phones



Source: EETT (based on Digital Economy and Society Index data)

Chart 1.78: Monthly price of a double play bundled offer (fixed telephony + Internet)



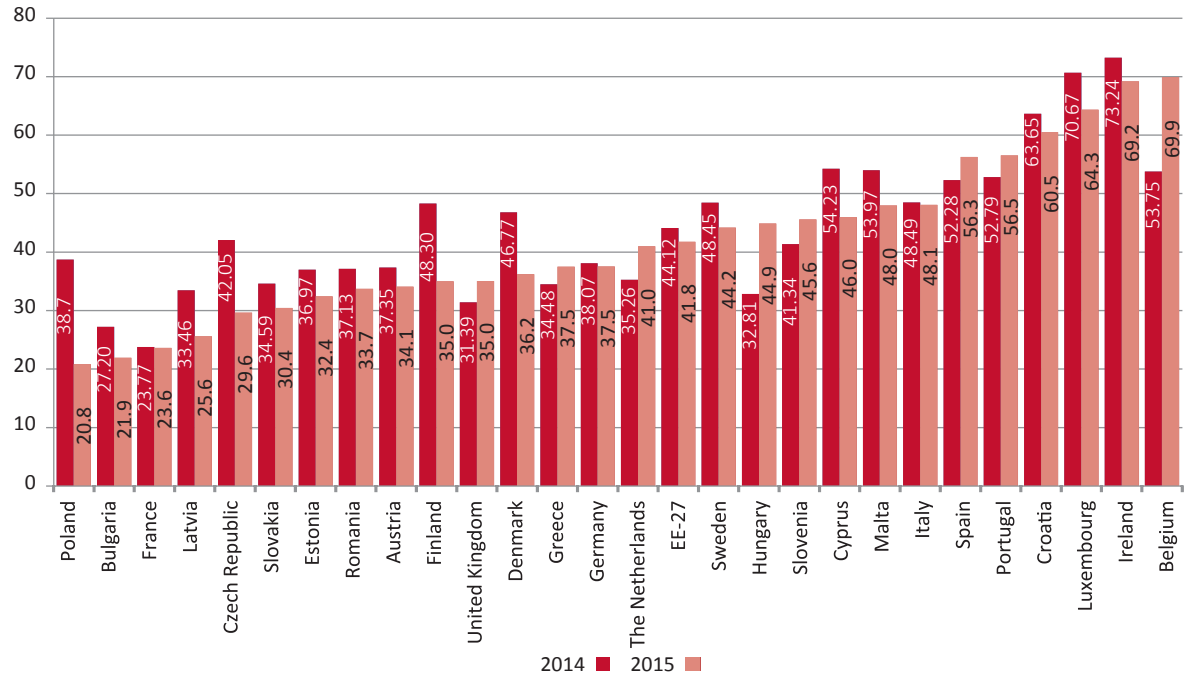
Source: EETT (based on Digital Economy and Society Index data)

Fixed telephony and Internet bundled offers

Greece is below the European average with respect to the monthly average price of double and triple play offers. More specifically, the average monthly price of a double play offer with nominal download speed between 12 and 30Mbps (that corresponds to 77.4% of Greek broadband lines) is 29.8 euros compared to the European average price of 32.5 euros (Chart 1.78), while the relevant numbers for a triple play offer are 37.5 euros and 41.8 euros respectively (Chart 1.79).

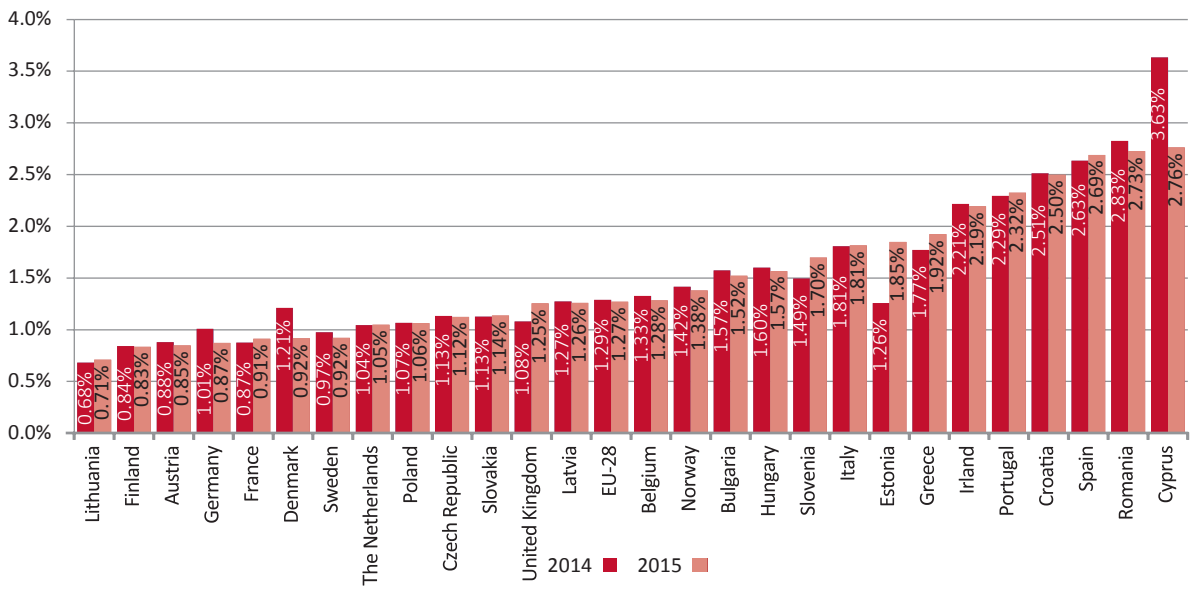
In Greece, however, a household has to spend, on average, 1.92% of its available income to pay for annual Internet access services. The respective number in the EU is around 1.27% (Chart 1.80).

Chart 1.79: Monthly price of a triple play bundled offer (fixed telephony + Internet + TV)



Source: EETT (based on Digital Economy and Society Index data)

Chart 1.80: Internet accessibility based on the available income



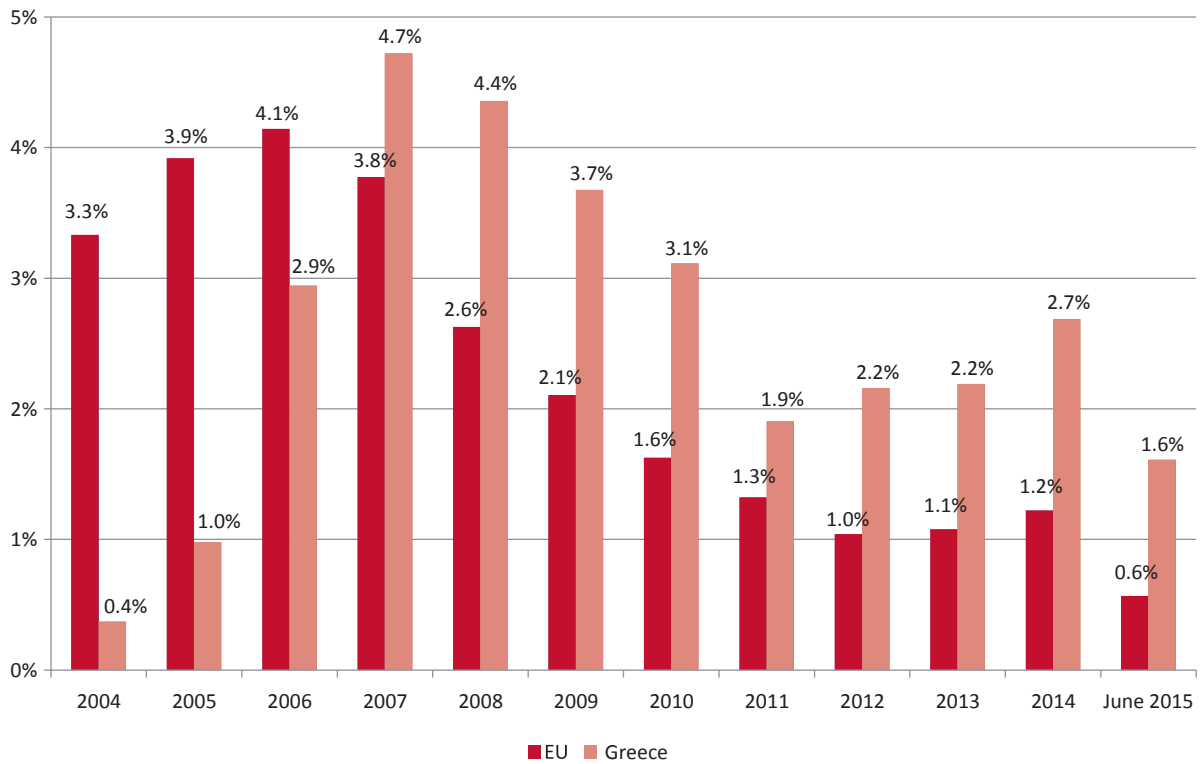
Source: EETT (based Digital Economy and Society Index data)

Broadband market

Broadband penetration in Europe continues at a slower pace. In June 2015, fixed broadband penetration, namely the number of broadband connection per 100 inhabitants, reached 31.6% compared to 30.5% in June 2014. The respective numbers for Greece were 30.8% and 27.5%, thus ranking it in the 11th place among the EU member states up from the 13th position in December 2014. Nowadays, Greece's gap from the respective European average has been almost bridged and that, in itself, shows that Greece is clearly converging with the rest of Europe with respect to broadband penetration. Furthermore, during the same time, the growth rate of broadband penetration in Greece was more than double than the European average penetration rate (1.6% and 0.6% respectively) (Charts 1.81 – 1.84).

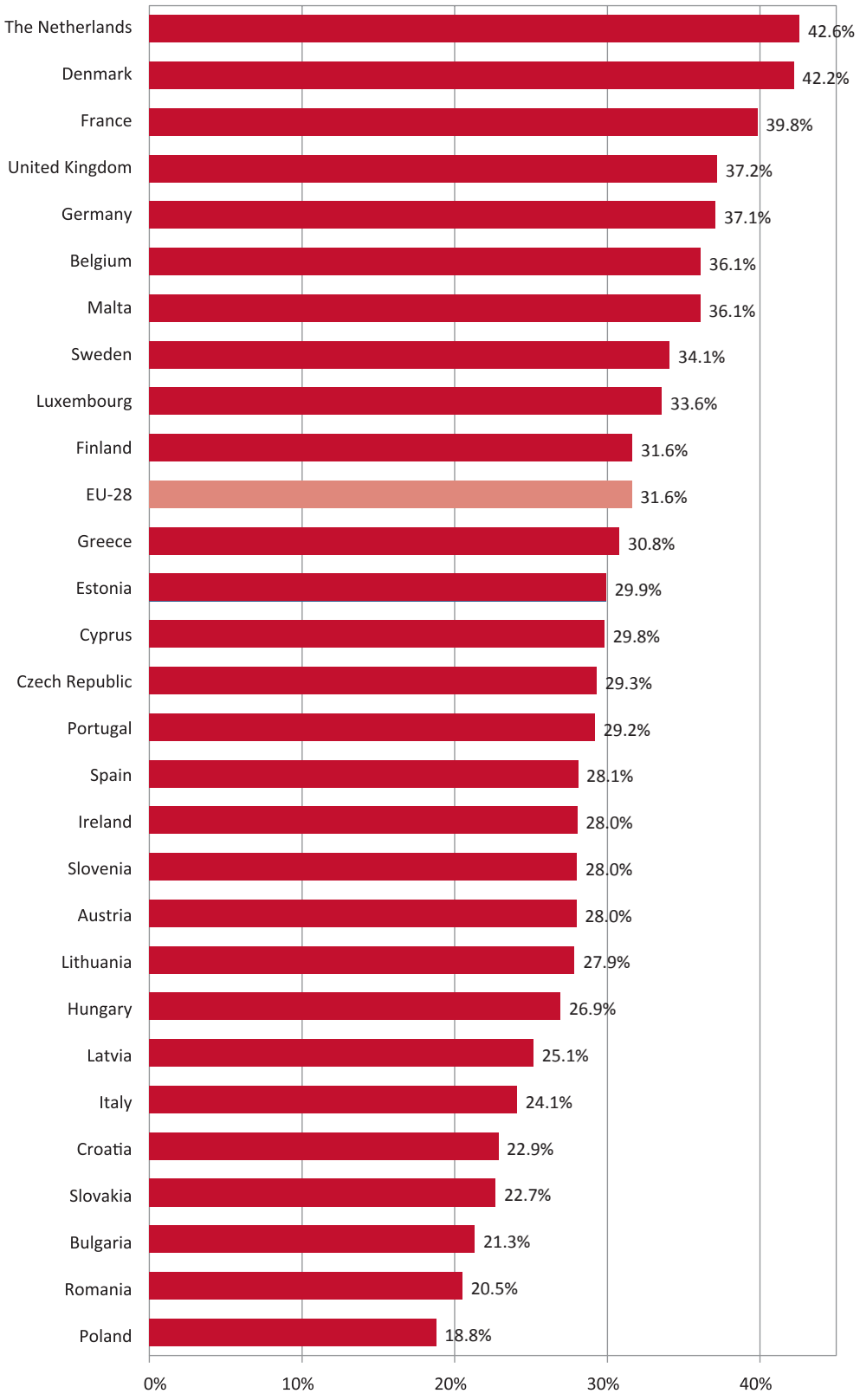
It seems also that the demand for ultra-fast broadband lines continues to increase. As a result, in June 2015, broadband connections at speeds over 30Mbps and 100Mbps accounted for 30% and 10.8% of total connections respectively (compared to 22.8% and 6.7% in June 2014). In both these categories, Greece is among the last in row with 4.2% and 0% respectively compared to 2.6% and 0% in June 2014 (Charts 1.84 – 1.85).

Chart 1.81: Broadband penetration increase in Greece and the EU



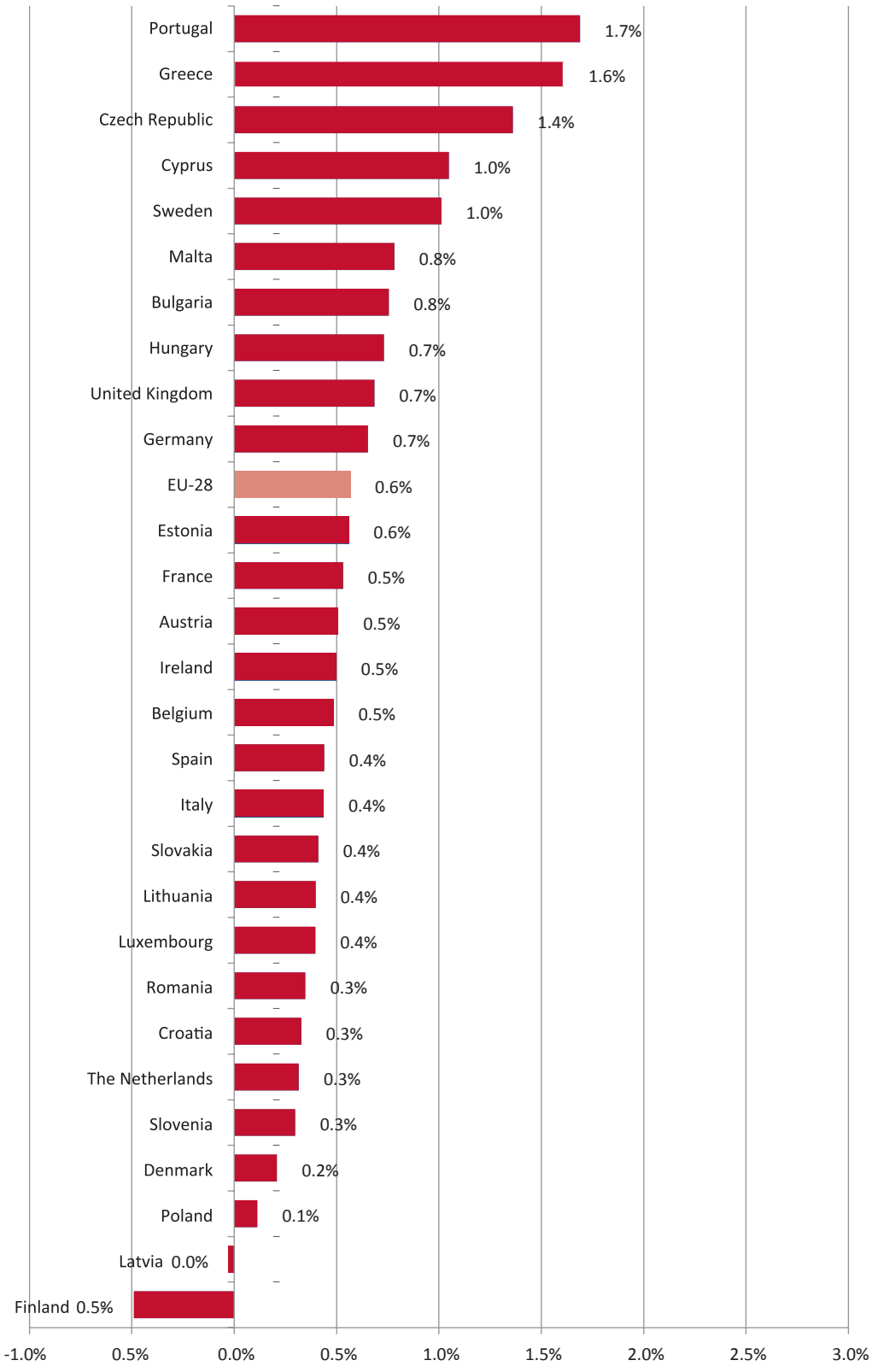
Source: EETT (based on Digital Economy and Society Index data)

Chart 1.82: Broadband penetration in the EU (June 2015)



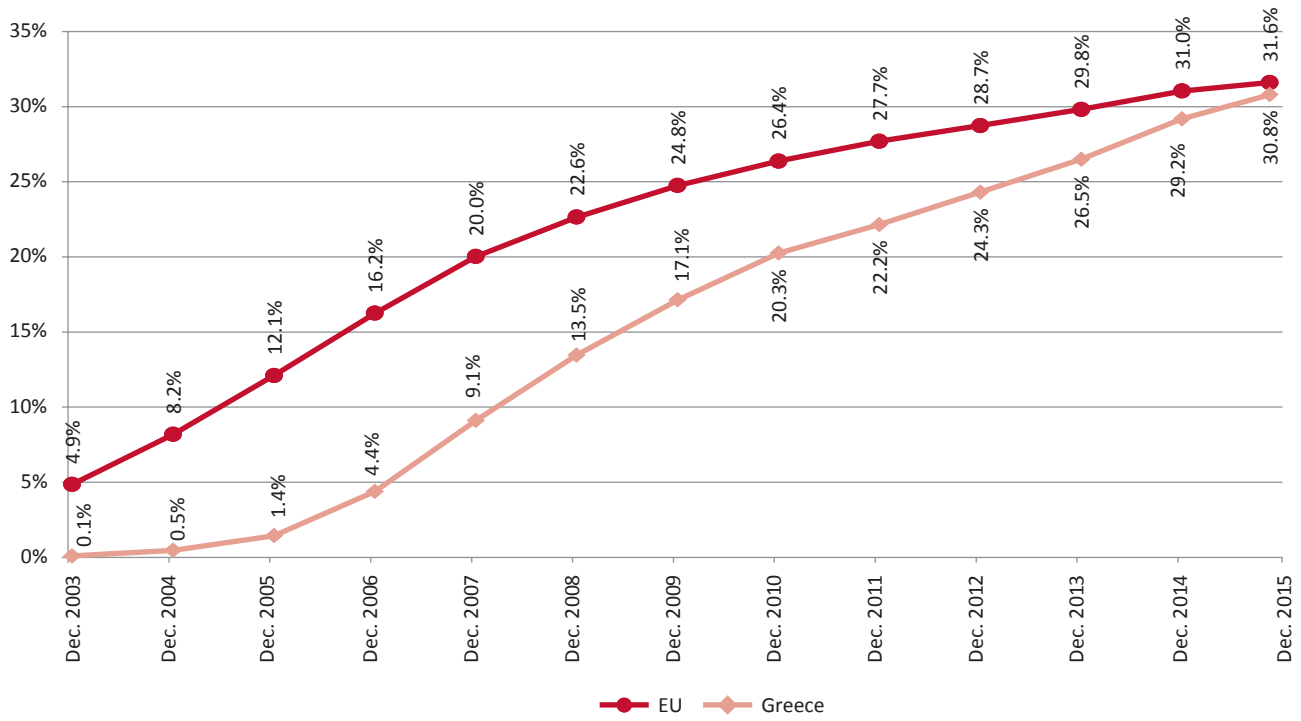
Source: EETT (based on Digital Economy and Society Index data)

Chart 1.83: Broadband penetration change in the EU (June 2015)



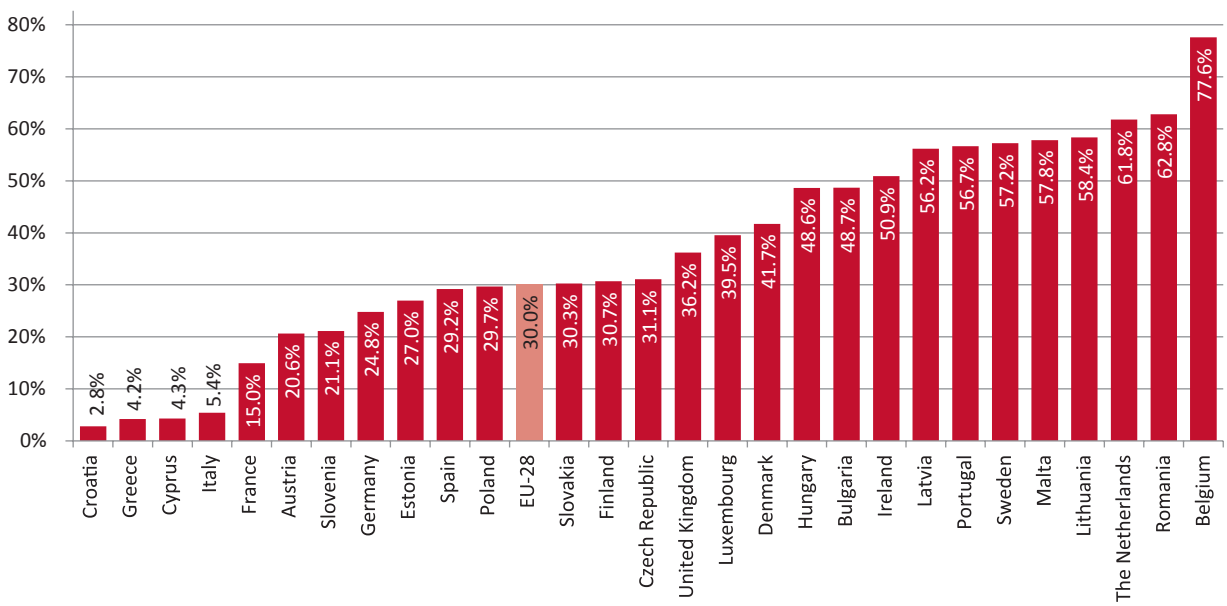
Source: EETT (based on Digital Economy and Society Index data)

Chart 1.84: Broadband penetration progress in Greece and the EU



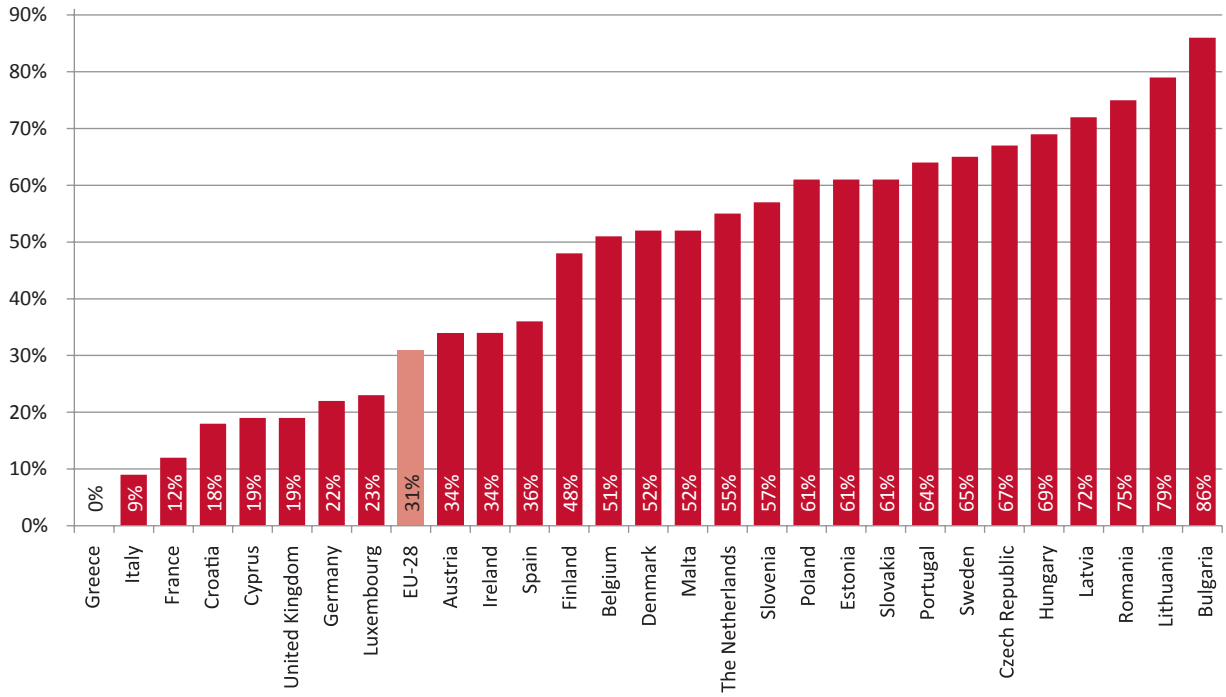
Source: EETT (based on Digital Economy and Society Index data)

Chart 1.85: Percentage of lines at speeds > 30Mbps in the EU (June 2015)



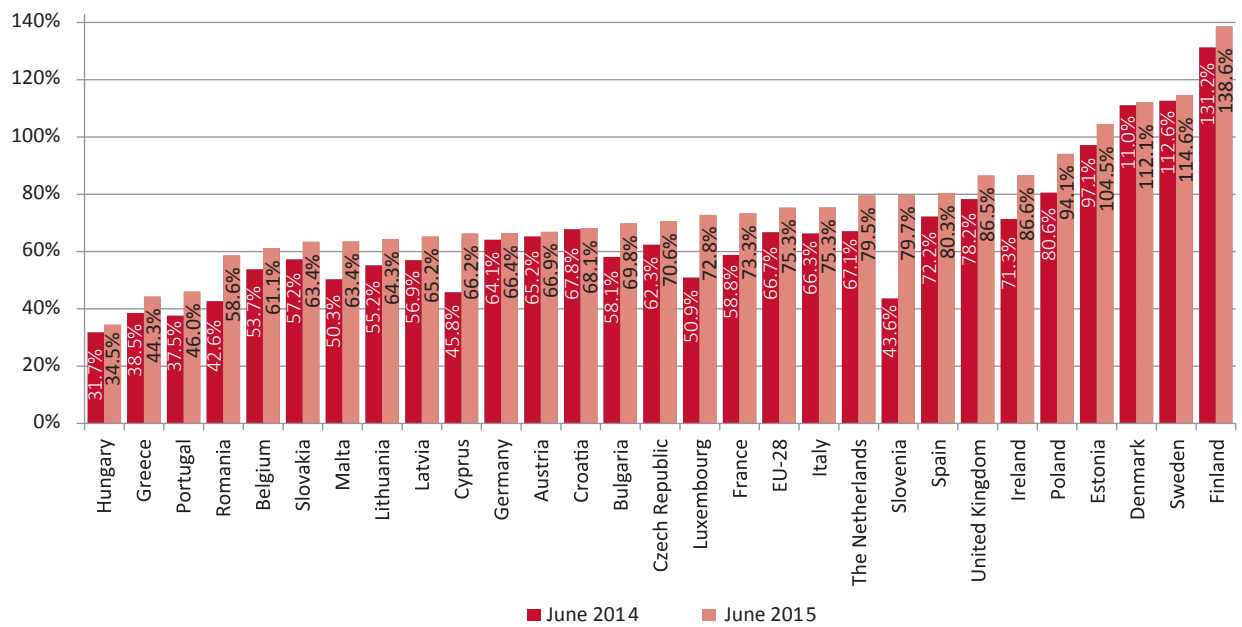
Source: EETT (based on Digital Economy and Society Index data)

Chart 1.86: Broadband lines with non DSL technologies in the EU (June 2015)



Source: EETT (based on Digital Economy and Society Index data)

Chart 1.87: Mobile broadband penetration in the EU



Source: EETT (based on Digital Economy and Society Index data)

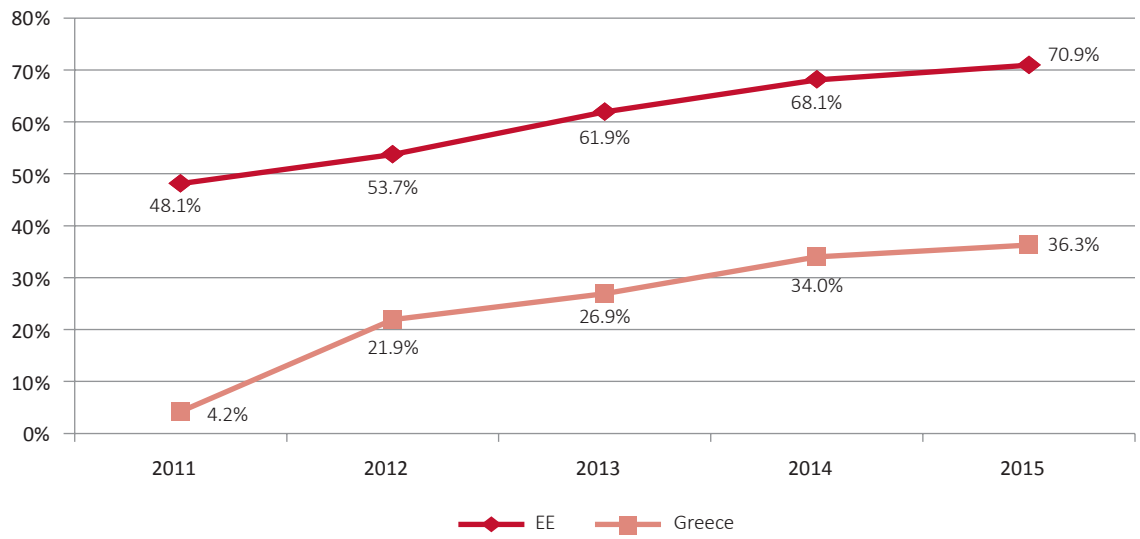
Mobile broadband

Mobile broadband keeps expanding and its penetration rate in the EU in June 2015 was 75.3% (connections per 100 inhabitants) compared to 66.7% in June 2014 (Chart 1.86). In 2014, four EU countries (Finland, Denmark, Estonia and Sweden) had mobile broadband penetration rates over 100%. Greece, with a mobile broadband penetration rate of 44.3%, is among the last in row in mobile broadband access, while its penetration rate increase from June 2014 to June 2015 was still lower than the European average (5.8% compared to 8.6%).

Network infrastructure development

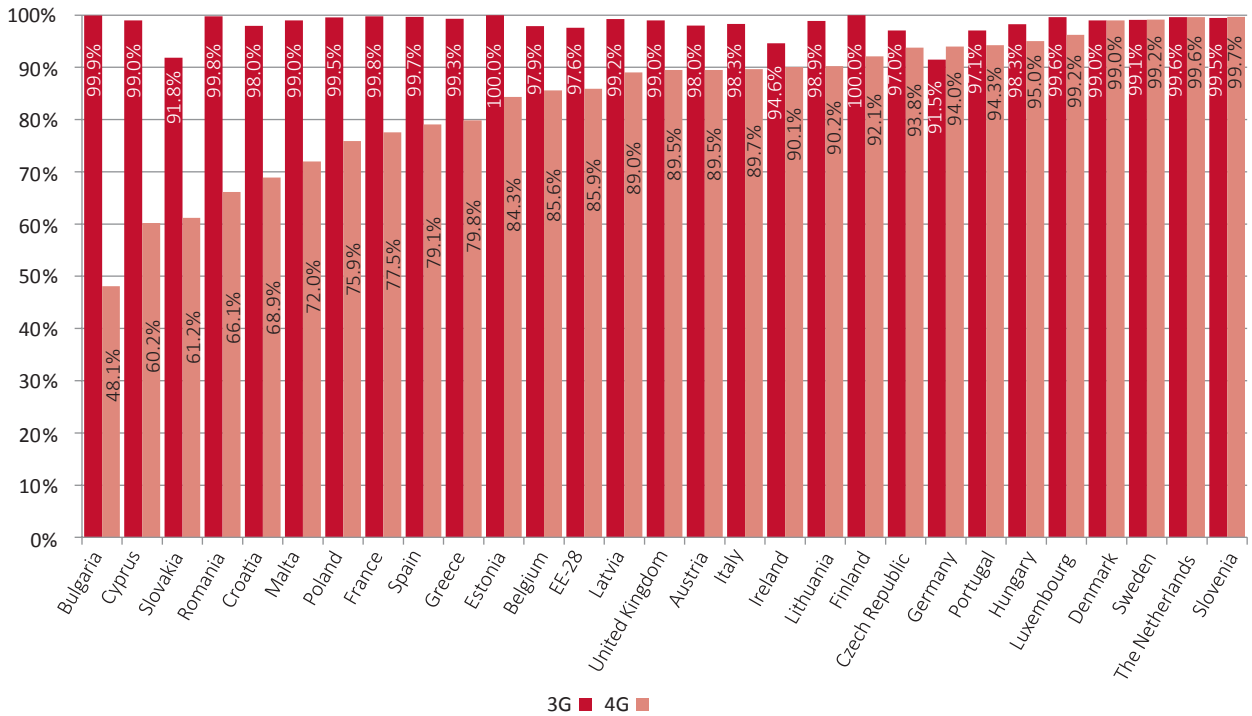
The Next Generation Access networks (NGAs) coverage is expanding and has covered 70.9% of households in 2015 compared to 68.1% in 2014 (Chart 1.88). Greece with 36.3% coverage ranks below the European average. The highest coverage is observed in TV network Cables DOCSIS 3.0 (44%), followed by VDSL networks (41%) and FTTP networks (21%). It should be noted that there are no Cable DOCSIS 3.0 networks in Greece. In June 2015, the nominal 4G network coverage (LTE) reached 85.9% of the population. Greece is lagging slightly behind with 79.8% of the population (Chart 1.89).

Chart 1.88: NGA broadband network coverage in Greece and the EU



Source: EETT (based on Digital Economy and Society Index data)

Chart 1.89: 3G and 4G mobile broadband access network coverage



Source: EETT (based on Digital Economy and Society Index data)

2. Postal Services

2.1. The course of the postal market

2.1.1. Globally

Key financial figures

The continuing global trend towards e-commerce and electronic means of communication and information has "revolutionized" the postal market, changing the way that postal service providers cooperate, as well as the way that they interact with their customers. The common objective of postal service providers is to differentiate their sources of revenues by developing new business activities and entering new geographic markets. At the same time, due to increased competition and the continuous electronic substitution of letter mail, postal service providers focus more on improving their operational efficiency, to help cut costs and sustain their profits. The first results for 2015[31] demonstrate a continuous growth of the global postal market. Revenues increased by 2.5%, year-on-year. Despite the decline of mail volume, mail revenue grew by 0.9%, while parcel and express revenue grew by 4.7% year-on-year, thanks to the continuous growth of e-commerce.

Despite this positive trend, the postal market growth slowed down compared to previous years. In 2014, the global postal market revenue totalled 435.6 billion euros, with an average growth rate of 2.8% and an average EBIT margin of 4.8%[32]. This increase was driven mainly by the parcel and courier activities of postal services providers and less by letter mail, logistics and freight activities.

Despite the continuous fall of the total mail volume, this segment remained strong, representing 44.8% of the total market revenue, mainly thanks to cost reduction and innovation efforts. It is worth noting that despite a 3.9% fall in the total mail volume in 2014, revenue increased by 1.5% year-on-year. The primary driver of the decline in mail volume is the e-substitution of mail, which affects strongly the sectors of corporate advertising and government administration. The postal products that declined the most compared to the previous year, were priority letters (6.5%) and non-priority letters (4.6%). In response to the negative performance of this segment, postal services providers are currently launching new, innovative services, including digital mailboxes, postal apps, digital stamps and postcards, etc.

The increase in e-commerce, the global economic growth[33], the acquisitions among postal providers and the use by consumers of new products and services were the main drivers of growth in the parcels sector. Parcels and express volumes have grown by more than 5% annually over the last three years. In fact, in 2014, the growth rate increased to 6.3%. Furthermore, revenues increased by 6.7%, although at a slower pace compared to last year. The main cause of this slowdown is the intensive competition that affects prices and operator profitability.

Trends in the global postal market

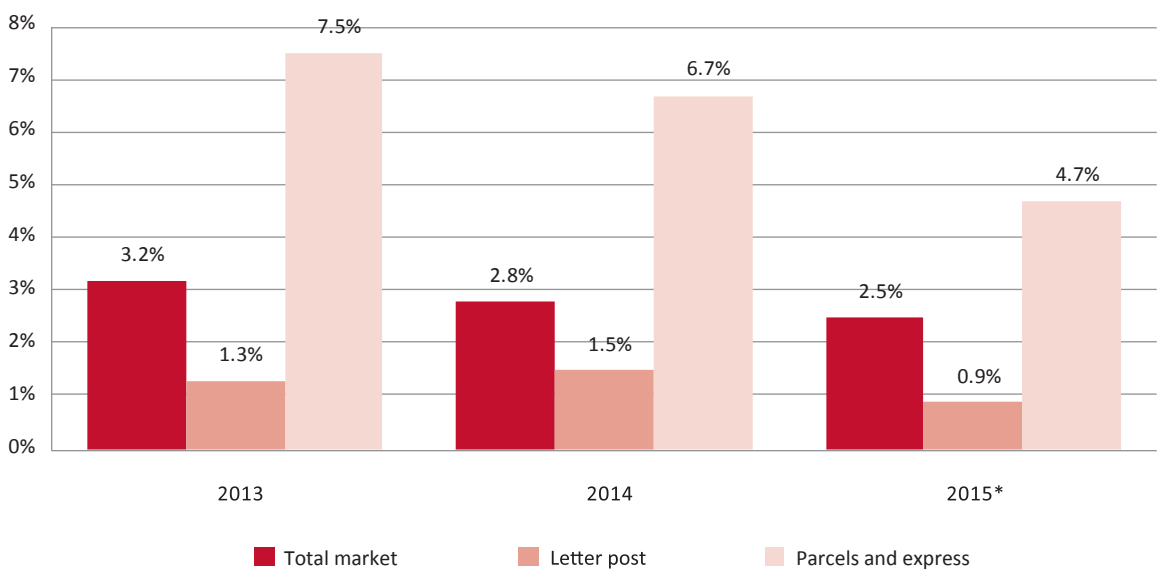
The current changes in the postal in-

31. IPC Preliminary Results 2015.
32. IPC, "Global Postal Industry Report" (November 2015)
33. In 2014, the world GDP increased by 3.4% (IPC, "Global Postal Industry Report", November 2015)..

dustry are expected to get intensified in the next few years as the volume of letter post continues to drop significantly due to e-substitution of letter mail. The "digital revolution" and the growth of e-commerce are already changing the existing business models of the postal operators, creating a need for development of new services and pursuit of new growth opportunities. At the same time, competition in the sector is getting more intense. The improvement of consumer experience, the development of multi-channel services, the ability to adjust and adapt to new trends, as well as competent personnel are the major success factors of postal companies in the years to come.

The main objective of postal operators is to make the delivery and collection of parcels for their customers as easy and convenient as possible. In

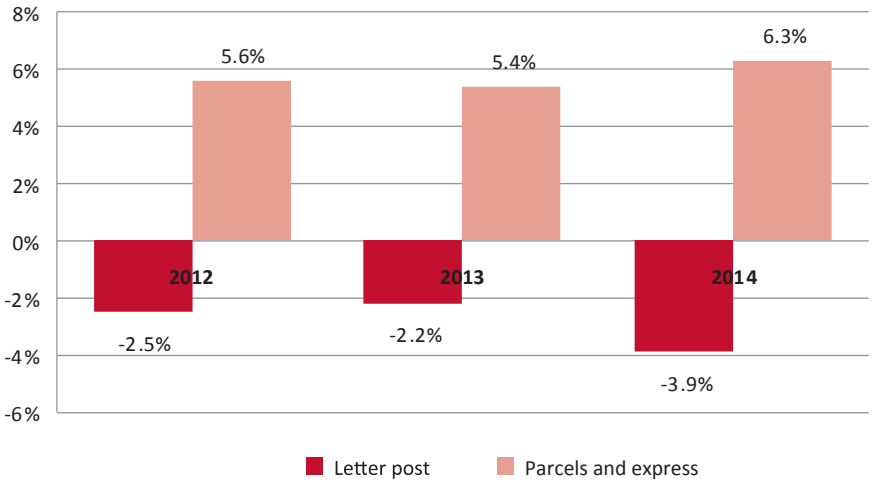
Chart 2.1: Average revenue growth rate in the global postal market



**Estimation for the year (IPC Preliminary Results)*

Source: IPC "Global Postal Industry Report" (November 2015)

Chart 2.2: Global volume growth rate of letters vs parcel and express (2012-2014)



Source: IPC "Global Postal Industry Report", (November 2015)

this context, many postal companies are already offering their customers alternatives to home delivery, including the installation of automated parcel terminals in public and/or commercial areas so that customers can collect or deposit their parcels on a 24-hours basis. For example, in Switzerland, Swiss Post has installed automated parcel terminals in the main railway stations from which thousands of passengers transit every day. In the United Kingdom, Parcelforce Select, member of Royal Mail Group, offers consumers the possibility to modify the place and time of delivery of their parcel, in case of absence, even on the day of its delivery. In Greece, ACS and DHL have installed, in cooperation with Coral SA, specially designed automated parcel delivery/collection terminals at Shell petrol stations.

The increase of e-commerce has brought up the customers' need for easy return of the products to the e-commerce companies. Postal operators are developing e-services in order to assist e-commerce companies in the management of their product returns and in offering an enhanced buying experience to their customers. In the United Kingdom, for example, Royal Mail has developed an online portal via which e-commerce companies can manage the returns and stock levels of their products, while consumers can print special labels for the return of their products to the e-merchant and monitor the progress of their shipment.

Postal operators are expanding their international parcel services by providing integrated e-commerce solutions to both the e-commerce companies and the consumers. For example, in Germany, DHL has developed an electronic platform that enables 3.5 million consumers to purchase more than 15 million products from more than 3,000 e-commerce companies, including fresh products from super markets. Furthermore, Royal Mail participates in a Chinese e-commerce platform to provide British products to Chinese consumers.

The need to facilitate consumers in their online purchases has led companies to the development of new e-services. For example, Swiss Post is currently offering consumers a service via which they can store their delivery information and preferences into a profile and use it to do their shopping at affiliated e-shops. Moreover, Royal Mail has developed a new e-solution that enables sellers of e-Bay to easily purchase and print labels in order to ship their products to their customers.

The drop in letter post volume and the shift towards electronic communications has pushed postal operators towards the development of innovative e-mail services. A typical example is that of Australia, where Australia Post is offering its customers a digital mailbox service, which enables them to safely receive bills and confidential correspondence from private and public organizations.

At the collective level, International Post Corporation (IPC) is developing solutions in order to provide support to its members (postal companies). In an effort to improve the process of cross-border parcel delivery, IPC has created a harmonised label that enables postal operators to optimize the end-to-end processing of international letter packages and parcels. Moreover, IPC has developed a platform that enables e-shops to offer their customers pre-paid labels for the return of their products free of charge.

2.1.2. Europe

Key financial figures

In 2014, the European postal market increased with respect to revenues of letter post (0.7%) and parcels (5.3%)[34]. The decline of the volume of letter post (3.8%) accelerated compared to 2013, while the volume of parcel traffic increased by 8.9%.

During the period 2011–2014, the total volume of postal items declined on average 5.6% per year[35]. This decrease is driven by non-express mail which represents 94.3% of total traffic and decreased 6.5% per year, on average. The express segment increased 6% on average per year. Furthermore, almost all European countries saw their total postal item traffic decline during the above mentioned period.

Between 2013 and 2014, total revenues dropped by 1.1% due to the significant decrease in the non-express segment, which is not compensated by the high increase of the express segment. Despite the general drop, at European level, some countries had an increase in the revenues in 2014. The percentage change in revenues ranges from -4.7% in Italy to +25% in Bulgaria.

Table 2.1: Revenue and volume growth rate of the European postal market

Letters		Parcels	
Revenues 2013-14	**Volume 2013-2014**	**Revenues 2013-14**	**Volume 2013-2014**
0.70%	-3.80%	5.30%	8.90%

Source: IPC, "Global Postal Industry Report" (November 2015)

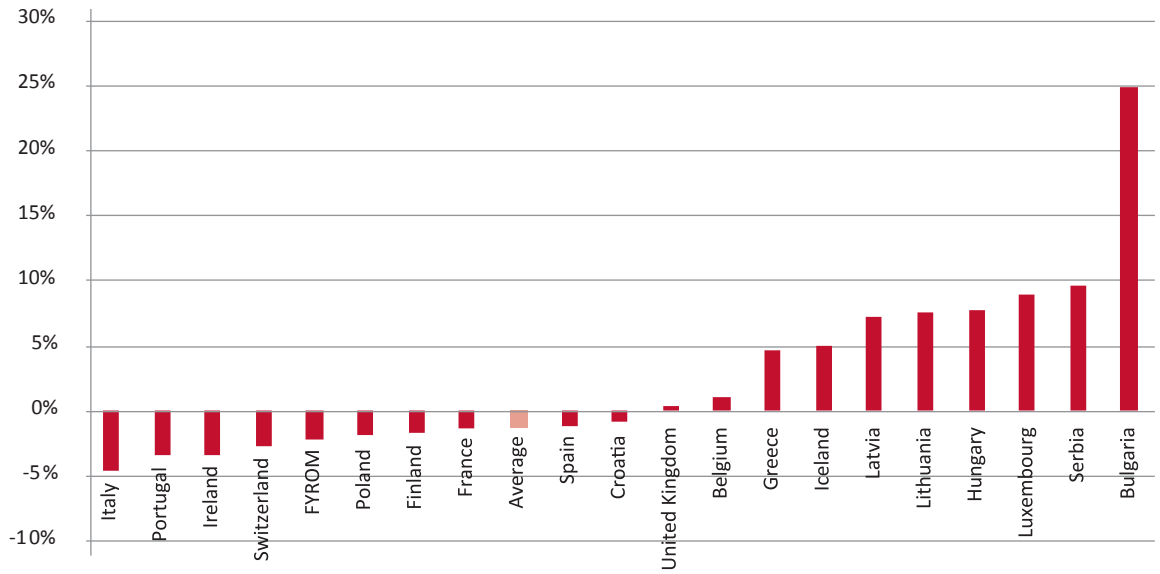
Table 2.2: Total volume of the European postal market

Total volume	Annual average change (2011-2014)	Change 2013-2014
Total market	-5.60%	-3.50%
Non-express	-6.50%	-4.60%
Express	6.00%	9.50%

Source: IPC, "Global Postal Industry Report" (November 2015)

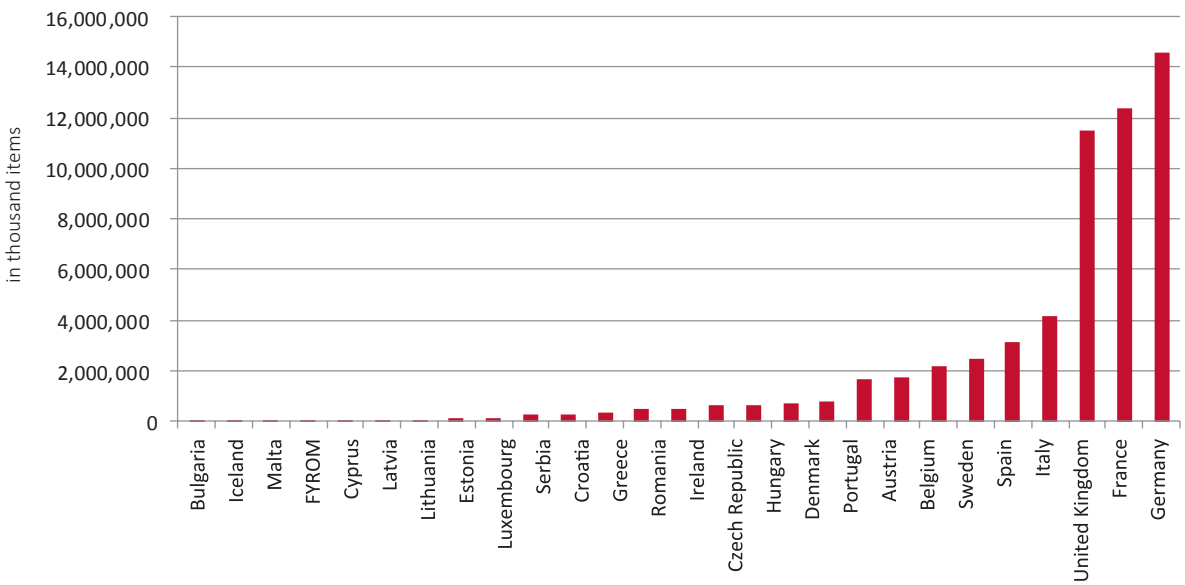
34. IPC, "Global Postal Industry Report" (November 2015).
35. Flash of the ERGP Report on Core Indicators for monitoring the European Postal Market (2015).

Chart 2.3: Total revenues of the European postal market (2013-2014)



Source: Flash of the ERGP Report on Core Indicators for monitoring the European Postal Market (2015)

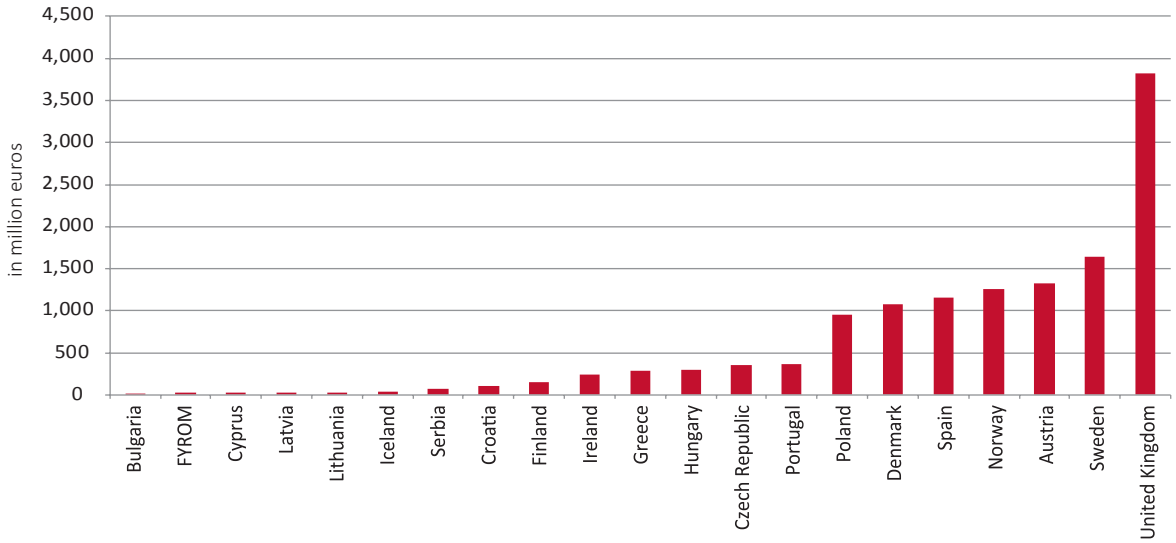
Chart 2.4: Domestic letter mail volume (excluding unaddressed mail) in the EU (2014)



Source: EU Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SME's (DG GROW)

In 2014, the volume of domestic letter mail (excluding unaddressed mail) in the EU totalled 64.1 billion items, decreased by 3.58% compared to 2013. With respect to US, in 2014, the total domestic revenues rose slightly compared to the previous year, totalling 23.89 billion euros.

Chart 2.5: Total domestic US revenue per country (2014)



Source: EU Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SME's (DG GROW)

Table 2.3: Herfindahl-Hirschman Index (HHI) (2013 & 2014)

	HHI - Volumes			HHI - Revenues		
	2013	**2014**	**Trend**	**2013**	**2014**	**Trend**
Austria	7,200	7,200	Stable	6,200	6,200	Stable
Belgium	N/A	N/A	-	4,705	4,539	Decrease
Bulgaria	N/A	N/A	-	5,691	5,230	Decrease
Croatia	5,424	5,196	Decrease	4,969	4,796	Decrease
Czech Republic	9,503	8,964	Decrease	8,978	7,692	Decrease
Estonia	5,243	5,244	Stable	3,372	3,312	Decrease
France	9,801	9,796	Decrease	9,707	9,607	Decrease
FYROM	8,998	8,694	Decrease	4,553	4,257	Decrease
Greece	7,648	6,871	Decrease	2,836	2,465	Decrease
Hungary	2,655	9,156	Increase	4,766	4,380	Decrease
Latvia	1,897	2,441	Increase	3,036	3,488	Increase
Lithuania	5,236	5,007	Decrease	2,263	2,544	Increase
Malta	9,600	9,500	Decrease	4,600	4,600	Stable
Portugal	8,977	8,942	Decrease	4,694	4,968	Decrease
Romania	4,783	3,578	Decrease	N/A	1,226	-
Serbia	9,463	9,357	Decrease	4,603	4,518	Decrease
Slovakia	6,833	6,772	Decrease	3,209	3,125	Decrease
Spain	7,777	7,766	Decrease	8,465	8,490	Increase
Sweden	7,590	7,420	Decrease	8,640	8,560	Decrease
The Netherlands	6,678	N/A	-	7,826	N/A	-
United Kingdom	9,913	9,752	Decrease	9,236	9,126	Decrease

Source: Flash of the ERGP Report on Core Indicators for monitoring the European Postal Market (2015)

Competition

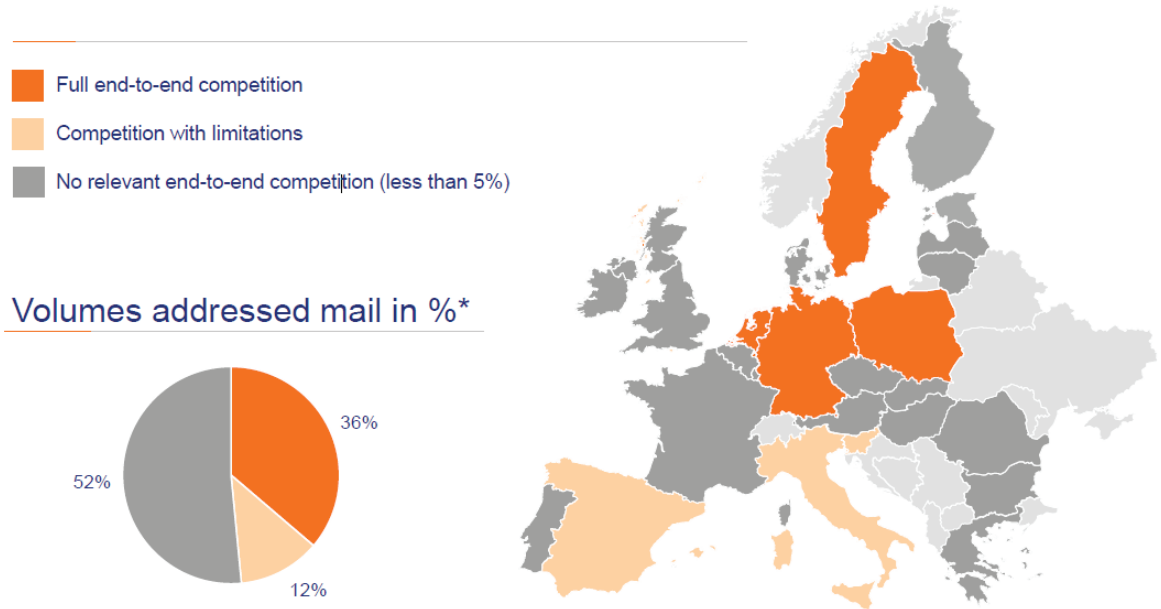
The European postal market is highly concentrated, as indicated by both the Herfindahl-Hirschman Index (HHI) and the number of postal operators with market share over 1%[36]. Between 2013 and 2014 however, the level of concentration of the market decreased (or stabilised) in the majority of the countries, both in terms of volumes and revenues.

Despite the liberalization of the postal market in the European countries, competition levels still remain very low, since 52% of postal items are handled by countries, where the competition represents less than 5% of the market[37]. Countries with higher competition levels handle 36% of postal items.

In 2014, the Universal Service Providers (USPs) maintained a high market share in non-express mail (approximately 87%), while in express mail their market share was significantly lower, approximately around 16%.

The European parcel market is competitive and characterized by a wide range of business models and ownership structures[38]. This market is served by a combination of integrators[39] (such as UPS that purchased TNT, DHL and FedEx), national postal services providers (i.e. Royal Mail, La Poste, Deutsche Post, bpost, Poste Italiane, Correos, PostNL), some of which are operating within European networks (DHL, DPD and GLS) and independent (mainly local) parcel delivery companies (i.e. UKMail, Yodel, MRW, BRT, TIPSA, Hermes). Furthermore, certain road transportation networks (i.e. Eurodis, Net Express) are operating as partners among the national postal services providers, thus enabling them to include international delivery in their service portfolios.

Chart 2.6: Postal market liberalization in Europe (2015)[40]



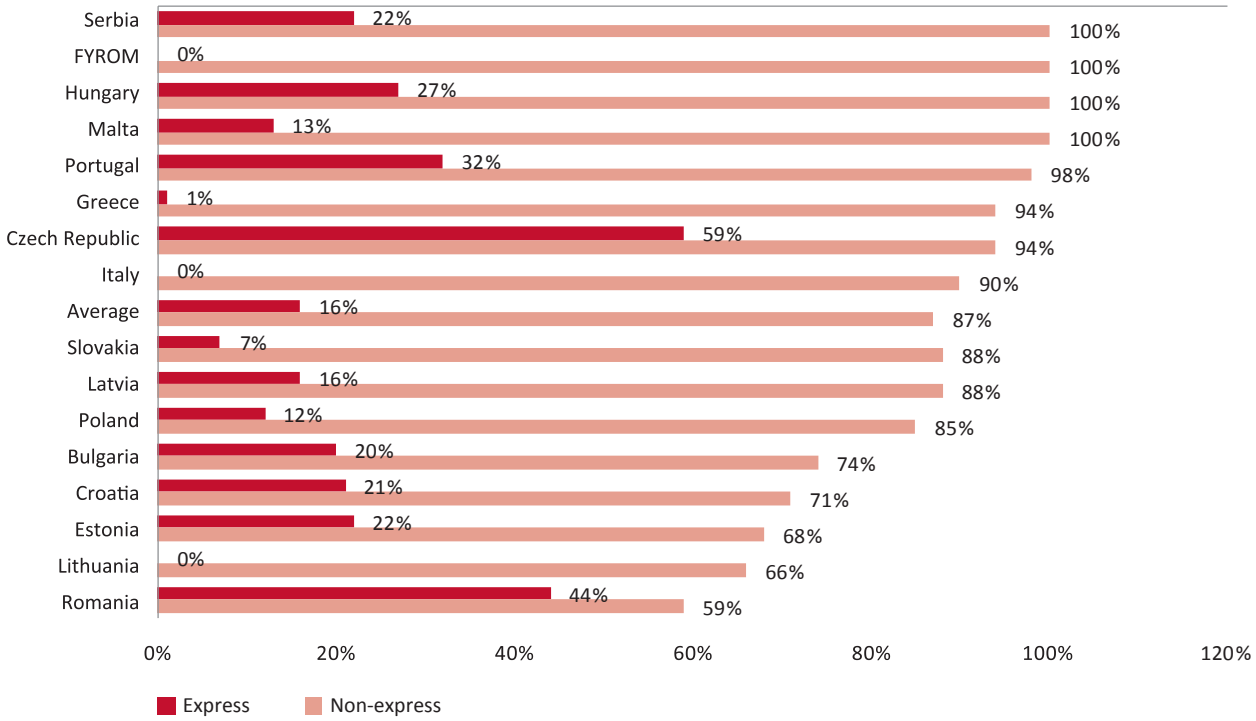
* Figures are based on market volumes of Austria, Belgium, Denmark, Finland, France, Germany, Italy, The Netherlands, Spain, Sweden, UK

Sources: Annual Reports, IPC, National Regulators, PostNL Team Analysis, WIK (2013)

Source: PostNL, "European postal markets, 2016 an overview" (February 2015)

36. Flash of the ERGP Report on Core Indicators for monitoring the European Postal Market (2015).
37. PostNL, "European postal markets, 2016 an overview" (February 2015).
38. Apex Insight Ltd, " European Parcels Market Insight Report 2016".
39. Integrators is a term used for companies that control an integrated air and road network for delivering small parcels within and out of Europe and are capable to provide the widest possible range of postal services.
40. It should be noted that in 2015, competition in Greece reached 8% and that this would give our country the orange colour.

Chart 2.7: USPs market shares in terms of volume in 2014: express and non-express



Source: Flash of the ERGP on Core Indicators for monitoring the European Postal Market (2015)

Pricing trends

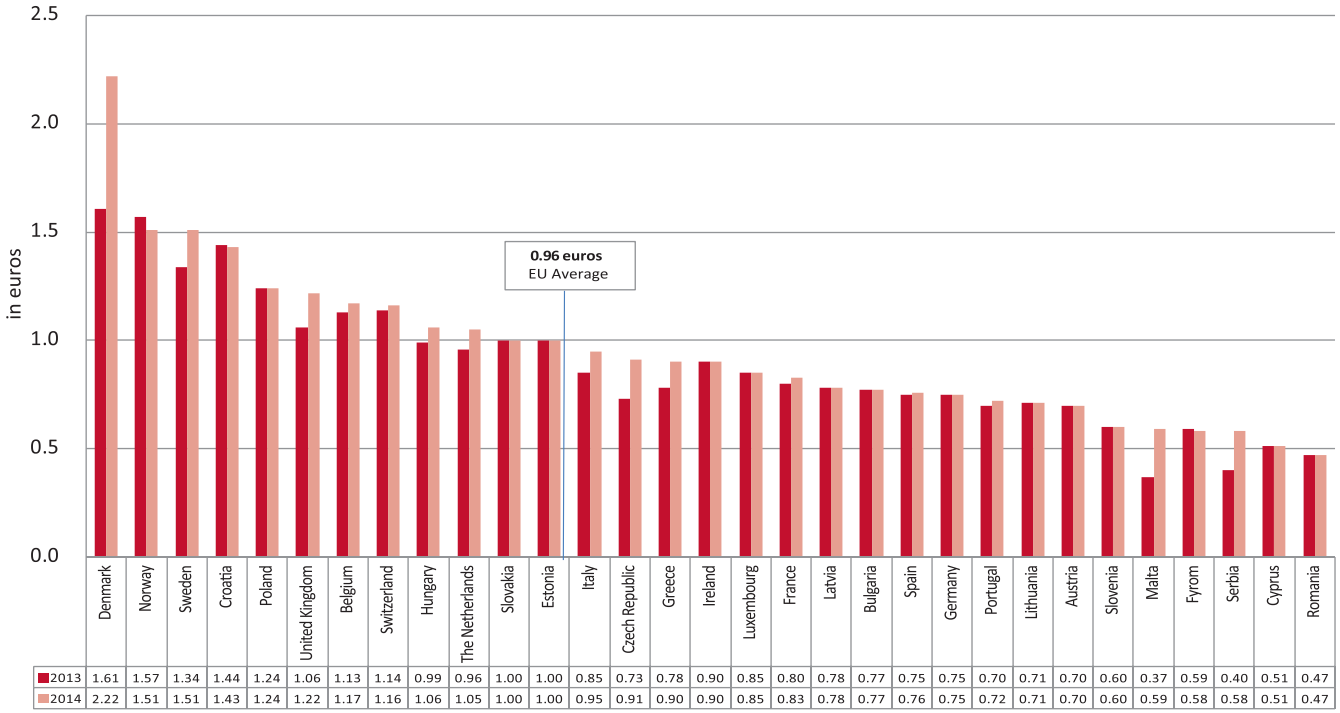
In 2014, the European average price of a domestic priority letter of the 1st weight step was 0.62 euros. Between 2008 and 2014, the highest price increase occurred in the Western European countries and the lowest in the Southern countries. The average price for posting cross-border similar postal items within Europe was 0.96 euros in 2014, which represents a price increase of 7.3% compared to 2013. In 2014, Denmark had the highest price (2.22 euros) while Romania the lowest price (0.47 euros)[41].

On average, cross-border USP prices were, at least three times higher (324%) than relative domestic prices for letter mail and almost five times higher (471%) than domestic prices for parcels[42]. Furthermore, the price for sending a postal item may be very high in one direction and much lower in the opposite direction. For example, the price for sending a 2kg package from Austria to Italy was 14 euros, while to send the same package from Italy to Austria costed 25 euros[43]. Furthermore, there were significant differences in sending a parcel from two countries with similar characteristics to the same destination. For example, Belgium and the Netherlands are neighboring countries with similar prices for domestic post. However, sending a 2kg package from Belgium to Spain costed 26.10 euros, while sending the same package from the Netherlands to Spain costed half the price, i.e. 13 euros. It is worth noting that sending the same package in the opposite direction, i.e. from Spain to Belgium or to the Netherlands costed even more (32.74 euros).

High cross-border delivery prices are one of the main factors inhibiting the development of e-commerce and they are actually not entirely related to the cost of delivery in the country of destination, since there is no obvious link between the actual cost and the price of delivery of the postal item.

41. Flash of the ERGP Report on Core Indicators for monitoring the European Postal Market (2015).
42. Université Saint-Louis Bruxelles, «Econometric study on parcel list prices».
43. EC, Cheaper cross-border parcel delivery to boost e-commerce in the EU (22-12-2015).

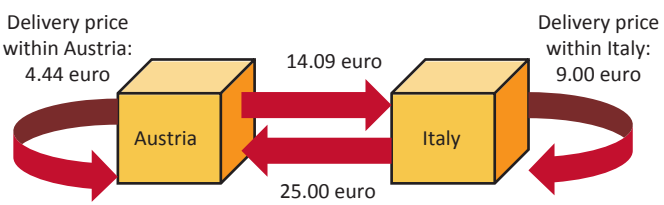
Chart 2.8: Average price for posting a letter of the 1st weight step within Europe (2013 & 2014)



	Denmark	Norway	Sweden	Croatia	Poland	United Kingdom	Belgium	Switzerland	Hungary	The Netherlands	Slovakia	Estonia	Italy	Czech Republic	Greece	Ireland	Luxembourg	France	Latvia	Bulgaria	Spain	Germany	Portugal	Lithuania	Austria	Slovenia	Malta	Fyrom	Serbia	Cyprus	Romania
2013	1.61	1.57	1.34	1.44	1.24	1.06	1.13	1.14	0.99	0.96	1.00	1.00	0.85	0.73	0.78	0.90	0.85	0.80	0.78	0.77	0.75	0.75	0.70	0.71	0.70	0.60	0.37	0.59	0.40	0.51	0.47
2014	2.22	1.51	1.51	1.43	1.24	1.22	1.17	1.16	1.06	1.05	1.00	1.00	0.95	0.91	0.90	0.90	0.85	0.83	0.78	0.77	0.76	0.75	0.72	0.71	0.70	0.60	0.59	0.58	0.58	0.51	0.47

Source: Flash of the ERGP on Core Indicators for monitoring the European Postal Market (2015)

Chart 2.9: Price for sending a 2kg parcel from Austria to Italy and vice-versa



Source: EC, Cheaper cross-border parcel delivery to boost e-commerce in the EU (22-12-2015)

Cross-border parcel delivery

The need to reduce prices for cross-border parcel delivery is a priority in EU's agenda, since it is expected to facilitate e-commerce and to contribute in the creation of a Digital Single Market in the EU. Almost 4 billion parcels are ordered online and delivered each year in the EU. However, although 44% of consumers buy online in their own country, only 15% orders products from other countries[44] (cross-border purchases). Furthermore, 62% of the companies that wish to sell their products online, identify high delivery costs and inefficiencies of delivery services as the main obstacle in the development of cross-border e-commerce[45].

On May 6, 2015, the European Commission adopted an ambitious strategy to complete the Digital Single Market. In this context, the European Commission will take action in order to improve regulatory oversight while supporting innovation and ensuring a fair level playing field for postal operators. Moreover, in view of supporting consumers and small enterprises, the

44. EC, Cheaper cross-border parcel delivery to boost e-commerce in the EU (22-12-2015).
45. EC, Better access for consumers and business to online goods.

European Commission will address the issue of price transparency, including prices of small shipments[46].

In 2015, the European Commission launched a public consultation in order to identify ways to enhance cross-border parcel delivery and to gain a better understanding of the function of the market in question. The main problems reported by consumers were uncertainty or lack of choice of date and time of delivery followed by high delivery prices. E-commerce companies reported that prices and the existence of track and trace systems are the most important factors in choosing a postal operator for parcel delivery. E-retailers were also dissatisfied with the existing possibility of changing the delivery location after dispatch, delivery prices and complaints handling. USPs noted that system interoperability and increased competition could improve cross-border delivery services[47].

In 2015, BEREC and ERGP formed a joint working group with the aim of analyzing whether regulatory insights from the electronic communications sector can be transferred to the cross-border parcels sector[48]. The working group adopted a joint opinion addressed to the European Commission regarding price transparency and regulatory oversight of cross-border parcel delivery. This joint opinion outlines the responsibilities that the competent national regulatory authorities should have to monitor cross border parcels delivery and to intervene in this market regarding price transparency for European deliveries. The document also focuses on existing measures to increase consumer and supplier awareness, including information platforms for small e-retailers on the available delivery services, price comparison websites, enhanced track and trace systems and scoreboards on delivery performance. During the first semester of 2016, the Commission is expected to take measures to improve price transparency and to enhance regulatory oversight of parcel delivery.

2.1.3. Greece

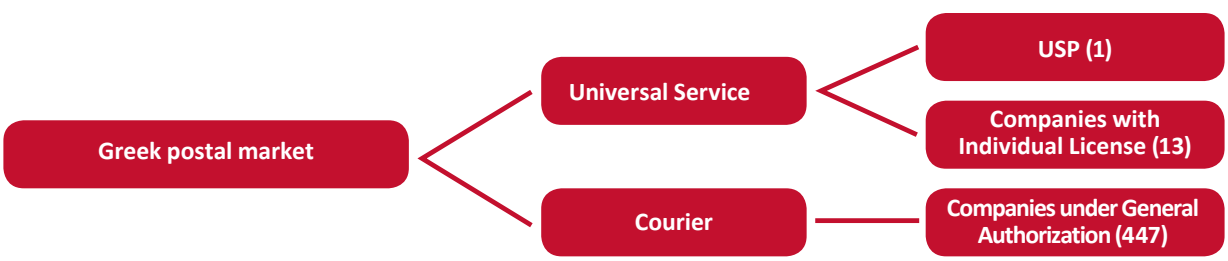
The postal market in Greece consists of two sectors:

a) the Universal Services sector, with the USP and 13 private companies holding an Individual License and

b) the courier services sector with 447 companies under General Authorization.

The designated by law USP in Greece is Hellenic Post (ELTA). In 2015, the Greek postal market showed signs of recession, contrary to the previous year that was characterized by stabilization trends. Despite the fact that letters continue to account for the largest share of the market, both in volume and in revenues, the share of parcels/small packages increased, mainly due to the growth of e-commerce and the e-substitution of letter mail.

Chart 2.10: The Greek postal market



Source: EETT (Postal Operators Registry)

46. EC, Digital Single Market for business and consumers.
47. 17-12-2015 «Summary of Responses to the European Commission's 2015 Public Consultation on Cross-border Parcel Delivery».
48. Joint BEREC-ERGP Opinion: Price transparency and regulatory oversight of cross-border parcels delivery, taking into account possible regulatory insights from the electronic communications sector.

2.2. Evolution of the key financial figures in the postal services market

2.2.1. Financial data from the published financial statements

The following section presents the key financial figures of the companies operating in the postal market, according to the financial statements of the licensed operators in 2015. With respect to Universal Service, in addition to the US, in 2015 seven other companies with Individual License were active, three of which operated exclusively in the field of postal services. Given, however, that these three companies operate mainly in the courier sector rather than in the US sector, the financial analysis of their consolidated statements is classified in the courier sector. With respect to companies under General Authorisation, the figures provided in this report have been based on the largest companies of the sector, as the majority of the courier companies are not obliged to publish financial statements, since they are sole proprietorship.

Turnover

The postal market followed the same negative trend, which is prevalent in almost all sectors of the economy, despite the stabilization of the previous year, as shown in Chart 2.11.

Chart 2.12 demonstrates the postal market turnover. In 2015, the turnover of postal companies under General Authorization decreased by 8% compared to the previous year, while the USP's turnover decreased by 4%.

It should be noted that the turnover of these companies may include entries from non postal activities. Consequently, there are differences in the revenues presented in detail in the following paragraphs and that are exclusively derived from postal activities.

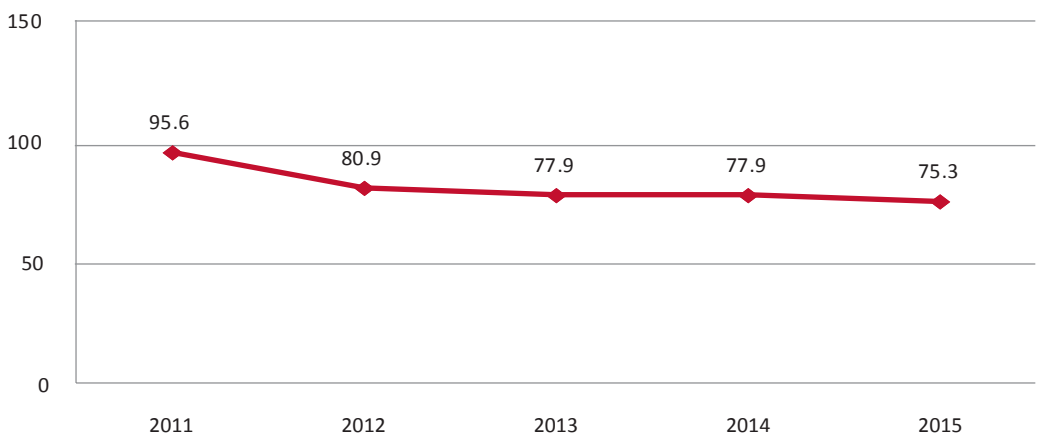
Profitability

Table 2.4 presents the key financials concerning the postal service providers' profitability. It is clear that despite the increased turnover, the gross profit margin was relatively low for postal operators, and especially for the USP.

Balance sheet analysis

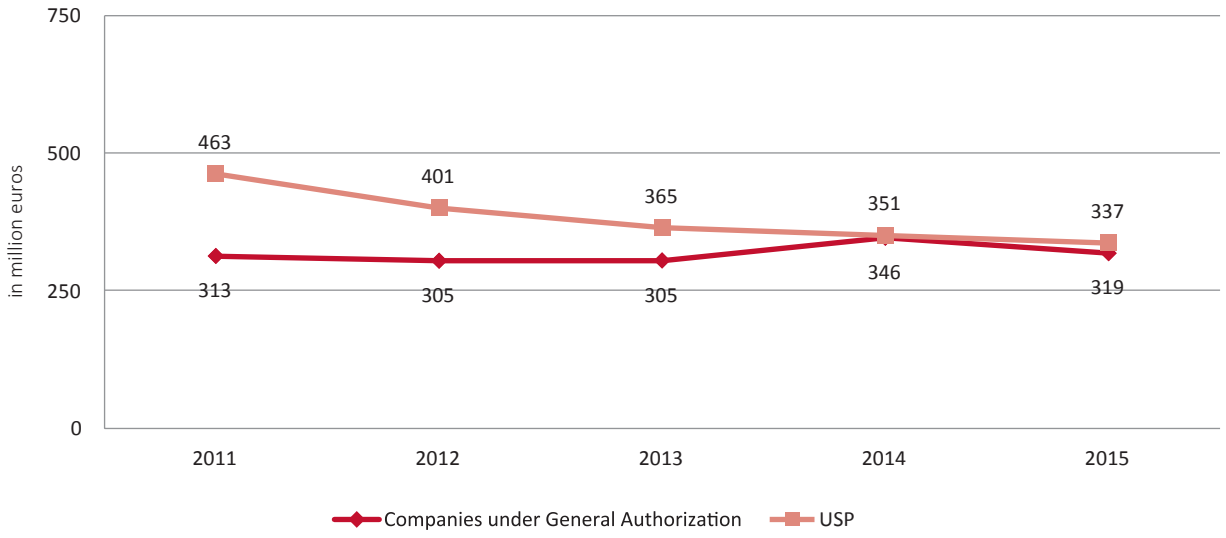
Chart 2.13 presents assets allocation for the USP and companies under General Authorization. The latter hold the majority of their capital (85%) in liquid assets (current assets), while the USP hold 59% of its capital in current assets and the remaining 41% in fixed assets.

Chart 2.11: Evolution of the postal market turnover index (base year 2010)



Source: HELLASTAT, Evolution of the turnover index in the service sector (September 2016)

Chart 2.12: Turnover of postal companies (in million euros)



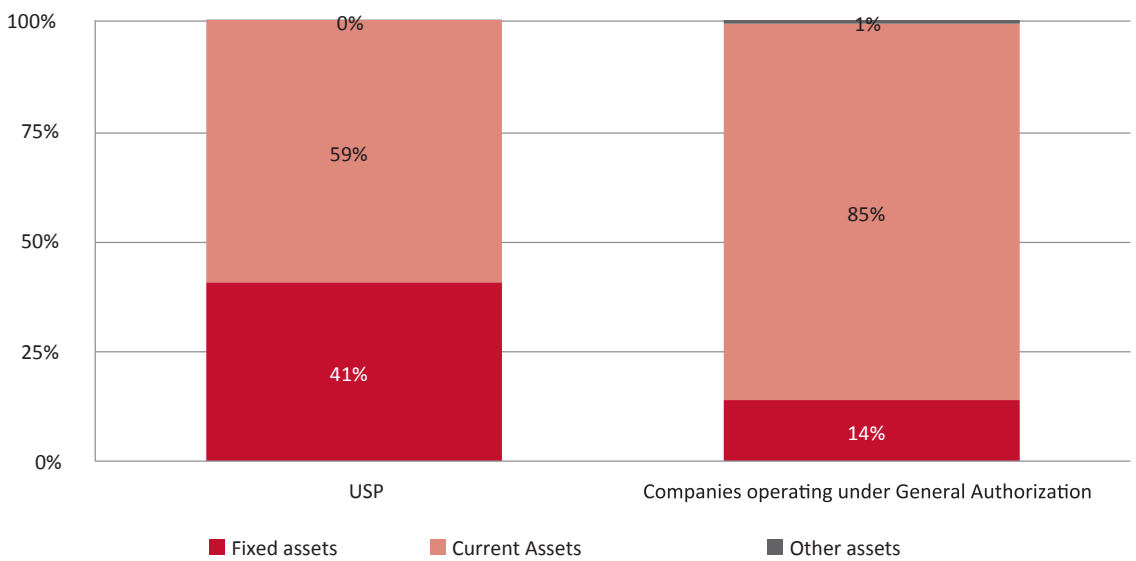
Source: Financial statements of the year 2015

Table 2.4: Main postal service providers' financials (in million euros) (2015)

	Turnover	Gross profits	Gross profit margin	Net profits	Net profit margin
USP	337	39	11.5%	3	0.9%
Companies under General Authorization	319	53	16.5%	8	2.6%

Source: Annual Financial statements 2015

Chart 2.13: Assets share in the postal market (2015)



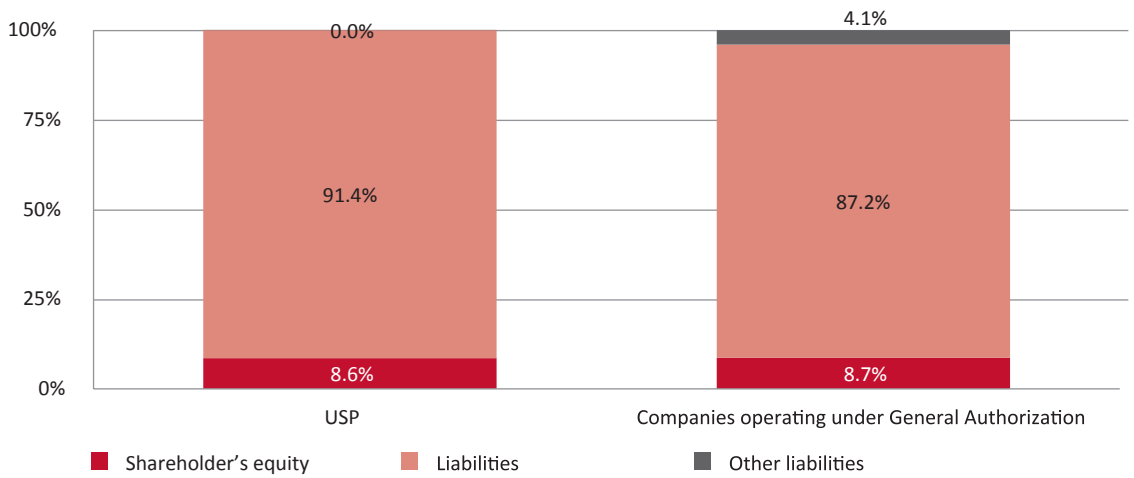
Source: Annual Financial statements 2015

As regards the structure of liabilities, USP's obligations accounted for 91.4% of its liabilities, while the obligations of the companies under General Authorization accounted for 87.2% of their liabilities (Chart 2.14).

Ratio analysis

Table 2.5 sets out the main ratios as derived from an analysis of the balance sheets of the postal service providers.

Chart 2.14: Liabilities share in the postal market (2015)



Source: Annual financial statements 2015

Table 2.5: Postal market financial indicators (2010-2015)

	2010	2011	2012	2013	2014	2015
Liquidity ratio						
USP	0.92	0.94	0.93	0.86	0.89	1.07
Companies under General Authorization	1.22	1.12	1.14	1.37	1.33	1.09
Turnover ratio						
USP	0.70	0.61	0.61	0.84	0.81	0.69
Companies under General Authorization	2.16	2.16	2.16	2.12	2.48	2.00
Day sales outstanding ratio						
USP	65.74	60.85	58.62	74.14	99.19	179.62
Companies under General Authorization	129.97	129.67	120.51	107.75	89.56	96.19
Return on capital						
USP	1.9%	2.9%	-10.9%	-14.7%	12.6%	7.4%
Companies under General Authorization	17.0%	17.5%	-45.4%	30.8%	73.0%	59.5%

Source: EETT (based on data provided by postal services providers)

The liquidity ratio for companies under General Authorization remained higher than one in the last six years, which demonstrates their ability to confront short term liabilities by using current assets. In 2015, this ratio was significantly increased as regards the USP and went above one due to an increase of the USP's current assets.

The turnover ratio was higher than one for companies under General Authorization. This is mostly due to their current asset intensive character (mainly receivables). The corresponding USP ratio was below one, as ELTA has invested in fixed assets, whereas its turnover has been declining overtime.

The day sales outstanding ratio for companies under General Authorization was high and increased by 7.4% compared to the previous year. Moreover, in 2015, this ratio for the USP increased sharply by 81%, due to an increase of the asset account "USO compensation fund".

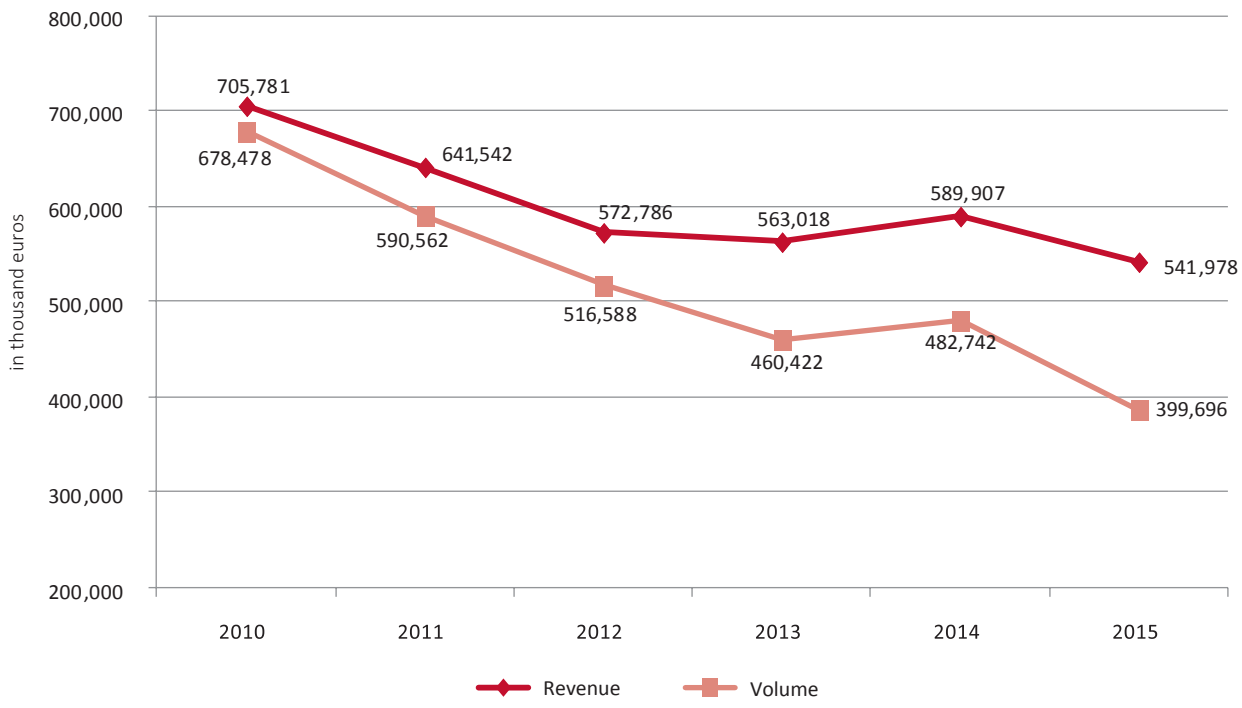
The return on capital decreased both for the USP and for companies under General Authorization, which is attributed to a progressive decrease of the profits before tax of all postal market operators, compared to the previous year.

2.2.2 Postal volume and revenue (EETT statistics)

Total postal volume and revenue

In 2015, the postal market in Greece showed signs of recession, contrary to 2014, where stability trends prevailed. Specifically, 400 million items were handled, generating revenues of 542 million euros. The course of the postal market during the last six years is depicted in Chart 2.15.

Chart 2.15: Revenue and volume of the Greek postal market (2010-2015)



Source: EETT (based on data provided by postal services providers)

Postal services

Volume and revenue per postal sector

The three sectors of the Greek postal market have evolved differently during the last six years. This evolution is shown in Charts 2.6 and 2.7. The overall decreasing trend of the market in 2015 is mainly attributed to the sharp decrease of both the total revenues and the volume of the USP. Companies operating under General Authorization and with Individual License handled slightly more items in 2015. However, their revenues decreased slightly compared to the previous year.

Table 2.6: Postal market volume (in thousand items)

	2010	2011	2012	2013	2014	2015	2015/14
USP	622,526	531,343	461,361	402,818	398,325	313,867	-21.2%
Companies with Individual License	6,765	10,933	8,065	5,326	26,854	27,251	1.5%
Companies under General Authorization	49,187	48,286	47,162	52,278	57,563	58,577	1.8%
Total	**678,478**	**590,562**	**516,588**	**460,422**	**482,742**	**399,695**	**-17,2%**
Annual change rate	-6.8%	-13.0%	-12.5%	-10.9%	7.7%	-17.1%	-

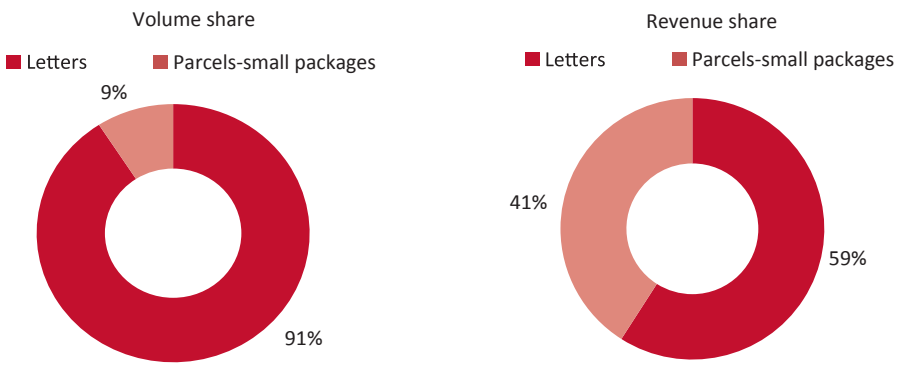
Source: EETT (based on data provided by postal services providers)

Table 2.7: Postal market revenue (in thousand euros)

	2010	2011	2012	2013	2014	2015	2015/14
USP	417,134	370,864	317,486	282,919	272,658	227,715	-16.5%
Companies with Individual License	2,498	4,066	3,486	2,471	14,496	14,309	-1.3%
Companies under General Authorization	286,149	266,612	251,814	277,628	302,753	299,954	-0.9%
Total	**705,781**	**641,542**	**572,786**	**563,018**	**589,907**	**541,978**	**-8.1%**
Annual change rate	-5.0%	-9.1%	-10.7%	-1.7%	4.8%	-8.1%	

Source: EETT (based on data provided by postal services providers)

Chart 2.16: Volume and revenue share per postal service (2015)

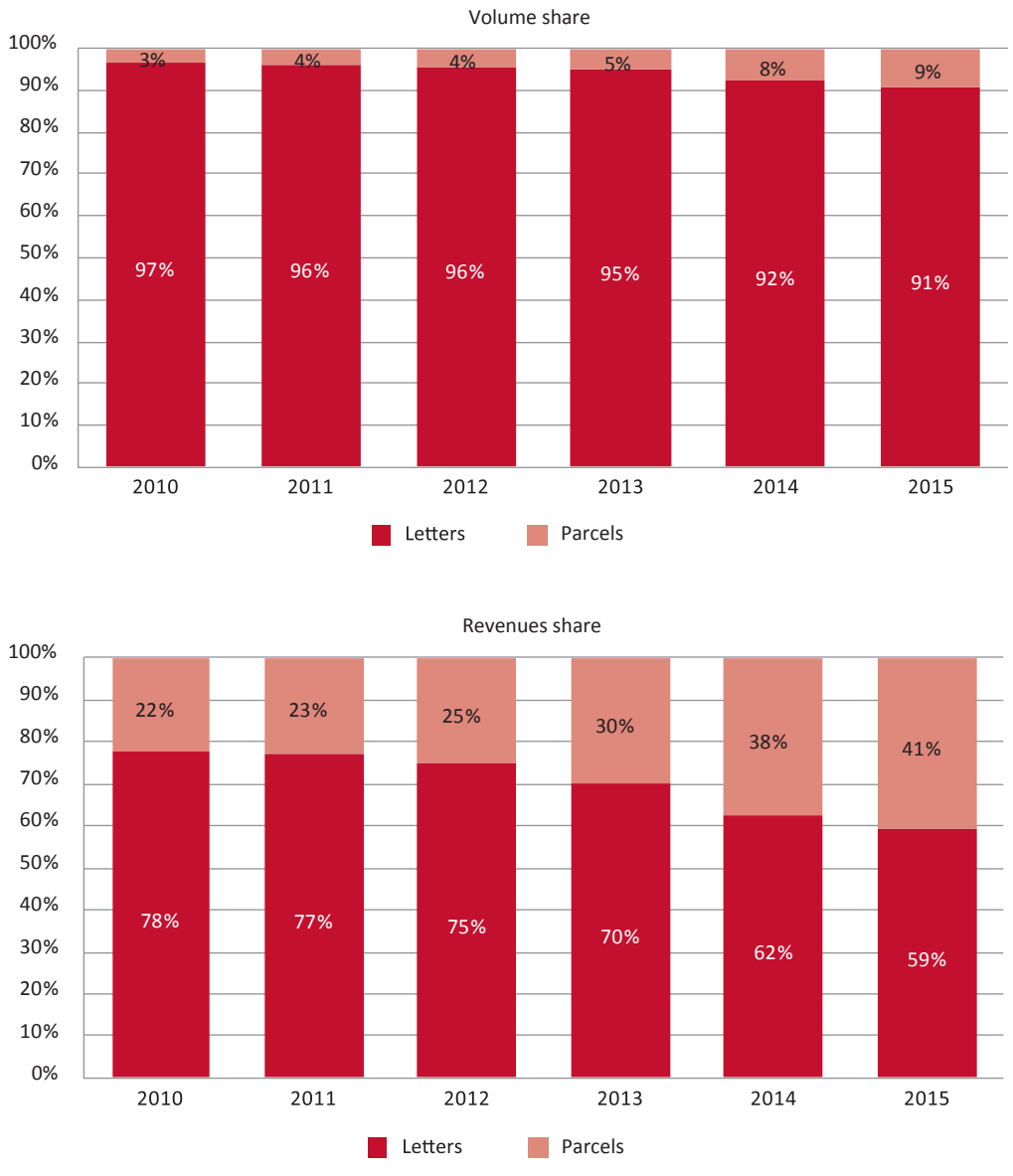


Source: EETT (based on data provided by postal services providers)

Volume and revenue per postal service

Postal items are divided into letters and parcels (including small packages). Chart 2.16 presents the shares of postal items for the entire postal market in 2015. Although letter mail handling is traditionally the main activity of postal companies, the parcel sector, which, in 2015, handled 9% of the total volume of postal items accounted for 41% of the total revenue. The market share of parcels/small packages as regards to volume as well as to revenue is increasing overtime mainly thanks to the growth of e-commerce and to the e-substitution of letter mail. In fact, as presented in Chart 2.17, during the last six years, the share of parcels/small packages has almost tripled in volume and doubled in revenue.

Chart 2.17: Volume and revenue share of parcels and letters (2010-2015)



Source: EETT (based on data provided by postal services providers)

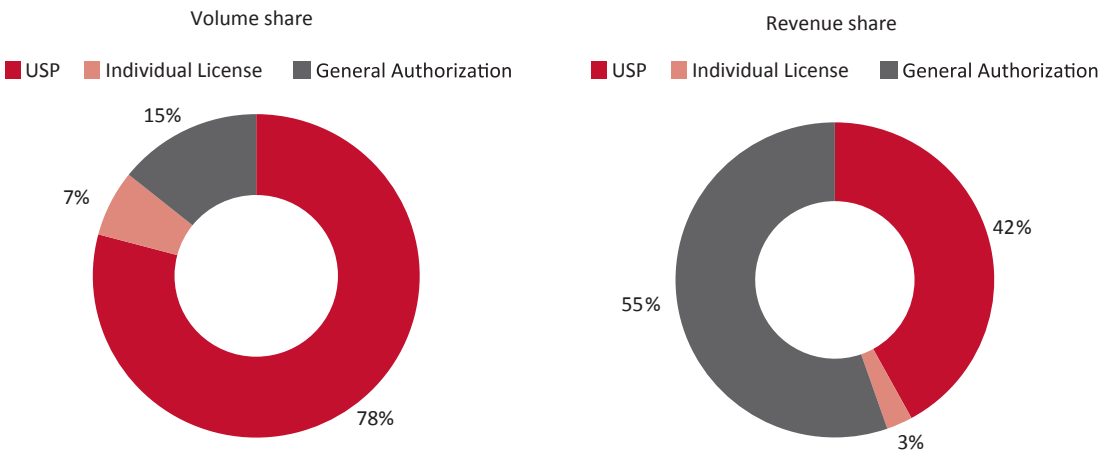
2.3. Competition in the postal market

2.3.1. Market shares

In 2015, the USP held 78% of the total market in terms of volume and 42% in terms of revenue (Chart 2.18). The USP's revenue share decreased over the last six years, while, the annual revenues from courier services increased significantly during the same period. Companies operating with Individual License marked a small increase following the liberalization of the postal market in 2013.

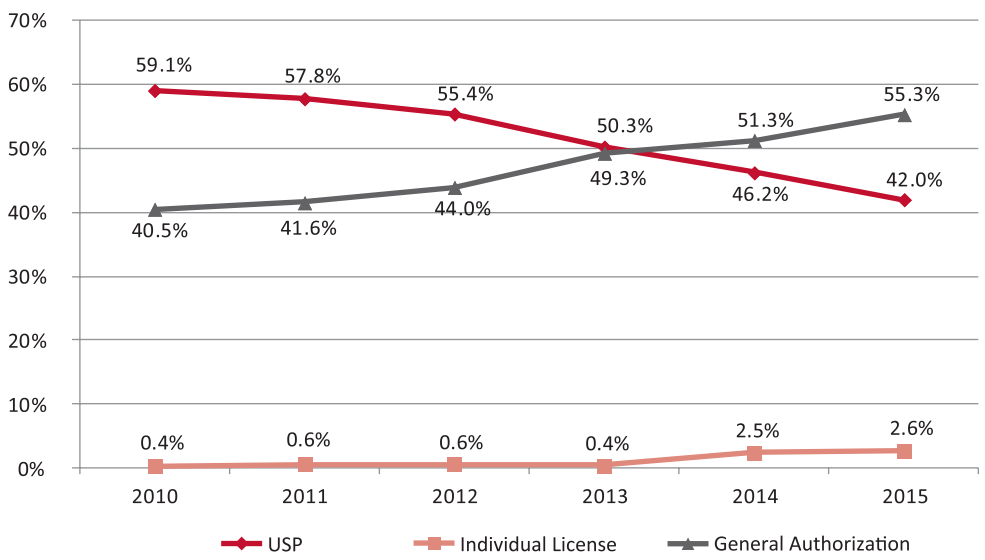
Regarding the services provided, it is obvious that the US dominates the letter mail sector[49], holding 93.1% of the volume and 70.4% of the revenue. On the other hand, the parcel/small package sector is dominated by courier companies that hold 93% of the volume and 92.5% of the revenue.

Chart 2.18: Volume and revenue share of postal operators (2015)



Source: EETT (based on data provided by postal services providers)

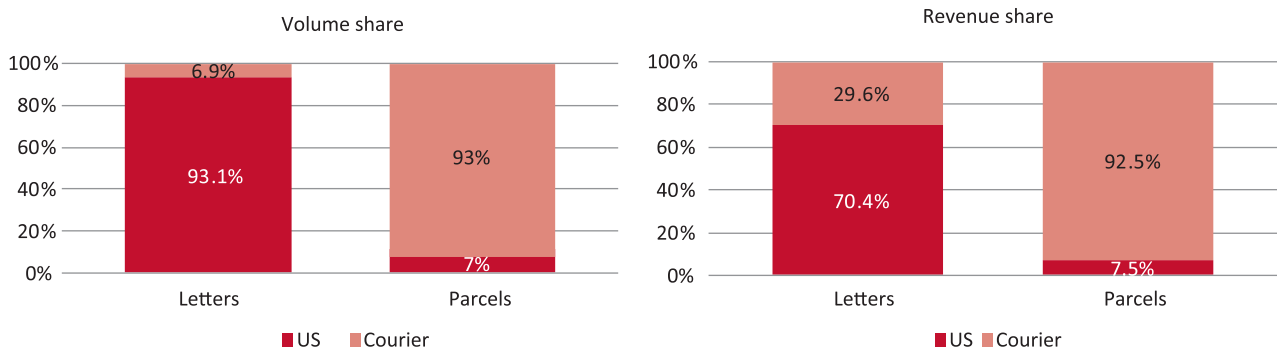
Chart 2.19: Revenue share of postal operators (2010-2015)



Source: EETT (based on data provided by postal services providers)

49. Including direct mail, newspapers, books, catalogues and periodicals.

Chart 2.20: Letter and parcels share for US and courier (2015)



Source: EETT (based on data provided by postal services providers)

2.3.2. The Universal Service sector

The USP as well as the companies with Individual License are the two types of players active in the Universal Service sector of the postal market. According to the current legal framework, ELTA is the USP in Greece and has undertaken the provision of US for 15 years as of the beginning of postal market liberalization, i.e. until 31-12-2028[50].

The provision of US includes the handling of letters, direct mail, newspapers, books, catalogues and periodicals weighing up to 2kg, as well as parcels up to 20kg. The share of these postal items in the US sector is shown in Table 2.8.

Table 2.8: Volume and revenue share of postal items within the US sector (2015)

	Volume	Revenues
Letters	88.3%	86.9%
Direct mail	6.6%	2.9%
Newspapers	1.6%	1.7%
Books/catalogues/periodicals	2.8%	1.7%
Parcels & small packages	0.7%	6.8%
Total US	**100%**	**100%**

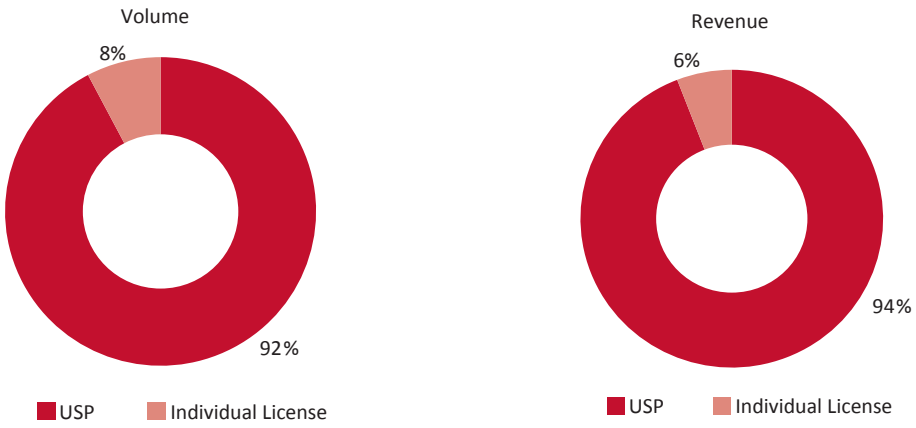
Source: EETT (based on data provided by postal services providers)

50. Law 4053/2012 "On the regulation of the operation of the postal market, of electronic communications related issues and other provisions" (GG 44/A/2012).

Postal services

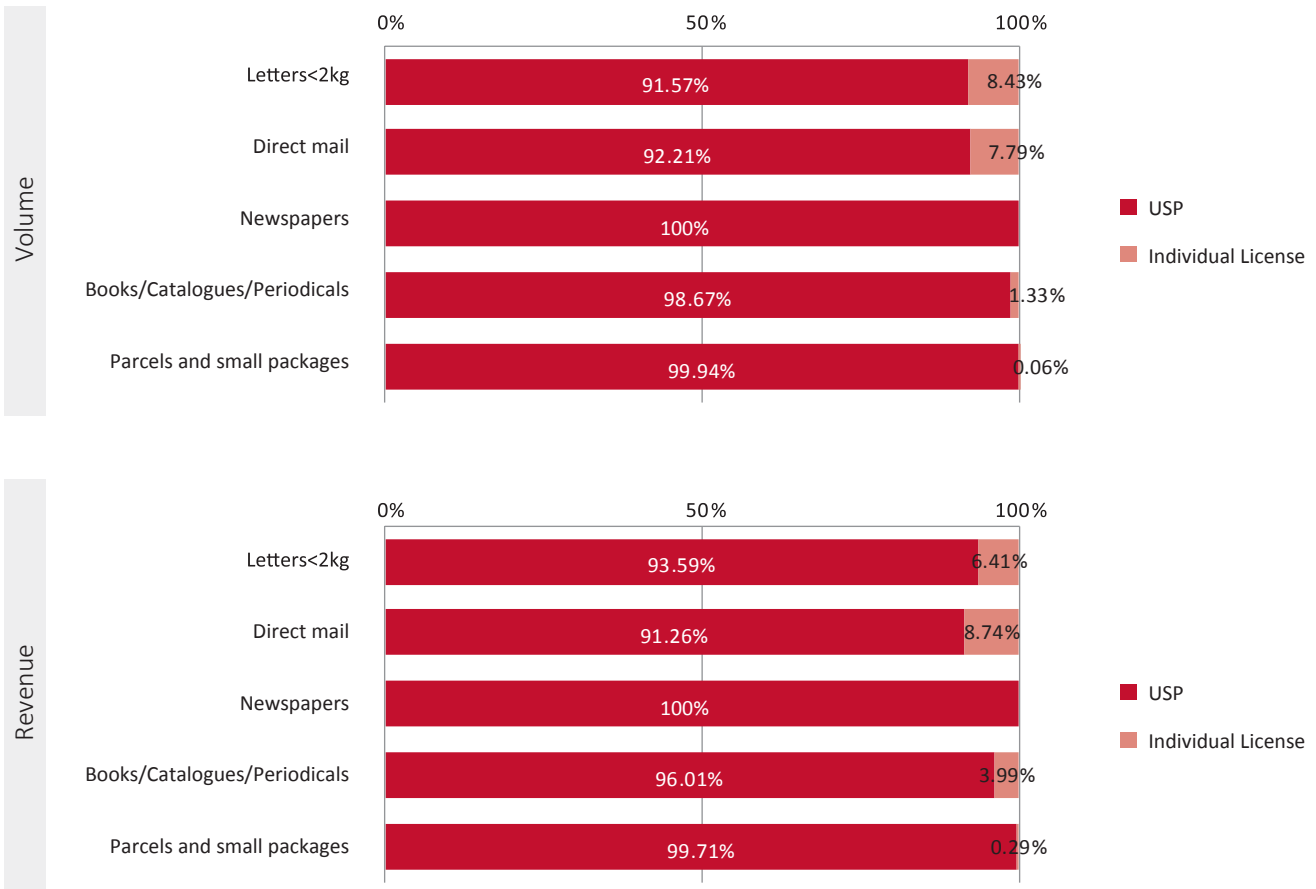
In 2015, the USP was the dominant player in the US market with 92% of postal item volume and 94% of the revenues from postal items. The increase of the market share of companies with Individual License compared to the previous year was mainly the result of the handling of letters and advertising mail with recipient address.

Chart 2.21: Volume and revenue share of postal operators within the US sector (2015)



Source: EETT (based on data provided by postal services providers)

Chart 2.22: Volume and revenue share of services within the US sector (2015)



Source: EETT (based on data provided by postal services providers)

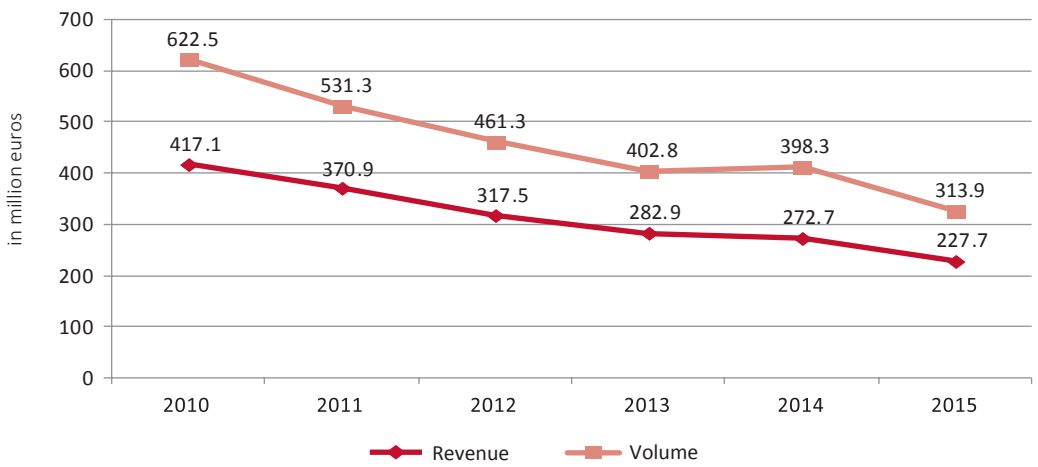
The Universal Service Provider (USP)

In 2015, the USP's revenues totalled 227.7 billion euros, decreased by 16.5% compared to the previous year. These revenues came from the handling of 313.9 million postal items, 21.2% less compared to 2014. The overtime progress of the USP's revenue and volume during the last six years is depicted in Chart 2.23.

The majority of the USP's revenue was generated from the handling of letters up to 2kg, followed by parcels up to 20kg and direct mail. In 2015, the average revenue per service decreased for parcels and small packages up to 2kg, compared to the previous year, while it increased for direct mail.

76% of the USP's customer portfolio consists of customers holding a contract and the remaining 24% of cash-paying customers. 30% of USP's customer portfolio are public sector organizations, 20% telecommunications operators, 20% individuals, 5%, bank assurance companies and the remaining 25% other businesses. In 2015, the USP's personnel dropped by 4.5% compared to 2014 (total: 6,859 employees). With respect to infrastructure, the USP maintains 693 post offices and 720 agencies. In 2015, the number of post offices declined by 0.4%, while the number of agencies remained stable compared to the previous year[51]. Moreover, the USP owns 739 cars and 1,867 motorbikes.

Chart 2.23: USP volume and revenue (2010-2015)



Source: Annual financial statements

Table 2.9: USP volume and revenue share per service

	Total postal items	Total revenues	Average revenue (in euros)	2014-2015
Letters	87.9%	86.4%	0.71	5.60%
Direct mail	6.6%	2.9%	0.31	11.30%
Newspapers	1.7%	1.8%	0.76	0.10%
Books/catalogues/periodicals	3.1%	1.7%	0.40	-3.51%
Parcels	0.2%	0.7%	2.76	-12.77%
Small packages	0.6%	6.5%	7.90	-17.29%
Total	**100%**	**100%**	**-**	**-**

Source: Annual financial statements

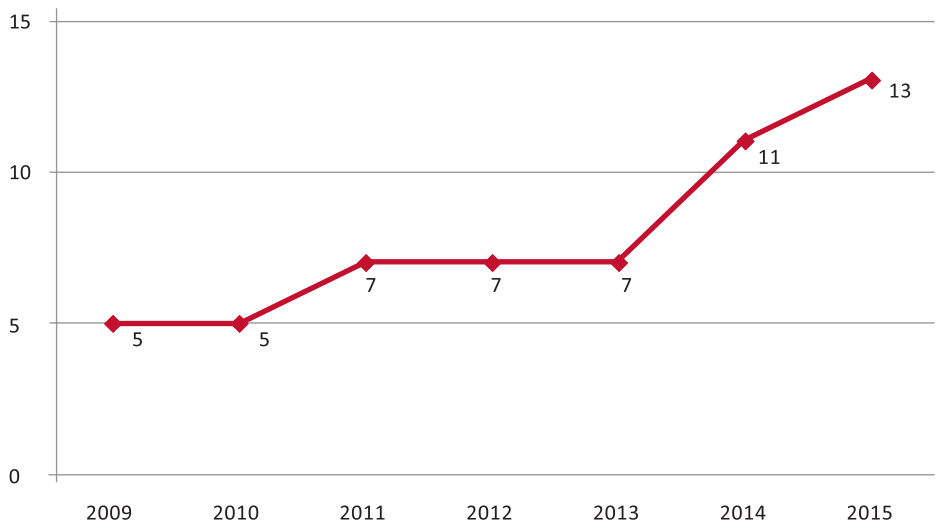
51. ELTA: 2015 financial statements.

Companies with Individual License

Apart from the UPS, in 2015, 13 companies with Individual License were active in the US sector[52]. Until market liberalization, companies with Individual License had been offering selective services to a limited number of customers, mainly in wholesale, following a "niche in the market" strategy. As soon as the postal market was liberalized in 2013, companies with a significant share in the courier industry started to express their interest in the provision of letter post services. In 2015, companies with Individual License handled 8% of all US sector postal items that corresponded to 6% of the total revenue. More specifically, three companies operated in letter mail handling, three in direct mail handling, one in the handling of books/catalogues and periodicals and two in parcel handling. It is worth noting that only one of these companies provided more than one services, handling 95% of the letters and 79% of the parcels.

Despite the fact that until 2013, the main activity of companies with Individual License was the distribution of direct mail, in 2015, letter mail handling almost monopolized the sector's activities.

Chart 2.24: Number of companies with an Individual License



Source: EETT (Register of postal services providers)

Table 2.10: Volume and revenue share per service for companies with Individual License (2015)

	Total items	Total revenues
Letters	93.1%	94.2%
Direct mail	6.4%	4.3%
Newspapers	0.0%	0.0%
Books / catalogues / periodicals	0.5%	1.1%
Parcels and small packages	0.0%	0.1%
Total US	**100%**	**100%**

Source: EETT (based on data provided by postal services providers)

52. Including companies that operated at least for a part of the reference year.

2.3.3. The courier sector

The courier services sector is a particularly interesting market, especially due to its significance in parcels and small packages delivery. This sector's companies operate under General Authorization and provide "courier" services, meaning express delivery of postal items, including monitoring and "track and trace" systems.

In 2015, 72 new companies entered the courier sector, thus raising the total number of courier companies operating under General Authorization to 447[53].

Volume and revenue share per category of postal items handled by courier companies for 2015 is demonstrated in Chart 2.25.

Letters represent an increasingly smaller part of the volume of postal items handled by courier companies (45.5% in 2014 and 48% in 2013). In 2015, the total volume of parcels and small packages exceeded significantly the volume of letters, while, in addition to that, letters generated significantly less revenue. The activity in the handling of small packages was also noteworthy.

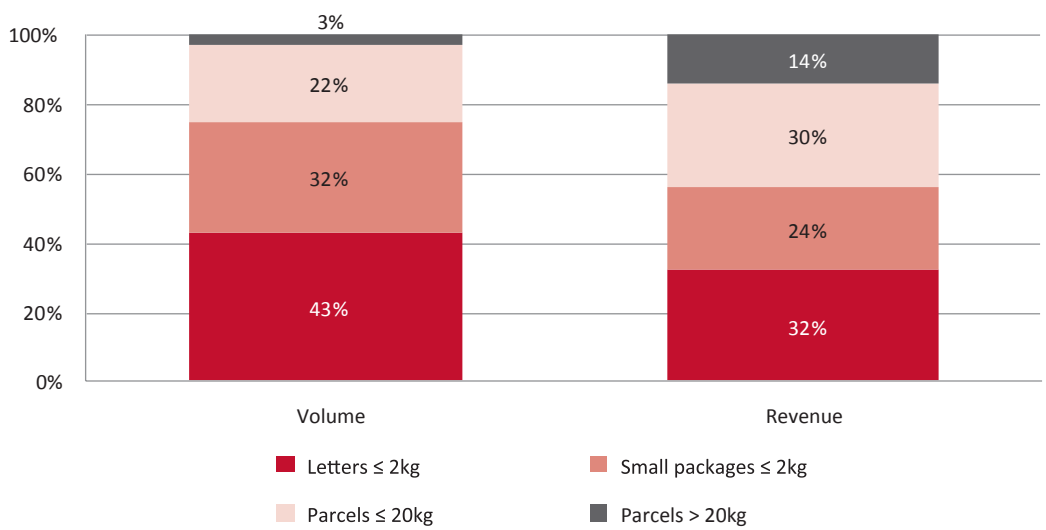
Courier companies owned more than 1.800 branches, including network outlets and mailing boxes, more than 5,500 vehicles (cars and motorbikes) and employed over 9,000 personnel.

To better understand competition within the courier services sector, Porter's five forces model is applied[54]. This model analyses: a) the intensity of competition, b) the threat of new entrants, c) the threat of potential substitute products, d) the customers' bargaining power and e) the suppliers' bargaining power. These five forces are indicative of the competition conditions in the courier sector that every postal service provider has to cope with and the extent to which the courier market is competitive and offers opportunities for new business development.

(a) Intensity of competition

Despite the increased number of companies operating in the courier services sector (447 in 2015), the largest share of the volume of postal items was handled by six companies that earned the majority of the revenue generated in the sector. As it is clearly demonstrated in Chart 2.26, in 2015, the six major courier companies handled 83.3% of postal items, taking up 81.4% of the courier sector revenue.

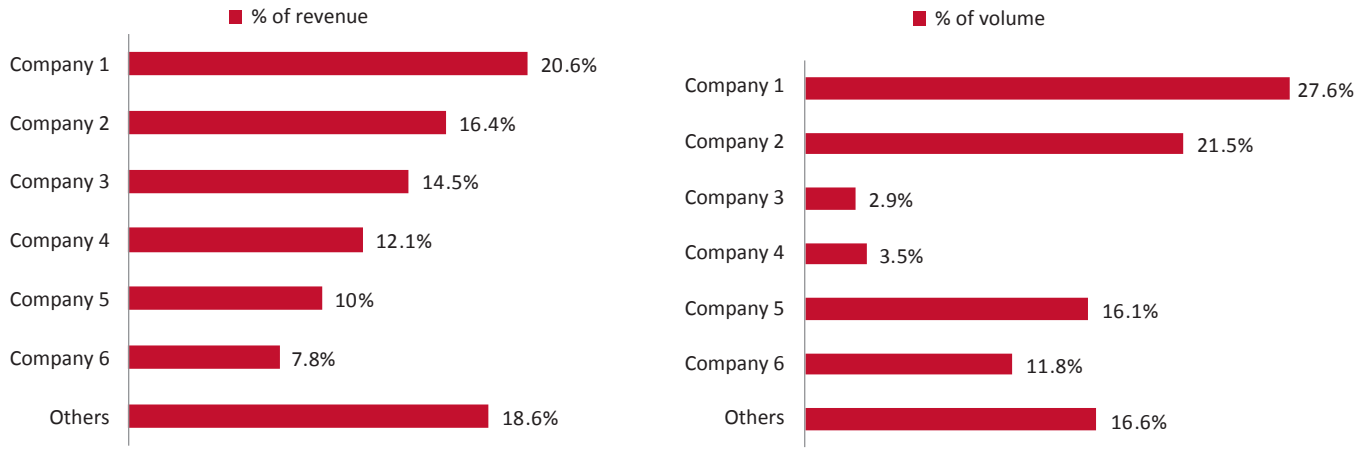
Chart 2.25: Volume and revenue share per service in the courier sector (2015)



Source: EETT (based on data provided by postal services providers)

53. This number includes companies that operated at least for a part of the reference year.
54. Porter M.E. (1979), «How Competitive Forces Shape Strategy», Harvard Business Review.

Chart 2.26: Volume and revenue share of courier companies (2015)



Source: EETT (based on data provided by postal services providers)

The competition appears to be more intense in the regions of Attica and Macedonia, where almost 80% of domestic and international postal objects are handled. The growth of cross-border e-commerce has boosted the activities of courier companies, since, currently, approximately one fifth of their revenue is generated by international outbound traffic. The most significant part of outbound traffic was forwarded to EU countries (70%) and Asia (10%), while the majority of inbound traffic also originated from the same areas (69% from EU countries and 18% from Asia)[55].

The Herfindahl-Hirschman Index (HHI) gives an indication of the degree of competition among courier companies[56]. The index shows the level of market concentration, i.e. the degree to which a small number of companies represents a large part of the market. A high HHI shows a high degree of market concentration in a small number of companies. In fact, a HHI between 1,000 and 1,800 indicates a moderate level of market concentration. In 2015, the HHI of the Greek courier sector remained approximately at the same level compared to the previous year, indicating a moderate degree of concentration.

As regards to individual services, the handling of letter mail, is characterized by a high degree of concentration, according to the HHI, since a single company handles 45% of letter mail items. The handling of parcels is also highly concentrated with a single company handling 35% of all postal items.

Courier companies offer added value services to their customers, e.g. faster delivery, detailed "track and trace" possibility, advanced customer service as well as procedures that facilitate e-commerce, such as delivery at a specified time and place, convenient return process of postal items, etc., aiming at gaining competitive advantage against competitors in the sector as well as the UPS.

(b) Barrier for new entrants

In the courier services sector, where competition is significant, the main obstacles for new entrants relate to economic issues, such as the Greek economic crisis or business issues, such as[57]:

a) Consumer demand, which is affected by parameters such as the company's reliability, the pricing and customer service quality, the range of provided services, the company's brand name and the size of the postal network.

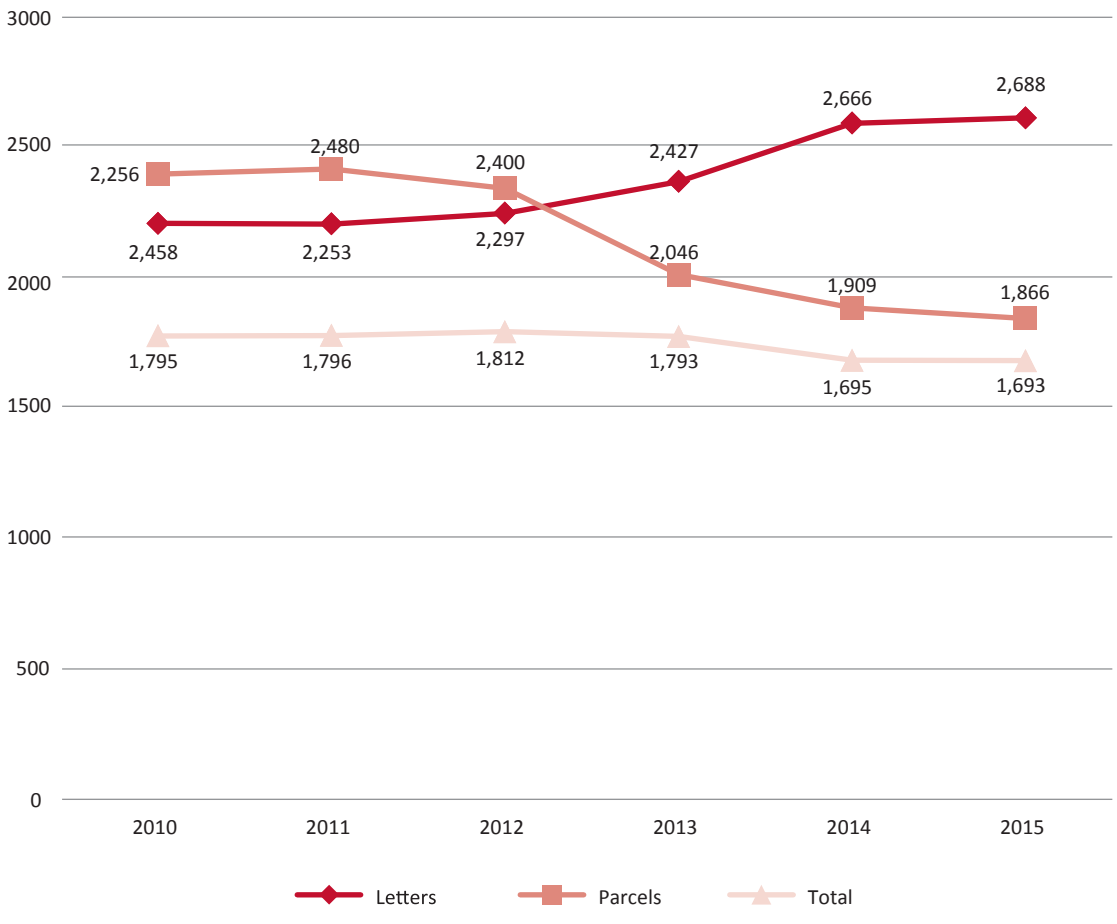
b) Market problems, such as compression of prices, the high cost of vehi-

55. EETT (based on quality-related data provided by postal services providers)
56. Source: Hirschman A. (1945), National Power and the Structure of Foreign Trade, Berkley & 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=$\sum^{n}$ ι=1 si ², where s is the market share of company "i" and n the number of companies.
57. EETT (based on quality-related data provided by postal services providers)

cle purchase and maintenance, the already high number of competitors in the postal market and competition from alternative transportation networks.

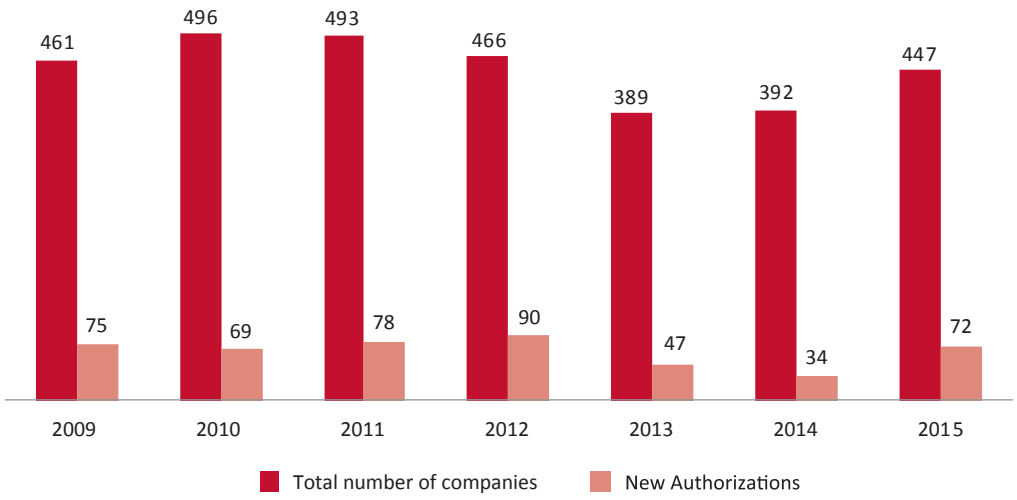
In 2015, the number of new entrants was more than doubled compared to the previous year, which shows that the market is leaving recession behind.

Chart 2.27: Herfindahl-Hirschman Index (HHI)



Source: EETT (based on data provided by postal services providers)

Chart 2.28: Companies under General Authorization



Source: EETT (Register of postal services providers)

(c) Substitute products/services

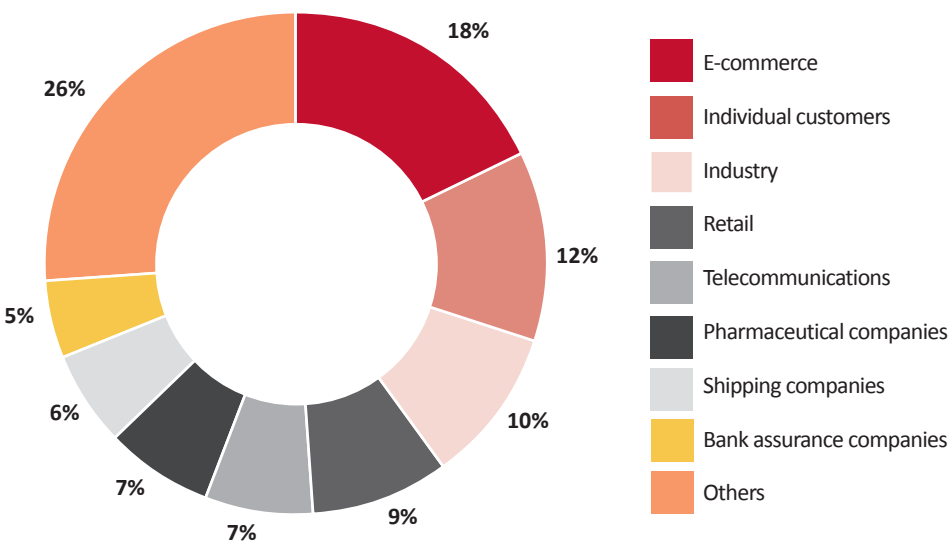
Regarding letter mail, the most important threat is constant technology advancements which leads to the substitution of traditional ways of communication by e-mail and new internet applications both by individuals and organizations.

As regards to parcels, it is almost impossible for either an individual, or a company to undertake the delivery of her parcels–especially the express delivery. It is therefore obvious that there are no direct substitutes but only supplementary services. Since the market is evolving, due to its relation to web marketing and e-commerce, there is potential for the development of supplementary services of additional mail, such as confirmations, bills, payments, invoices, etc.

(d) Bargaining power of customers

The large customers of courier companies have a considerably high level of bargaining power, mainly due to

Chart 2.29: Revenue share of courier companies' clientele (2015)



Source: EETT (based on data provided by postal services providers)

the increased volume of postal items they handle and the high frequency of use of postal services. On the contrary,individual customers have limited bargaining power in defining the price of postal services they wish to purchase.

Taking under consideration the growth of e-commerce and consequently its significance for the viability of courier companies, e-merchants are becoming increasingly powerful. This is more intensive in the case of courier providers that are absolutely dependent on one customer. These providers are more willing to compress prices and reduce their operating costs, in order to keep that unique customer.

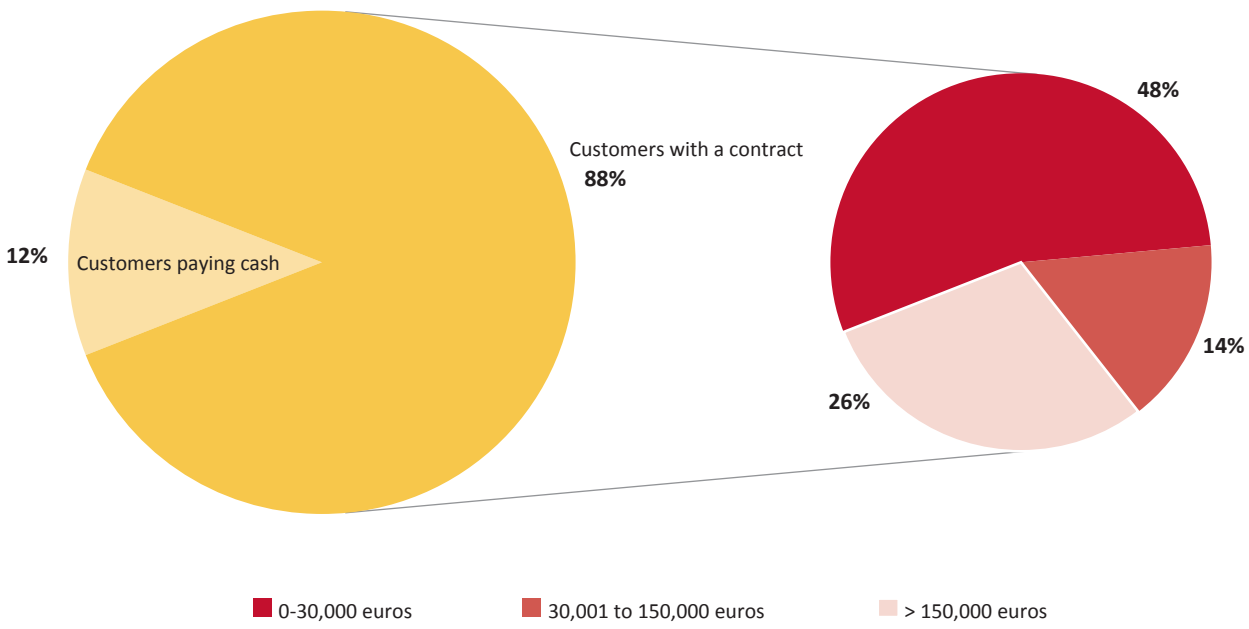
The clientele of courier companies consists mainly of corporate customers and less of individual consumers, as shown by Chart 2.29. Main business customers come from e-commerce, followed by industry, retail, telecommunications, the pharmaceutical industry, etc.

Customers with a contract generated 88% of courier company revenue compared to only 12% from customers paying cash. Moreover, revenue from contracts was mainly generated from customers with contracts up to 30,000 euros (48%) followed by customers with contracts above 150,000 euros (26%). Chart 2.30 depicts revenue per customer type.

(e) Bargaining power of the suppliers

Postal market suppliers, such as the manufacturers of sorting machines, transportation vehicles, mail handling machines, fuel supply, etc. influence the operation of postal companies without, however, affecting competition in terms of pricing, delivery frequency or network coverage. Nevertheless, postal service providers, in order to cope with competition, are willing to invest in the near future mostly in new technologies and vehicles and less in network development and advertising.

Chart 2.30: Analysis of courier company clientele in terms of revenue (2015)



Source: EETT (based on data provided by postal services providers)

Annex

Index of Tables and Charts

(a) Tables

(b) Charts

(b) Charts

(b) Charts

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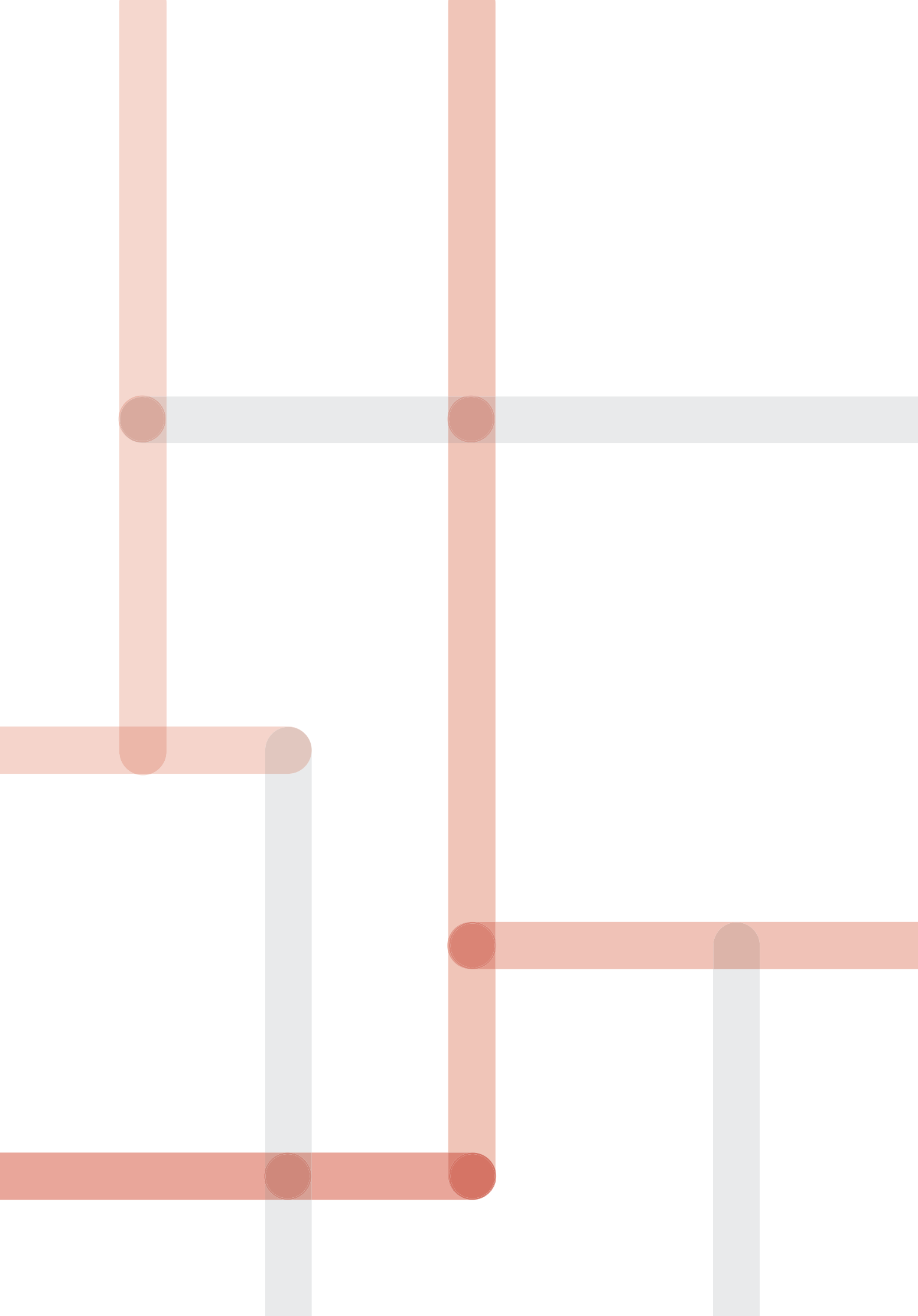

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