2009 MARKET REVIEW OF ELECTRONIC COMMUNICATIONS & POSTAL SERVICES

EETT

HELLENIC TELECOMMUNICATIONS & POST COMMISSION

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Market Review of Electronic Communications & Postal Services 2009

Maroussi, 2010

Contents

1. ELECTRONIC COMMUNICATIONS SECTOR

2009 is marked by the profound consequences of the financial crisis, especially as reflected in market concentration (operator withdrawals, mergers, etc) and also in the sector's diminishing results (turnover, gross profit and total assets).

With regard to the financial results, Mobile Telephony Operators (MTOs) led in all categories even though they suffered decreases, the most important of which was an almost 40% drop in gross profit. OTE's turnover also fell by 7% due to various factors (fall in domestic and international telephony revenues, interconnection rates, cost of telecommunications equipment, etc). OTE's total assets fell by 7.5%. However, the losses in gross profit by 2% have been significantly contained due to the reduction in the operating costs. Finally, the alternative operators also suffered significant losses in turnover (12%), in total assets (14%), and especially in gross profit (40%). It should be reminded that the difficulty in arriving at uniform conclusions still persists due to the fact that some operators apply the International Financial Reporting Standards (IFRS) on their balance sheets whereas other operators continue to apply the Greek Accounting Standards.

The intense competition in the fixed telephony market persisted during the first semester of 2009. With regard to the volume of outgoing traffic, OTE managed to hold on to its shares (marginally higher compared to those of 2008). At the same time, the share of the three biggest alternative operators rose to 21.4% from 17.9% in the first semester of 2008, whereas the share of the smaller alternative operators fell (12.3% compared to 17% in the first semester of 2008), which may also be attributed to the fact that important providers (ALTEC, LANNET and TELEDOME) ceased operations and folded. Moreover, in terms of the number of direct connections, the alternative operators share is estimated to have risen to 17.9% by the end of 2009 as compared to 7.8% in 2008. Additionally, the retail revenues stemming from fixed telephony continued to drop, registering a 3% reduction compared to the respective period of 2008, which was mostly due to the fall in traffic revenues by 8%.

With regard to retail tariffs, the cost of a 3-minute local or long-distance call in Greece remained below the European average. However, the average monthly expenditure for Greek residential users exceeds the respective European average. In contrast, the expenditure for business users in Greece is the cheapest among the respective expenditure of member states of the European Union (EU), based on the usage baskets arising from the methodology used by both the EU and the Organization of Economic Cooperation and Development (OECD). Moreover, it should be noted that the average monthly expenditure for a medium usage mobile telephony user in Greece is significantly higher (by around 40%) than the European average.

Mobile telephony subscribers amounted to more than 20 million (an increase by 7.3% compared to 2008) with mobile telephony penetration rising to 125% in September 2009 and exceeding the European average (122%). The number of active mobile subscribers reached 13.3 million in December 2009 compared to 13.8 million in December 2008 and 14.1 million in September 2008.

Number Portability remains an important tool for consumers. During 2009, 487,000 mobile numbers and 544,000 fixed numbers were ported.

OTE's Interconnection traffic (fixed telephony) fell significantly compared to that in 2008, with call origination and call termination decreasing by 44% and 22%, respectively. To a considerable extent, this fall is related to the continuing rise in Local Loop Unbundling (LLU) lines (full access). The Interconnection traffic in mobile telephony also fell compared to that in 2008. However, that was fully counterbalanced by the significant rise in on-net traffic (28% compared to 2008) which currently amounts to approximately 50% of total Interconnection traffic. Interconnection rates in the OTE network were approximately at the same level as the European average in contrast to the mobile termination rates which, according to the 15th Report of the European Commission , remain higher than the European average by almost 17% despite their steady decrease (the average national termination rate from fixed to mobile fell by 22%).

With regard to Broadband, broadband lines continued to increase reaching approximately 2,000,000 and demonstrating a 27% increase compared to 2008. Broadband penetration in Greece amounted to 17% of the population, achieving the third highest increase (3.6%) in the EU. However, despite the ongoing growth, the gap between the domestic penetration rate and the average European one is still great reaching a 25%, while the fall in the broadband penetration rate (from 4.7% in 2007 to 3.6% in 2009) may be an indication of the gradual saturation of the market.

1. http://ec.europa.eu/information_society/policy/ecomm/library/communications_reports/annualreports/15th/index_en.htm

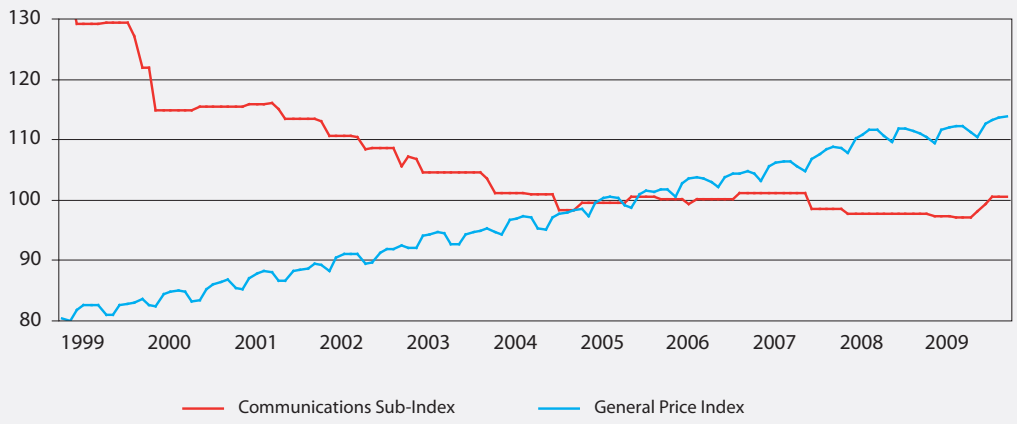
The ongoing rise of LLU is still of the utmost importance, since the number of lines increased by 53%, came to approximately 1 million having increased by 53% as compared to 2008 (there were 646,000 lines at the end of 2008). What is more, Greece is still one of the cheapest member states of the EU in both full and shared access, given that rates keep decreasing (a 5% and 4% decrease, respectively, compared to 2008). Furthermore, the access speed of broadband lines kept rising with 16% of lines ranging from 2 to 10 Mbps and 36% being over 10 Mbps. Last, the development of the average speed of ARYS lines (wholesale and retail) is also important as it has been steadily rising, having reached 4.385 Mbps at the end of 2009, as compared to 2.4 Mbps at the end of 2008.

Finally, according to the new edition of the European Commission Report entitled "Broadband Internet Access" and entailing the broadband retail cost in the member states of the EU, the abovementioned cost in Greece is generally lower than the European average and, with few exceptions, lower than the average retail cost in the 15 old member states. The report's conclusion that more than 77% of subscribers use packages with speeds whose retail cost has fallen more than 25% is worthy of note.

1.1. Consumer Price Index

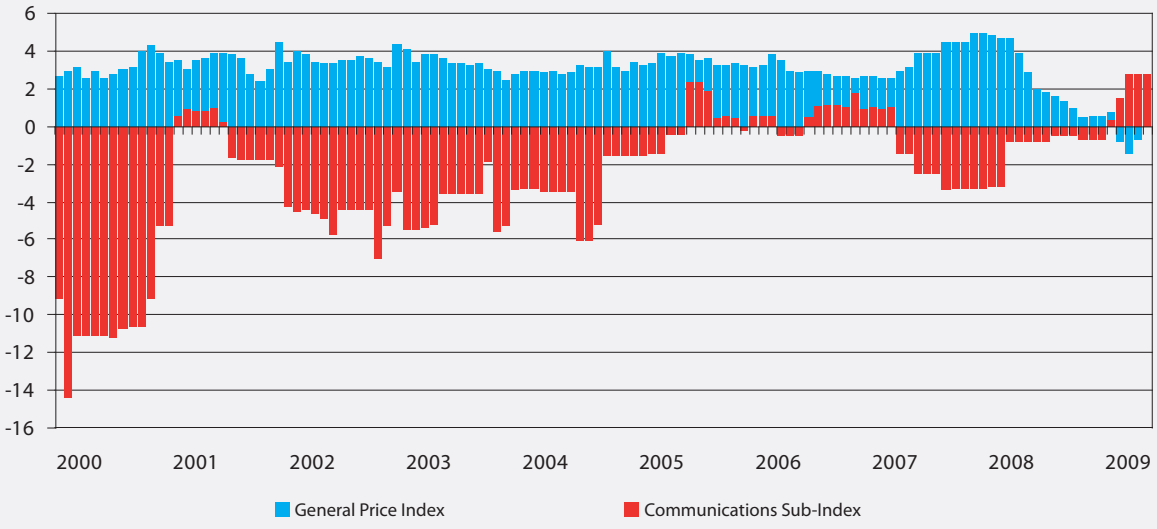
The general progress of the cost of Electronic Communications services is reflected in the annual course of the general Consumer Price Index (CPI) presented in Charts 1.1 and 1.2. The Communications Sub-Index has generally followed a declining course compared to the CPI. Especially for 2009, the Communications Sub-index shows a significant rise in the last five months as a result of the increase in the mobile telephony fee.

Chart 1.1
Progress of the Monthly Consumer Index –
General Index – Communications Sub-Index



Source: EETT (based on the National Statistical Service of Greece – NSSG)

Chart 1.2
Variation of the Monthly Consumer Price Index (%) as compared to the Respective Index of the Previous Year



Source: EETT (based on the National Statistical Service of Greece – NSSG)

1.2. Financial Data of the Electronic Communications Market

This section presents the basic financial data of the Greek Electronic Communications market as drawn from the published balance sheets of the licensed operators for the period 2000-2008. For 2009, the various financial data regarding the operators listed in the Athens Stock Exchange (ASE) are based on those operators' annual financial statements in conformity with the International Financial Reporting Standards (IFRS). Additionally, data regarding turnover, investments, etc that are collected by EETT from licensed operators on a six-month basis have also been taken into account.

As depicted in Chart 1.3, the indicators of the entire market[2] are characterized by significant decreases. The operators' turnover (Chart 1.4) suffered a 5% decline because of the reduction in OTE's turnover by 7%, of MTOs by 4%, and of fixed telephony alternative operators by 12%, mostly owing to the takeover of TELLAS by WIND. The decline in gross profit is significantly higher (Chart 1.5) with MTOs and fixed telephony alternative operators suffering a decrease of 39% and 37%, respectively. OTE suffered a substantially smaller decrease in the order of 2%. In contrast, the decline in total assets (Chart 1.6) by 4% is mainly due to the fall in OTE's total assets by 7%, which is mostly attributable to the decrease in the company's cash holdings and other financial assets. Table 1.1 summarizes the financial data as presented in the Charts below.

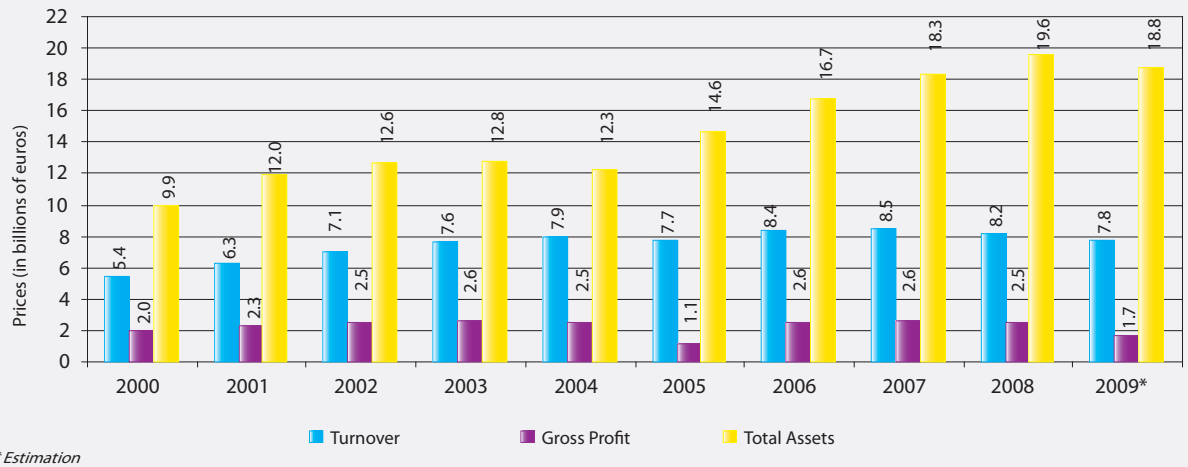
Additionally, Charts 1.7 through 1.10 present a series of ratios that reflect in more detail the financial progress of the operators based on the published balance sheets of fixed and mobile telephony providers[3]. When reading the charts, the decrease of fixed telephony alternative operators has to be taken into account, since, for 2008, there are no data for ALTEC, LANNET, and TELEDOME, which ceased their operations and for TELLAS, which was taken over by WIND. More specifically:

- The Acid Test Ratio (Chart 1.7) presents an increase by over 30% for fixed telephony operators and a decrease by 31% for the MTOs, showing a significant reduction in their ability to respond promptly to their direct needs. The improvement observed in the case of fixed telephony operators is partly owed to the fact that the prices of the companies which exited the market were less than one unit where this particular ratio is concerned. At the same time, the merger of TELLAS and WIND exacerbated the ratio for the latter (falling from 1 in 2008 to 0.49 in 2009). COSMOTE's performance also deteriorated significantly, registering a reduction of 37%.
- The Gross Profit Margin Ratio (Chart 1.8) fell by 4% for fixed telephony operators and by more than 50% for MTOs, mainly due to WIND's negative profit margin.
- The Equity to Total Liabilities Ratio (Chart 1.9) decreased by a significant 7% for the MTOs whereas, for fixed telephony providers, it increased substantially by more than 100%. That is explained by the fact that two out of the three companies that ceased operation during 2008 had a negative ratio. It is also justified by the fact that several operators improved their performance (COSMOLINE, FORTHNET, and NETONE).
- The average collecting period (Chart 1.10) increased for all operators and especially for the MTOs due to the merger of WIND and TELLAS. In contrast, the average paying period decreased for fixed telephony operators (substantial improvement of the ratio for FORTHNET, HELLAS ON LINE, NETONE, and OTE) whereas it increased for the MTOs due to the deterioration in WIND's ratio.

2. It must be noted that all financial data for licensed operators are taken into account.
3. The definition of ratios is included in the Glossary. Since the relevant procedure for 2009 had not been concluded at the time, the ratios' calculation was based on the published balanced sheets of the companies for 2008.

Chart 1.3

Progress of the Financial Data of Licensed Operators

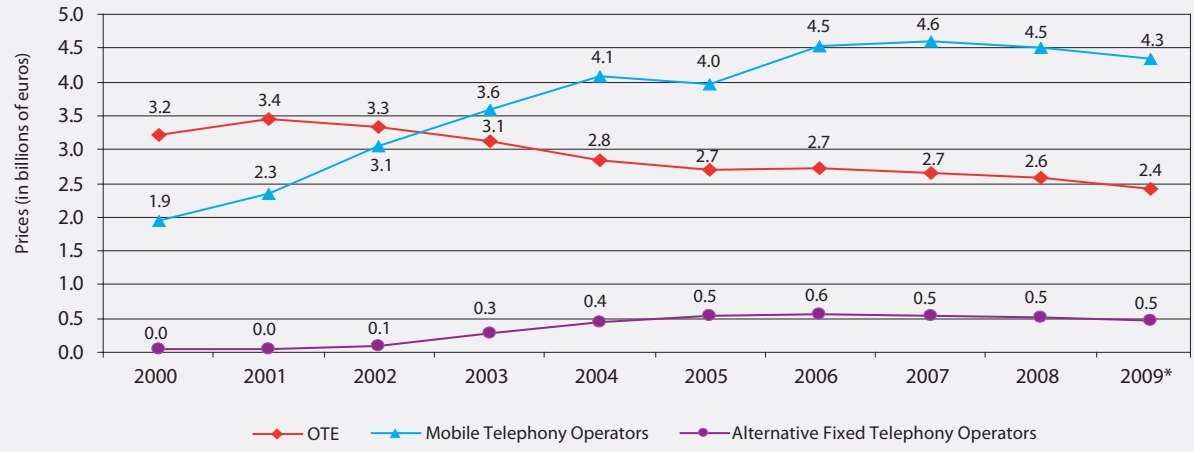


** Estimation*

Source: EETT (based on the published balance sheets)

Chart 1.4

Turnover of Electronic Communications Operators

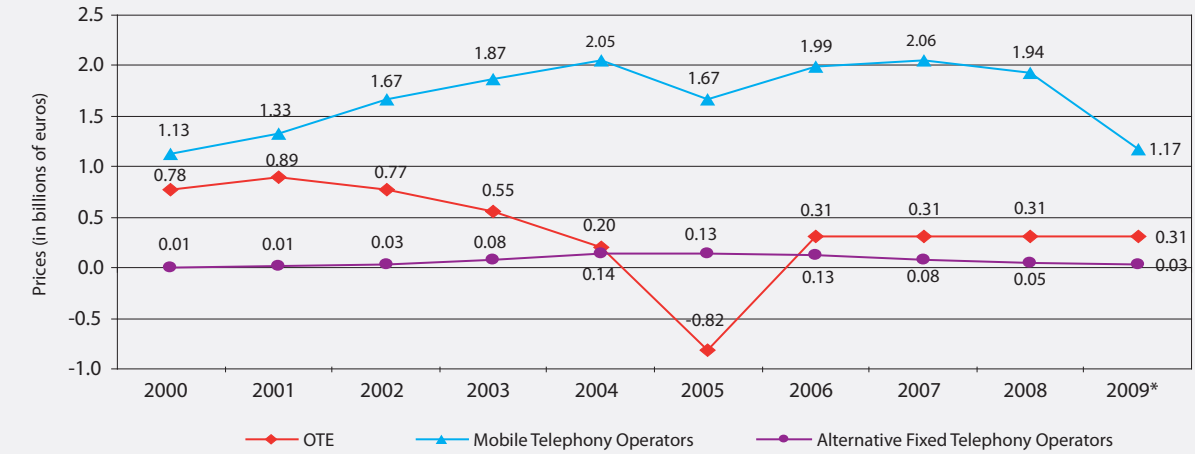


** Estimation*

Source: EETT (based on the published balance sheets)

Chart 1.5

Gross Profit of the Electronic Communications Operators



** Estimation*

Source: EETT (based on the published balance sheets)

Table 1.1

Progress of the Financial Data of the Electronic Communications Operators

Turnover (in billions of euros)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009*
OTE	3.21	3.45	3.34	3.12	2.85	2.71	2.71	2.66	2.59	2.41
Mobile Telephony Operators	1.95	2.95	3.05	3.58	4.08	3.96	4.53	4.59	4.50	4.34
Alternative Fixed Telephony Operators **	0.04	0.05	0.10	0.29	0.44	0.53	0.56	0.54	0.53	0.47
Remaining Operators ***	0.25	0.43	0.57	0.61	0.54	0.53	0.56	0.70	0.60	0.59
Total	**5.45**	**6.88**	**7.06**	**7.61**	**7.91**	**7.72**	**8.36**	**8.49**	**8.22**	**7.80**
Gross Profit (in billions of euros)										
OTE	0.78	0.89	0.77	0.55	0.20	-0.82	0.31	0.31	0.31	0.31
Mobile Telephony Operators	1.13	1.33	1.67	1.87	2.05	1.67	1.99	2.06	1.94	1.17
Alternative Fixed Telephony Operators**	0.01	0.01	0.03	0.08	0.14	0.13	0.13	0.08	0.05	0.03
Remaining Operators ***	0.07	0.05	0.003	0.15	0.17	0.12	0.12	0.15	0.17	0.16
Total	**1.99**	**2.28**	**2.48**	**2.64**	**2.55**	**1.11**	**2.56**	**2.59**	**2.47**	**1.67**
Total Assets (in billionsof euros)										
OTE	7.09	7.55	7.78	7.63	6.79	7.16	6.80	8.36	8.87	8.21
Mobile Telephony Operators	2.40	3.39	3.64	3.90	4.27	6.21	8.41	8.14	8.46	8.35
Alternative Fixed Telephony Operators **	0.13	0.18	0.36	0.50	0.58	0.65	0.93	1.18	1.53	1.32
Remaining Operators ***	0.32	0.83	0.86	0.74	0.64	0.60	0.60	0.66	0.77	0.90
Total	**9.94**	**11.96**	**12.65**	**12.77**	**12.27**	**14.62**	**16.74**	**18.34**	**19.63**	**18.78**

* Estimation

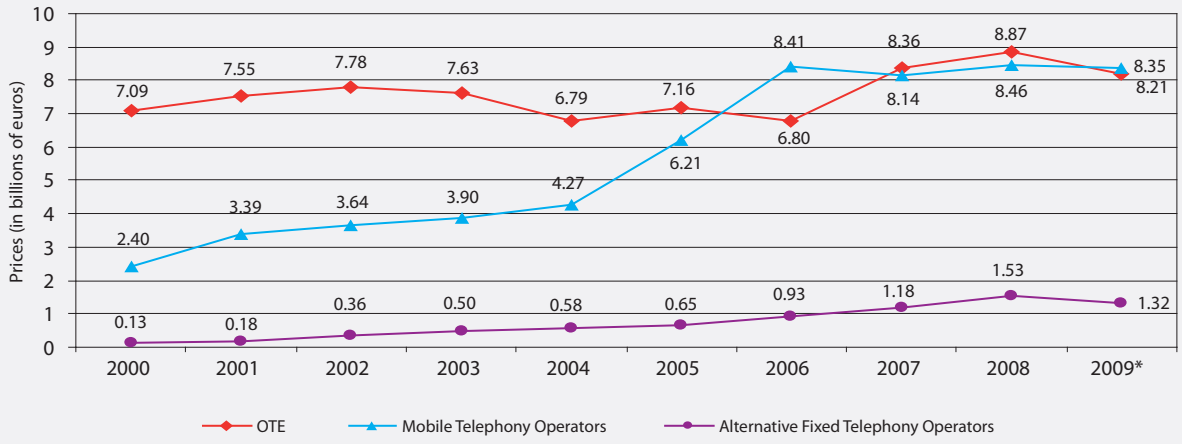
** All licensed operators offering fixed telephony services are included

*** All remaining licensed operators are included

Source: EETT (based on the published balanced sheets)

Chart 1.6

Total Assets of Electronic Communications Operators

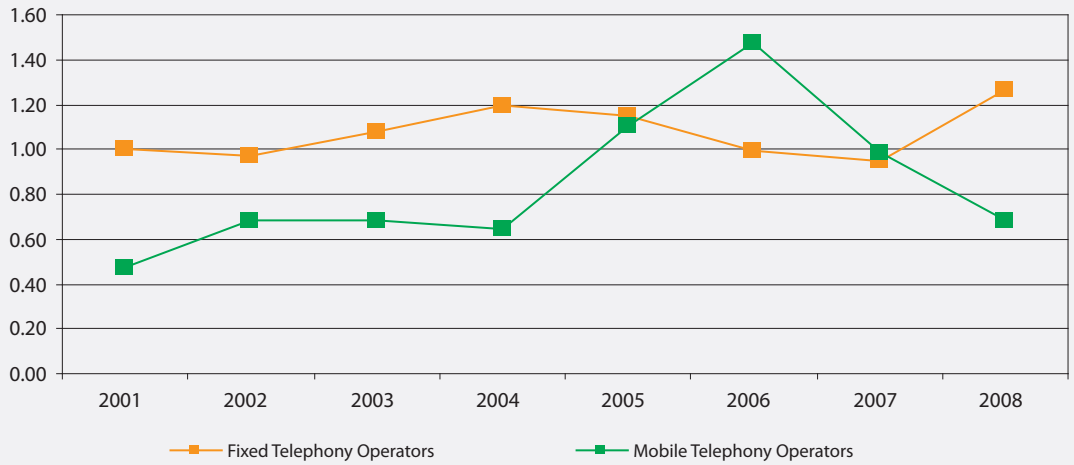


** Estimation*

Source: EETT (based on the published balanced sheets)

Chart 1.7

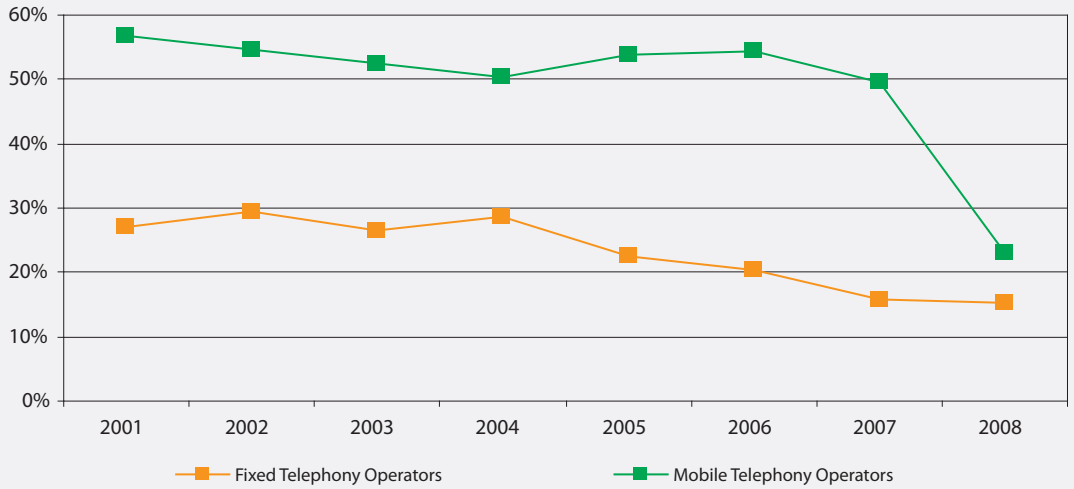
Acid Test Ratio



Source: EETT (based on the published balanced sheets)

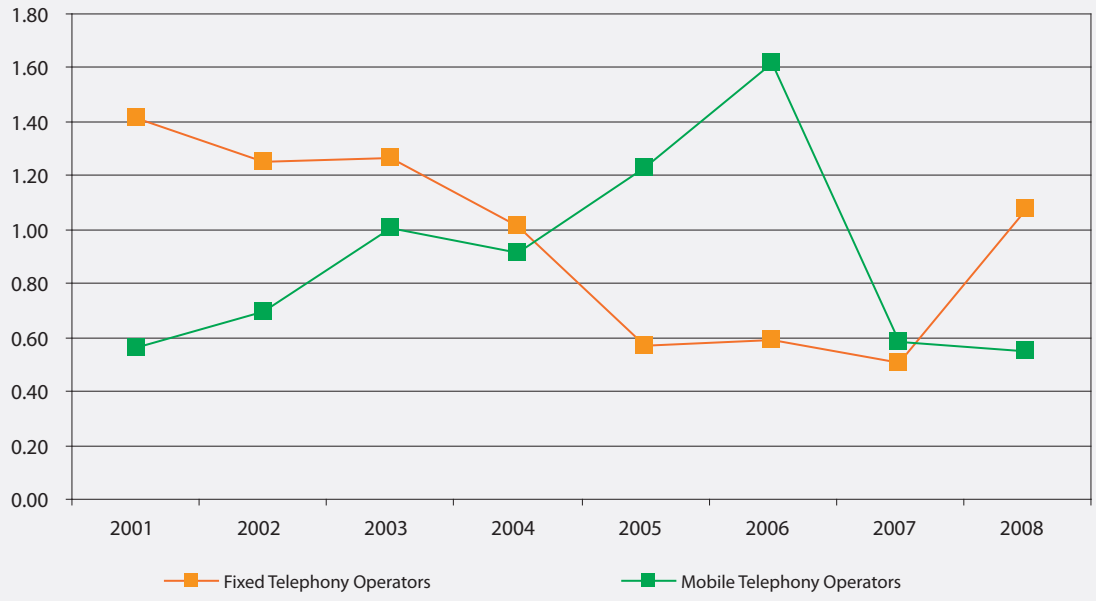
Chart 1.8

Gross Profit Margin Ratio



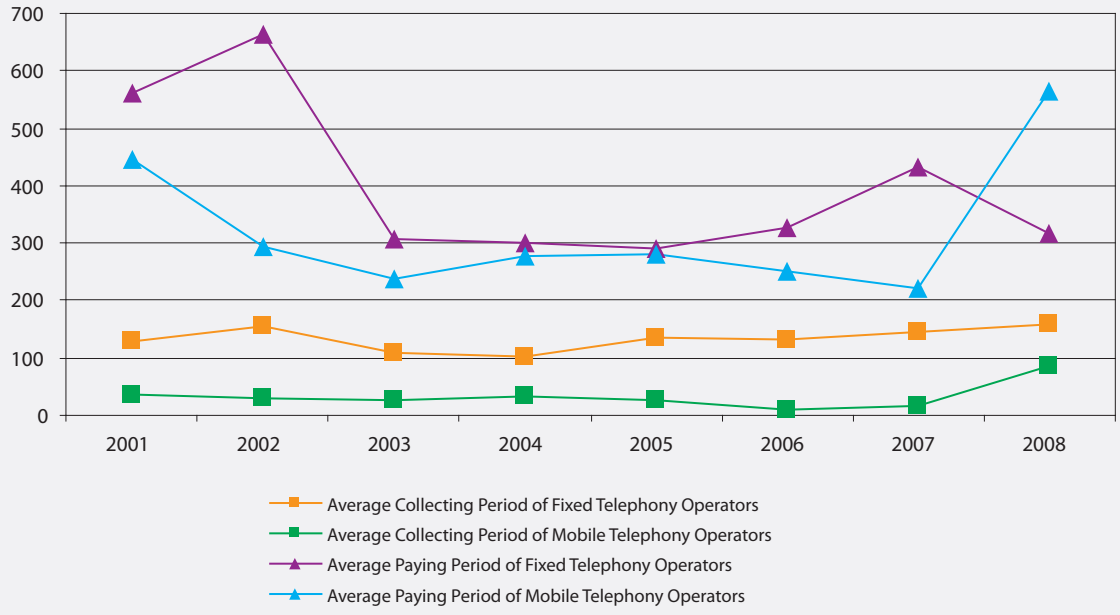
Source: EETT (based on the published balanced sheets)

Chart 1.9
Equity to Total Liabilities Ratio



Source: EETT (based on the published balanced sheets)

Chart 1.10
Activity Ratios



Source: EETT (based on the published balanced sheets)

1.3. Licensing

Table 1.2 presents the number of licensed operators active in the main sectors of the Electronic Communications Market by the end of 2009.

Table 1.2
Licensed Operators per Category

Activity	Number of Operators
Voice Telephony and Fixed Network Development	178
Voice Telephony	141
Fixed Network Development	87
Satellite Networks	34
2nd Generation Mobile Telephony	6
3rd Generation Mobile Telephony	7
TETRA	5
W-LAN	73

Source: EETT

1.4. Access to the Public Telephone Network

During 2009, the number of main telephony lines (including OTE's PSTN and ISDN lines as well as LLU full access lines) remained approximately the same since in December 2009, that number reached 5,248,122 a figure equivalent to a 46.6% penetration rate compared to 5,253,695 in December of 2008 (Charts 1.11, 1.12, and Table 1.3). Nevertheless, if we measure the main telephony lines in 64Kbps Channels, then we observe a noticeable decrease since, in December 2009, they fell to 5,932,038 a figure equivalent to a 52.7% penetration rate, compared to 5,975,242 in December 2008, thus registering a 0.7% reduction (Charts 1.11, 1.12, and Table 1.3).

Chart 1.11
Penetration of Main Telephony Lines within the Greek Population

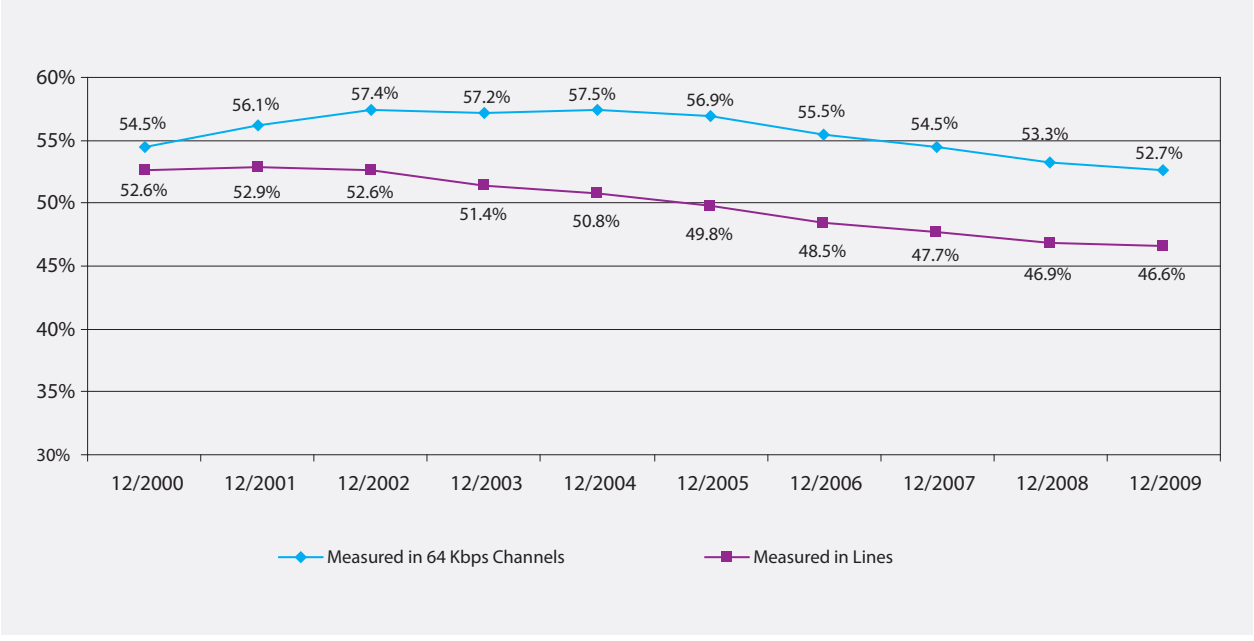
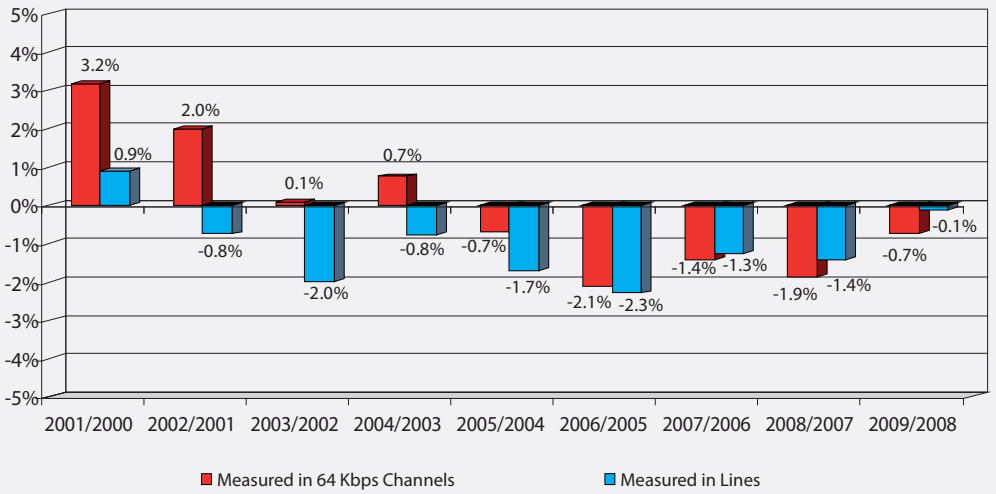


Chart 1.12
Annual Percentage Change in the number of Main Telephony Lines



Source: EETT (based on the licensed operators' data)

Table 1.3
Progress of Telephony Lines

	Main OTE Telephony Lines			LLU Full Access Lines	Total Lines	Total of 64 Kbps Channels
	PSTN	ISDN BRA	ISDN PRA			
Dec. 2000	5,659,274	96,972	3,946		5,760,192	5,971,598
Dec. 2001	5,607,726	199,033	5,385		5,812,144	6,167,342
Dec. 2002	5,412,796	349,747	6,022	93	5,768,658	6,293,043
Dec. 2003	5,200,231	448,490	6,668	650	5,656,039	6,297,901
Dec. 2004	5,078,709	525,426	7,138	1,787	5,613,060	6,345,488
Dec. 2005	4,927,622	578,505	7,094	5,018	5,518,239	6,302,470
Dec. 2006	4,778,245	597,867	6,213	12,176	5,394,501	6,172,545
Dec. 2007	4,509,564	579,533	6,185	232,582	5,327,864	6,086,762
Dec. 2008	4,110,102	548,388	5,971	589,234	5,253,695	5,975,242
Dec. 2009	3,787,132	517,369	5,743	937,878	5,248,122	5,932,038

1.5. Fixed Telephony

1.5.1. Retail Outgoing Traffic

Throughout the second semester of 2008 and the first of 2009, the intense competition in the fixed telephony market persisted, with OTE keeping its share at its 2008 level in the first semester of 2009 (Chart 1.13). OTE's shares in terms of outgoing traffic volume on a six-month basis (Chart 1.14) presented a sudden rise which climbed to 67.5% in the second semester of 2008 (compared to 65.2% in the first semester of 2008) and came into contrast with the declining course observed during the years following the liberalization of the market. In the first semester of 2009, the decline persisted, with OTE's share falling to 66.4%. Still, that was higher than the one in the respective period of 2008, something that can be explained if we take into account the fact that three quite sizeable companies, all important in size (ALTEC, LANNET and TELEDOME), ceased gradually their operations during 2008, leading to market shrinkage as reflected in the significant decrease in the shares obtained by the smaller alternative operators (from 17% in the first semester of 2008 to 12.3% in the respective period of 2009). In contrast, the share obtained by the three biggest alternative operators increased (from 17.9% in the first semester of 2008 to 21.4% in the first semester of 2009).

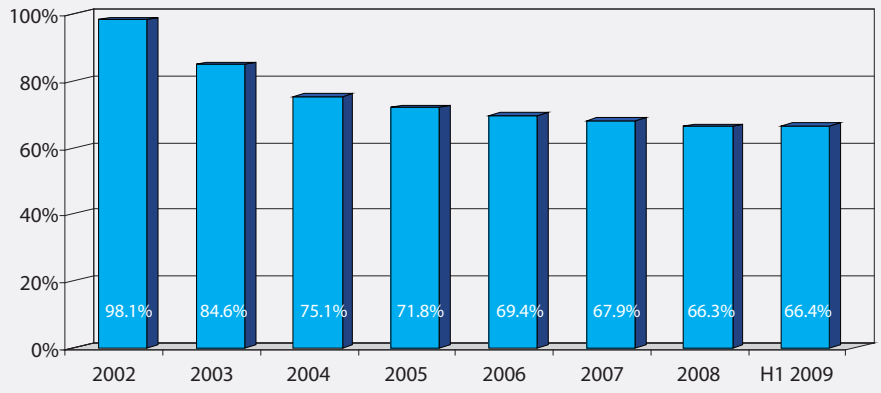
OTE's shares per type of call presented a similar increasing trend (Chart 1.15), rising in the second semester of 2008 and then falling again in the first semester of 2009, with the exception of calls to national fixed lines (i.e., all local and long-distance calls) in which OTE's share remained the same.

The total outgoing traffic continued falling in the period under consideration, with the traffic in the first semester of 2009 declining by 2.5% when compared to the respective semester of the previous year (Chart 1.16). Charts 1.17 and 1.18, together with Table 1.4 show the inter-temporal progress of outgoing traffic in total and as per type of call. Given that the volume of long-distance calls seems to have somewhat increased, it is worth noting that the reduction of calls to national fixed lines in the second semester of 2008 and the first of 2009, as compared to the respective semesters of the previous year, has been due to the reduction in local calls (as shown in Table 1.4).

Chart 1.19 and Table 1.5 show the progress of traffic analyzed in terms of the three components forming the competitive environment, namely OTE's traffic, alternative operators' traffic from directly connected subscribers[4] and alternative operators' traffic from indirectly connected subscribers[5]. These data reflect the shift in competition from services to infrastructure: since 2006, the traffic of directly connected subscribers has been rising rapidly at the expense of the indirectly connected subscribers traffic, having exceeded the latter since 2007.

Chart 1.13

OTE's Annual Market Shares based on the Outgoing Traffic Volume (Dial-Up Traffic not included)



Note: Calls via prepaid cards have been included in international calls

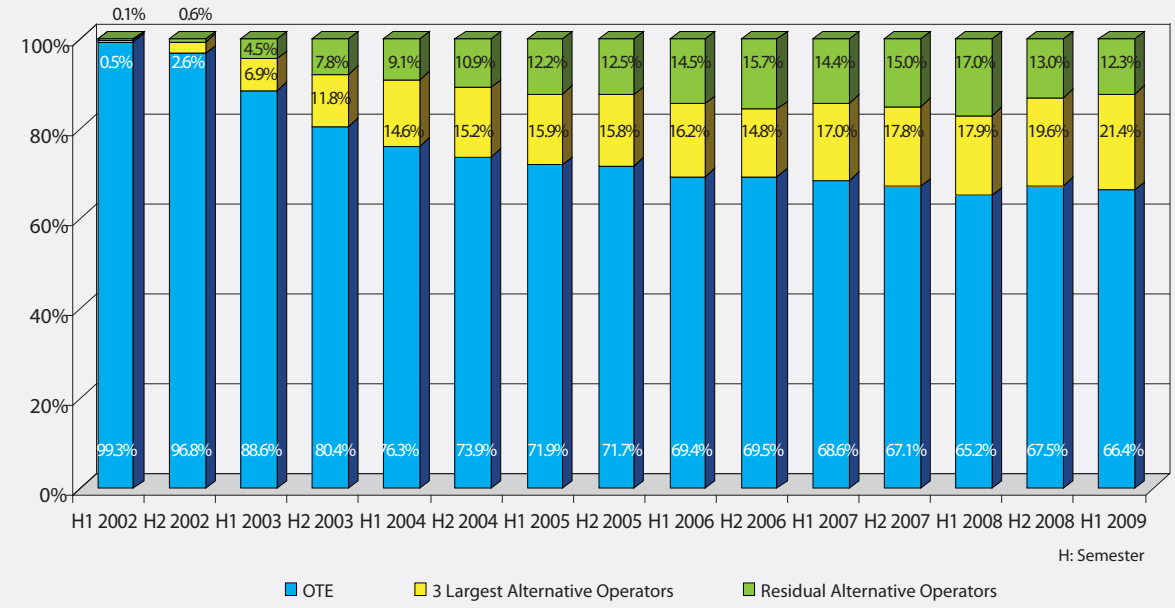
H: Semester

Source: EETT (based on the licensed operators' data)

4. Directly connected subscribers are those subscribers connected to the operator's network via private infrastructure; via another carrier's Leased Line; or via a LLU line.
5. Indirectly connected subscribers are those subscribers connected to an operator's network mainly via Carrier Selection or Pre-selection. They may also be connected by means of another way (e.g. card, code).

Chart 1.14

Progress of Market Shares based on the Outgoing Traffic Volume (Dial-up traffic not included)

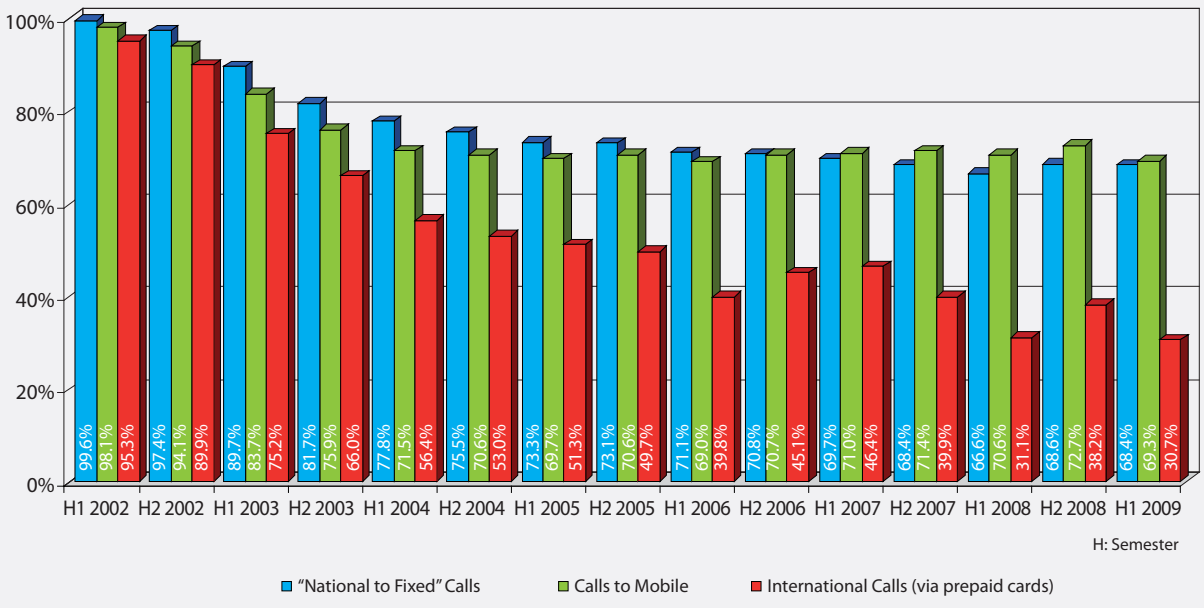


Note: Calls via prepaid cards have been included in international calls

Source: EETT (based on the licensed operators' data)

Chart 1.15

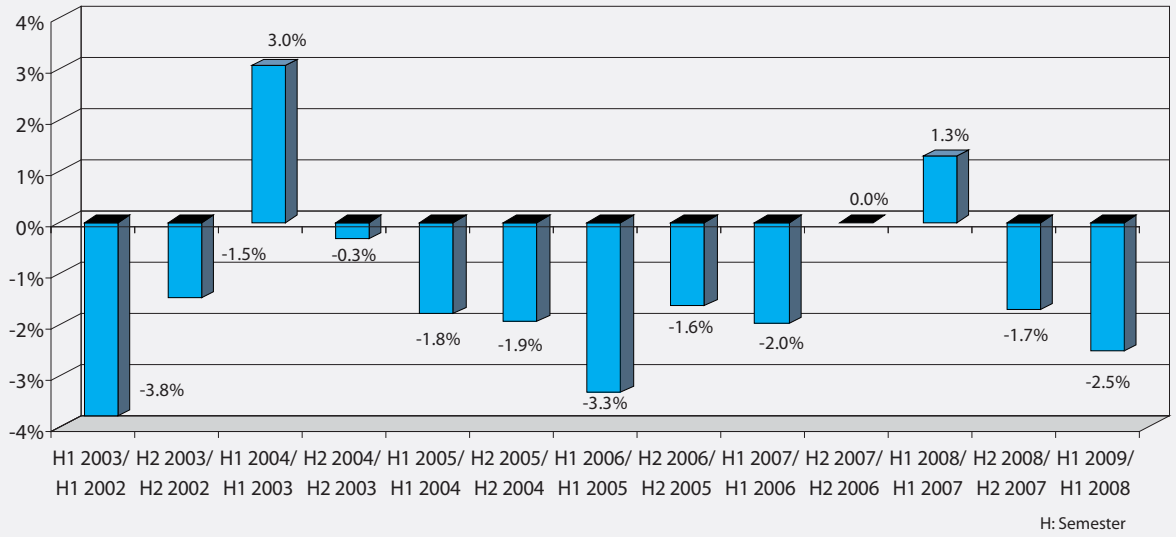
OTE's Market Shares per Semester and per Type of Call based on the Outgoing Traffic Volume



Source: EETT (based on the licensed operators' data)

Chart 1.16

Percentage Change per Semester (%) in the Outgoing Calls Volume (not Including Dial-up Calls), as Compared to the Corresponding Semester of the Previous Year

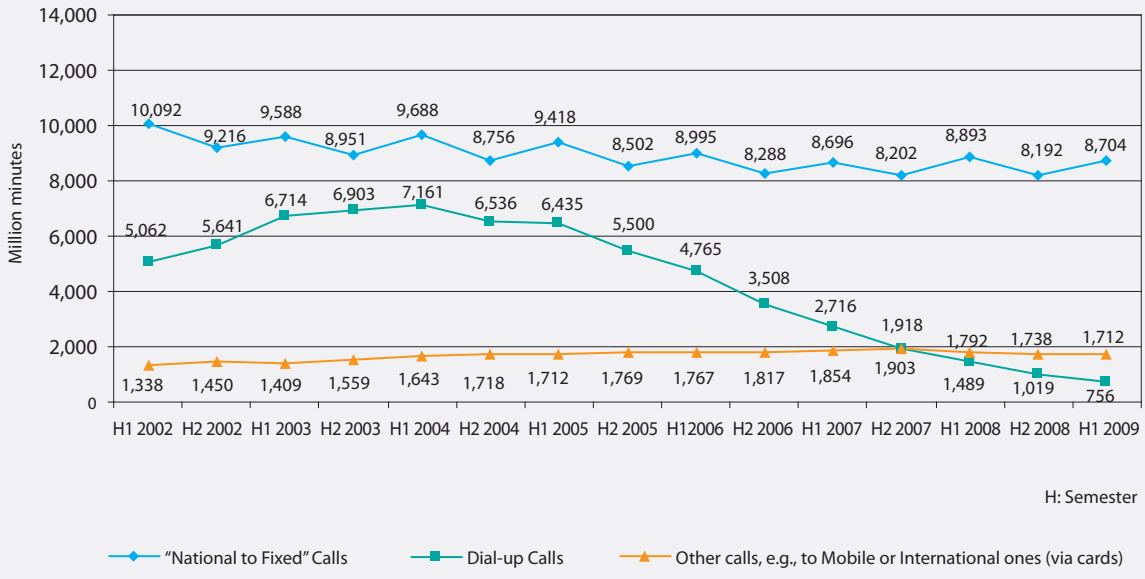


Note: Calls via prepaid cards have been included in international calls

Source: EETT (based on the licensed operators' data)

Chart 1.17

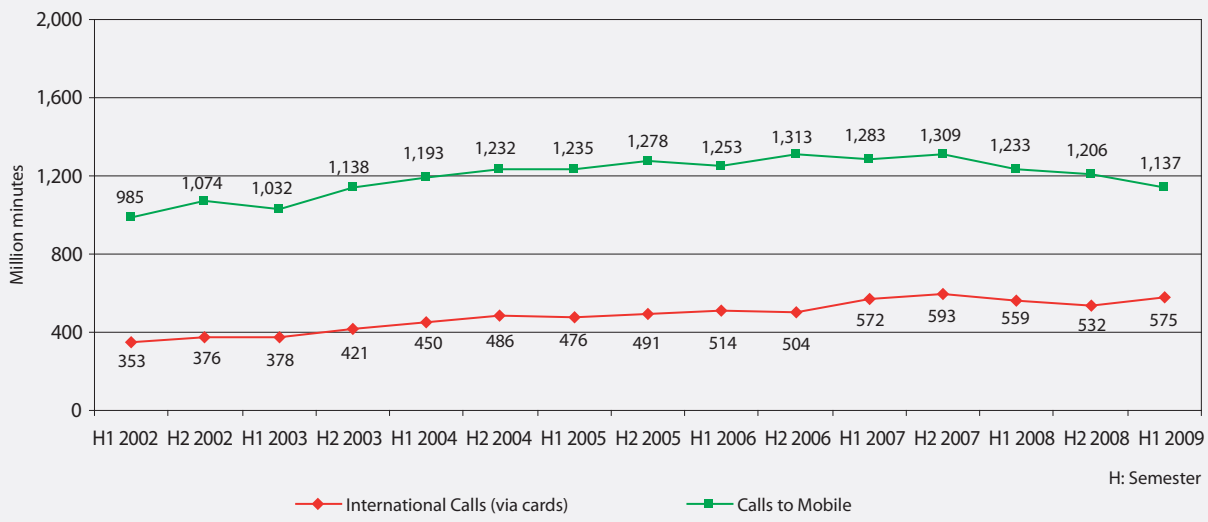
Progress of Outgoing Calls Volume - Total Calls not Including Dial-Up, "National to Fixed" Calls and Dial-Up Calls



Source: EETT (based on the licensed operators' data)

Chart 1.18

Progress of Outgoing Calls Volume –
International Calls (via cards) and Calls to Mobile



Source: EETT (based on the licensed operators' data)

Table 1.4

Outgoing Fixed Telephony Traffic Volume per Type of Call (in millions of minutes)

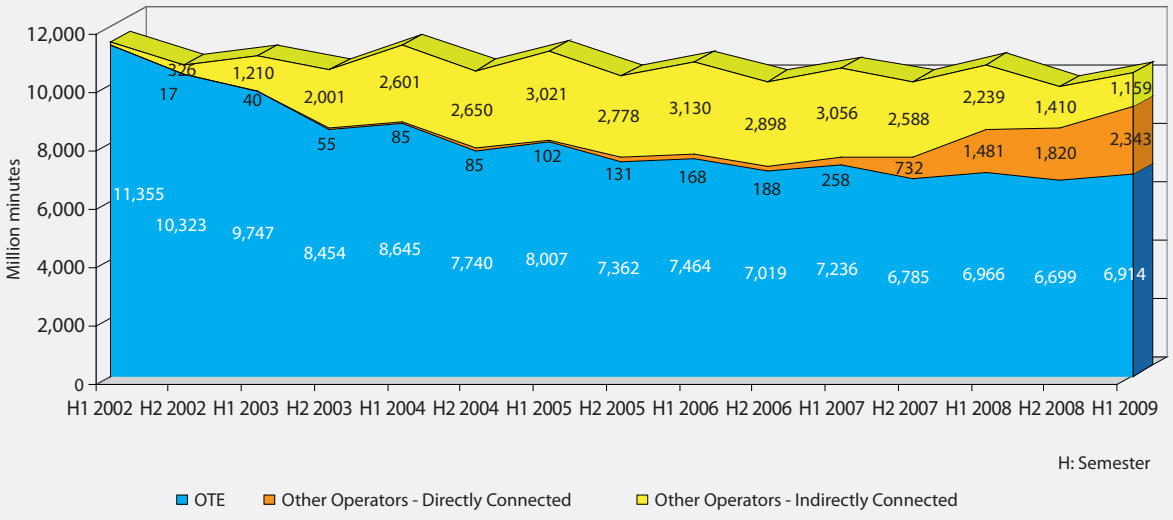
Semester	Local Calls	Long-Distance Calls	"National to Fixed" Calls (1)	Dial-up Calls	International Calls (via cards)	Calls to Mobile	Total Calls (Dial-up not included)	Total Calls (including Dial-up)
H1 2002	8,914	1,178	10,092	5,062	353	985	11,430	16,492
H2 2002	7,998	1,218	9,216	5,641	376	1,074	10,666	16,307
H1 2003	8,351	1,237	9,588	6,714	378	1,032	10,997	17,711
H2 2003	7,639	1,312	8,951	6,903	421	1,138	10,510	17,413
H1 2004	8,314	1,375	9,688	7,161	450	1,193	11,331	18,492
H2 2004	7,390	1,366	8,756	6,536	486	1,232	10,474	17,010
H1 2005	8,014	1,404	9,418	6,435	476	1,235	11,130	17,565
H2 2005	7,136	1,366	8,502	5,500	491	1,278	10,272	15,772
H1 2006	7,641	1,354	8,995	4,765	514	1,253	10,762	15,527
H2 2006	6,949	1,339	8,288	3,508	504	1,313	10,105	13,614
H1 2007	7,314	1,382	8,696	2,716	572	1,283	10,550	13,266
H2 2007	6,716	1,485	8,202	1,918	593	1,309	10,104	12,023
H1 2008	7,236	1,657	8,893	1,489	559	1,233	10,686	12,175
H2 2008	6,535 (2)	1,657 (4)	8,192	1,019	532	1,206	9,930	10,949
H1 2009	7,047 (3)	1,657 (5)	8,704	756	575	1,137	10,416	11,172

(1) "National to fixed" calls are all local and long-distance ones.
(2) This figure includes 156 million minutes that cover both local and long-distance traffic but the relevant distinction was not provided by the operators (the traffic was classified as local despite the fact that it covers both local and long-distance calls).
(3) This figure includes 319 million minutes that cover both local and long-distance traffic but the relevant distinction was not provided by the operators (the traffic was classified as local despite the fact that it covers both local and long-distance calls).
(4) Part of the long-distance traffic is absent since it has been included in the local traffic (see note 2).
(5) Part of the long-distance traffic is absent since it has been included in the local traffic (see note 3).

Source: EETT (based on the licensed operators' data)

Chart 1.19

Progress of the Outgoing Fixed Calls Volume (Dial-Up Calls not included)
Distribution Between OTE and Directly as well as Indirectly Connected Customers of Other Operators



Source: EETT (based on the licensed operators' data)

Table 1.5

Distribution of the Volume of Outgoing Fixed Calls (Dial-Up Calls not included) between OTE and Directly/Indirectly Connected Subscribers of Other Operators (in millions of minutes)

Semester	OTE	Other Operators - Directly Connected	Other Operators - Indirectly Connected	Total
H1 2002	11,355	14	61	11,430
H2 2002	10,323	17	326	10,666
H1 2003	9,747	40	1,210	10,997
H2 2003	8,454	55	2,001	10,510
H1 2004	8,645	85	2,601	11,331
H2 2004	7,740	85	2,650	10,474
H1 2005	8,007	102	3,021	11,130
H2 2005	7,362	131	2,778	10,272
H1 2006	7,464	168	3,130	10,762
H2 2006	7,019	188	2,898	10,105
H1 2007	7,236	258	3,056	10,550
H2 2007	6,785	732	2,588	10,104
H1 2008	6,966	1,481	2,239	10,686
H2 2008	6,699	1,820	1,410	9,930
H1 2009	6,914	2,343	1,159	10,416

Note: Calls via cards have been included in the calculations for international calls

Source: EETT (based on the licensed operators' data)

1.5.2. Revenues of Retail Telephony

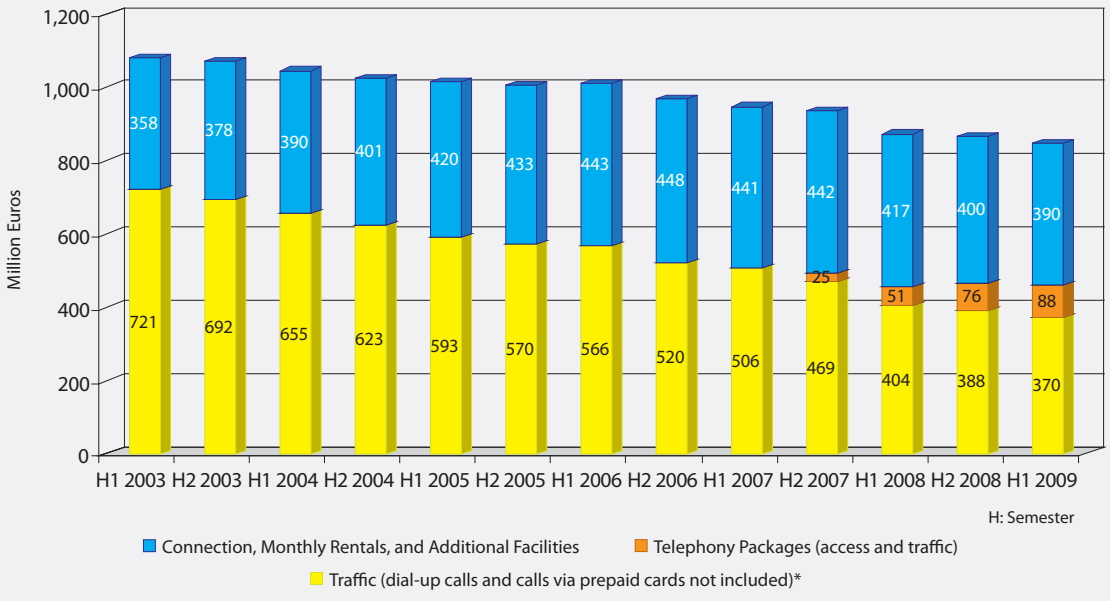
The declining course of fixed telephony revenues[6] persisted in the period under consideration. The revenues' progress over time is depicted in Chart 1.20. In this Chart, apart from monthly rentals and traffic revenues, one more category, covering revenues from bundled services packages, has been added (telephony packages) and analysed further. It should be noted that this category may include revenues that actually pertain to Internet access services and/or television or Internet video services.

1.5.3. Alternative Operators' Lines

The share of alternative operators in terms of the number of direct connections, which mainly concerns LLU full access lines, increased from 7.8% (or 412,000 connections) in mid-2008 to 17.9% (or 938,000 connections) in late 2009. At the same time, the number of Carrier Pre-selection lines continued falling, going from 673,000 in mid-2008 to 278,000 in late 2009. The shift of alternative operators' lines from Carrier Pre-selection to LLU full access lines over the year is shown in Chart 1.21. More specifically, as of the second semester of 2008, the number of LLU lines exceeds that of Carrier Pre-selection lines. This trend is reflected in the rapid decrease in Carrier Pre-Selection Lines as a percentage of OTE lines which reached its peak in July 2007 (17.9%) and then continued its downward trend until it settled at 6.5% at the end of 2009 (Chart 1.22).

Moreover, in the first semester of 2009, the Wholesale Line Rental (WLR) service became available in Greece. This service allows OTE subscribers using the Carrier Pre-selection service to be charged both for their calls and for their monthly rentals via a unified bill sent by the alternative provider through which they have activated this Pre-Selection. In mid-2009, almost 9,000 Carrier Pre-Selection subscribers had selected this particular service (an approximate 2.4% of that type of subscriber).

Chart 1.20
Retail Revenues of Fixed Telephony

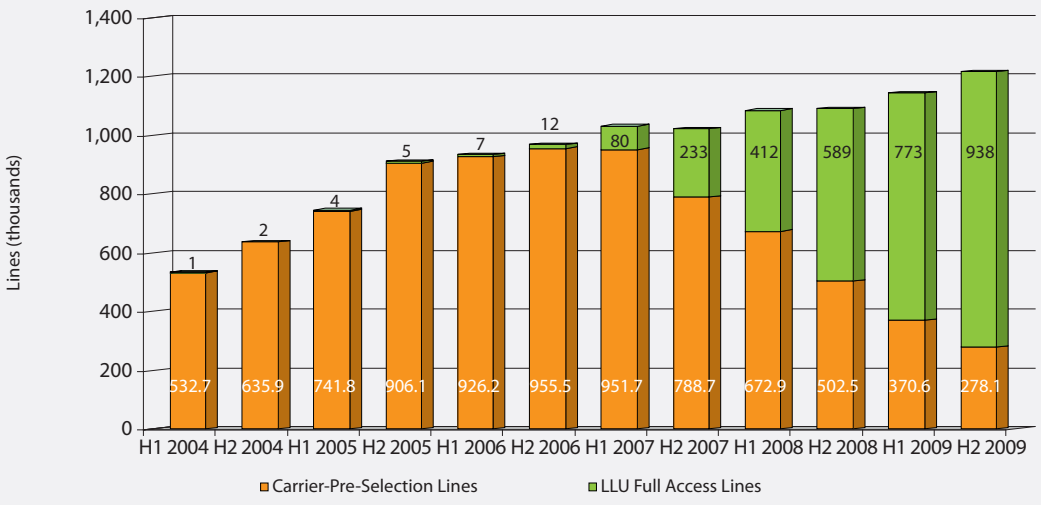


Note: No specific distinction for these revenues was provided. Further, they also include some revenues corresponding to broadband access and on-line television

Source: EETT (based on the licensed operators' data)

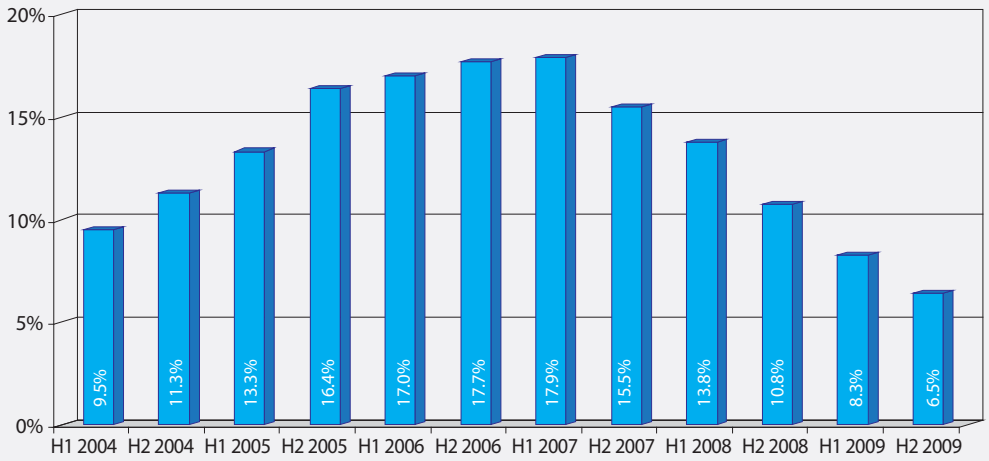
6. These include revenues from connection, monthly rentals, additional facilities, and revenues from traffic, with the exception of revenues from dial-up calls and international calls via pre-paid cards.

Chart 1.21
Alternative Operators' Lines via Carrier Pre-Selection or LLU (at semester's end)



Source: EETT (based on the licensed operators' data)

Chart 1.22
Pre-Selection Lines as a Percentage of OTE Lines (at semester's end)

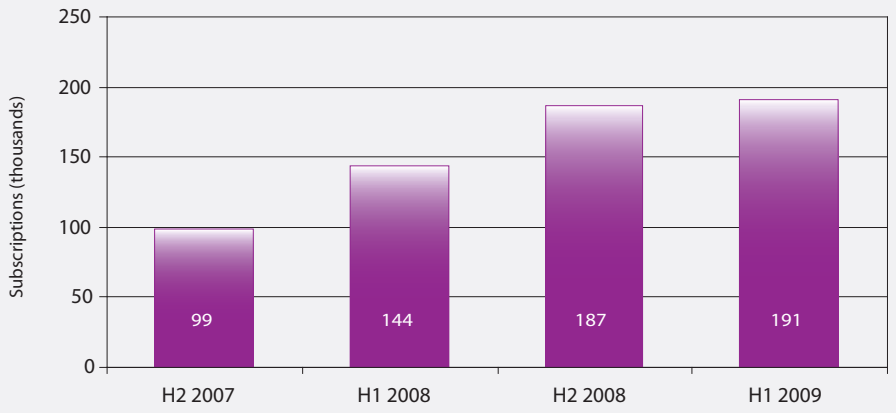


Source: EETT (based on the licensed operators' data)

1.5.4. Homezone Services

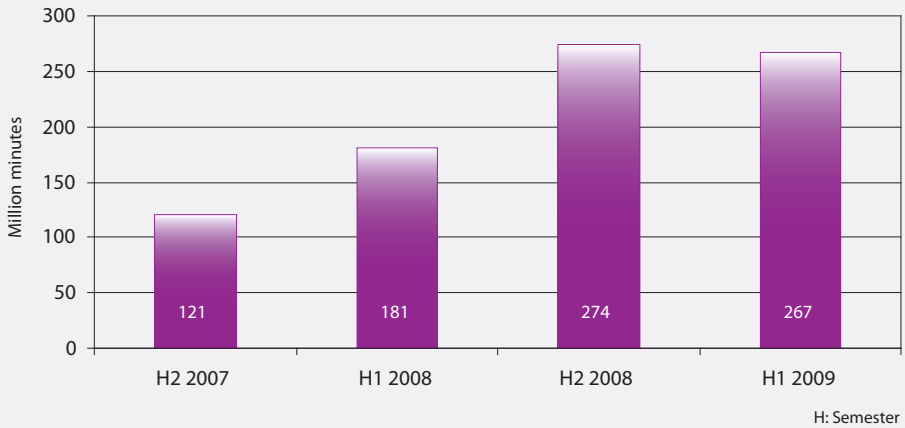
The homezone services became available in the market in mid-2007. These services pertain to fixed telephony services in terms of costs despite the fact that they are based on mobile communications networks. Until mid-2008, the number of subscribers for homezone services had risen significantly and has remained stable ever since (Chart 1.23) reaching 191,000 subscribers at the end of the first semester of 2009. The progress of homezone outgoing traffic volume was similar: it rose significantly up until mid-2008 and has been declining slightly ever since (Chart 1.24), amounting to 267 million minutes in the first semester of 2009.

Chart 1.23
Homezone Subscriptions (at semester's end)



Source: EETT (based on the licensed operators' data)

Chart 1.24
Outgoing Traffic deriving from the Provision of Telephony Services from Homezone Packages



Note: telephony services consist of on-net calls, off-net calls, calls to national fixed networks, and calls to international destinations

Source: EETT (based on the licensed operators' data)

1.6. Telephony Tariffs

1.6.1. Fixed Telephony

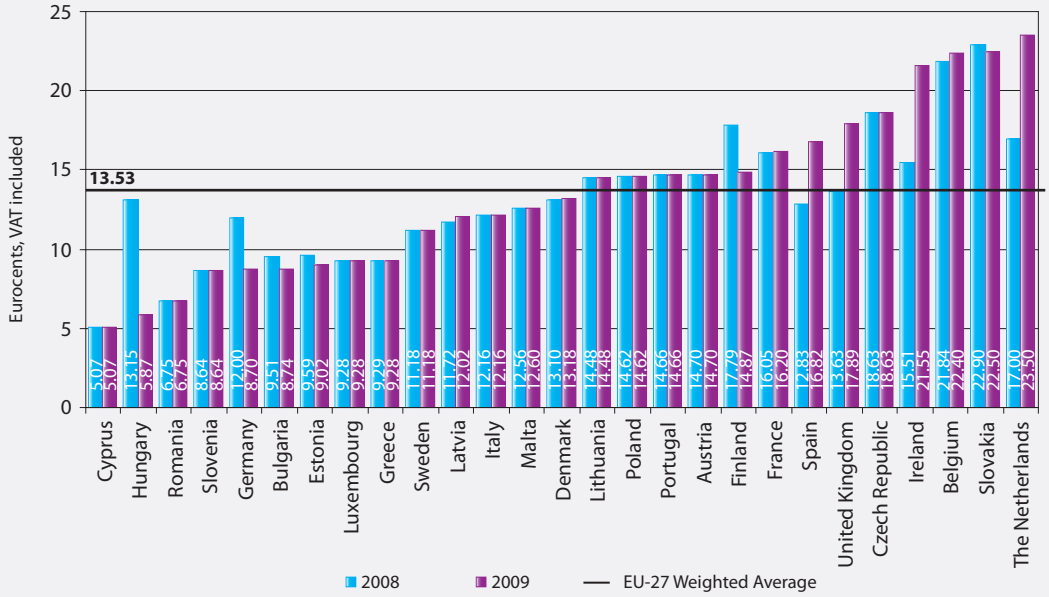
Charts 1.25 and 1.26 present the cost of a 3-minute local and national call for the incumbent operators in Electronic Communications of the 27 EU member states. It is mentioned that the cost includes any call set-up, minimum charge, and/or other allowances depending on call duration. The cost refers to calls made during peak hours in September 2009. Greece ranks below the European average both for local calls where it is the 9th cheapest EU member state and national ones where Greece ranks 12th.

Furthermore, Charts 1.27 and 1.28 present the comparative progress of the cost for a 3-minute and 10-minute local and national call made by a residential user in Greece (OTE) and in the EU (weighted average of the former state monopolies of the European member states). Local calls in Greece were substantially cheaper than the weighted average of the EU member states while, with regard to national calls, the 3-minute calls were marginally cheaper as opposed to the 10-minute calls which were more expensive than the European average.

Similarly, the monthly rental for the residential user, as shown in Chart 1.29, remains higher than the weighted average of the 27 EU member states.

Last, Charts 1.30 through 1.32 provide a comparative presentation of the average monthly expenditure for a residential user across EU member states and Charts 1.33 and 1.34 provide a comparative presentation of the average monthly expenditure for small and medium enterprises, respectively[7]. Greece ranks higher than the European average with regard to residential user baskets. On the contrary, things are different in terms of average monthly expenditure for business users since Greece is the 9th cheapest member state for small enterprises and the 3rd cheapest for medium enterprises.

Chart 1.25
Cost for a 3-Minute Local Call

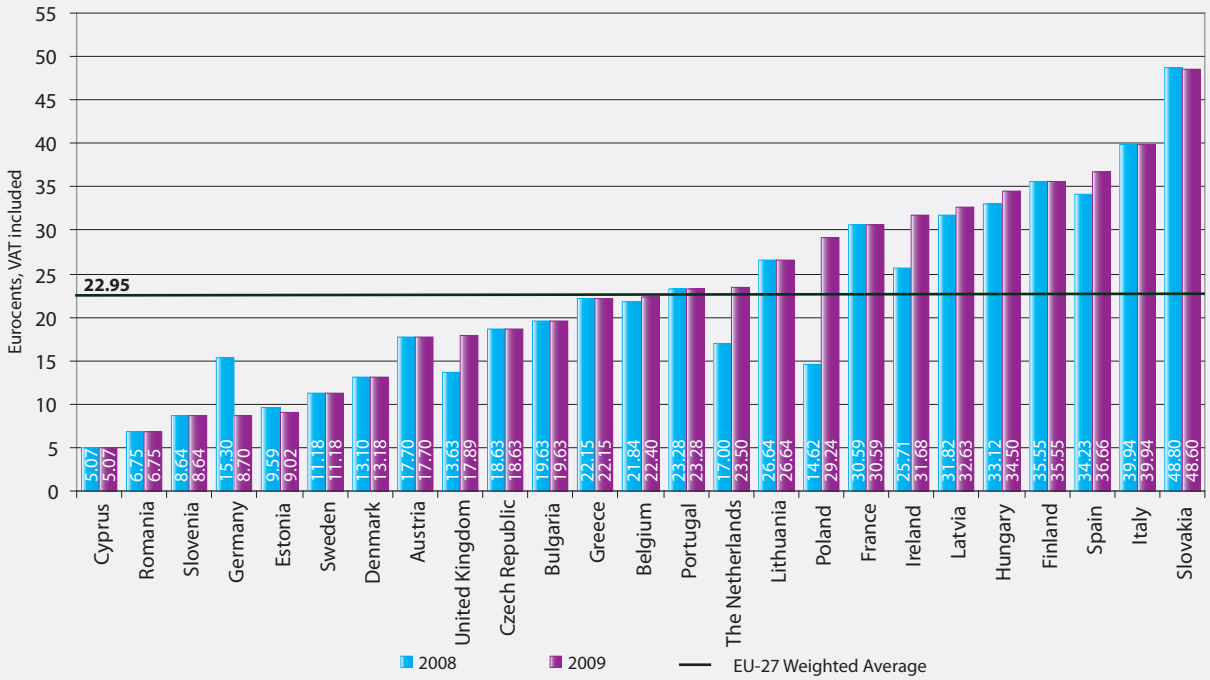


Source: 15th Report of the European Commission

7. The OECD methodology that EU also employs for usage baskets and price comparison is presented in the Appendix.

Chart 1.26

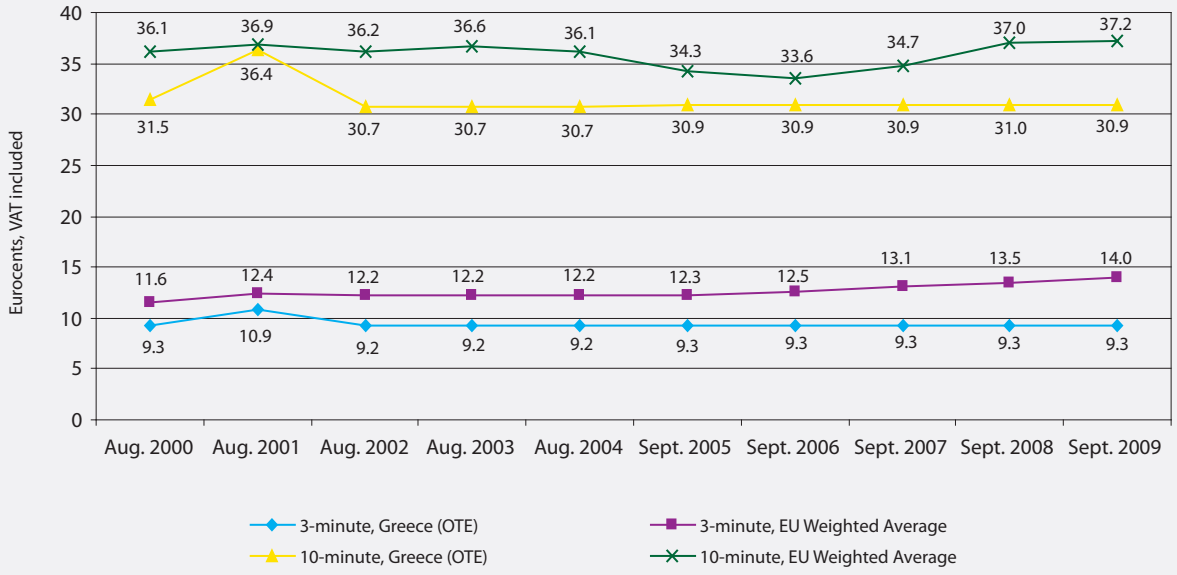
Cost for a 3-Minute Long - Distance Call



Source: EETT and 15th Report of the European Commission

Chart 1.27

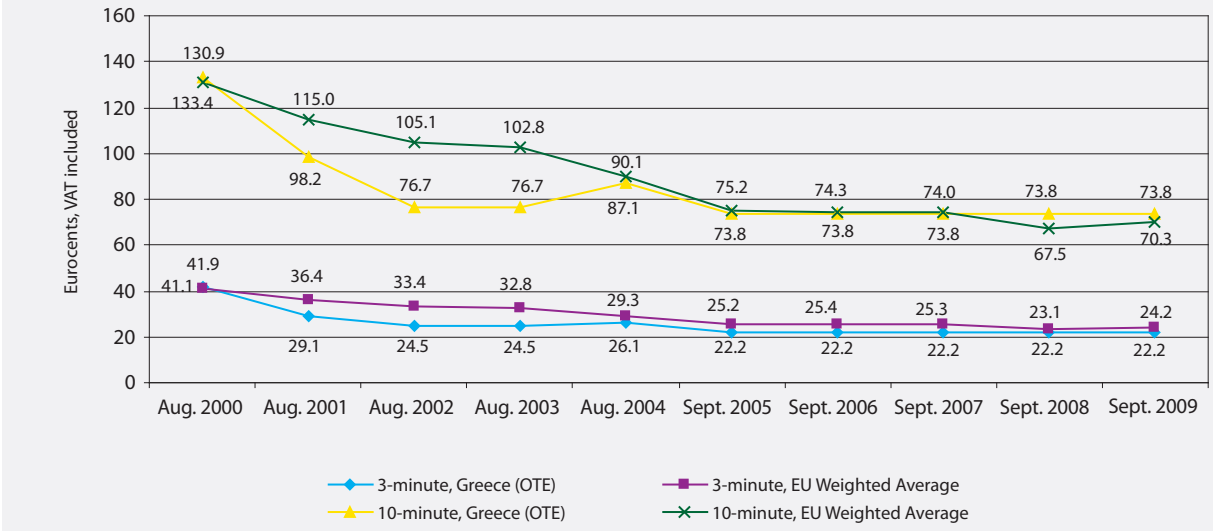
3-Minute and 10-Minute Local Call Charge for a Residential User



Source: EETT and 15th Report of the European Commission

Chart 1.28

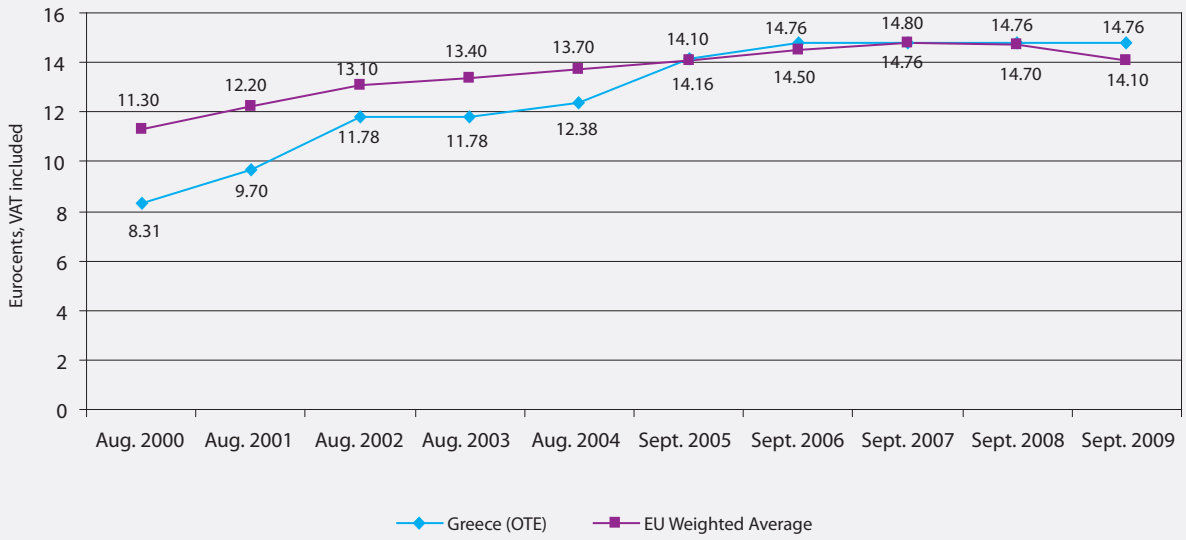
3-Minute and 10-Minute National Call Charge for a Residential User



Source: EETT and 15th Report of the European Commission

Chart 1.29

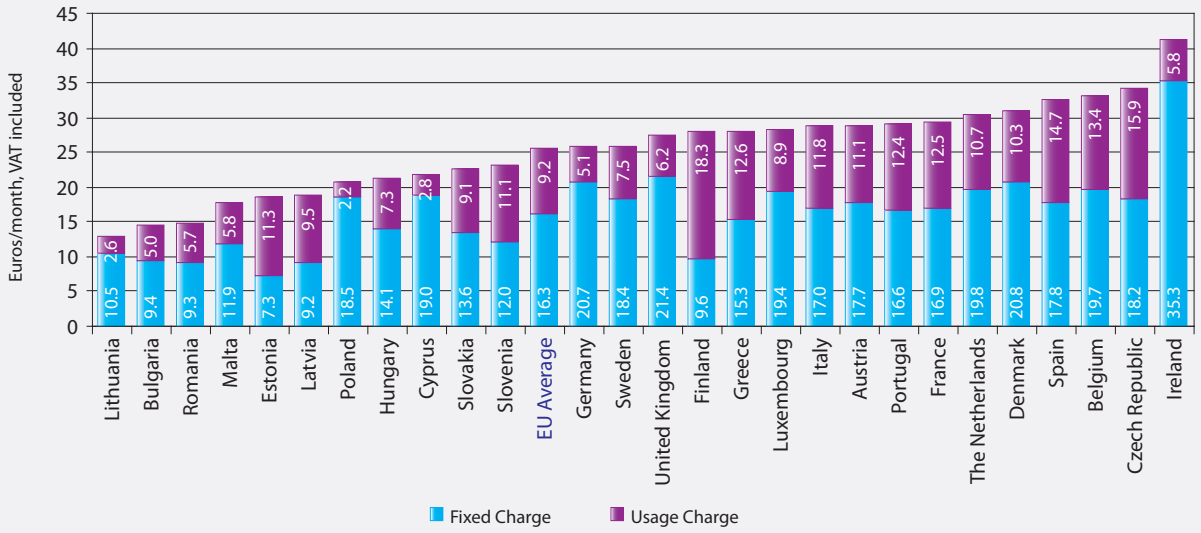
Monthly Rental Charge for a Fixed Telephony Residential User



Source: EETT and 15th Report of the European Commission

Chart 1.30

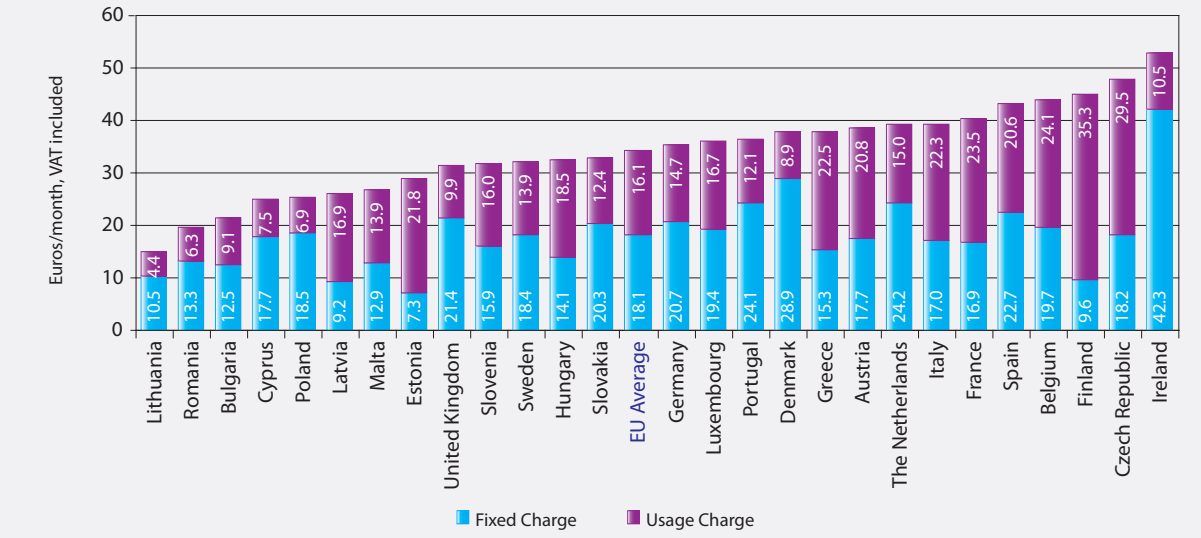
Average Monthly Expenditure for a Residential User–Low Usage Basket, September 2009



Source: 15th Report of the European Commission

Chart 1.31

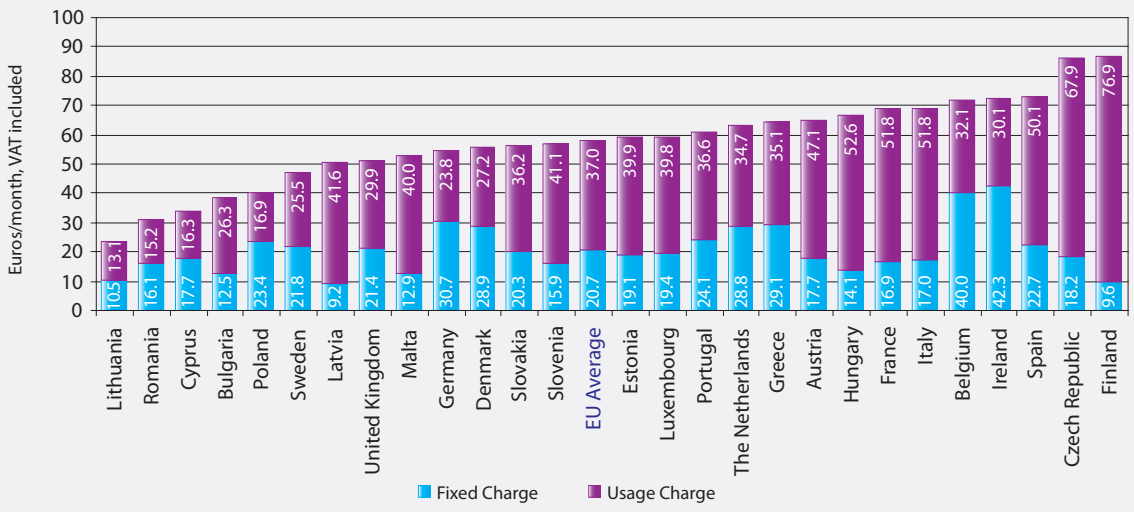
Average Monthly Expenditure for a Residential User–Medium Usage Basket, September 2009



Source: 15th Report of the European Commission

Chart 1.32

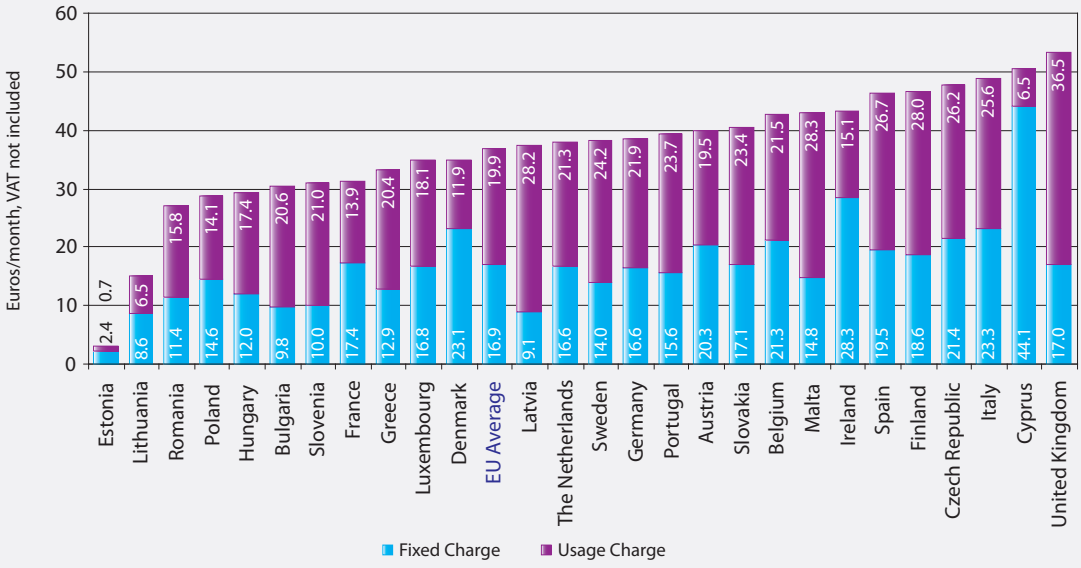
Average Monthly Expenditure for a Residential User–High Usage Basket, September 2009



Source: 15th Report of the European Commission

Chart 1.33

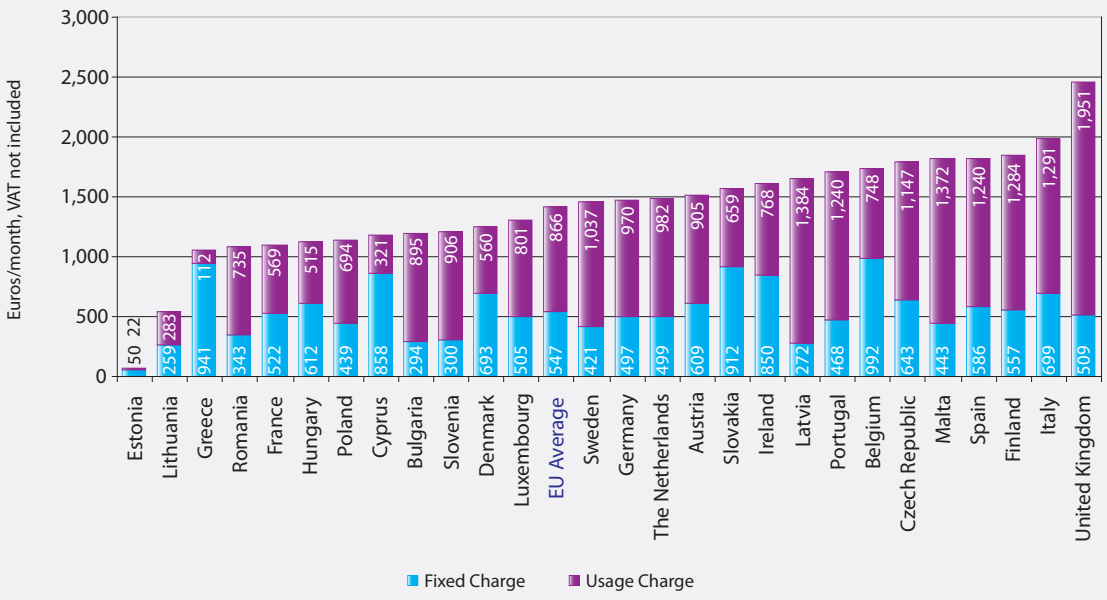
Average Monthly Expenditure for a Business User–Small Office/Home Office, September 2009



Source: 15th Report of the European Commission

Chart 1.34

Average Monthly Expenditure for a Business User–Small and Medium Enterprises, September 2009



Source: 15th Report of the European Commission

1.6.2. Mobile Telephony

Chart 1.35 shows the comparative progress of the average monthly expenditure for a medium usage basket[8]. Greece exceeds the European average which is estimated at 19.3 Euros.

1.7. Internet

1.7.1. The Internet Market

The number of Internet subscribers (Chart 1.36) kept on its upward course. It is estimated that this number had reached 2 million (dial-up and broadband access) in December 2009. As expected, the dial-up connections have been declining since 2005 (Chart 1.37). In 2009, they fell for the first time below 100,000 corresponding to approximately 3.5% of the total subscribers. The overall picture indicates that broadband growth does not rely exclusively on the subscribers' transfer from dial-up to broadband access but also on the attraction of new subscribers. The present charts do not take into account the occasional Internet users accessing it via prepaid access cards.

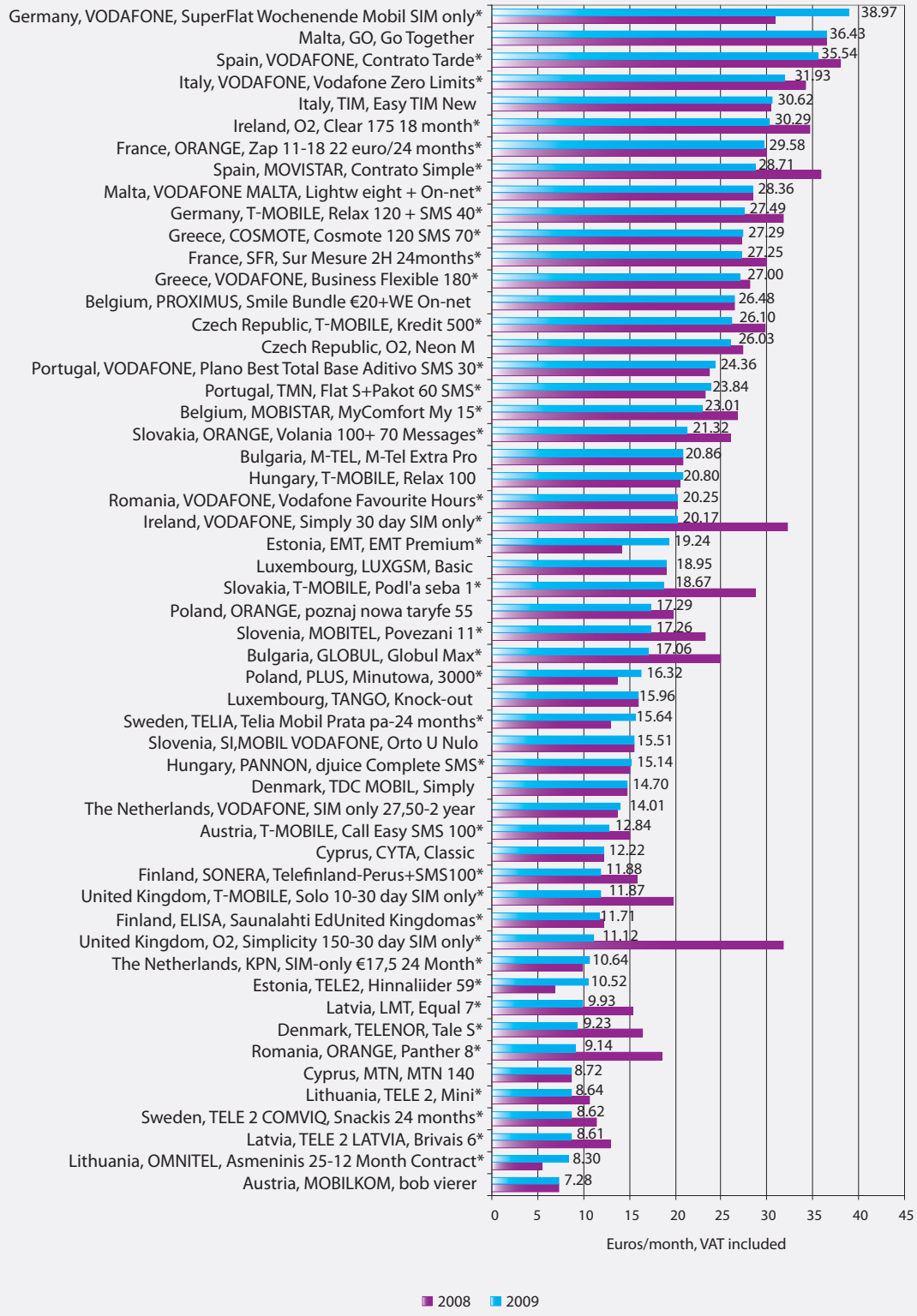
1.7.2. [.gr] Domain Names

The significant increase of both the number of applications and the total assigned [.gr] Domain Names stayed on course throughout 2009. The total number of Domain Names, including sub-domains (com.gr, net.gr, org.gr, edu.gr, gov.gr) had reached almost 300,000 at the end of the year. Chart 1.38 shows the progress of the total number of Domain Names for the period 1998-2009. Respectively, Chart 1.39 presents the progress of the requested and assigned Domain Names, Chart 1.40 shows the progress of the assignment percentage over the submitted applications. Chart 1.41 indicates the annual progress of the average assignment percentage for the period 2002-2009. The average assignment percentage during that period fell to 88% from 94% in 2008.

8. The OECD methodology also employed by the EU for usage baskets and price comparison is presented in the Appendix.

Chart 1.35

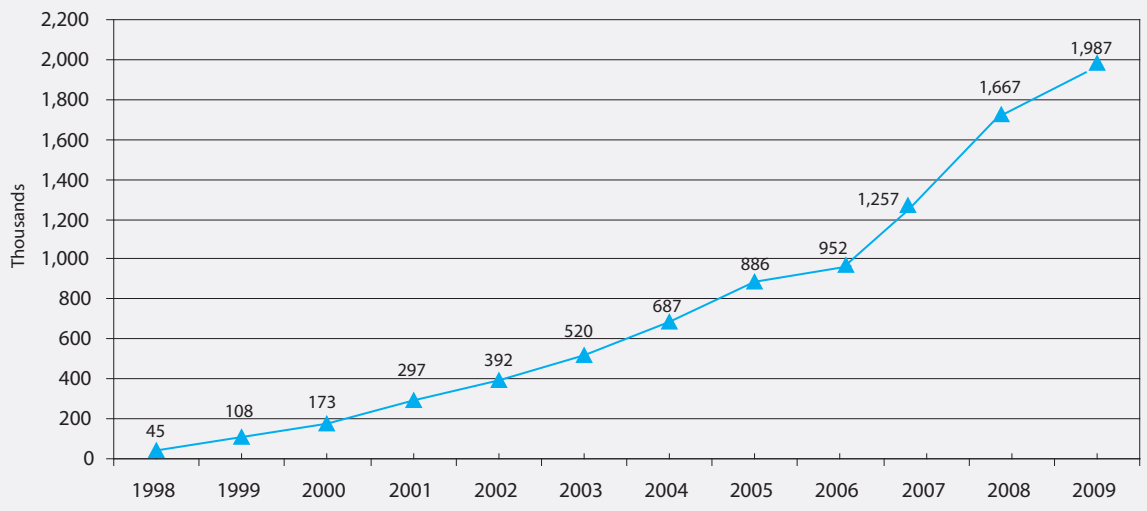
Average Monthly Expenditure incurred by a Mobile Telephony User–Medium Usage Basket, 2009



The asterisk (*) after the package title indicates that either the package title or the structure has been altered within the period.

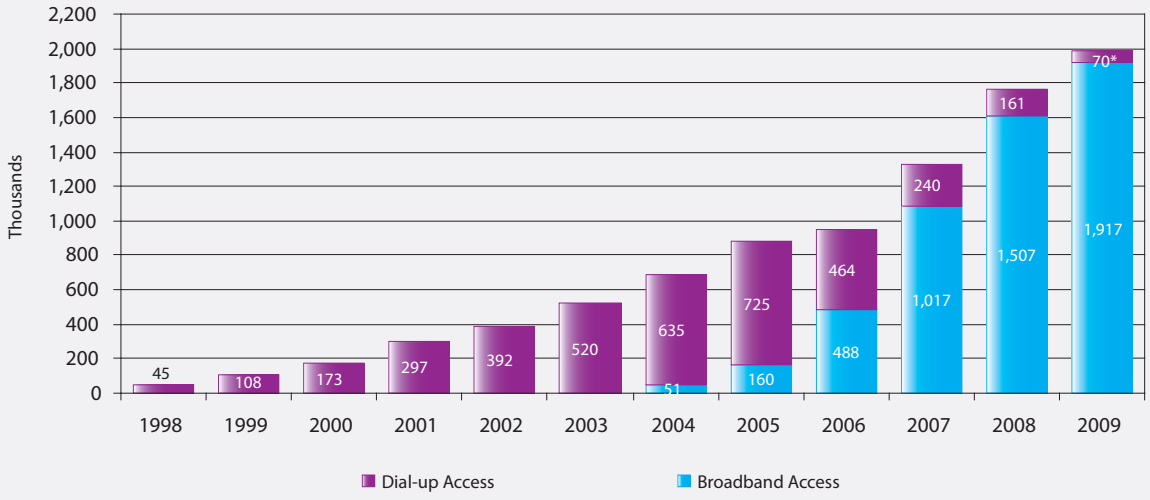
Source: 15th Report of the European Commission

Chart 1.36
Internet Subscribers, 1998-2009



Source: EETT (based on the licensed operators' data)

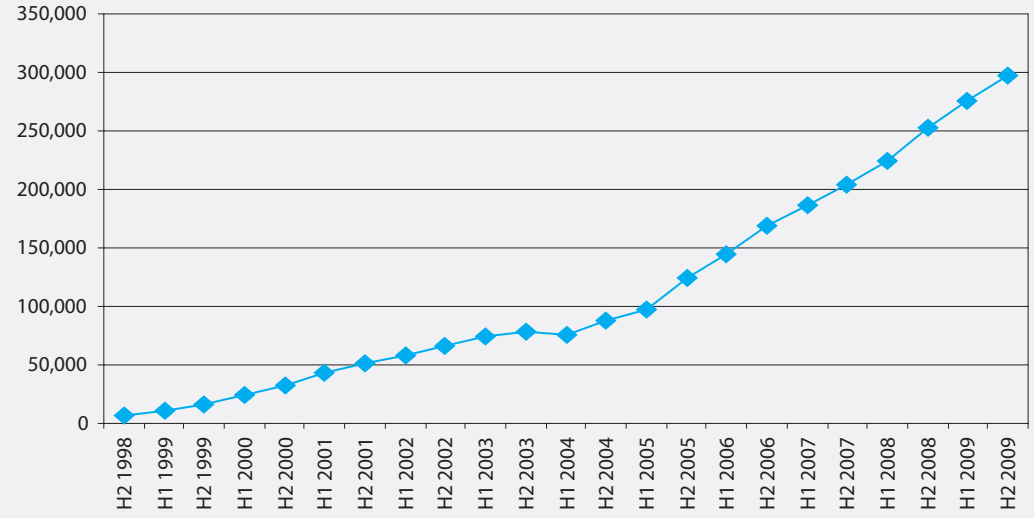
Chart 1.37
Internet Subscribers, 1998-2009



**Estimation*

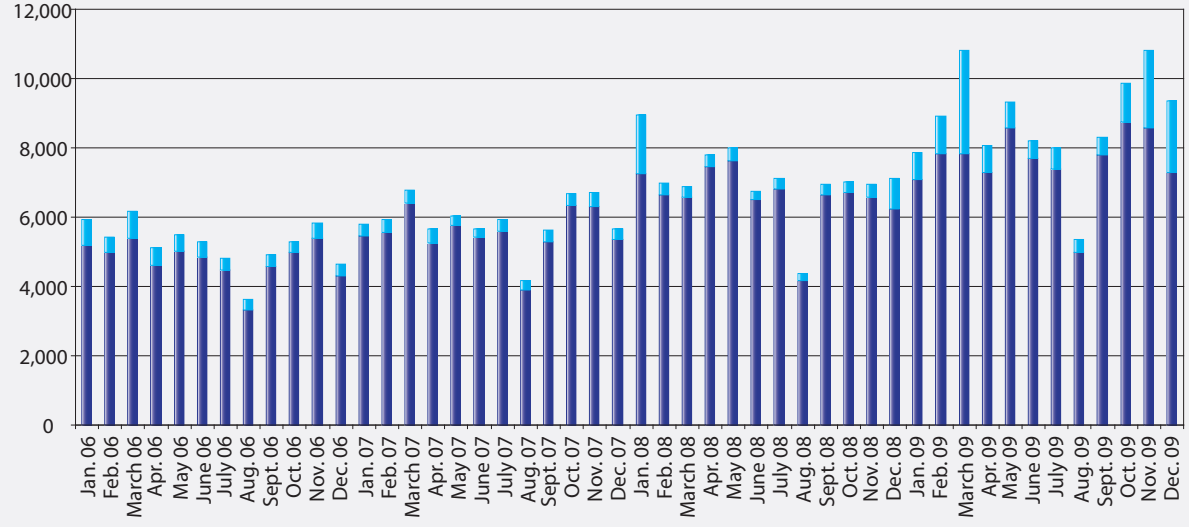
Source: EETT (based on the licensed operators' data)

Chart 1.38
Evolution of Domain Names, 1998-2009



Source: EETT

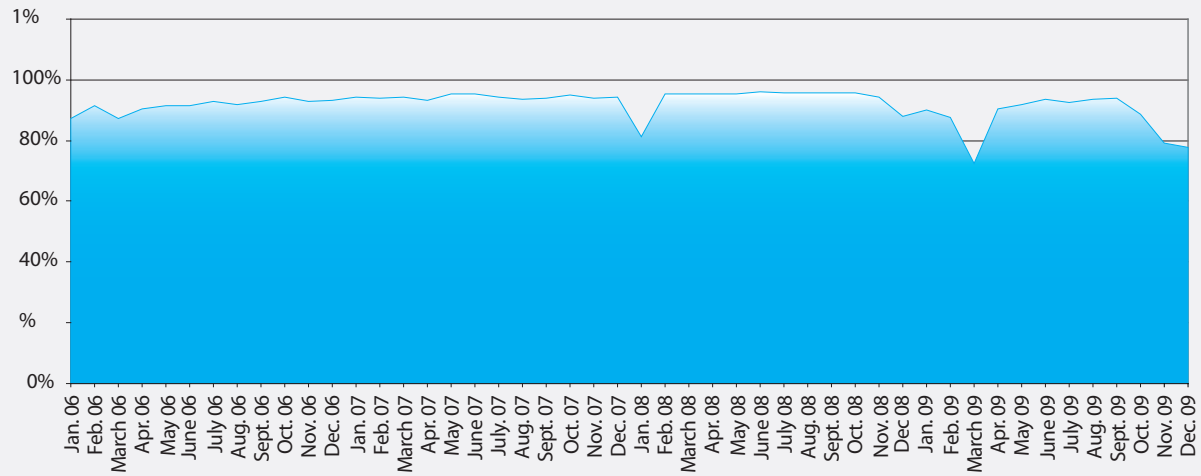
Chart 1.39
Number of Requested and Assigned Domain Names



Note: Lighter colors represent the volume of applications, while darker ones represent the volume of assigned Names

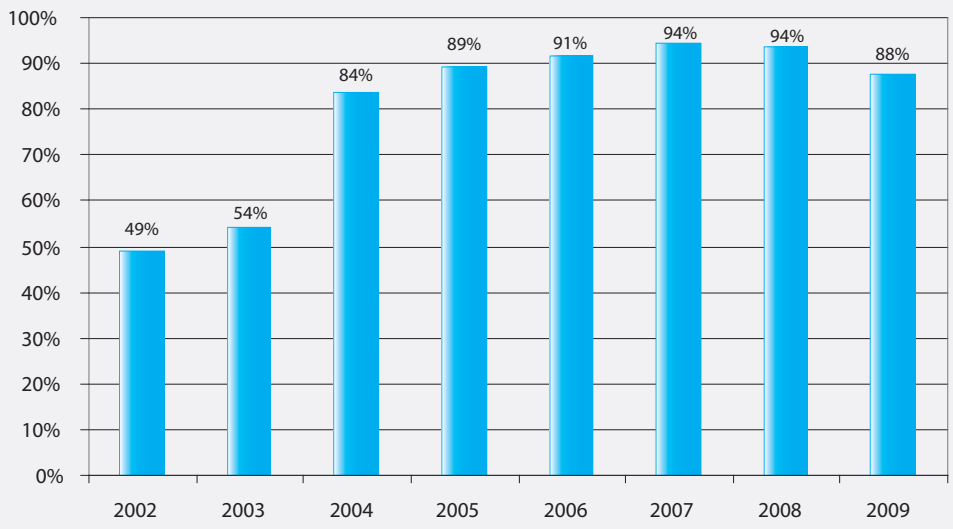
Source: Institute of Computer Science of the Foundation for Research and Technology – Hellas (ICS-FORTH)

Chart 1.40
Assignment Percentage Over the Number of Applications



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

Chart 1.41
Average Assignment Percentage



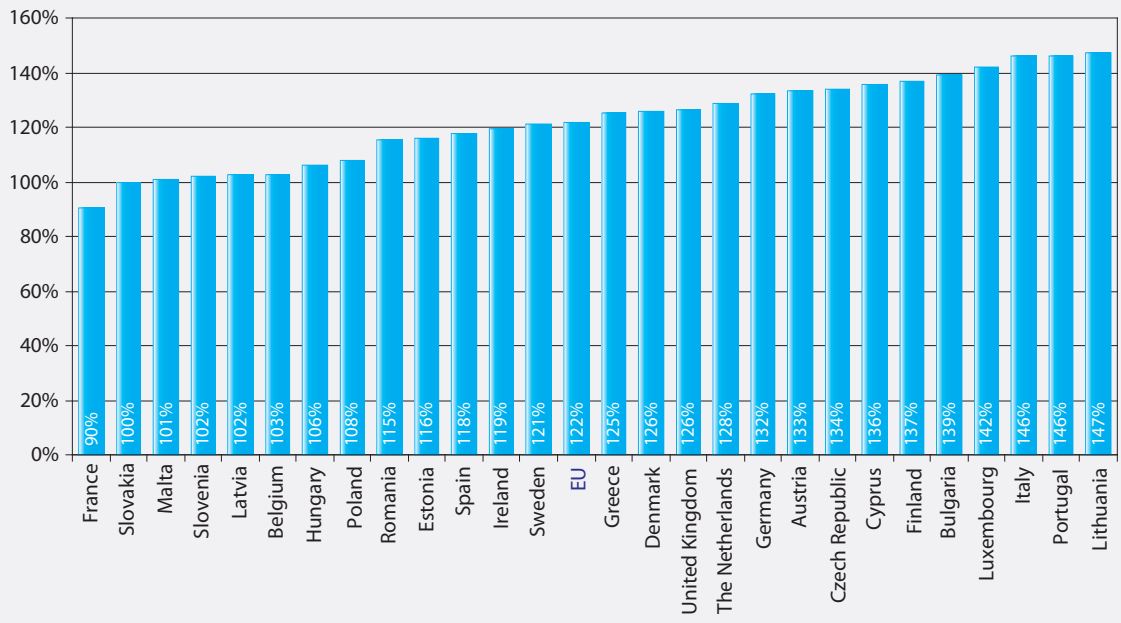
Source: EETT

1.8. Mobile Telephony

In September 2009, mobile telephony penetration amounted to 125% (Chart 1.42), a figure slightly higher than the European average standing at 122%. As depicted in Chart 1.43, the total number of mobile telephony subscribers at the end of 2009 was 20.3 million compared to 19 million at the end of 2008 (growth by 7%). In contrast, active mobile subscribers fell by 3.6% and are estimated to have been 13.3 million at the end of 2009 (118% penetration) compared to 13.8 million at the end of 2008. It should be additionally noted that this fall occurred fully within the fourth quarter of 2009, given that the estimated number of active mobile subscribers on 30-09-2009 stood at 14.1 million, marking a 5.7% drop during the fourth quarter.

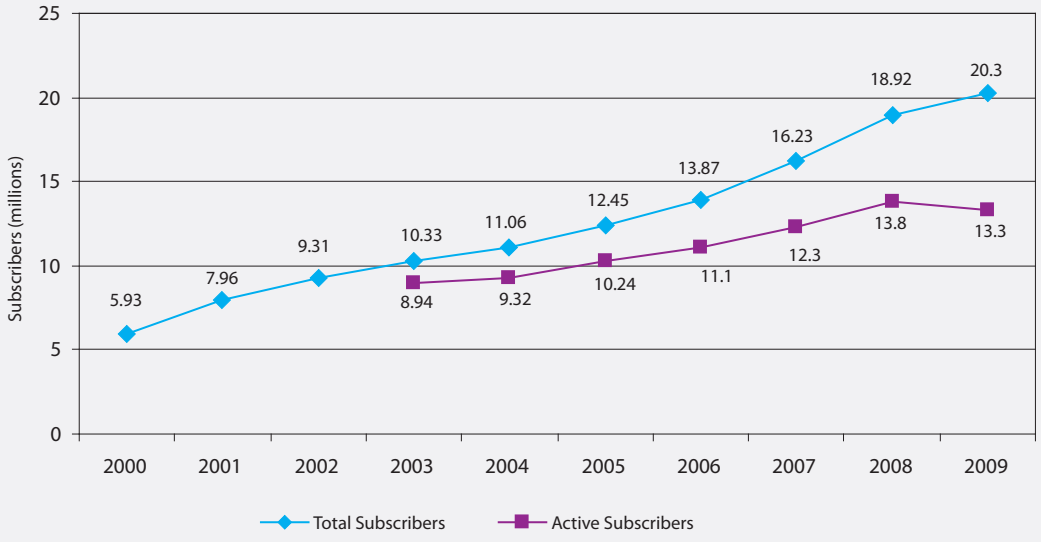
Mobile telephony subscribers who showed a preference for prepaid cards in 2009 rose to 15.7 million (Chart 1.44), marking a 13.8% increase as compared to 2008. However, if we consider the active subscribers of the same category, then we observe that their number has remained stable compared to the previous year (8.7 million). At the same time, the mobile telephony subscribers who opted for contracts fell by almost 11% at the end of 2009 compared to 2008, going from 5.1 to 4.6 million. Last, Chart 1.45 shows the MTO market shares based on the number of subscribers.

Chart 1.42
Mobile Telephony Penetration in Europe



Source: 15th Report of the European Commission

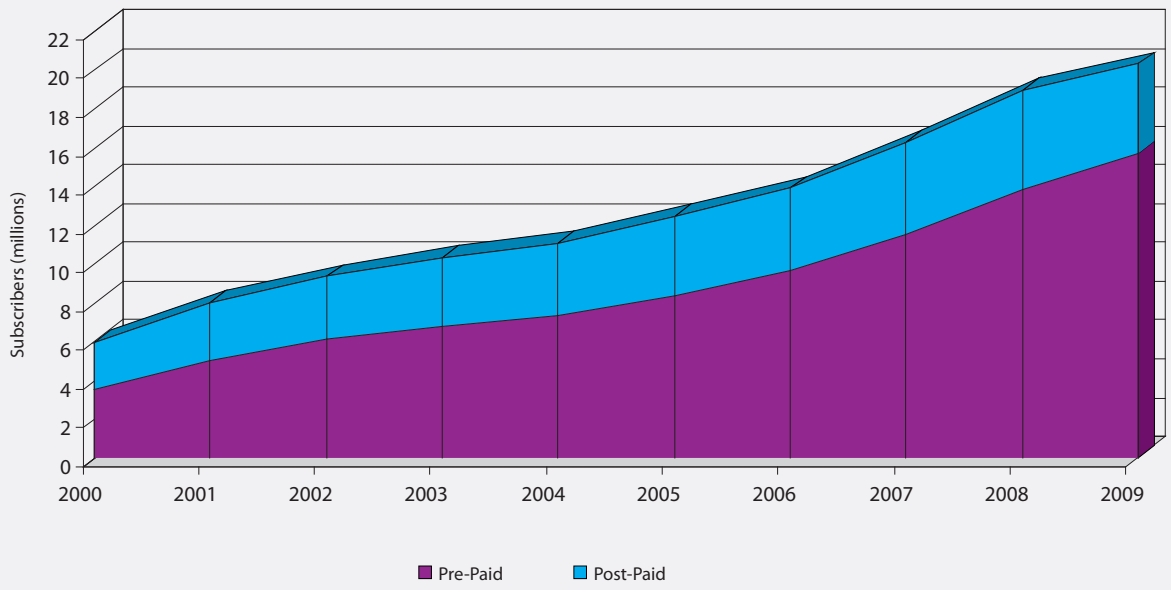
Chart 1.43
Mobile Telephony Subscribers



Note: Data on active mobile subscribers are being collected since 2003

Source: EETT (based on the licensed operators' data)

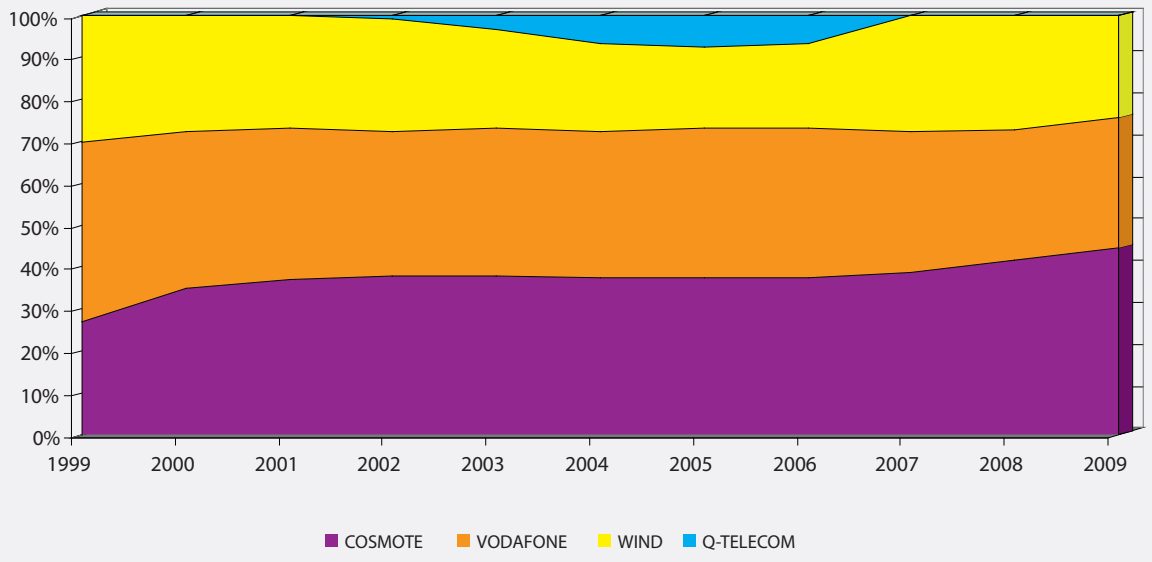
Chart 1.44
Evolution of the Post-paid and Pre-paid Mobile Subscribers



Source: EETT (based on the licensed operators' data)

Chart 1.45

Mobile Telephony Market Shares on Subscribers



Source: EETT (based on the licensed operators' data)

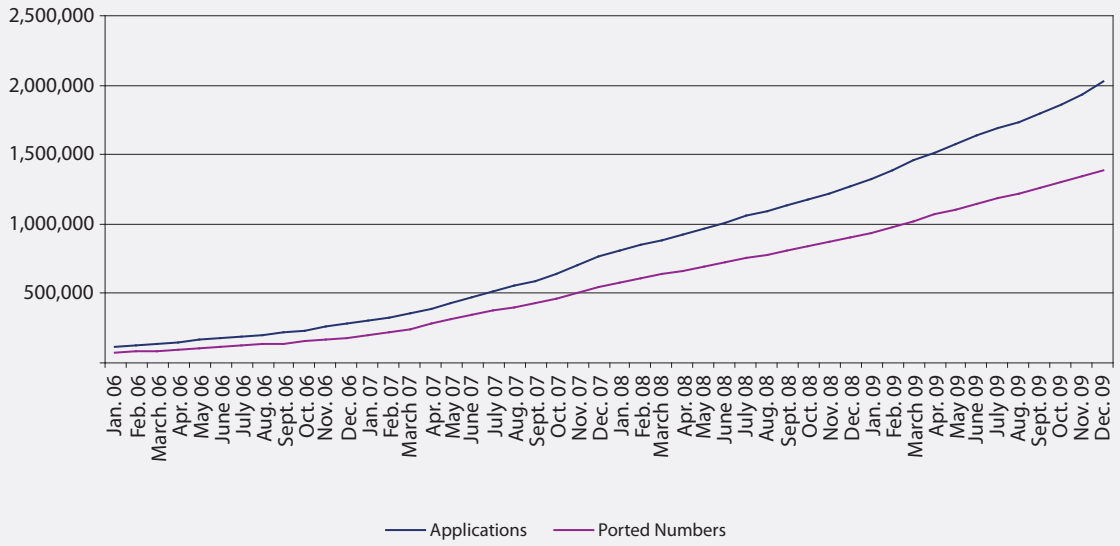
1.9. Number Portability

The applications for Number Portability continued to grow during 2009. The progress of applications and of ported numbers for mobile and fixed telephony is presented in Charts 1.46 and 1.47. Chart 1.48 shows the progress of ported numbers per month.

During 2009, 750,375 applications were submitted for mobile telephony (a 47% rise compared to 510,432 applications in 2008) and 486,815 numbers were ported, marking an increase by 34%. For fixed telephony, 690,700 applications were submitted and 544,034 numbers were ported.

Chart 1.46

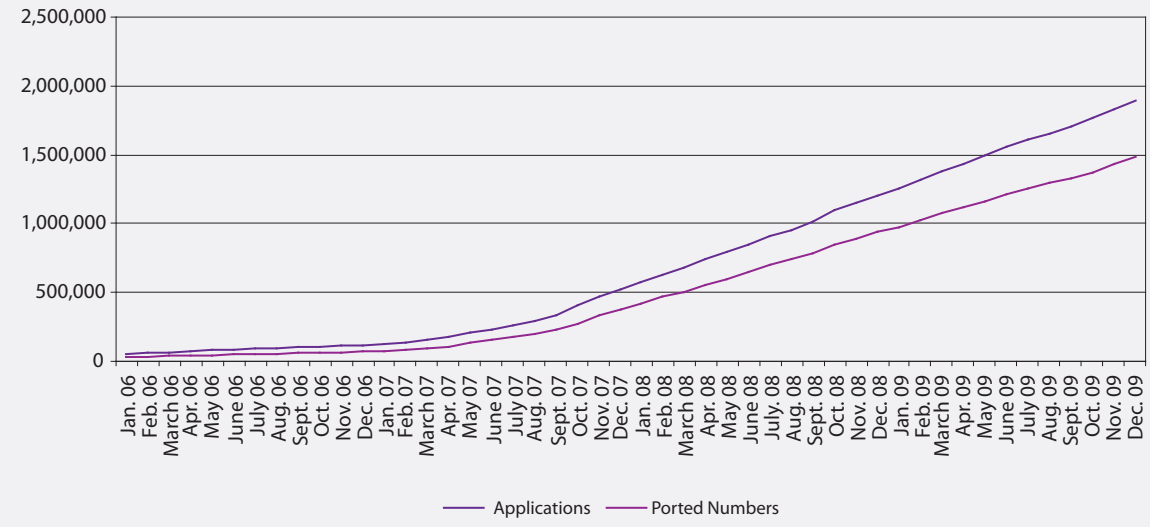
Number Portability: Applications and Ported Numbers of Mobile Telephony



Source: EETT

Chart 1.47

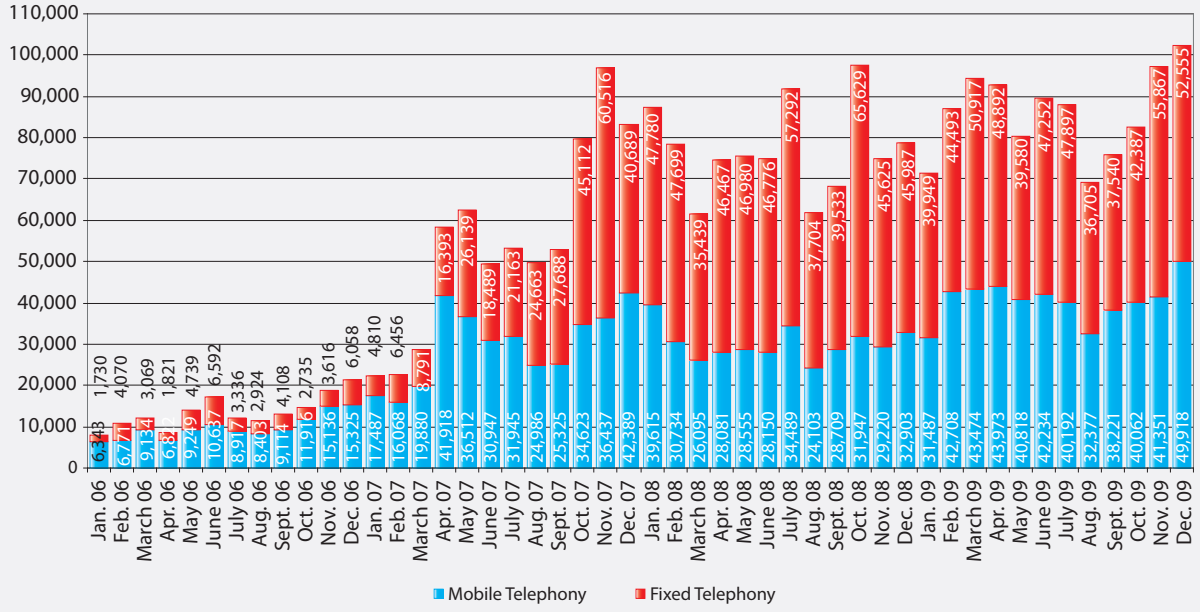
Number Portability: Applications and Ported Numbers of Fixed Telephony



Source: EETT

Chart 1.48

Number Portability: Ported Numbers per Month



Source: EETT

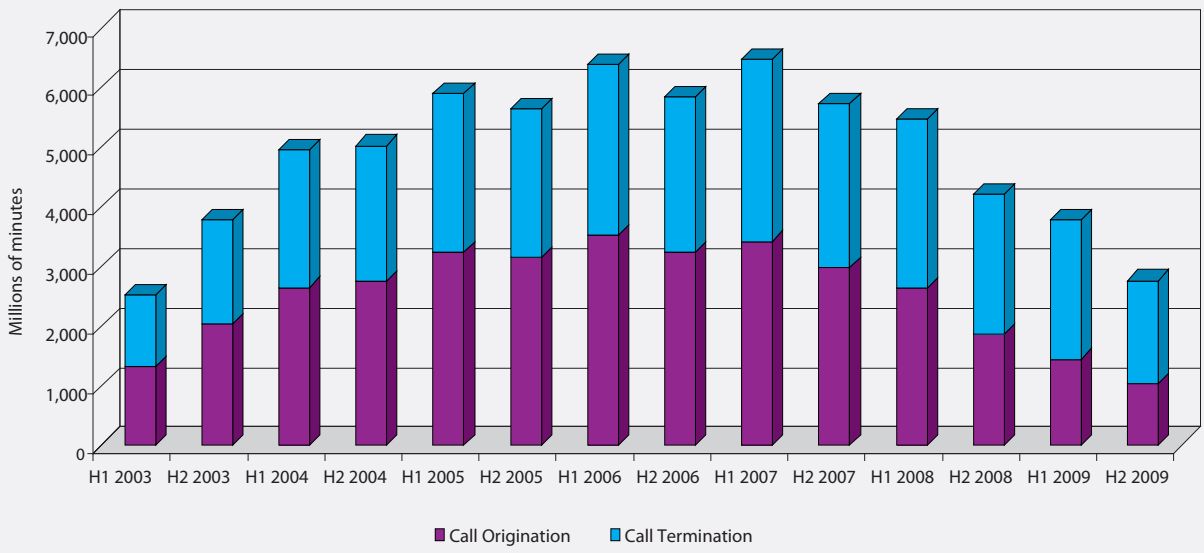
1.10. Interconnection

1.10.1. Fixed Telephony

Chart 1.49 presents the historical progress of Interconnection traffic for the alternative fixed telephony operators, including call origination and termination from/to OTE's network. During 2009, call origination dropped to 2.5 billion minutes compared to 4.5 billion minutes in 2008, thus marking a reduction by 44%. Similarly, call termination decreased by 22% compared to 2008 (4.1 billion minutes as opposed to 5.2 billion minutes, respectively). To a great extent, the reduction in the call origination volume is related to the growth of full LLU lines since, as in this case, the subscriber is directly connected to the alternative operator's network without interference from OTE's network and the call origination procedure is consequently rendered unnecessary.

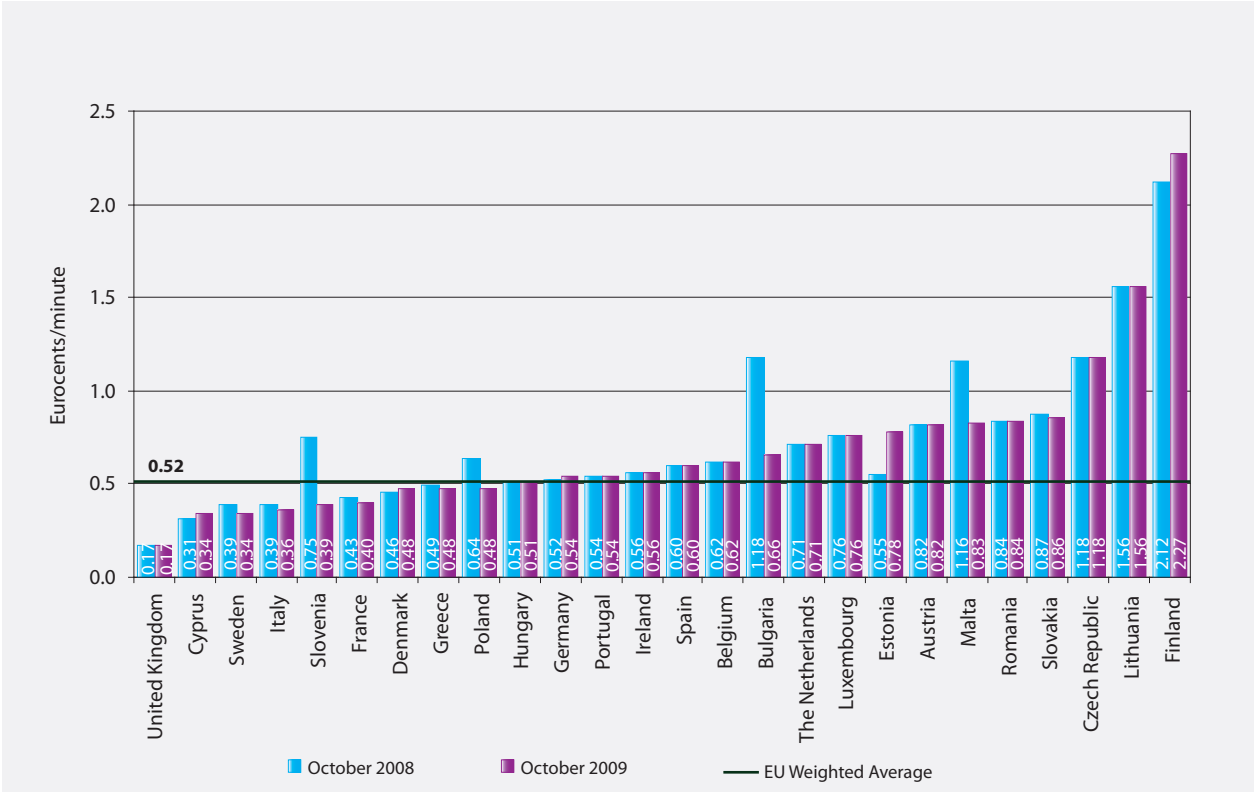
According to the 15th Report of the European Commission Implementation, in October 2009, the Local and Double Interconnection fees in Greece were lower than the European average, whereas the Single Interconnection fee was marginally higher. Charts 1.50 to 1.52 show the Interconnection fees to the incumbent Electronic Communications operator's network for each EU member state depending on Interconnection type (local, single, or double). Greece is one of the cheapest EU member states, since it ranks 9th for local, 11th for single, and 12th for double Interconnection.

Chart 1.49
Interconnection Traffic of Alternative Operators via OTE



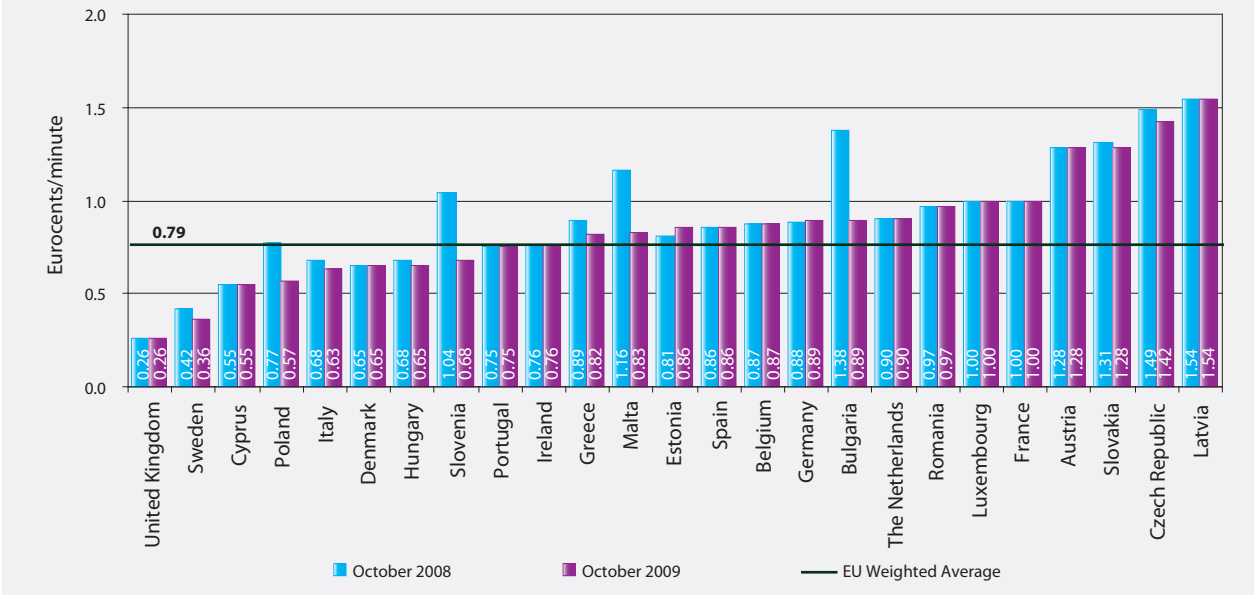
Source: EETT (based on the licensed operators' data)

Chart 1.50
Local Interconnection Fees, 2009



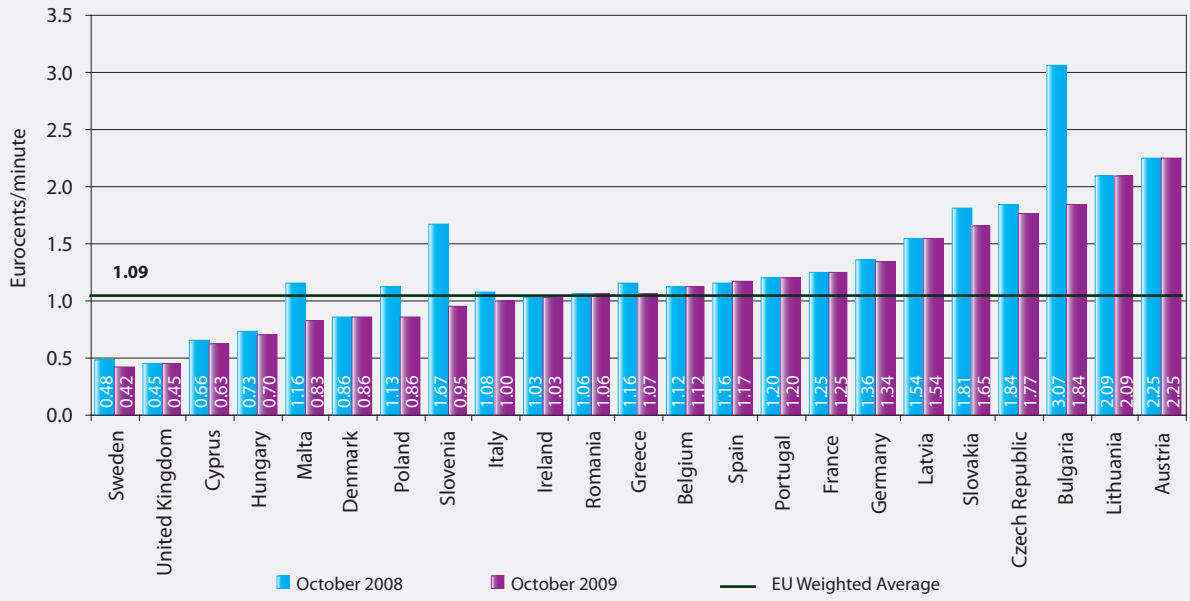
Source: 15th Report of the European Commission

Chart 1.51
Single Interconnection Fees, 2009



Source: 15th Report of the European Commission

Chart 1.52
Double Interconnection Fees, 2009



Source: 15th Report of the European Commission

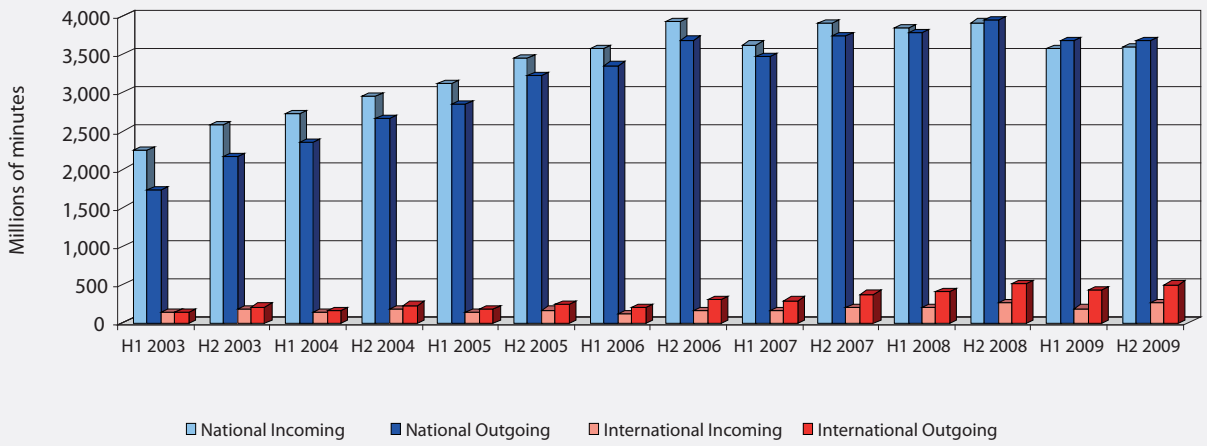
1.10.2. Mobile Telephony

The Interconnection traffic of the MTOs (on-net traffic not included) fell slightly in 2009, as shown in Chart 1.53 which presents the national and international Interconnection traffic (both incoming and outgoing) for mobile telephony. In total, the fall amounted to 6% compared to the 2008 figures and is equivalent to a 1-billion-minute reduction on an annual basis. This fall is fully counter-balanced by the rise in the on-net traffic which reached 15.7 billion minutes in 2009 compared to 12.2 billion minutes in 2008 (increase by 28%) and consequently amounts to 50% of total Interconnection traffic (Chart 1.54).

At the same time, the gradual reduction in the termination fees of mobile networks continued, as shown in Chart 1.55.

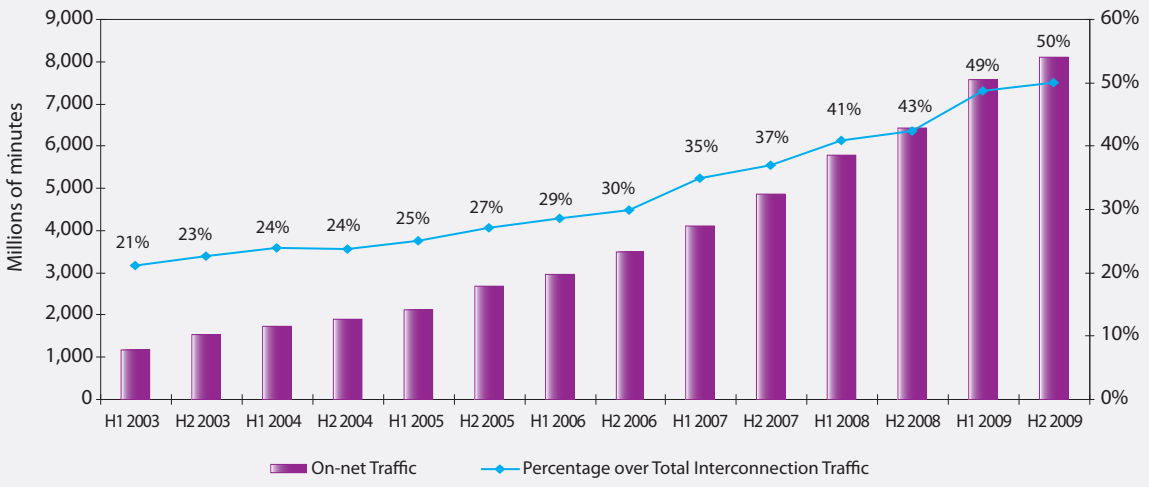
Finally, Chart 1.56 presents the Average National Termination Fee on mobile telephony networks for the 27 EU member states (data as of October 2009). Greece is the 16th most expensive country with an average termination fee of 7.86 eurocents/minute compared to 6.70 of the European average. Its distance from the European average (Chart 1.57) remains stable since in 2009, Greece was still more expensive than the European average by 17%. The application of the glide path in the reduction of termination fees at the beginning of 2010 is expected to lower them to the level of the European average.

Chart 1.53
Interconnection Traffic of Mobile Telephony Operators



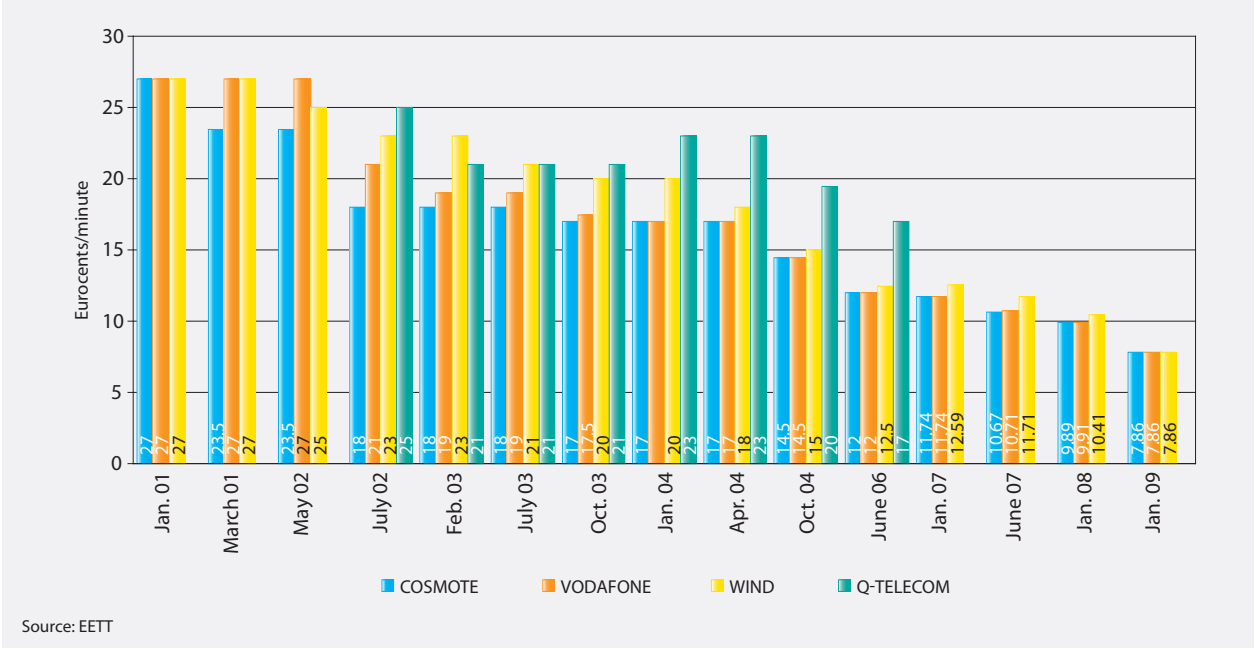
Source: EETT (based on data by MTOs)

Chart 1.54
On-netTraffic of Mobile Telephony Operators



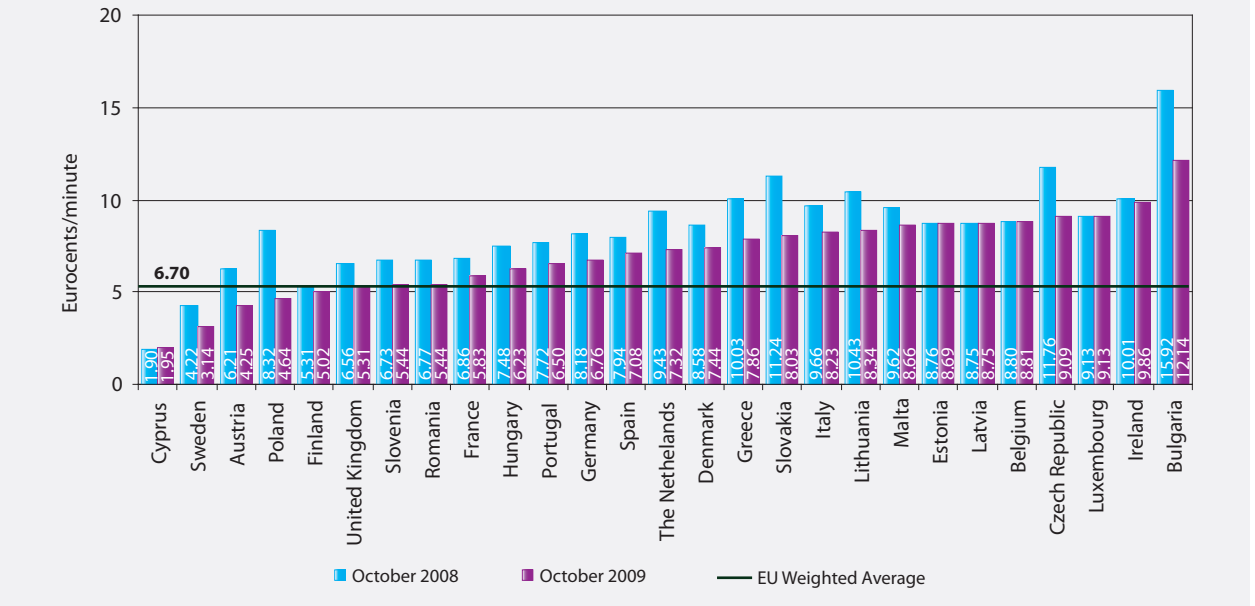
Source: EETT (based on data by MTOs)

Chart 1.55
Evolution of Mobile Termination Fees



Source: EETT

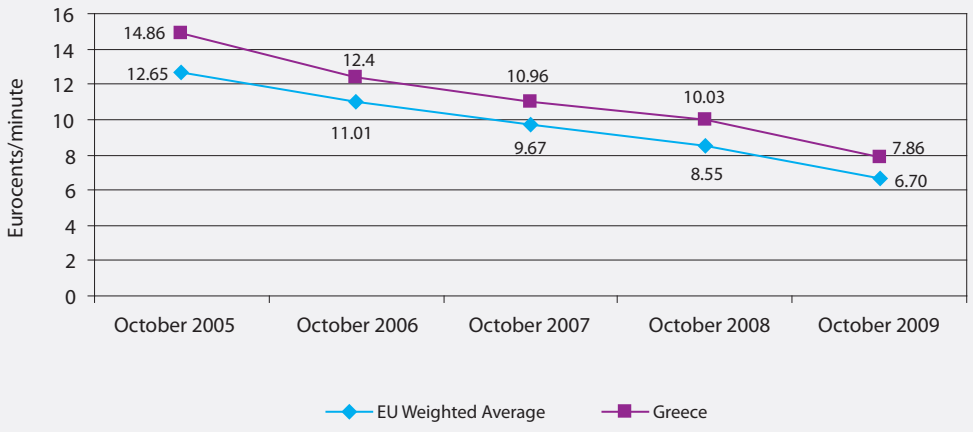
Chart 1.56
Average National Fee for Call Termination on Mobile Networks (per country)



Source: 15th Report of the European Commission

Chart 1.57

Average National Fee for Call Termination on Mobile Networks (over time)



Source: 15th Report of the European Commission

1.11. Broadband

1.11.1. Evolution of Broadband Lines

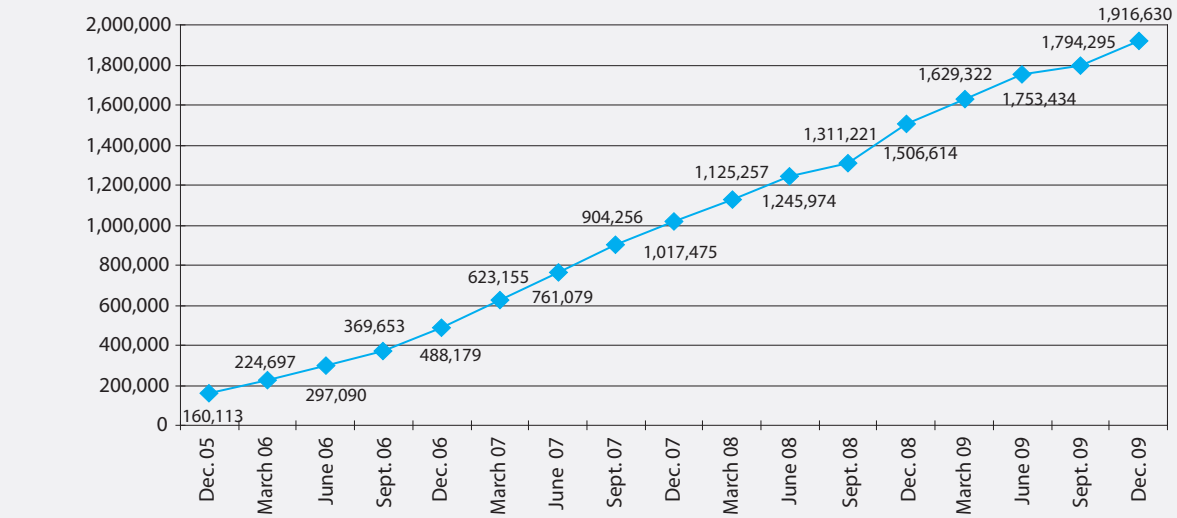
The broadband market kept growing in 2009. On 31-12-2009 broadband connections reached 1,916,630 compared to 1,506,614 on 31-12-2008, registering an annual increase of 27% (Charts 1.58 and 1.59).

Respectively, broadband penetration amounted to 17% on 31-12-2009 compared to 13.4% on 31-12-2008 (Chart 1.60). The growth of the broadband penetration rate in Greece during 2009 (3.6%) was the third highest in the EU and substantially higher than the European average (2%). This is an indication of the ongoing convergence of Greece with the rest of Europe that started in 2007 (Charts 1.61 and 1.62).

However, this convergence is not reflected in any improvement of the country's ranking in terms of broadband penetration. Greece remains in the 24th place in the relevant ranking with 17%, compared to Portugal which is in the 23rd place with 18.6% and compared to a European average of 24.8%.

Last, it should be noted that the slow decline in the growth rate of broadband penetration (4.7% in 2007, 4.3% in 2008 and 3.6% in 2009) may be an indication of the gradual saturation of the market.

Chart 1.58
Evolution of Broadband Lines



Source: EETT (based on the licensed operators' data)

Chart 1.59
EU Broadband Lines by Member State on 01-01-2010

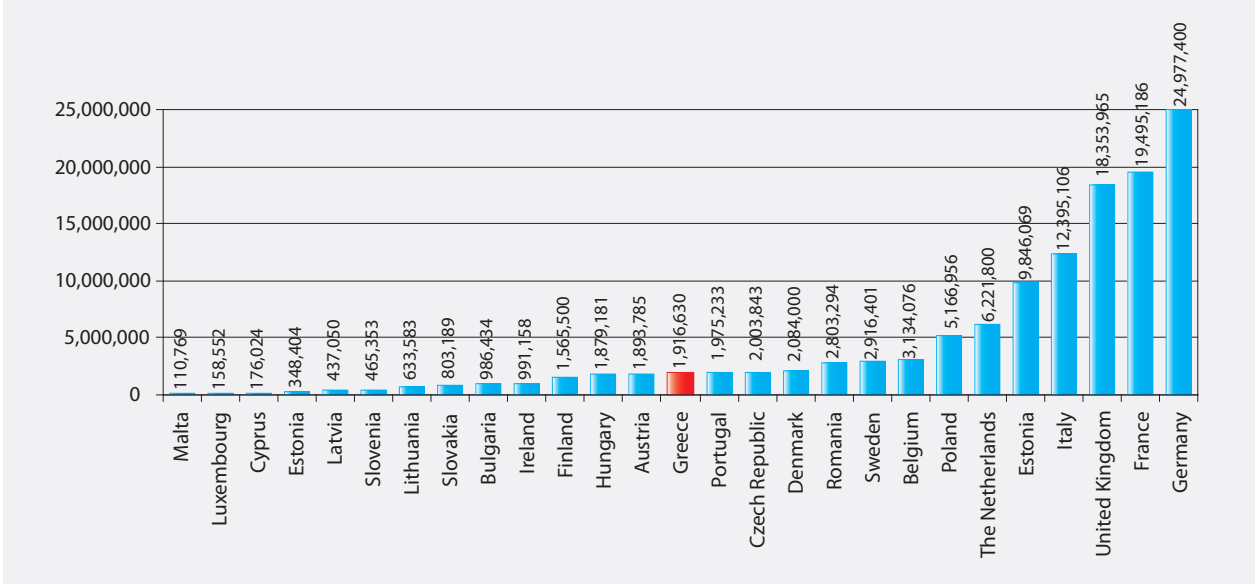
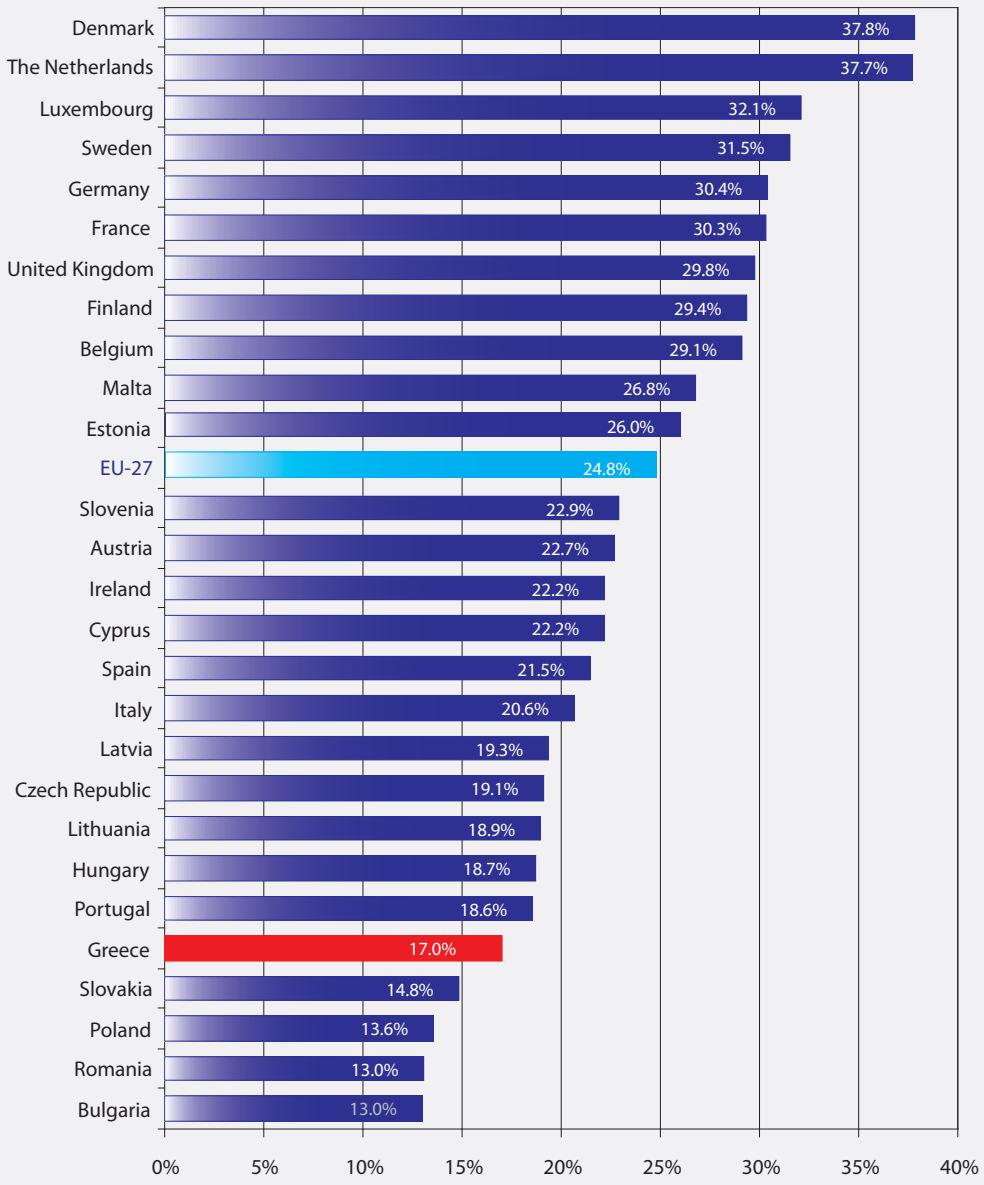
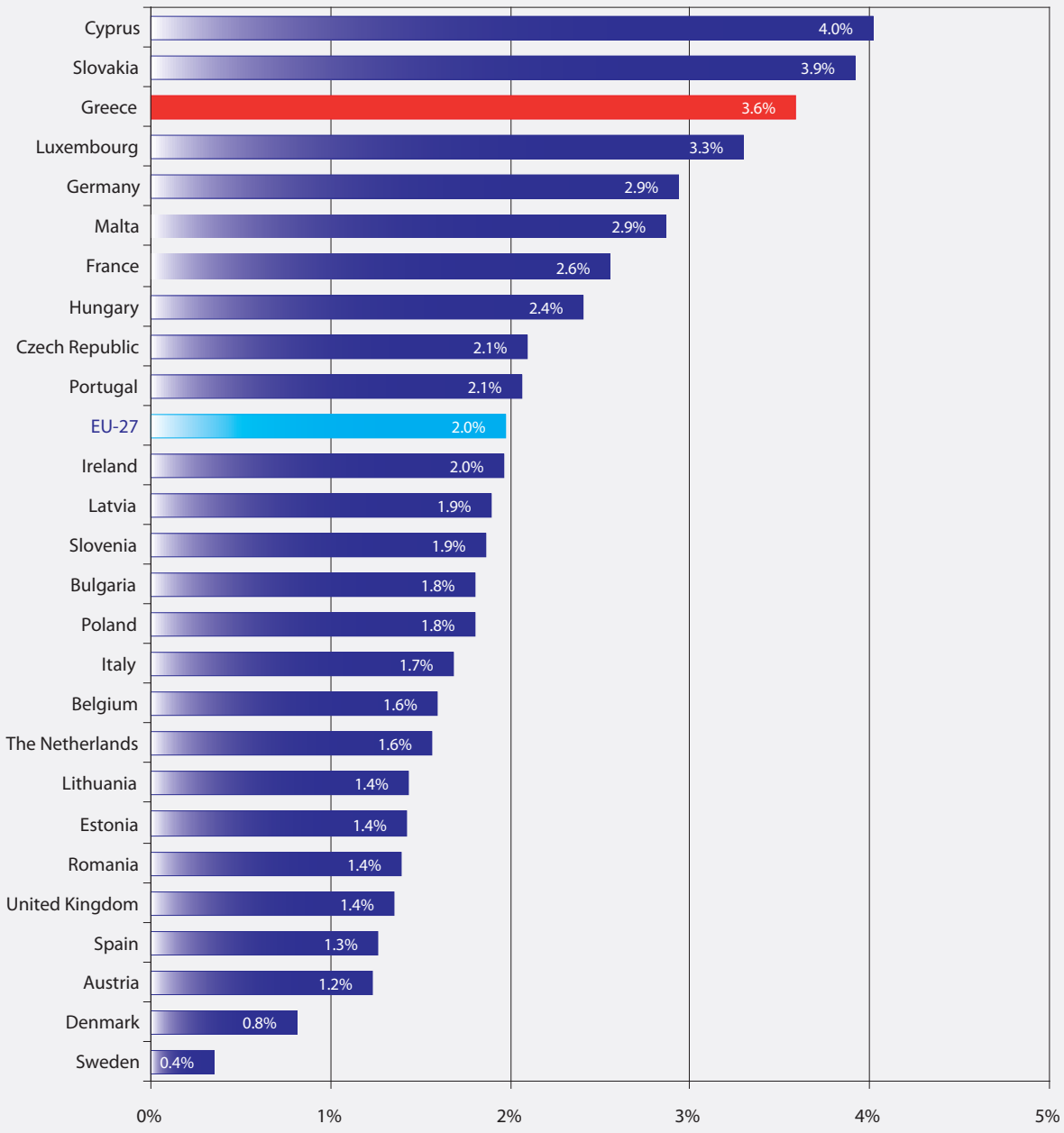


Chart 1.60
Broadband Penetration Rate on 01-01-2010



Source: 15th Report of the European Commission

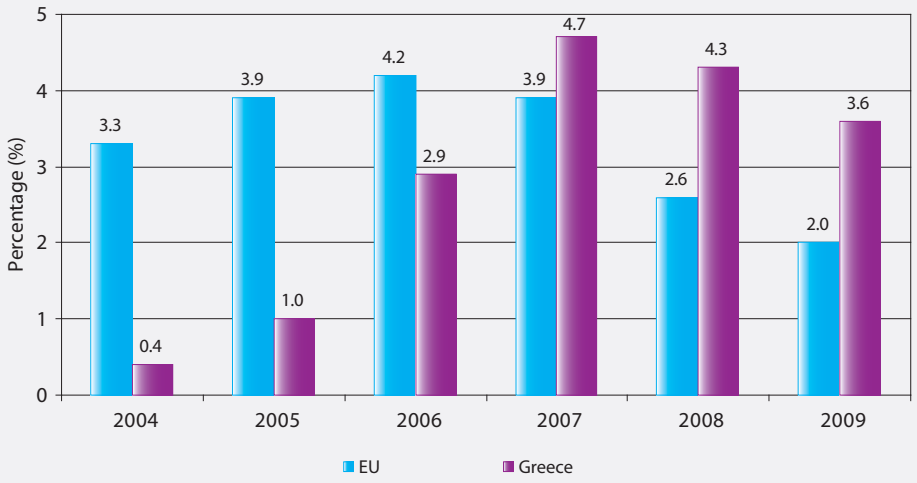
Chart 1.61
Increase in Broadband Penetration Rate in the EU Member States in 2009



Source: 15th Report of the European Commission

Chart 1.62

Annual Increase in Broadband Penetration Rate in Greece and the EU (broadband lines per 100 inhabitants)



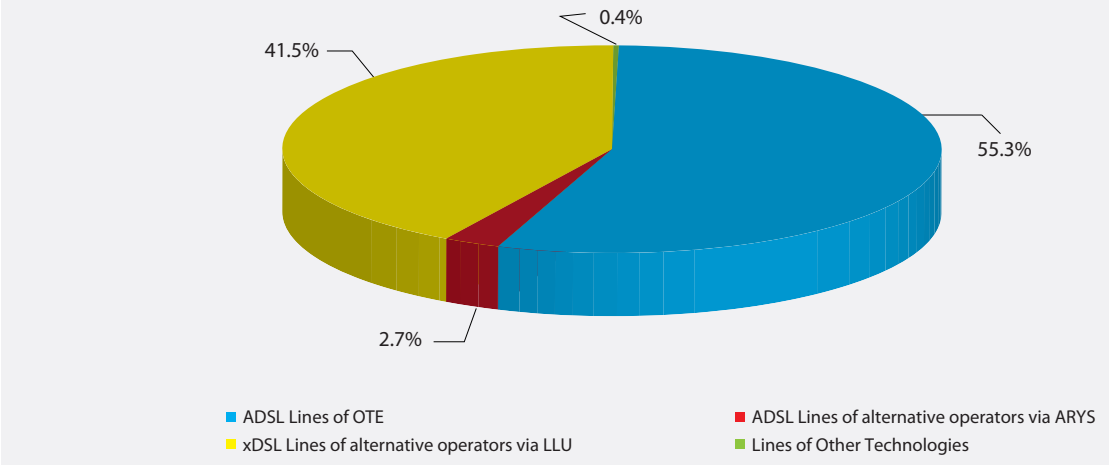
Source: 15th Report of the European Commission

1.11.2. Broadband Lines by Technology

The xDSL lines via LLU kept rising significantly amounting to 41.5% of broadband lines on 31-12-2009 compared to 36% on 31-12-2008[9] (Charts 1.63, 1.64 and 1.65). In contrast, the percentage of OTE's retail ADSL lines fell to 55.3% of broadband lines on 31-12-2009 compared to 57.3% on 31-12-2008 but still kept the biggest share in the broadband market (Charts 1.63 and 1.65). The percentage of wholesale ARYS lines (bitstream) fell even more, dropping to 2.7% of broadband lines on 31-12-2009 compared to 6.3% on 31-12-2008. It is noteworthy that wholesale ARYS lines are the only ones who manifest a decline not just in percentage terms but also in absolute terms (Chart 1.64). Finally, the level of broadband lines of other technologies remains very low at a percentage of 0.5% that is by far the lowest among EU member states (Chart 1.66).

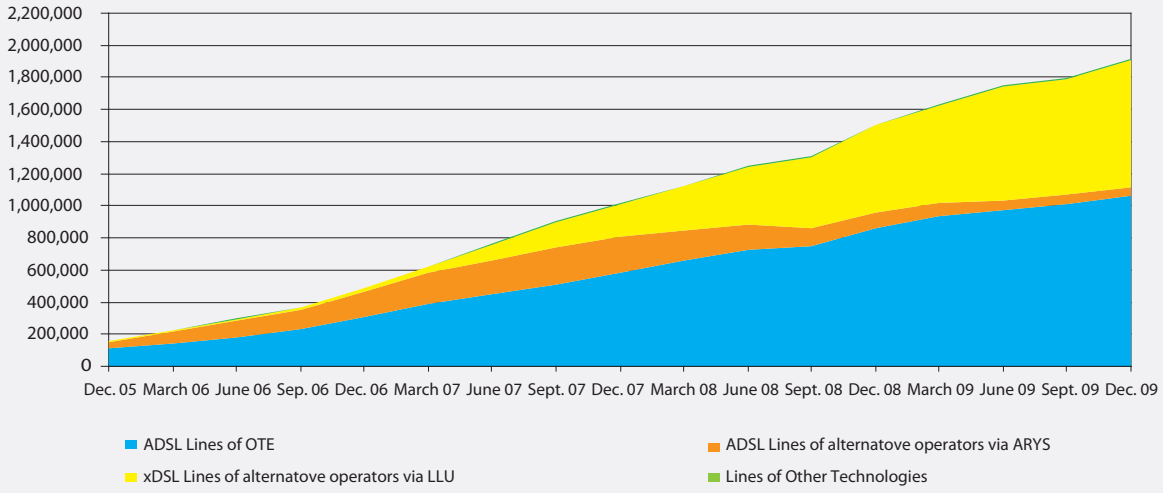
9. It should be reminded that a percentage of LLU lines is used exclusively for the provision of telephony services and has not been counted among broadband lines.

Chart 1.63
Distribution of Broadband Lines by Technology, December 2009



Source: EETT (based on the licensed operators' data)

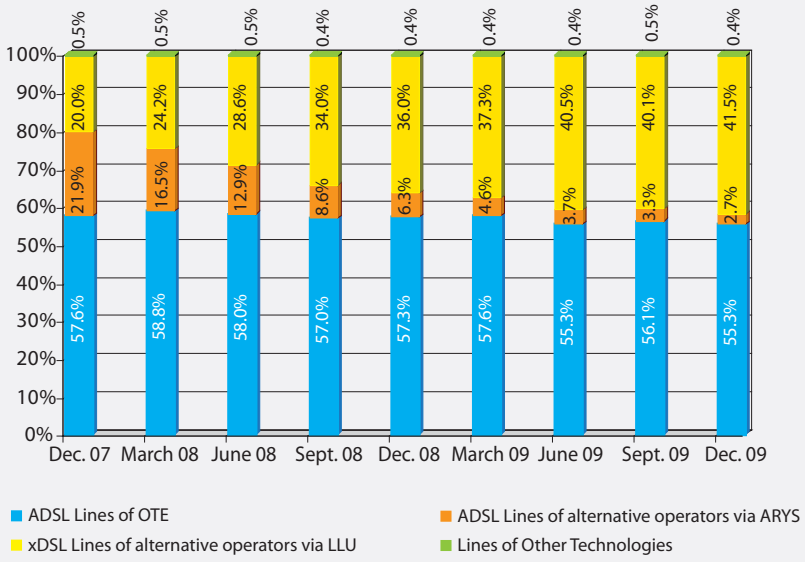
Chart 1.64
Evolution of Broadband Lines by Technology



Source: EETT (based on the licensed operators' data)

Chart 1.65

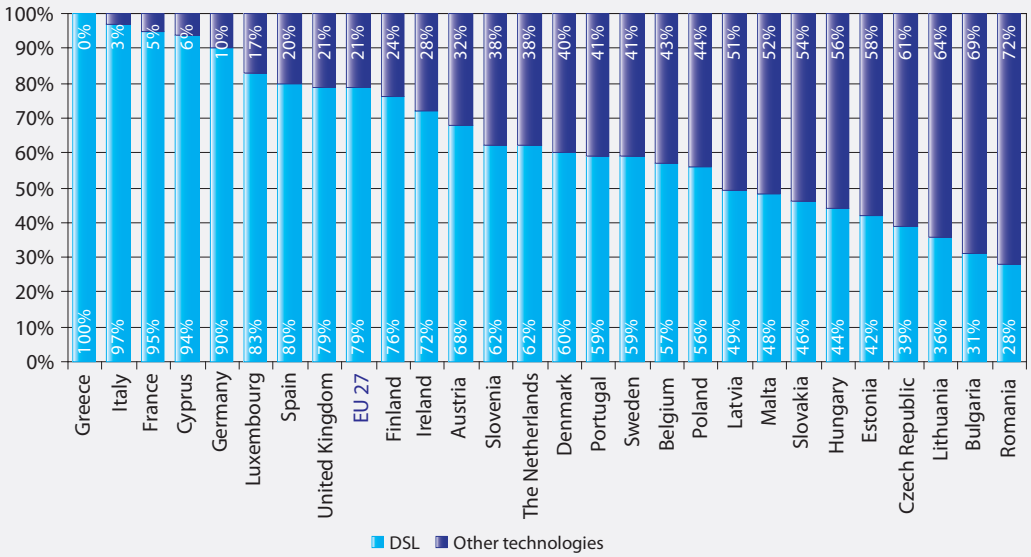
Distribution of Broadband Lines by Type of Access



Source: EETT (based on the licensed operators' data)

Chart 1.66

Distribution of Broadband Lines by Technology, December 2009



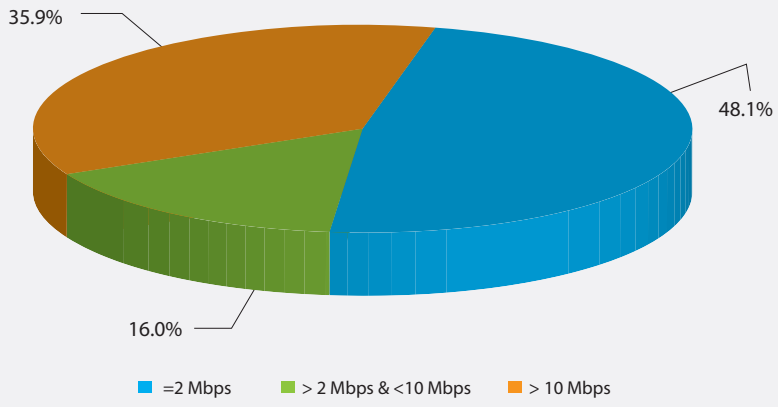
Source: 15th Report of the European Commission

1.11.3. Speeds of Broadband Lines

Chart 1.67 presents the distribution of all broadband lines by access speed. All broadband lines now operate at speeds equal to or more than 2 Mbps (download). 16% of lines operate at speeds ranging from 2 up to 10Mbps (download), whereas 36% of lines operate at speeds higher than 10 Mbps. The remaining 48% operate at 2 Mbps (download). The percentages on 31-12-2008 were 10.9%, 32.6%, and 16%, respectively.

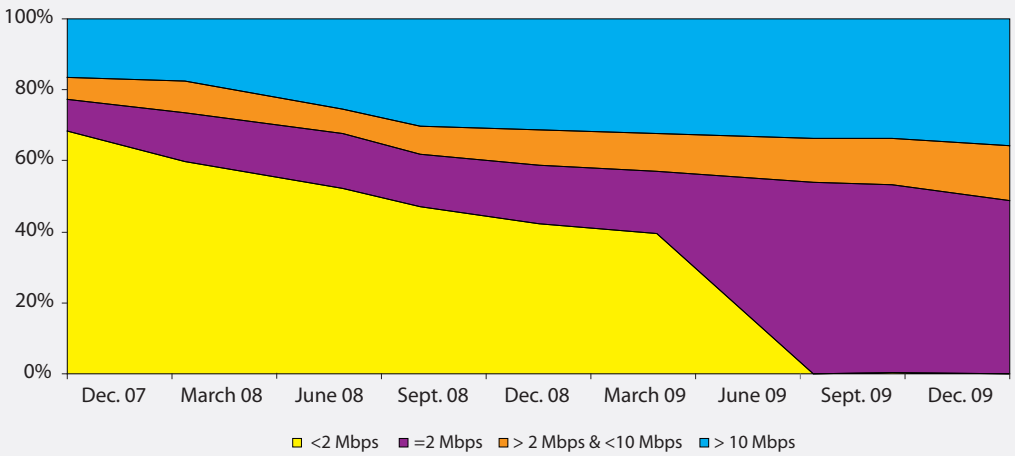
A 40.6% of lines operated at less than 2 Mbps, indicating the gradual shift of users towards high speed products (Chart 1.68). Last, Chart 1.69 shows the progress of the average speed of ARYS lines (wholesale and retail) which depicts a continuous rise, reaching a speed of 4.385 Mbps on 31-12-2009 as compared to 2.843 Mbps on 31-12-2008.

Chart 1.67
Percentage Distribution of Broadband Lines' Nominal Speeds, December 2009



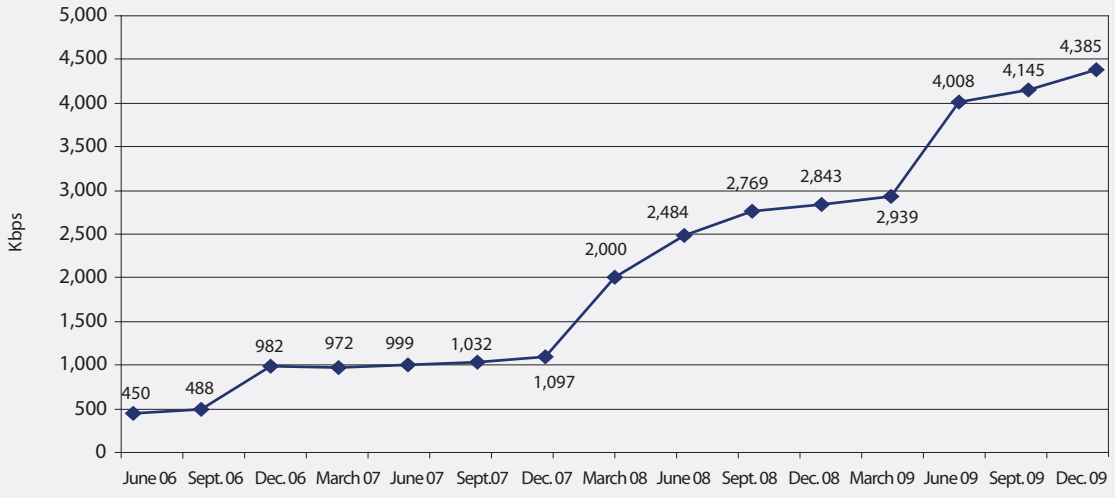
Source: EETT (based on the licensed operators' data)

Chart 1.68
Evolution of Broadband Lines' Nominal Speeds



Source: EETT (based on the licensed operators' data)

Chart 1.69
Evolution of Average Nominal Access of ARYS Lines

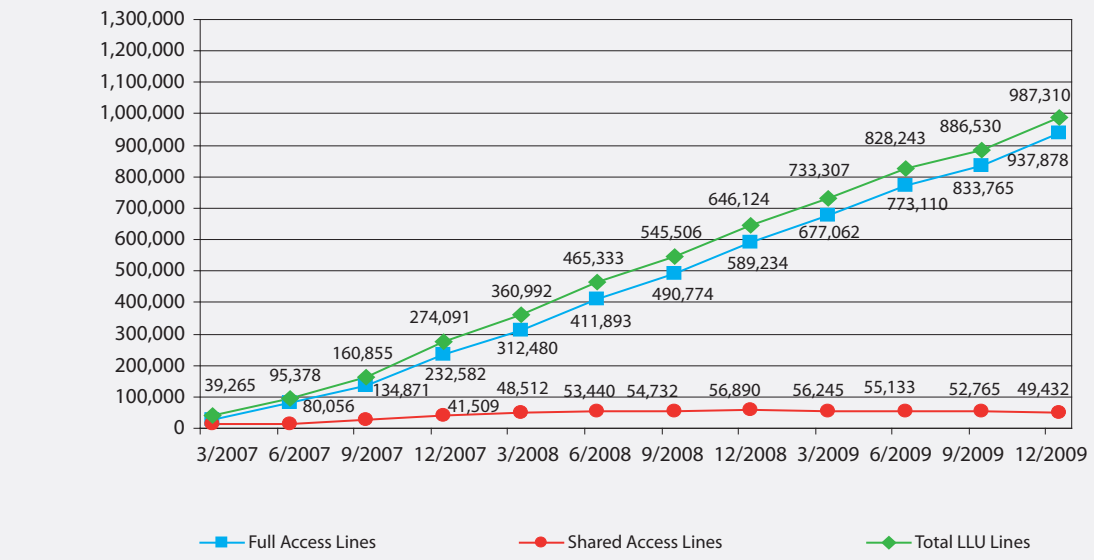


Source: EETT (based on the licensed operators' data)

1.11.4. Local Loop Unbundling

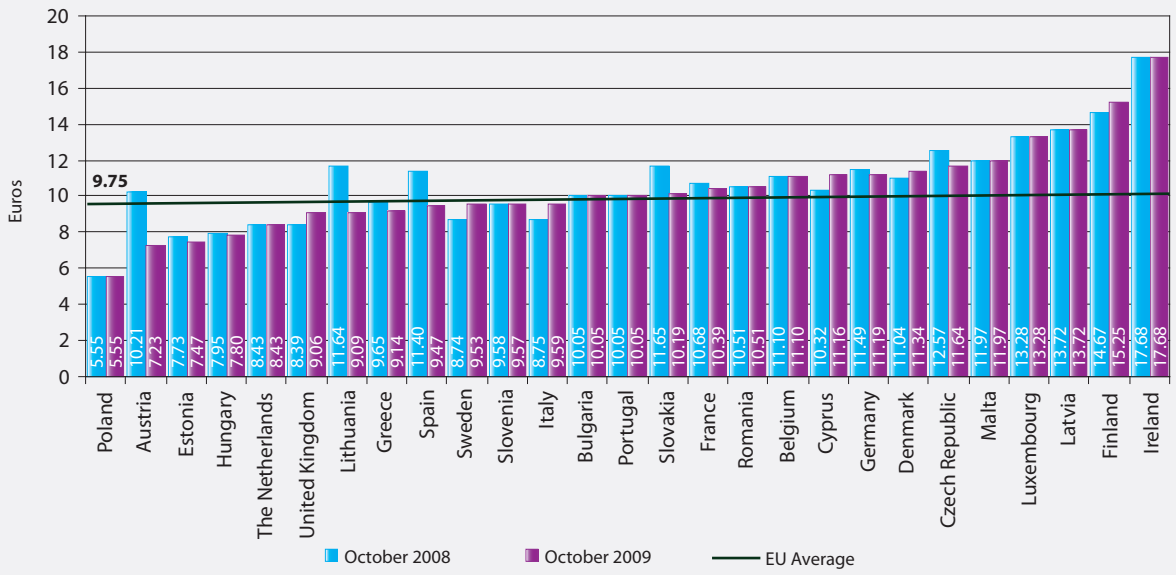
ASDL access via LLU (Chart 1.70) reached the number of 987,310 lines on 31-12-2009 compared to 646,124 on 31-12-2008 (increase by 53%). This increase is entirely due to full access lines, given that shared access lines are relatively stable, thus presenting a decrease by 13% for 2009. The average monthly access cost for a fully unbundled loop in Greece amounted to 9.14 Euros compared to 9.75 Euros of the European average, making Greece the 8th cheapest country in the EU (Chart 1.71). The relevant price for 2008 was 9.65 Euros (decrease by 5%). Respectively, the average monthly access cost for shared access amounted to 3.24 Euros compared to 3.53 Euros of the European average, making Greece the 10th cheapest country in the EU (Chart 1.72). The relevant price for 2008 was 3.39 Euros (decrease by 4%).

Chart 1.70
Evolution of LLU Lines



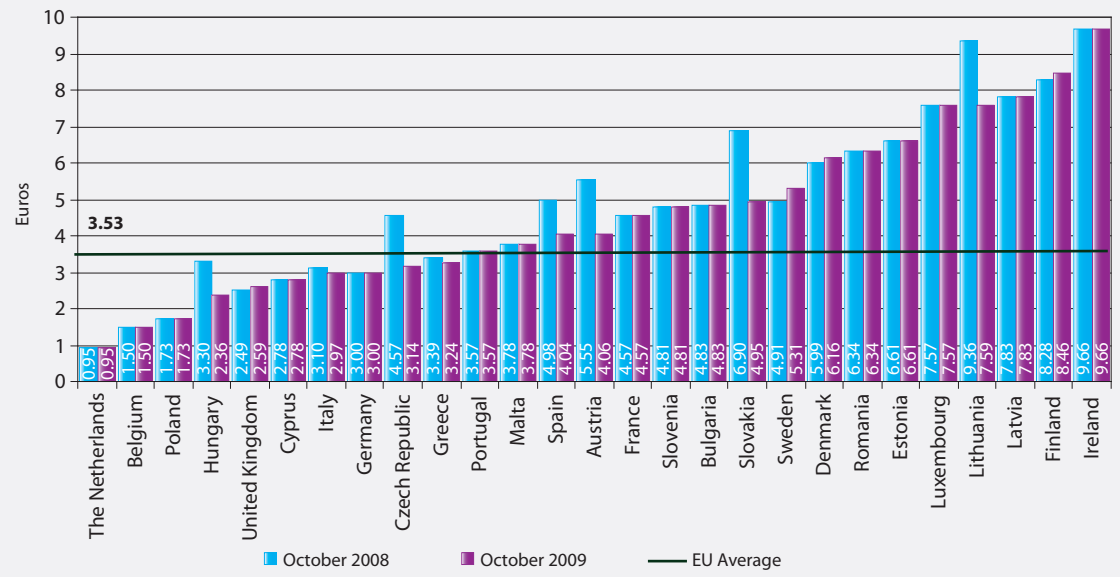
Source: EETT (based on the licensed operators' data)

Chart 1.71
Monthly Average Total Cost per Full Access LLU Line



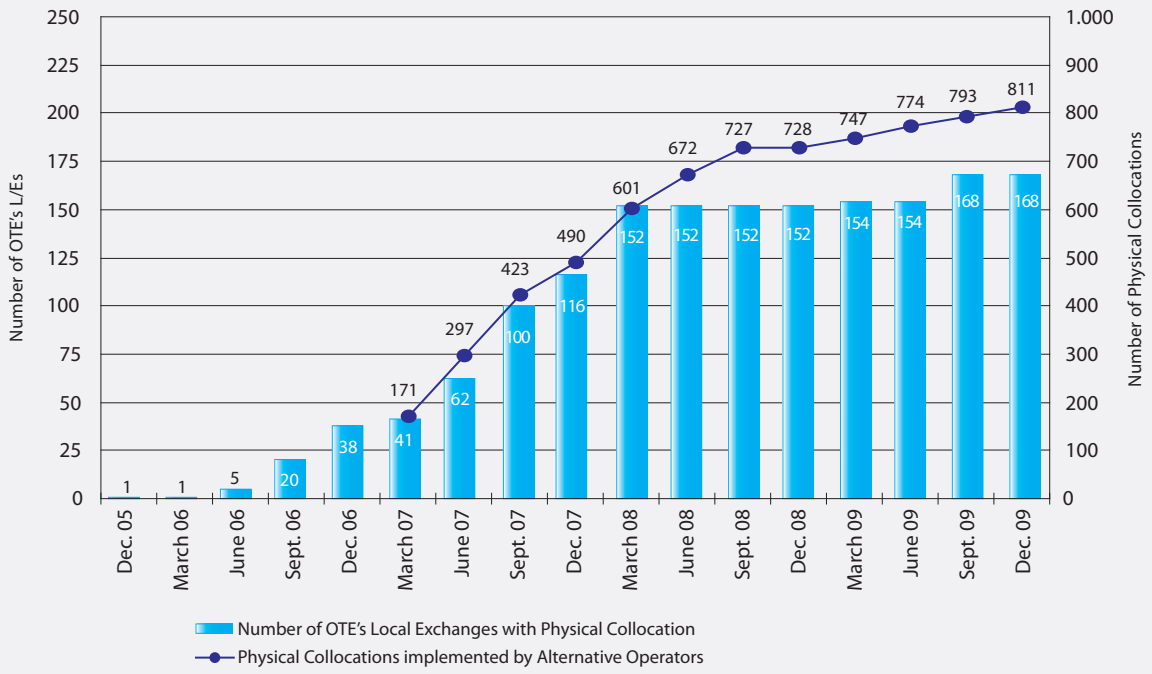
Source: 15th Report of the European Commission

Chart 1.72
Monthly Average Total Cost per Shared Access LLU Line



Source: 15th Report of the European Commission

Chart 1.73
Evolution of Physical Collocation



Source: EETT (based on the licensed operators' data)

1.11.5. Collocation

Chart 1.73 presents the progress of OTE's Local Exchanges providing physical collocation as well as the number of physical collocations materialised by alternative operators by summing up the number of alternative operators collocated in each local exchange.

- Since the first semester of 2008 the number of OTE's L/Es with physical collocation was stabilized at a little higher than 150 and started growing again at 168 during the second semester of 2009.
- The number of physical collocations set up by alternative operators grew gradually until September 2008 when it stabilized at 730. Since the beginning of 2009 that number has begun growing again, albeit at a slower rate.

1.11.6. Retail Cost of Broadband Access

In January 2010, the European Commission published an updated Report on "Broadband Internet Access Cost" which presents the retail cost of broadband access in the EU member states during the second semester of 2009. The report is based on data collected during the period from 01 to15-10-2009. It should be reminded that the Report's previous edition contained data collected during the period from 01 to 25-04-2008. The study was carried out by "Van Dijk Management Consultants". The assumptions needed for rendering the prices in the different national markets comparable are summarized in the Appendix.

The conclusion stemming from the price comparison (Charts 1.74 through 1.82) was that the retail cost of broadband access in Greece is generally lower than the European average and, with a few exceptions, lower than the average retail cost of the 15 old member states[10]. Specifically, with regard to Internet services, Greece is one of the cheapest countries of the EU (when compared not only to the 27 member states but also to the core of the 15 old member states). With regard to Internet and telephony services, Greece is one of the cheapest member states for two speed categories: the up to 2 Mbps speed category and the over than 20 Mbps speed category.

Specifically, the Report demonstrates that, compared to the average retail cost in the EU, the retail cost in Greece is:

- Lower by 31% for the monthly Internet subscription fee in the speed category 512-1024 Kbps (Chart 1.74).
- Lower by 46% for the monthly Internet subscription fee in the speed category 1024-2048 Kbps (Chart 1.75).
- Lower by 13% for the monthly Internet subscription fee in the speed category 2048-4096 Kbps (Chart 1.76).
- Lower by 14% for the monthly Internet subscription fee in the speed category 4096-8192 Kbps (Chart 1.77).
- Lower by 72% for the monthly Internet subscription fee in the speed category 20+ Mbps (Chart 1.78).
- Lower by 22% for the monthly Internet and telephony subscription fee in the speed category 1024-2048 Kbps (Chart 1.79).
- Higher by 4% for the monthly Internet and telephony subscription fee in the speed category 4096-8192 Kbps (Chart 1.80).
- Higher by 6% for the monthly Internet and telephony subscription fee in the speed category 8192-20 Mbps (Chart 1.81).
- Lower by 27% for the monthly Internet and telephony subscription fee in the speed category 20+ Mbps (Chart 1.82).

Furthermore, in comparison to the previous reference period in the Report, the following are observed:

1. For the monthly Internet subscription packages the retail price has:
   - Fallen by 5% in the speed category 512-1024 Kbps.
   - Fallen by 26% in the speed category 1024-2048 Kbps.
   - Risen by 19% in the speed category 2048-4096 Kbps.
   - Risen by 2% in the speed category 4096-8192 Kbps.
   - Fallen by 10% in the speed category 20+ Mbps.

10. Retail cost is calculated by weighting the equivalent purchase power parity rate. VAT is included in the price.

2. For the monthly Internet and telephony subscription packages the retail price has:

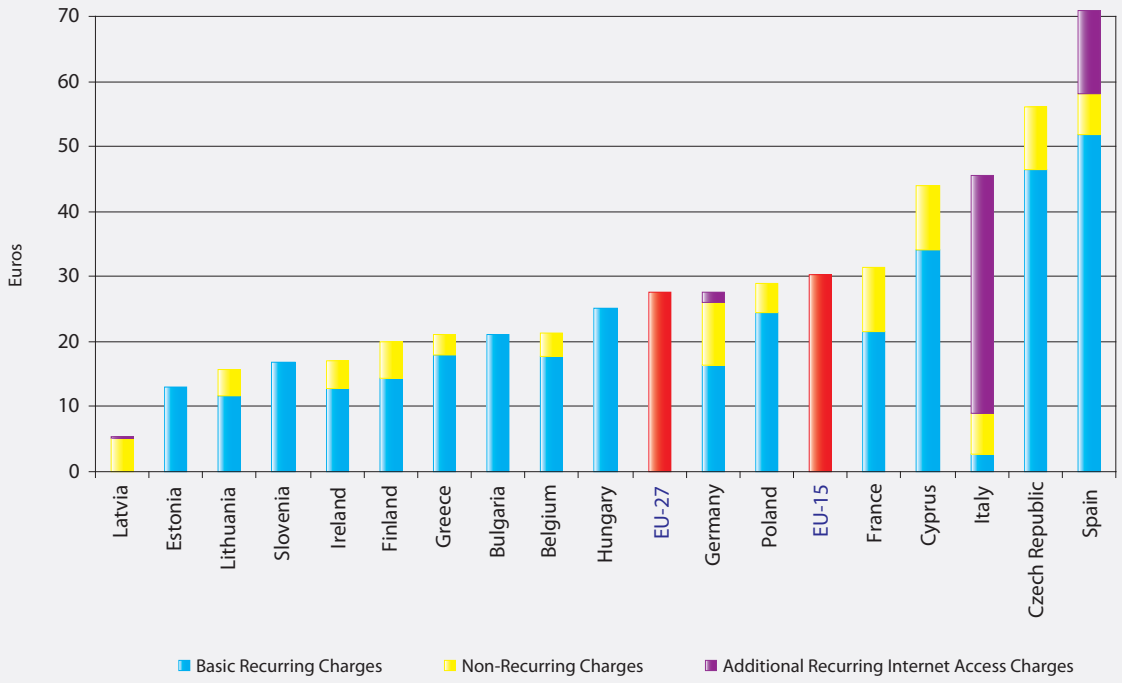
- Fallen by 17% in the speed category 1024-2048 Kbps.
- Fallen by 2% in the speed category 4096-8192 Kbps.
- Fallen by 26% in the speed category 20+ Mbps.

Taking into account the penetration of the various packages we conclude that:

- Only 12% of subscribers use packages in speed categories where retail cost has risen.
- More than 77% of subscribers use packages in speed categories where retail cost has fallen by more than 25%.

Chart 1.74

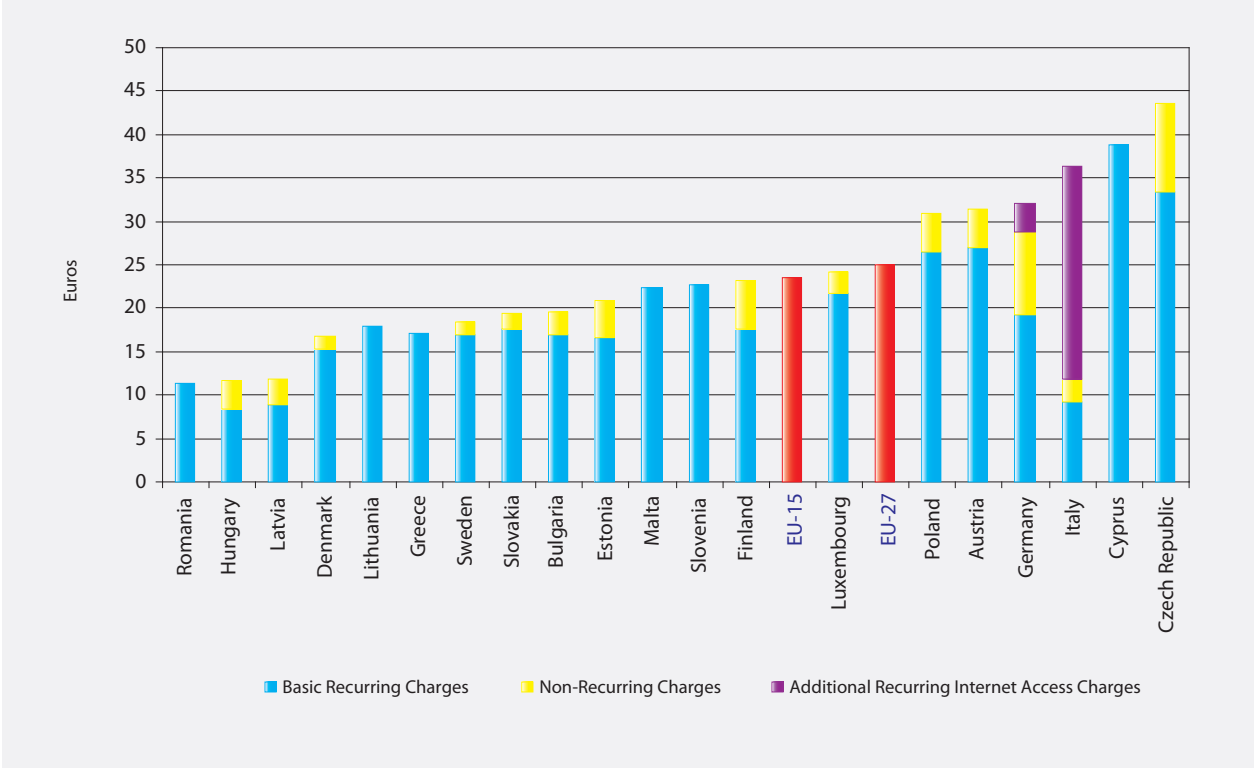
Monthly Subscription Cost for Internet at Speeds of 512-1024 Kbps



Note: Certain older (Austria, Denmark, Luxembourg, The Netherlands, Portugal, Sweden, UK) and some newer member states (Malta, Romania, Slovakia) are not included in the calculation of average charges.

Chart 1.75

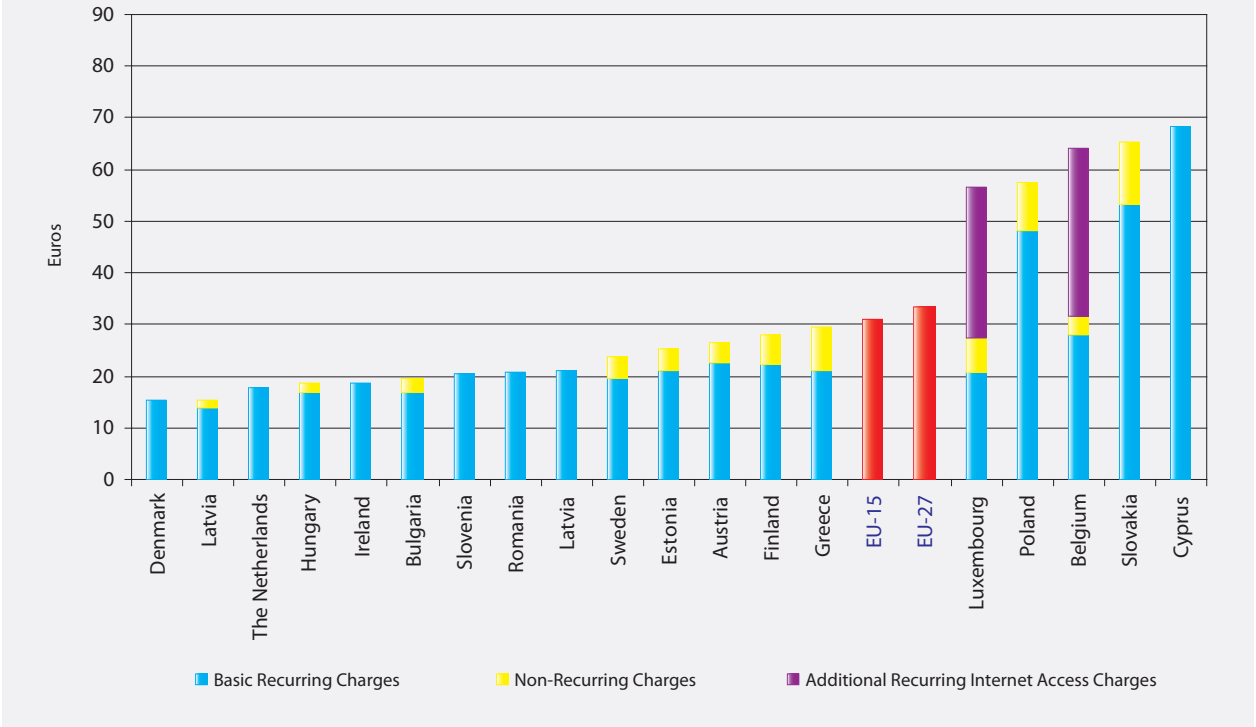
Monthly Subscription Cost for Internet at Speeds of 1024-2048 Kbps



Note: The following older member states are not included in the calculation of average charges: Belgium, France, Ireland, the Netherlands, Portugal, Sweden and the United Kingdom.

Chart 1.76

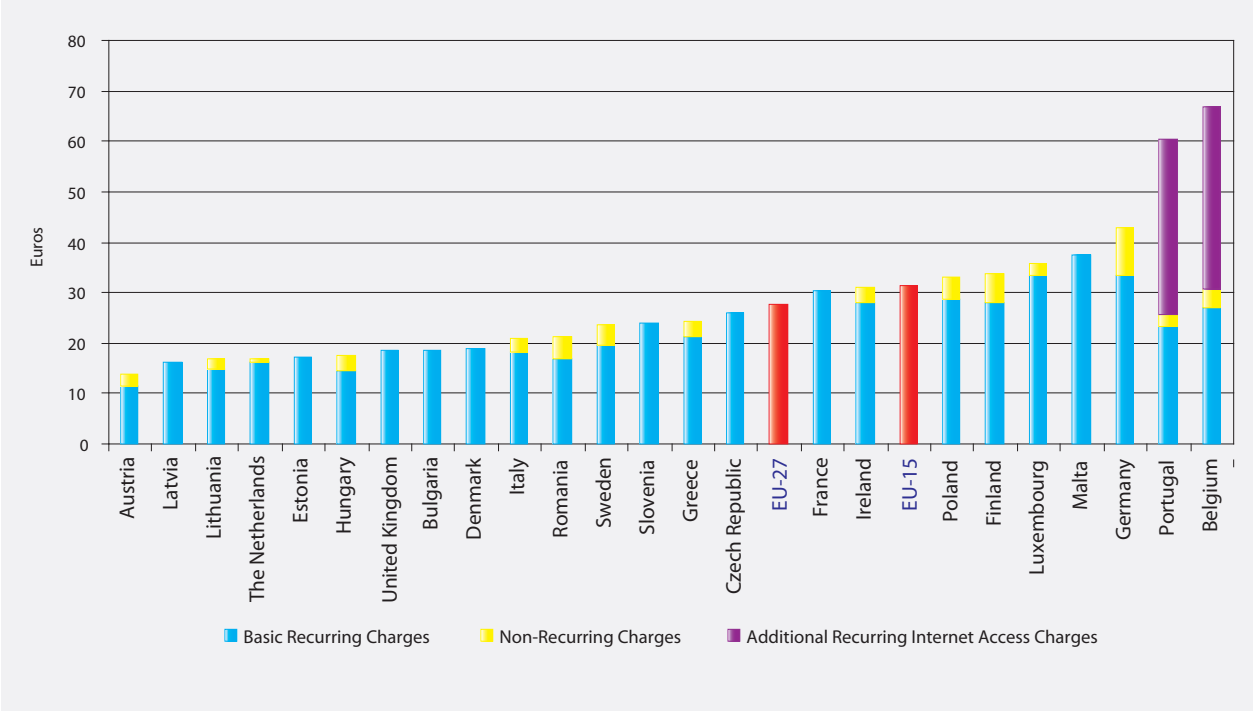
Monthly Subscription Cost for Internet at Speeds of 2048-4096 Kbps



Note: Certain old member states, namely Germany, Spain, France, Italy, Portugal and the United Kingdom as well as Malta from the new member states are not included in the calculation of average charges.

Chart 1.77

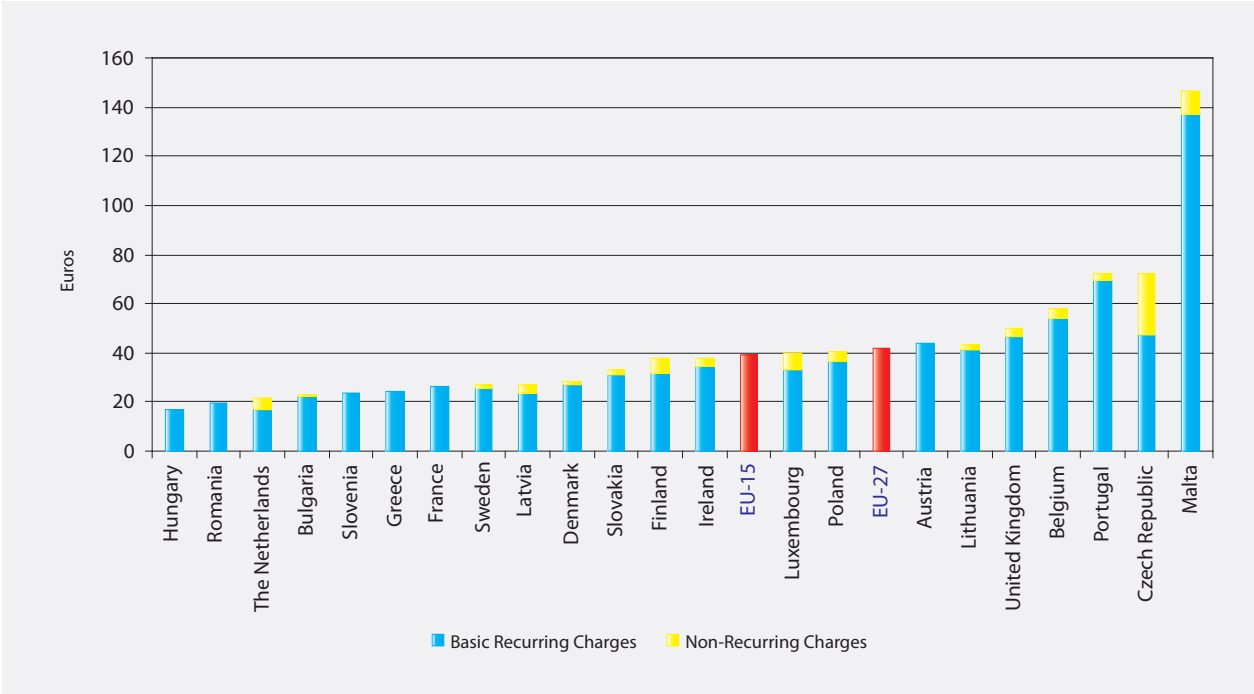
Monthly Subscription Cost for Internet Access at Speeds of 4096-8192 Kbps



Note: One older member state, namely Spain and some newer, namely Cyprus and Slovakia, are not included in the calculation of average charges.

Chart 1.78

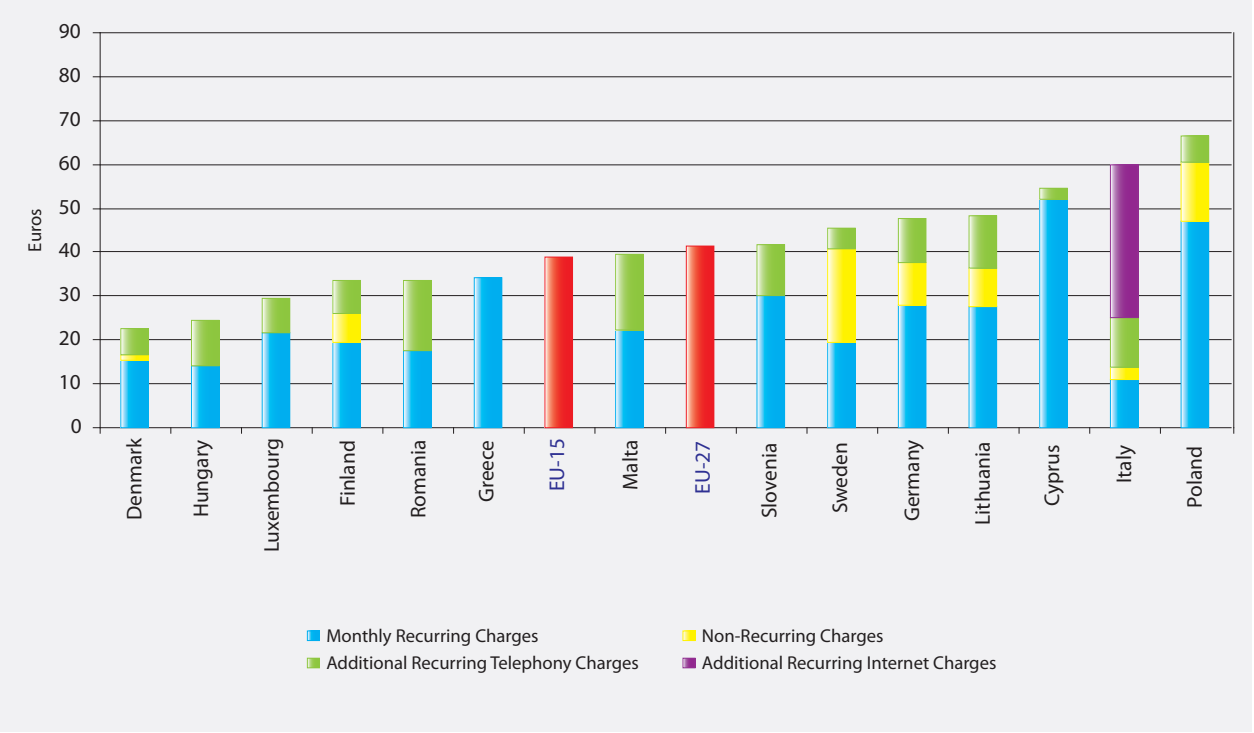
Monthly Subscription Cost for Internet Access at Speeds of 20+ Mbps



Note: Germany, Spain and Italy as well as Cyprus and Estonia are not included in the calculation of average charges.

Chart 1.79

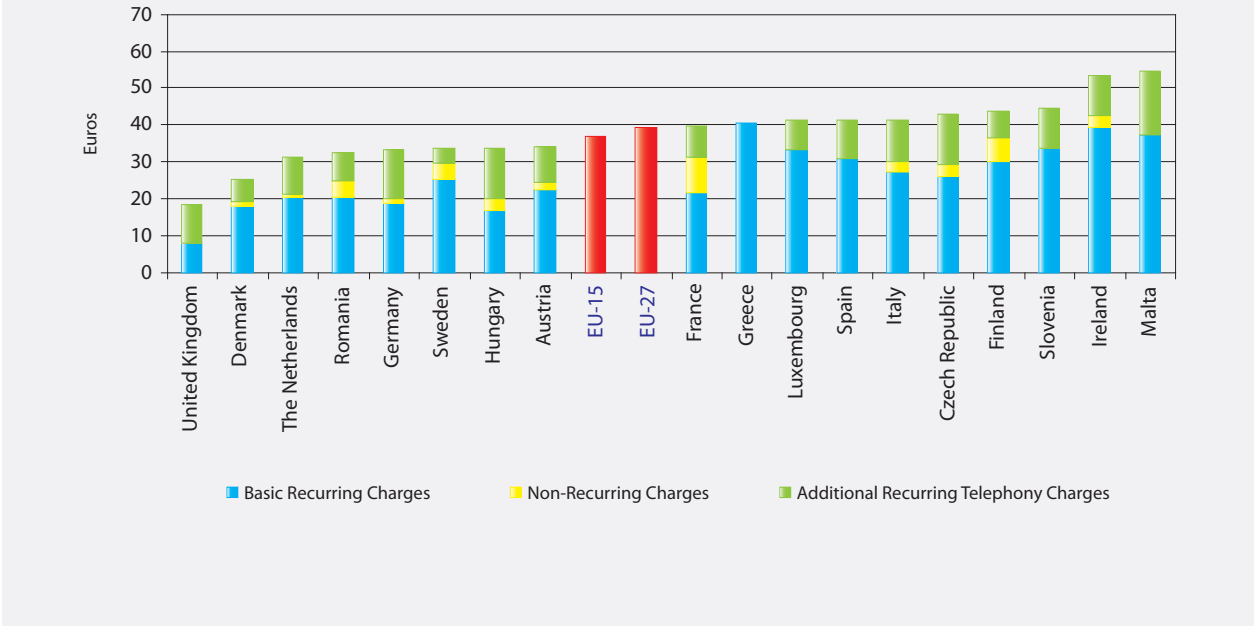
Monthly Subscription Cost for Telephony and Internet Access at Speeds of 1024-2048 Kbps



Note: Certain older (Austria, Belgium, Spain, France, Ireland, the Netherlands, Portugal, the United Kingdom) and some newer (Bulgaria, Czech Republic, Estonia, Latvia, Slovakia) member states are not included in the calculation of average charges.

Chart 1.80

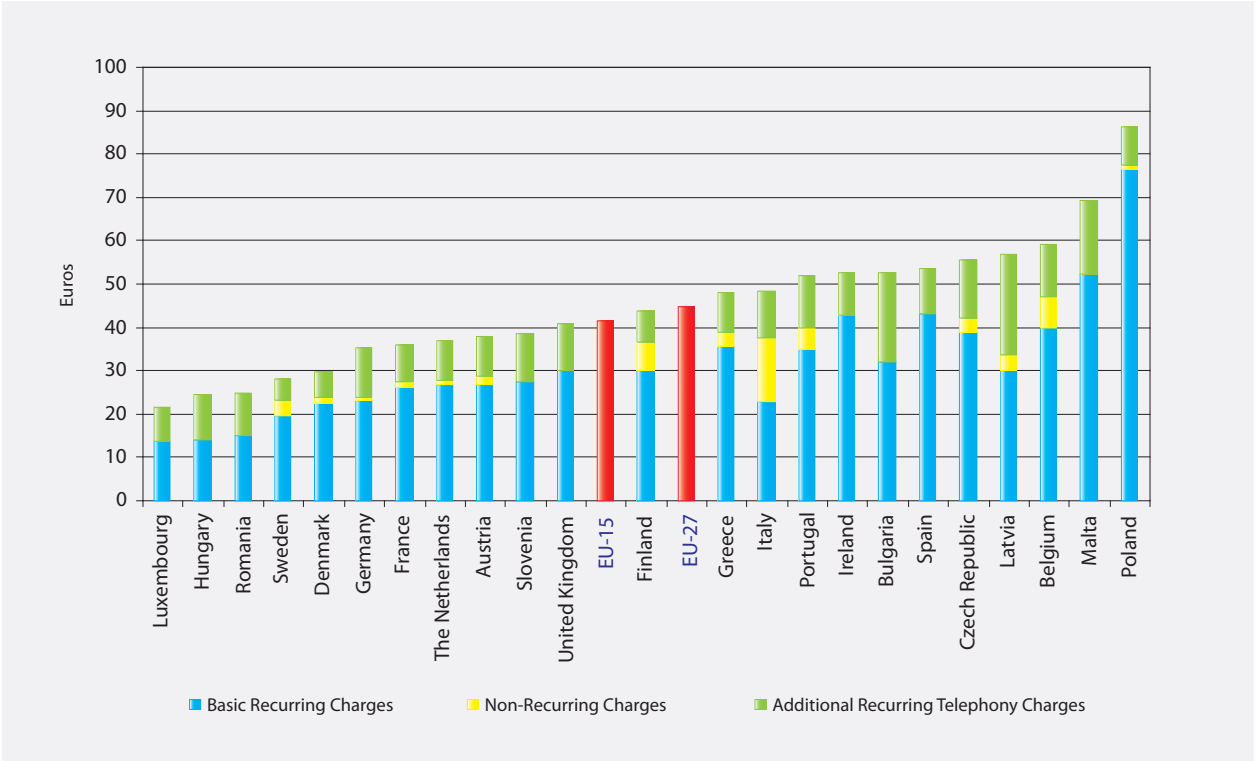
Monthly Subscription Cost for Telephony and Internet Access at Speeds of 4096-8192 Kbps



Note: Certain older (Belgium, Portugal) and some newer (Bulgaria, Cyprus, Estonia, Latvia, Lithuania, Slovakia) member states are not included in the calculation of average charges.

Chart 1.81

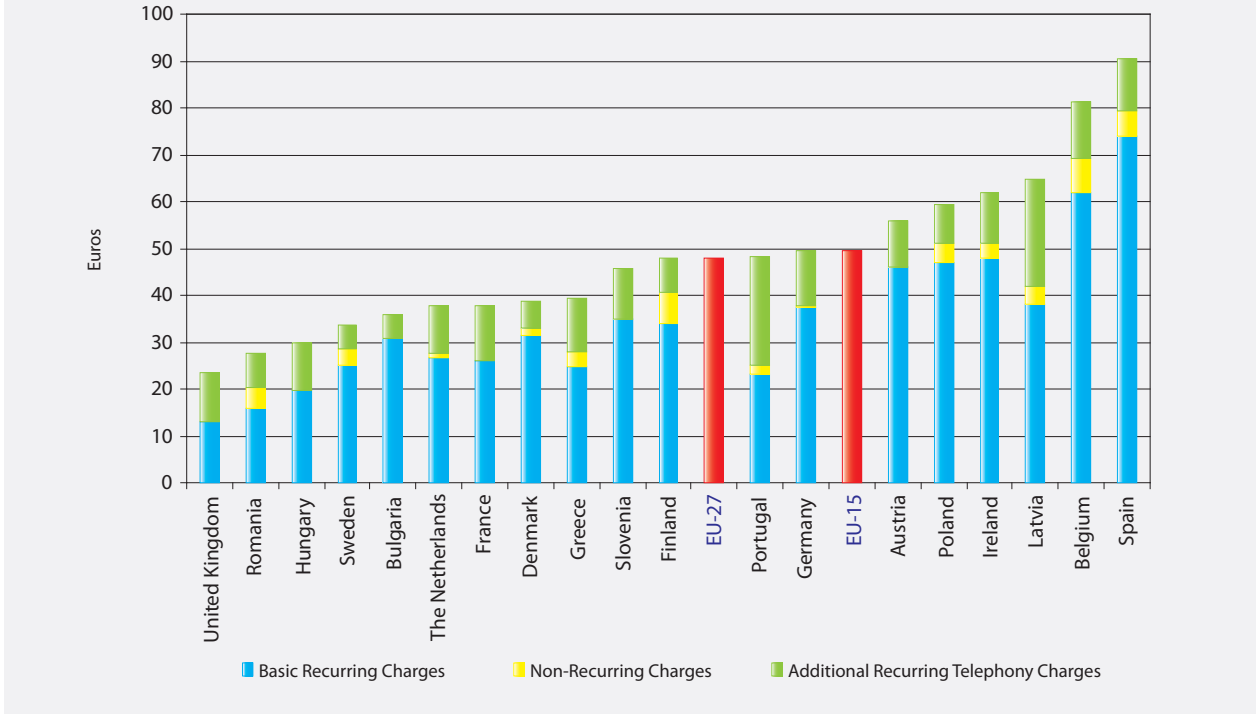
Monthly Subscription Cost for Telephony and Internet Access at Speeds of 8192-20 Mbps



Note: Certain newer (Cyprus, Estonia, Lithuania, Slovakia) member states are not included in the calculation of average charges.

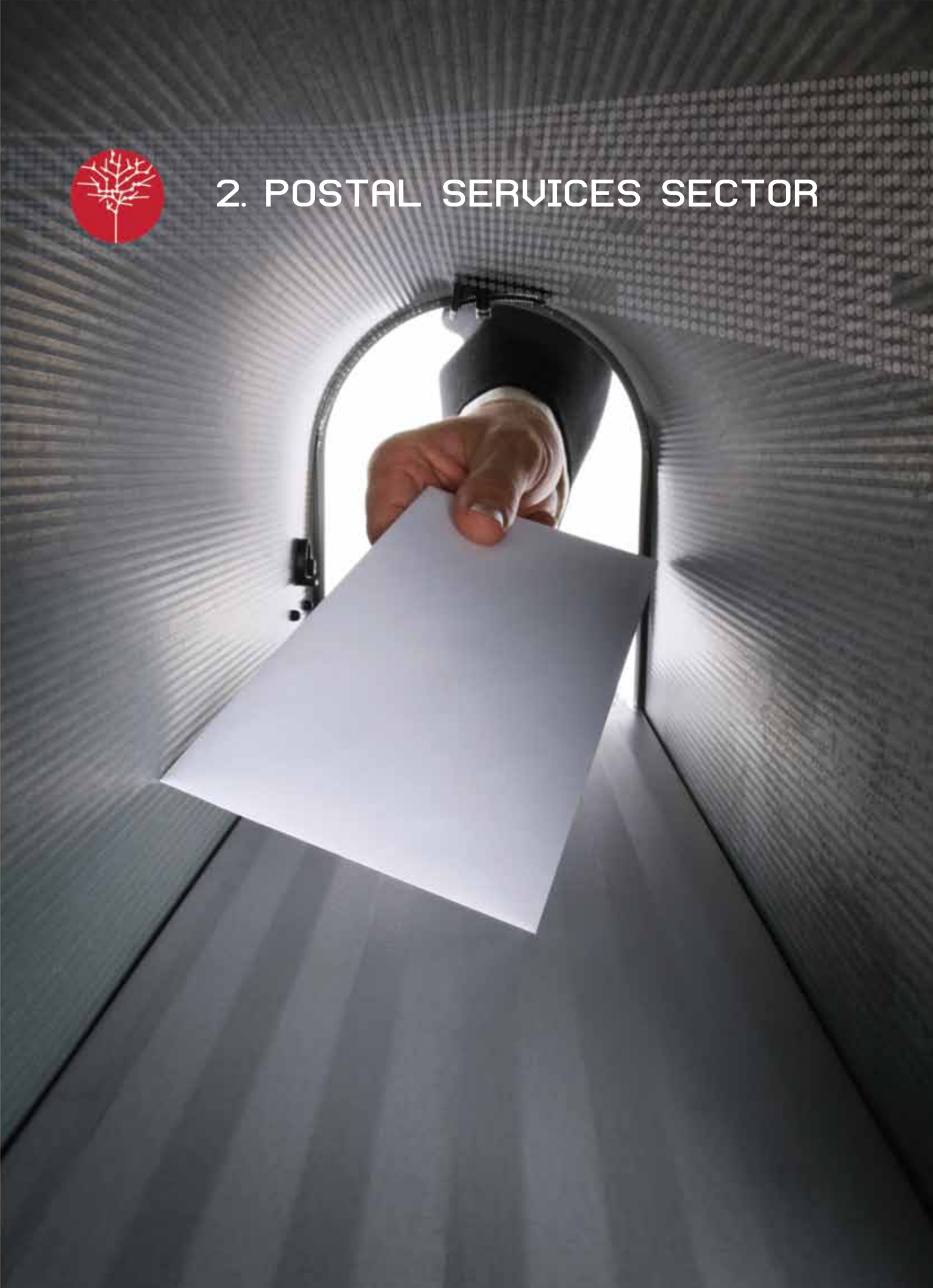
Chart 1.82

Monthly Subscription Cost for Telephony and Internet Access at Speeds of 20+ Mbps



Note: Certain older (Italy, Luxembourg) and some newer (Czech Republic, Cyprus, Estonia, Malta, Lithuania, Slovakia) member states are not included in the calculation of average charges.

2. POSTAL SERVICES SECTOR



The Greek postal market is composed of the following sub-markets: (a) the Universal Service (US) market within which the Universal Service Provider (USP) and operators under Individual License operate and (b) the Courier market within which operators under General License operate.

The implementation of the 3rd Postal Directive in our country is expected to accelerate significantly the liberalization of the US market. Currently, less than 1% of handled items and generated revenues in the US sector are associated with alternative operators business activities. The majority of items within the liberalized part of US are addressed direct mail, dispatched by large commercial companies to consumers.

In contrast, in the Courier market, which operates under more competitive terms, although there were more than 400 operators enlisted in EETT's Registry in 2009, 90% of volumes (revenues) pertained to a comparatively small (single-digit) number of operators (including their networks).

The postal activity in our country, even though it contributes minimally to the annual GDP (<0.5%), it supports the growth in productivity of important sectors of the Greek economy (trade, industry, services etc.).

2.1. The Greek Postal Market

For 2009, the revenues of the postal market (US and Courier) are estimated at 743 million Euros and were generated by the handling of 728 million items. In the period 2007-2009, the average annual growth rate of the number of handled items in the Greek postal market was negative (-2.7%). Mainly, that was the result of the considerable drop in the volumes of US (-3.2%). Although the respective growth rate for Courier items was positive (+3.7%), it cannot reverse the negative climate because Courier services account for only a small share (6.9%) of the sum total of handled volumes (see Table 2.1 and Charts 2.1A, 2.1B and 2.3). In the period 2007-2009, revenues from US and Courier services (in 2009 prices) displayed a downward trend at an annual average rate of approximately 1% for either market (see Table 2.2 and Charts 2.2A, 2.2B and 2.3). The observed revenue reduction which led many companies to ceasing operation could be attributed to the recession.

The number of operators under General License (Courier) registered in EETT's Registry (their networks included) amounted to 1,181 on 31-12-2009, an increase by 7.2% as compared to 2008 (see Chart 2.4). Approximately 40% of all operators registered with EETT run their own businesses, with the rest forming

Table 2.1
Postal Market Volumes (in millions of items)

Market	2007	2008	2009
Universal Service (USP)	716.2 (93.1%)	718.9 (92.5%)	671.7 (92.2%)
Courier (General License)	46.5 (6.0%)	50.7 (6.5%)	50.0 (6.9%)
Liberalized Share of US (Individual License)	6.8 (0.9%)	7.3 (0.9%)	6.7 (0.9%)
Total	**769.5 (100.0%)**	**776.8 (100.0%)**	**728.4 (100.0%)**

Table 2.2
Postal Market Revenues (in millions of euros - 2009 prices)

Market	2007	2008	2009
Universal Service (USP)	456.5 (60.4%)	455.7 (59.8%)	448.6 (60.4%)
Courier (General License)	296.6 (39.2%)	303.0 (39.8%)	291.9 (39.3%)
Liberalized Share of US (Individual License)	2.8 (0.4%)	2.9 (0.4%)	2.5 (0.3%)
Total	**756.0 (100.0%)**	**761.6 (100.0%)**	**743.1 (100.0%)**

part of the network of other registered companies. Over the years, new market entrants have preferred to obtain a license rather than operate as part of the network of an already licensed operator, since the granting of licenses by the Ministry for Commercial Vehicles (Lorries) to deliver Postal Services, requires prior registration with EETT.

More than 25,000 people were employed in the Greek postal market in 2009, a 13% increase compared to 2008. The noticeable staff increase, is due to the inclusion in the estimated figure, of the local agents collaborated with USP for the provision of the Universal Service.

2.2. The Courier Market

International mail is an exceptionally important activity for Greek operators: although only 8% of postal operators belong to this category, international mail generates almost 30% of total revenues (see Charts 2.5A and 2.5B).

The concentration of customers for Courier operators in Athens and Thessaloniki, the country's two largest cities, explains why the majority of items sent within the Greek territory (75%) and abroad (85%) originate in these two cities. The same geographical distribution for items sent within Greece and abroad holds true for US as well (see Charts 2.8A and 2.8B).

Being an EU member, Greece has established strong commercial links with the other European countries (in or out of the EU), therefore it is hardly surprising that 6 (7) out of 10 incoming (outgoing) Courier items are originated from (delivered to) European countries. The number of outgoing items to Asian countries or to the American Continent is balanced out (10% of the total outgoing mail for all continents). In contrast, to every 3 items incoming from the American Continent correspond 4 items incoming from Asian countries (see Charts 2.9A and 2.9B). Last, the ratio of incoming/outgoing items from/to the American continent is estimated to have been close to 2 in 2009, whereas the respective ratio for Asia has been 3 (see Chart 2.10).

Regarding Courier item type, 1 out of 4 items is a parcel, with parcels thus generating almost half of the Courier operators' total revenues (see Charts 2.6A and 2.6B). Parcels have played an important role in the liberalization of both the domestic and the international market. It must be mentioned that, in 2009, items weighing up to 2kg amounted to almost 80% of handled items. To boost its revenues, the Courier Market has traditionally dealt with heavier items, i.e., parcels weighing>2kg (see Chart 2.11).

The delivery of a domestic letter item using Courier services costs the consumer 3.5 euros on average (not including VAT), while the delivery of a domestic parcel costs double (7.3 euros) compared to the letter. Additionally, the delivery of a letter post/parcel abroad would cost the consumer 6-8 times more compared to the respective domestic delivery (see Table 2.3). The prices for domestic delivery have remained essentially unaltered in the years 2008-2009 while there was a small decline in the prices for international delivery for the period under consideration (see Chart 2.7A).

Quick delivery of items is a contractual obligation Courier operators have, towards users of these services (individuals/businesses). Therefore, the speed of delivery may not be the decisive factor for price divergence in the services offered. In Courier services, special handling entails the flexibility of operators to meet the customers' needs (e.g. delivery to a particular location within a time period that may usually exceed 24 hours, transportation by means of special vehicles, etc). Special-handling shipments abroad are more expensive by 20-30% for customers who request them, whereas the extra cost for domestic shipments of that type is small (if and when available - see Chart 2.7B).

Table 2.3
Average Unit Prices of Postal Products Based on Destination and Type of Item
(autonomous handling - 2009 prices in euros)

Type of Item	Destination	2008	2009
Document	Domestic	3.5	3.5
Parcel	Domestic	7.2	7.3
Document	International	24.6	21.6
Parcel	International	56.8	54.4

2.3. General Characteristics of Postal Market Operators

The number of people employed in Courier services is estimated at 10,300 decreased by 4% compared to 2008 (see Charts 2.12A and 2.12B). Over the years, almost 80% of staff in Courier are full-time employees, although there is a noticeable rise in the percentage of part-time employees (see Charts 2.13A and 2.13B). Almost 50% of staff in both markets (Courier and US – see Charts 2.14A and 2.14B) are employed in the delivery stage, which is the most difficult part of the postal process. With regard to the education level of the postal personnel, the majority (80%) are high school graduates (see Charts 2.15A and 2.15B).

Only a third of central postal service points (shops, sorting centers, warehouses) are used for the needs of the US (see Charts 2.16A and 2.16B). However, these facilities still take up approximately 2/3 of the total surface area of the domestic market's infrastructure (see Charts 2.17A and 2.17B). Therefore, the USP owns larger facilities so that it may effectively handle US volumes. Courier operators, on the other hand, serve their increasingly more diverse client base by using smaller facilities, appropriately located geographically. In the period 2008-2009, the number of postal service points showed a 12% increase, while their total surface area increased by 17%. This increase is primarily due to the ongoing cooperation of the USP with smaller operators (agents) for local delivery (post office box management, collection) of US and, secondarily, to the new entrants in the Courier sector.

There are approximately 12,000 vehicles serving the needs behind transportation of all shipments. Out of those, 7,500 (63%) are used by Courier companies (see Charts 2.18A and 2.18B).

The customers of Courier companies are mainly businesses specializing in commerce and services and generating a significant annual volume of postal items (wholesale volumes). Wholesale customers are accountable for over 80% and 85% of the revenues and volumes of Courier operators, respectively. Over the years, Courier operators have increasingly come to depend on large, important customers for enhancement of their revenues. It is worth noting that wholesale customers enjoy a discount of approximately 30% over retail customers (see Table 2.4 and Charts 2.19A and 2.19B).

The number of defective postal service cases, the amount of compensations paid and the way of resolving disputes, are indicators of the quality of the liberalized market. More specifically, in 2009, the number of complaints for Courier operators fell by 30% in comparison to 2008. Subsequently, the amount paid out for compensations declined respectively by 39% for the period under consideration. Out of 5,000 complaints, almost half concerned delayed delivery to the receiver, and 1/3 concerned lost postal items. With regard to the amount of compensation, the importance of "delayed delivery/lost items" is reversed with 70% of total compensations pertaining to lost items and only 10% to delayed delivery. In 2009, the number

Table 2.4
Average Unit Prices of Postal Products Based on Type of Customer (2009 prices in euros)

Revenue per Customer	2008	2009
Cash	7.8	7.5
Contract	5.7	5.6

of complaints over delays decreased significantly (44%) in comparison to 2008, whereas the respective reduction in complaints for lost items has also been lower (18%). The compensation paid for lost items is 8 times higher than that paid for delay (see Table 2.5 and Charts 2.20A, 2.20B, 2.21A and 2.21B).

In most cases (97%), disputes are resolved through amicable settlements (see Charts 2.22A and 2.22B).

With regard to cost of operation, salaries and operating expenses amount to 60% of total costs for Courier operators, while the respective percentage for the USP exceeds 75%. Overall, profit margins for the market are expected to be quite limited in the coming years (see Chart 2.23).

The following charts present the statistical data for the Greek postal market.

Table 2.5
Average Unit Prices of Compensation per Type of Defective Service (2009 prices in euros)

Type	2008	2009
Loss	391	283
Damage	204	124
Delay	27	34

Chart 2.1A
Postal Market Volumes

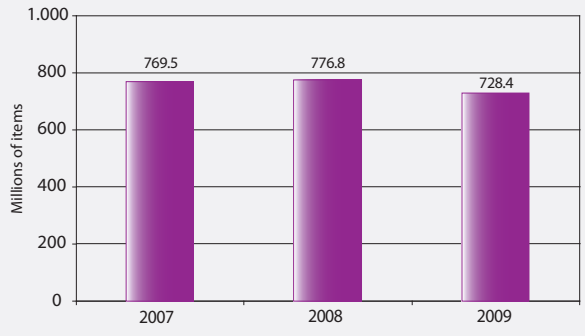
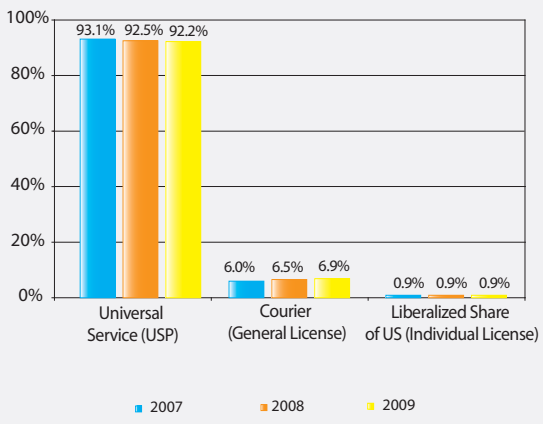


Chart 2.1B
Postal Market Volume Shares



Source: EETT (based on operators' data)

Chart 2.2A
Postal Market Revenues – 2009 Prices

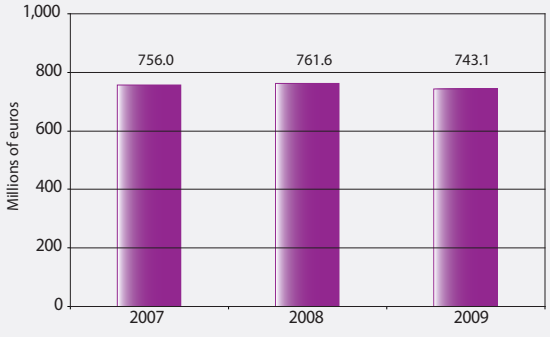
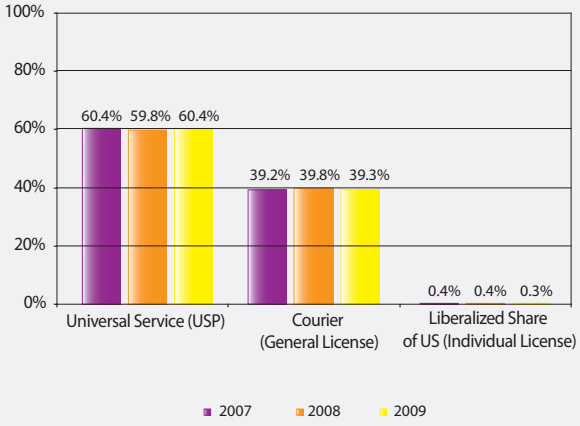


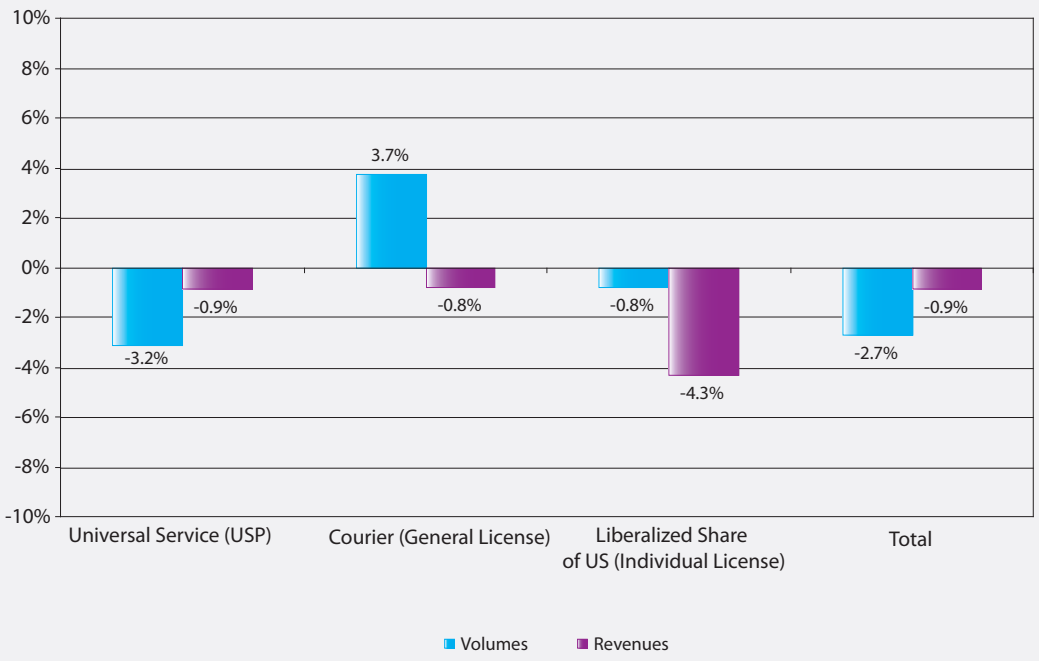
Chart 2.2B
Postal Market Revenue Shares



Source: EETT (based on operators' data)

Chart 2.3

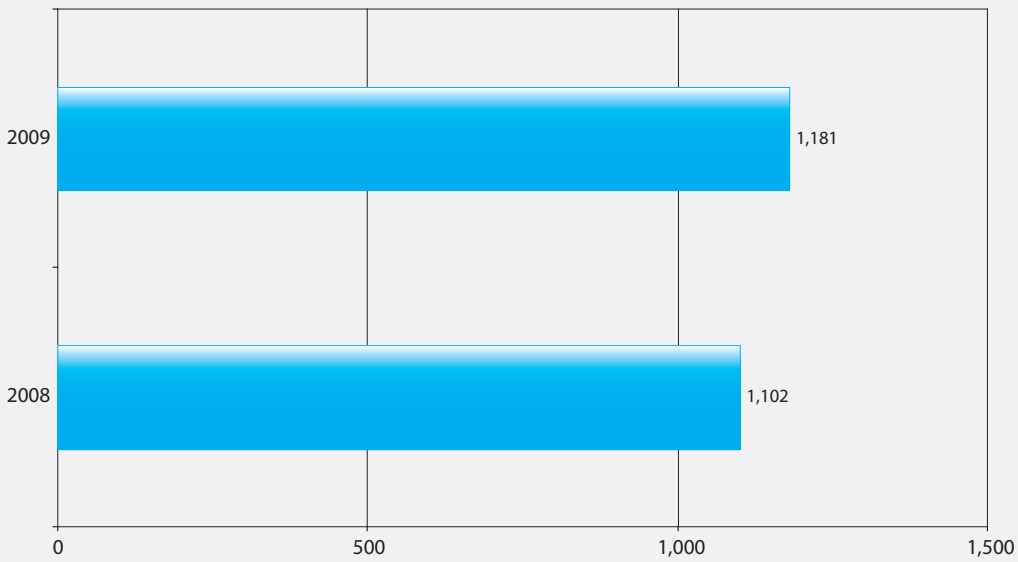
Average Percentage Change of Volumes/Revenues for the Years 2007-2009 (2009 prices)



Source: EETT (based on operators' data)

Chart 2.4

Courier Operators (registered and network)



Source: EETT (based on operators' data)

Chart 2.5A
Distribution of Courier Volumes
per Destination

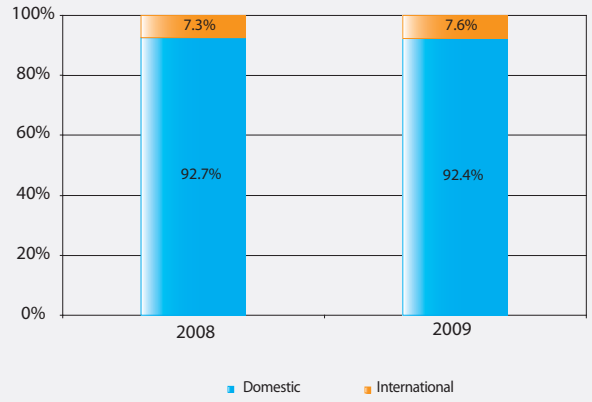
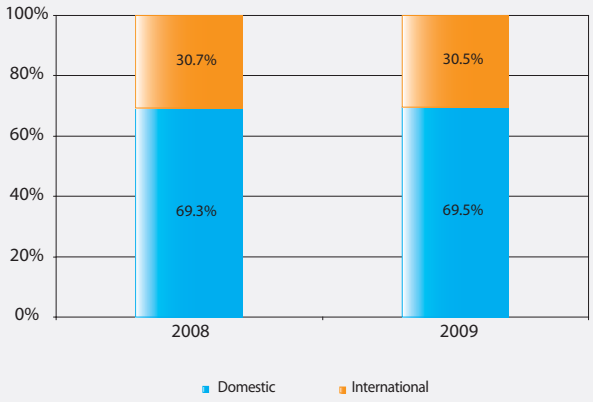


Chart 2.5B
Distribution of Courier Revenues
per Destination



Source: EETT (based on operators' data)

Chart 2.6A
Distribution of Courier Volumes
per Type of Item

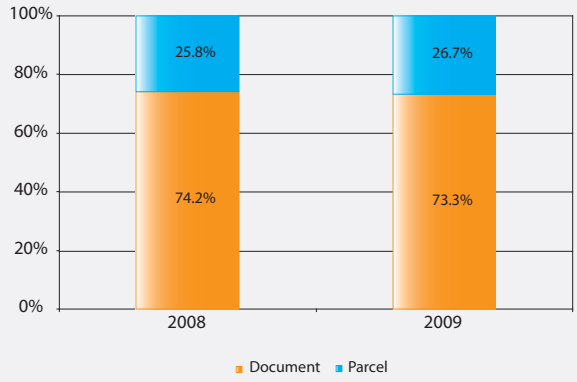
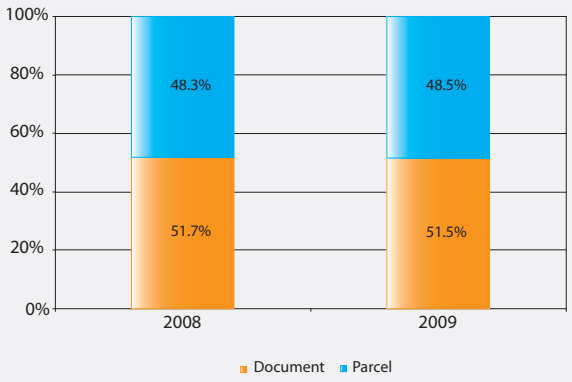


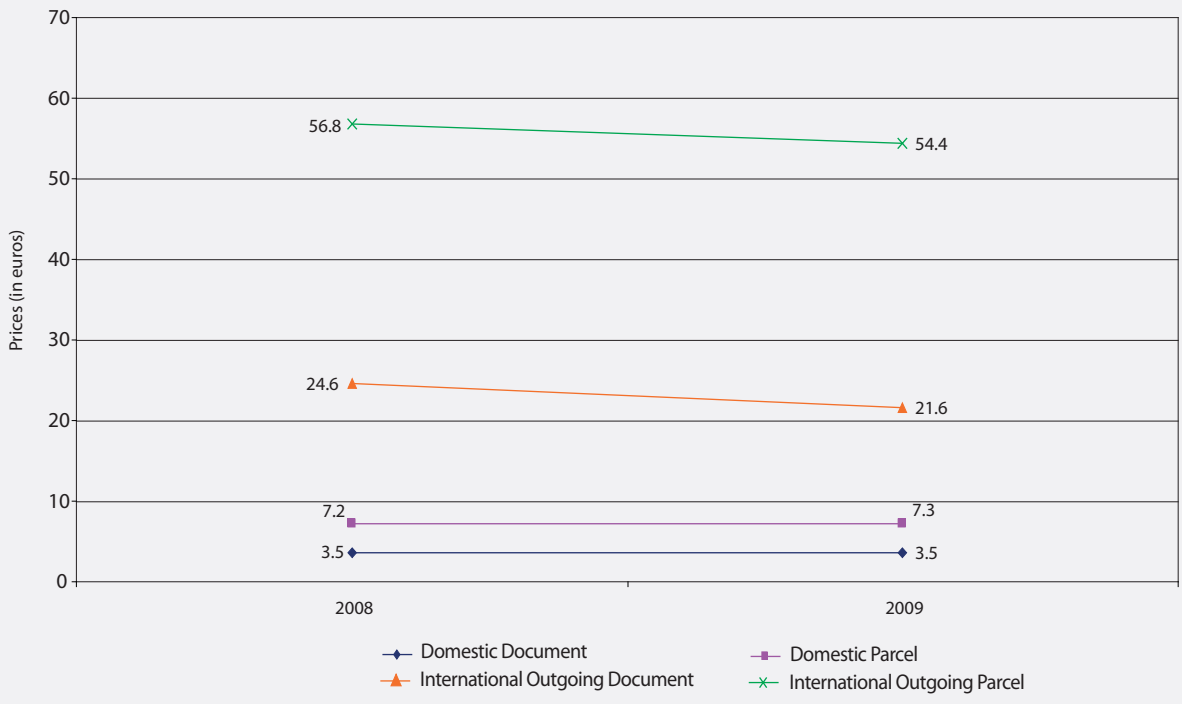
Chart 2.6B
Distribution of Courier Revenues
per Type of Item



Source: EETT (based on operators' data)

Chart 2.7A

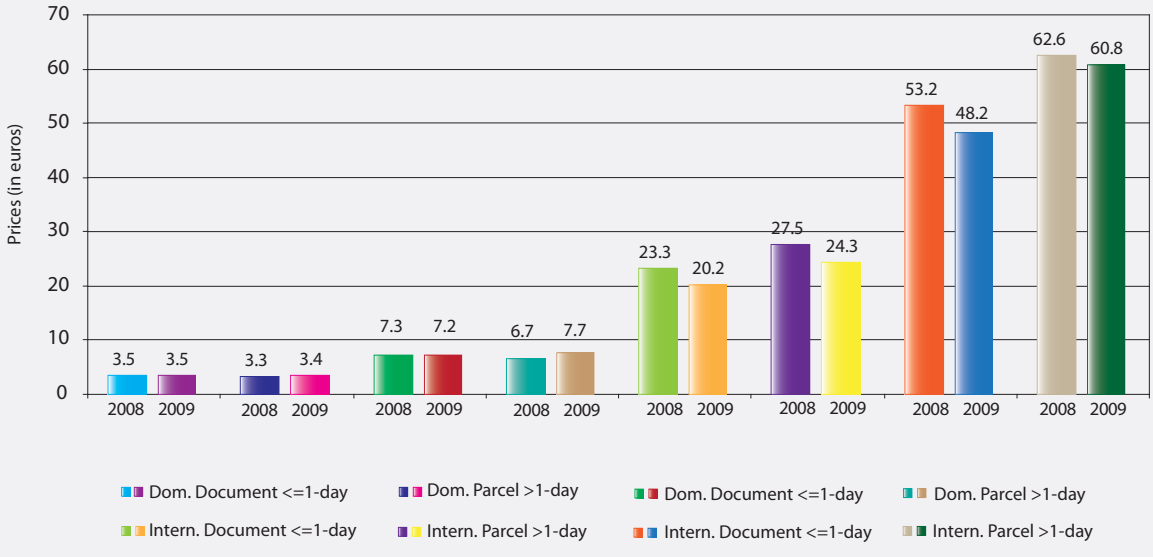
Average Unit Prices of Postal Products per Destination and Type of Item
(autonomous handling - 2009 prices VAT not included)



Source: EETT (based on operators' data)

Chart 2.7B

Average Unit Prices of Postal Products per Speed, Destination, and Type of Item
(autonomous handling - 2009 prices VAT not included)



Source: EETT (based on operators' data)

Chart 2.8A
Distribution of Domestic Courier Volume per Origin

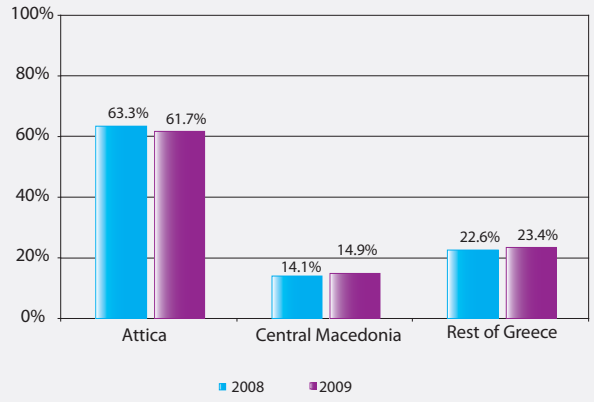
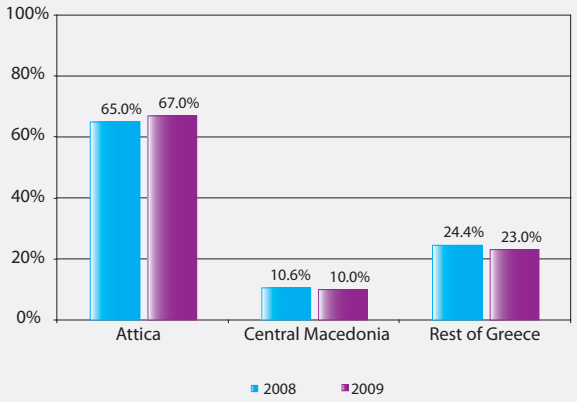


Chart 2.8B
Distribution of Domestic Universal Service Volume per Origin



Source: EETT (based on operators' data)

Chart 2.9A
Geographical Distribution of International Outgoing Volume per Destination

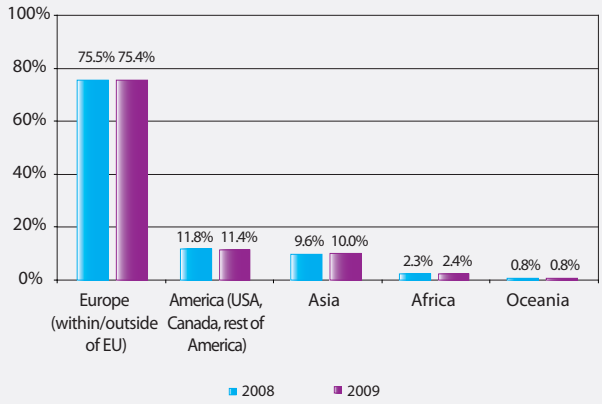
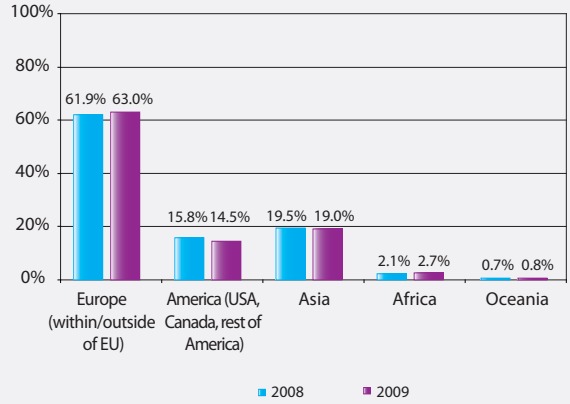
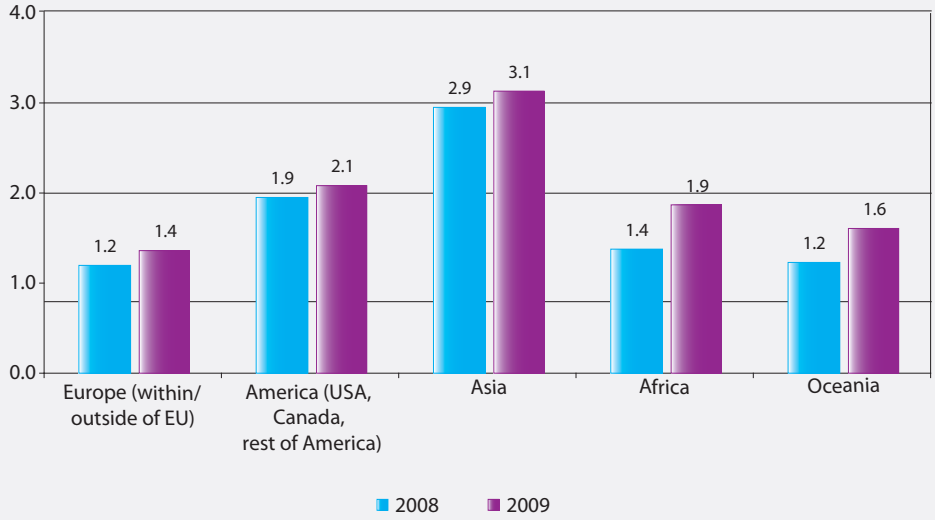


Chart 2.9B
Geographical Distribution of International Incoming Courier Volume per Destination



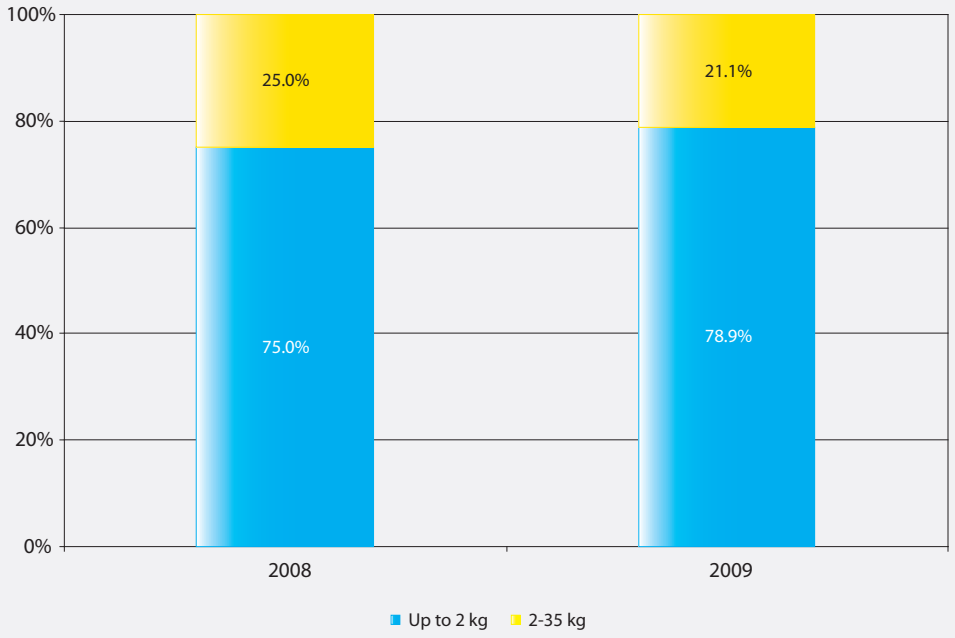
Source: EETT (based on operators' data)

Chart 2.10
Ratio of Incoming to Outgoing International Courier Items



Source: EETT (based on operators' data)

Chart 2.11
Distribution of Courier Items' Weight



Source: EETT (based on operators' data)

Chart 2.12A
Postal Market Employees

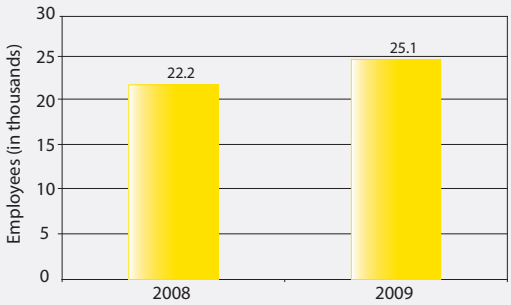
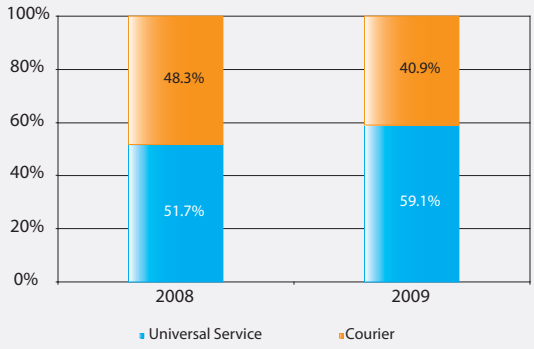


Chart 2.12B
Distribution of Postal Market Employees



Source: EETT (based on operators' data)

Chart 2.13A
Distribution of Employees in Universal Service based on Labor Contract

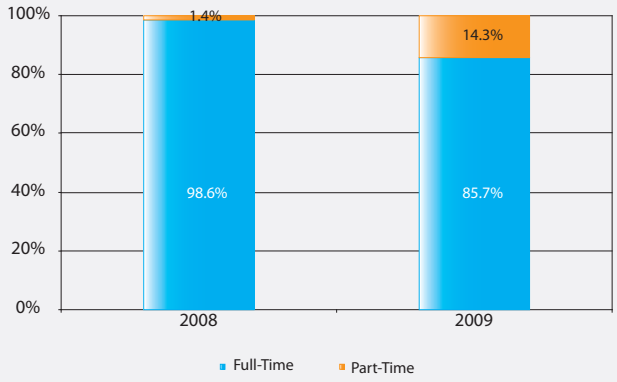


Chart 2.13B
Distribution of Employees in Courier based on Labor Contract

Source: EETT (based on operators' data)

Chart 2.14A
Distribution of Employees in Universal Service based on Type of Employment

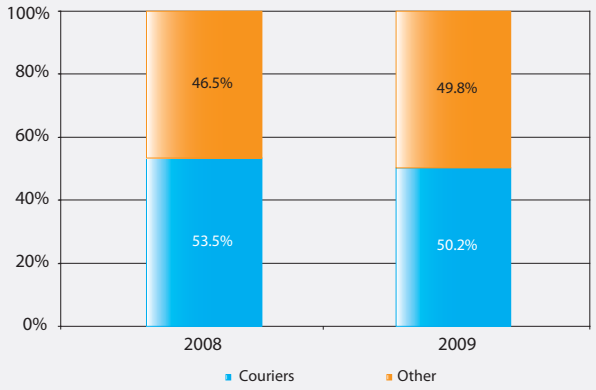
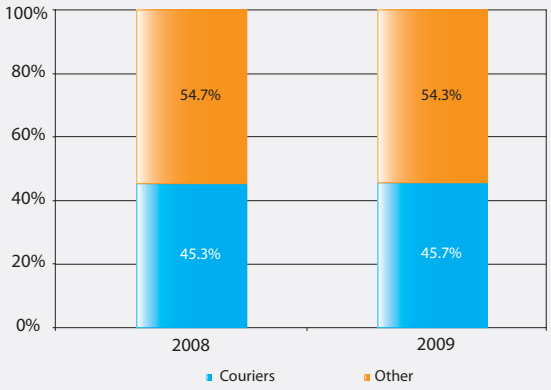


Chart 2.14B
Distribution of Employees in Courier based on Type of Employment



Source: EETT (based on operators' data)

Chart 2.15A
Distribution of Employees in Universal Service based on Educational Level

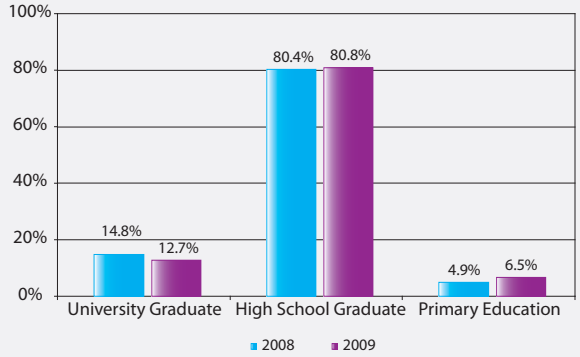
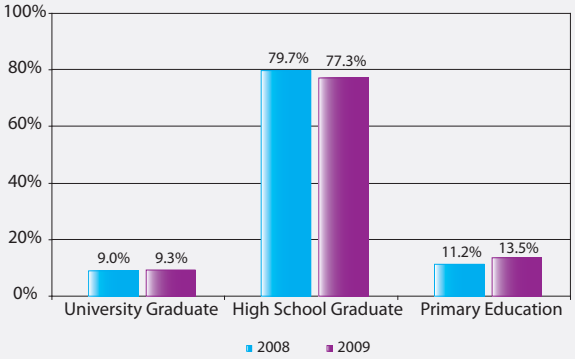


Chart 2.15B
Distribution of Employees in Courier based on Educational Level



Source: EETT (based on operators' data)

Chart 2.16A
Central Postal Service Points

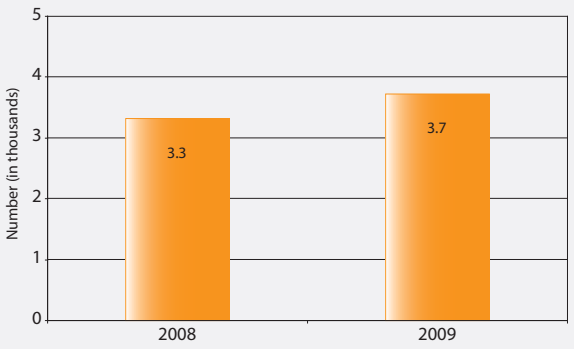
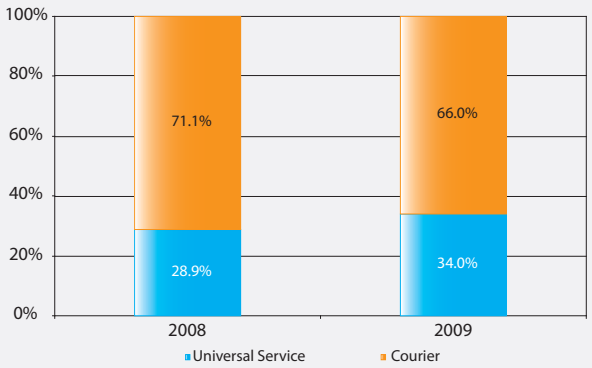


Chart 2.16B
Distribution of Central Postal Service Points



Source: EETT (based on operators' data)

Chart 2.17A
Surface Area of Postal Market Hubs

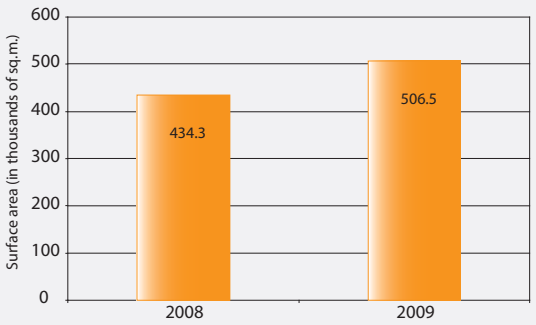
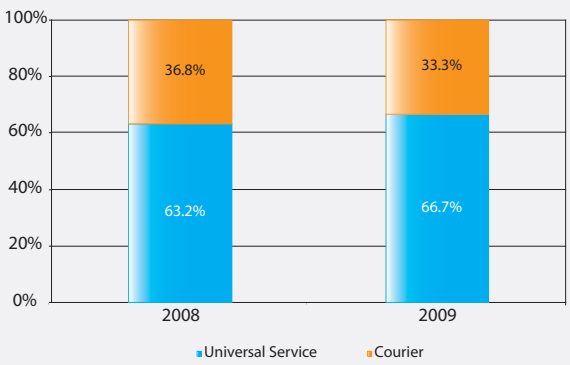


Chart 2.17B
Distribution of Surface Area of Postal Market Hubs



Source: EETT (based on operators' data)

Chart 2.18A
Postal Market Vehicles

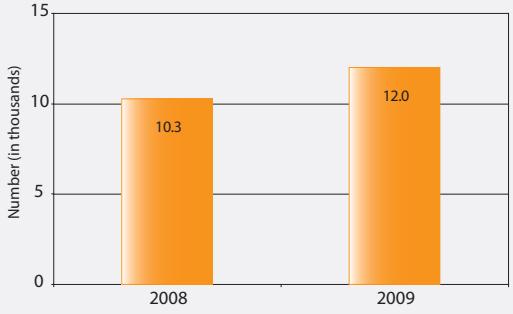
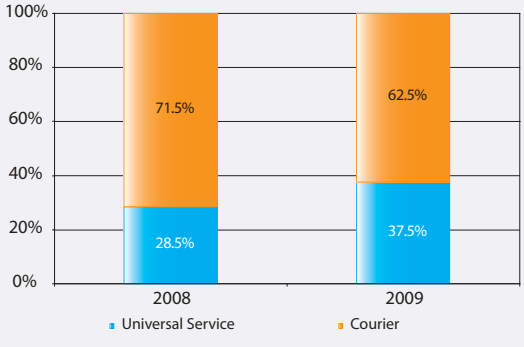


Chart 2.18B
Postal Market Vehicles' Distribution



Source: EETT (based on operators' data)

Chart 2.19A
Distribution of Courier Volumes per Type of Customer

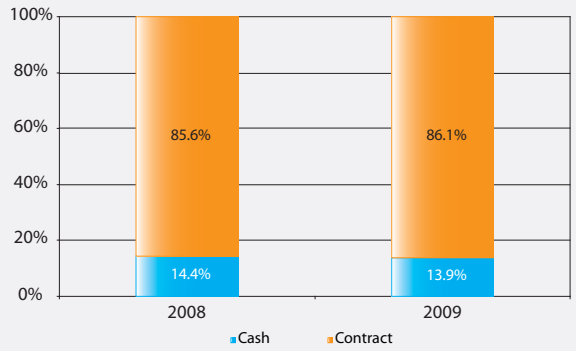
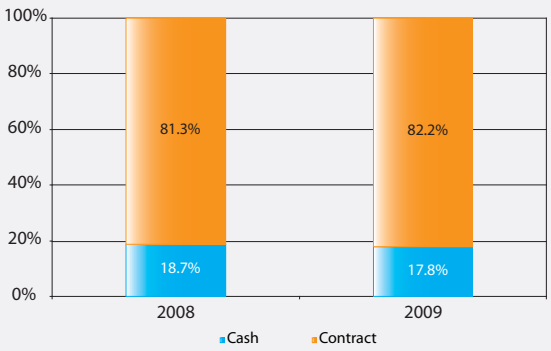
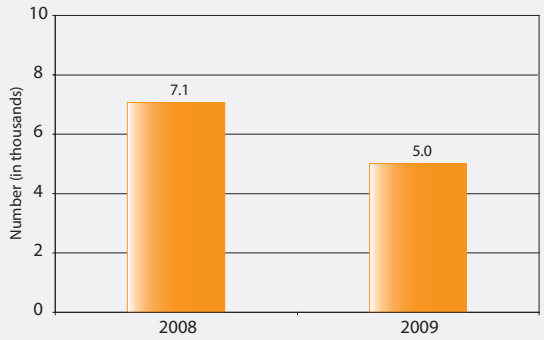


Chart 2.19B
Distribution of Courier Revenues per Type of Customer



Source: EETT (based on operators' data)

Chart 2.20A
Courier Users' Complaints



Source: EETT (based on operators' data)

Chart 2.20B
Distribution of Courier Users' Complaints per Type of Defective Service

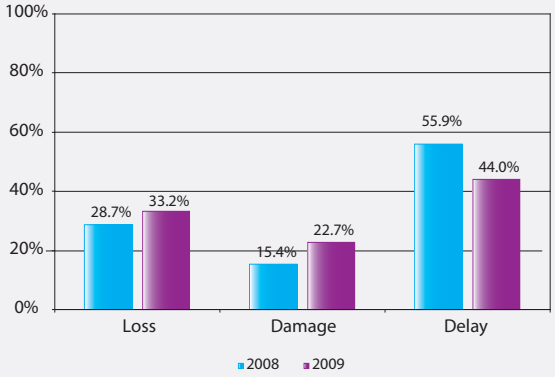


Chart 2.21A
Compensation Paid by Courier Operators to Users for Defective Services – 2009 Prices

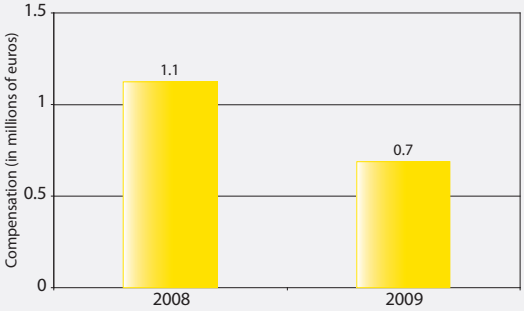
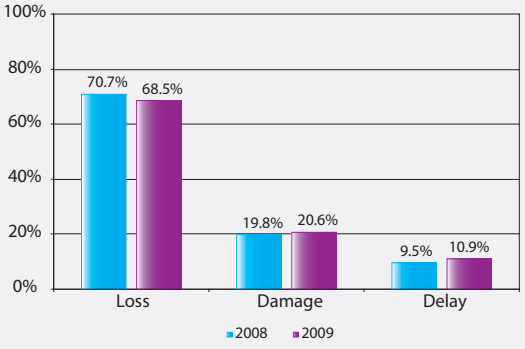


Chart 2.21B
Distribution of Courier Users' Complaints per Type of Defective Service



Source: EETT (based on operators' data)

Chart 2.22A
Distribution of Courier Users' Complaints based on Type of Settlement

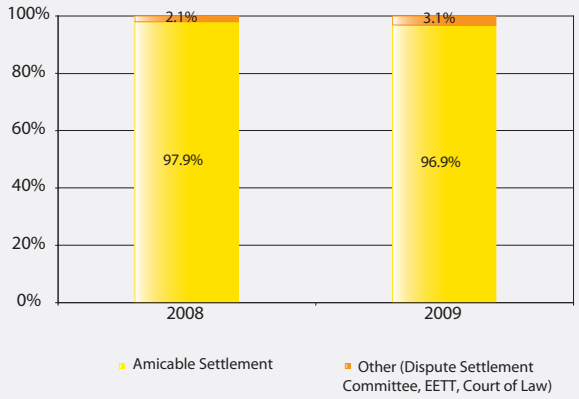
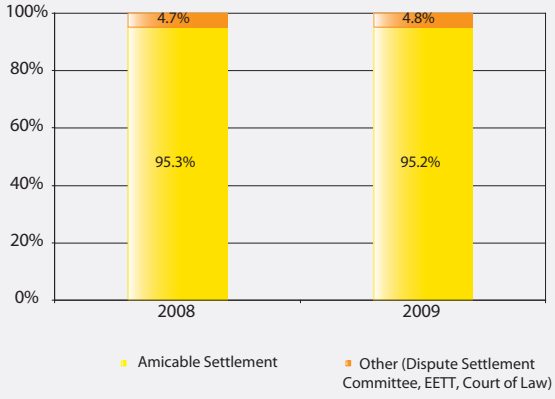
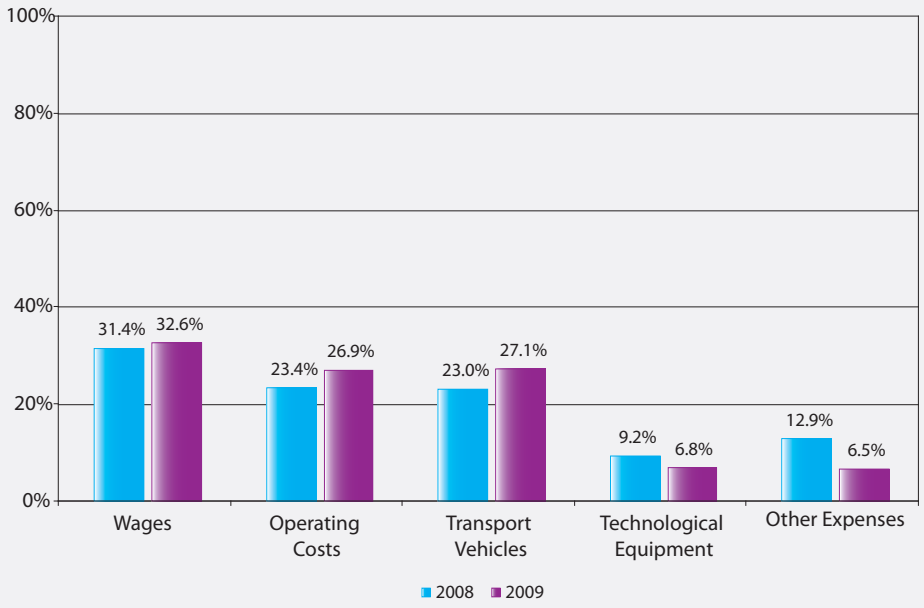


Chart 2.22B
Distribution of Compensation Paid to Courier Users based on Type of Settlement



Source: EETT (based on operators' data)

Chart 2.23
Distribution of Courier Companies' Costs



Source: EETT (based on operators' data)

2.4. The International Postal Market

According to the latest Report published in August 2009 and commissioned by the EU, the classification of postal items is the following:

- Mail items (including addressed direct mail, books/ newspapers/magazines, statements issued by banks/public organizations/private companies').
- Parcels delivered within 2-3 days (with no quality specifications over parcel handling).
- Courier items whose handling is subject to such specifications as time and/or place of delivery.

2.4.1. Mail Items

The handling of mail items accounts for 56% of the total revenues of Postal Service operators of the member states. More specifically, for every 10 mail items handled, 6 are letter posts, 3 are addressed direct mail and 1 belongs to the books/newspapers/ magazines category. The USPs handle more than 95% of items in their domestic markets. Given that mail items are sent by businesses and delivered to consumers (B2C - Business to Consumer), the intense business activity observed in 6 developed countries of western Europe (UK, Germany, France, The Netherlands, Italy, and Spain) explains the fact that 80% of B2C mail items is handled within the domestic markets of these particular countries. The average European citizen receives approximately 200 mail items annually. The majority of B2C mail is sent by businesses, but the number of items per inhabitant varies from country to country with the range being 50-400 items per inhabitant.

In Western European countries the volumes of mail items have been practically stabilized in the years 1998-2007 (0.2% average annual growth rate), whereas in Southern European countries the respective annual growth rate barely exceeds 1%. The developing economies of the new member states from Eastern Europe show the highest annual growth rates for mail items (>2%) in the period under consideration. The most important cause for the gradual decline of mail volumes is the extensive use of electronic media. Additionally, the users of Postal Services who account for significant volumes (e.g. banks) are reducing the frequency of communication with their customers in an effort to control their costs.

Direct mail is especially developed in western European countries with 60 to 80 items per inhabitant, while there is still ample room for further growth in the countries of eastern and southern Europe (10 to 30 items per inhabitant). The high cost of producing direct mail (planning and printing of material, distribution), the necessary investments in infrastructure (e.g., databases containing recipients' addresses), and the possibility of alternative methods of advertising (e.g. via the Internet) are some of the determinants in the evolution of addressed direct mail. It is worth mentioning that, especially in the case of western European countries, unaddressed direct mail is an important substitute product of addressed direct mail.

Over the years, distribution of books/newspapers/ magazines has been declining in the member states owing to the decrease in subscribers to newspapers/ magazines on the one hand, and on the other, due to the tendency of publishers to hire distribution companies for the promotion of their printed material.

In countries where the postal market is fully deregulated, the alternative operators market share in volumes of mail items ranges between 8-12%. However, in countries where deregulation, according to the provisions of the three EU[11] Directives, has been a gradual process, the intensity of competition is limited. Since the customers of alternative operators are companies with medium/high volumes, items are collected at the customer's premises making it unnecessary for the operator to deploy an extensive collection network. Overall, the operation of alternative operators is limited to local geographical scale.

With regard to the pricing of mail items, the price for 20gr in the fastest category of simple domestic item has not risen in real terms in more than half of the member states. As a result, postal services remain accessible to consumers and small businesses. This fact does not apply to eastern European countries, where the observed price increases in domestic Postal Services are due to the convergence of those countries' exceptionally low charges to western European tariffs. The USPs offer uniform prices for cross-border services within the EU-27. In western European countries, the observed increases in the price for 20gr in the fastest category of simple cross-border postal items are higher than the corresponding increase in the price of the domestic items. In contrast, the price of a similar cross-border service in the countries of southern and eastern Europe has been declining in real terms. It must be mentioned that for every 100 euros spent by the average European consumer, only 0.1 euros is spent for Postal Services, whereas the respective cost for Electronic Communications Services amounts to 3.2 euros.

11. Directives 1997/67/EC, 2002/39/EC and 2008/6/EC.

The introduction of automated processes in sorting centers and the application of research techniques for the optimization of the operation of collection/distribution networks of the USPs, have resulted in significant improvements in the quality of the US. The USPs (Netherlands, UK, Germany, Finland, Luxembourg, Sweden, Denmark and Portugal) that introduced new technologies, in their production process at the beginning of the 90s had achieved for domestic mail a speed indicator (that is, the percentage of items delivered to the recipient within one working day) higher than 90% before 2000. In contrast, in the 9 countries, including Greece, where there was a delay in the introduction of new technologies in the productive chain, the speed indicator for the delivery of domestic mail remains below 90% even today. With regard to the quality of cross-border mail within the EU, the respective speed indicator (that is, the percentage of items delivered to the recipient within 3 working days) for the 18 members which have been subjected to quality measurements for more than a decade has improved by more than 10 units in the period 1998-2008. It must be mentioned that in 2008 the speed indicator of cross-border mail within the EU was close to 95%.

For the period 1998-2007, the total number of post offices within the EU-27 dropped by 10%. On the one hand, that was due to the fall in demand for Postal Services and, on the other, it arose from the need to reduce the operating costs of the USPs of the member states. More specifically, in 7 EU member states, the density of access points (number of post offices per inhabitant) decreased significantly, while in only 2 member states of southern Europe (Greece, Malta) and 3 member states of eastern Europe (Bulgaria, Romania and Poland) the corresponding density increased. The USP offices have been significantly upgraded in the last decade, partly due to the evolution of the Postal Services offered and partly due to the promotion of non-postal products. The associated postal agencies operate as alternative access points with relatively low costs for the USP. In a few member states, such as Germany, operators competing with the USP have been contributing to the growth of the postal network by developing their own private networks of retail shops and by setting up mailboxes in public spaces. It should be mentioned that the decrease of access points in the Public Postal Network (PPN) has resulted in the citizens of several member states in the EU becoming discontent.

The reorganization of USP infrastructures aiming at improving provision of the US includes:

- Introducing the automation process in the sorting centers down to local level (roads) and not restricting it to the local distribution units.
- The reduction of the number of sorting centers and distribution units and the revision of the distribution routes.
- The cooperation of the USP with other operators (agents) for faster and more cost-effective implementation of the stages of collection, transportation, and delivery of mail items.

The reforms mentioned above allowed western European USPs to report positive profit margins, although the level of profits varied from country to country. In contrast, in the southern and eastern European countries, where the reorganization of the USPs has proceeded at a slower pace and the structure of markets differs significantly from that of western Europe's, the profit margins were limited.

In the future, individuals and businesses will be able to choose how to receive their mail (either physically or electronically). Among the determining factors for the rate of substitution between physical and electronic communication are: the progress of electronic governance, the degree of social acceptance of new technologies, the reliability/security of Electronic Communications networks and the additional benefits for consumers from the use of the electronic media. The financial crisis is expected to significantly reduce the mail volumes handled in the countries of Western Europe and by extension in EU-27, even though the respective volumes are expected to increase in Eastern Europe.

2.4.2. Parcels/Courier items

The revenues of operators active in the Parcels/Courier market have nearly doubled during the decade 1998-2008. The estimated turnover in 2008 exceeds 42 billion euros. The growth rate in this market for the period 1998-2008 is almost two times higher than the growth rate of the GDP in EU-27.

Traditionally, the shipments of Parcels/Courier items are carried out globally by multinational companies with international networks and with their headquarters either in Western Europe (Germany, Netherlands) or in the United States. At the same time, private companies, which offered initially Courier services in their domestic markets of EU member states, by signing cooperation contracts for the shipment of cross border mail, established their own European Courier networks that compete with the networks of the multinational companies. Also, the entry of the USPs in the Parcels/Courier market through the

establishment of subsidiaries intensifies further the competition.

Approximately 70% of the revenues in the parcels market are generated in the domestic markets of the 27 EU member states, 20% derived from cross-border commercial activity within the EU, and the remaining 10% stemmed from intercontinental shipments (ingoing/outgoing). The senders/recipients of these items are mainly businesses (B2B - Business to Business). B2B generates almost 80% of revenues. Internet sales (B2C) contribute another 15% and the remaining 5% comes from parcels traditionally handled (C2C - Consumer to Consumer). B2B is significantly affected by the climate of mergers and acquisitions within the EU and by the efforts exerted by the USPs to play a leading role in the handling of these items through their subsidiaries. In contrast, the leadership of the USPs in the handling of B2C items remains undisputed mainly due to their having held the monopoly in most EU member states until recently. Electronic commerce contributes decisively to the growth of B2C shipments but almost 70% of B2C revenues are generated within the markets of Germany, UK and France. The increasing trend among product/manufacturers/ sellers to communicate directly with their consumers/ customers, thus bypassing intermediaries, has been convertings B2B shipments into B2C ones, something which explains the higher growth rates in the B2C shipments compared to the B2B ones for the last 2 years.

Traditionally, B2B parcels have been handled by transport companies. However, having come to the realization that are being given an opportunity to expand their activities in the Courier services, transport companies have been upgrading their networks with an aim at improving delivery time and at offeringcustomized services, all the while keeping their prices at accessible levels. On the other hand, Courier operators respond to this challenge either by further reducing the prices and slightly increasing the delivery time for products that transport companies do have the ability of handling or by adding new services to shipments that transport companies are unable to handle. Moreover, transport companies have been focusing on the handling of domestic parcels as opposed to Courier operators who also handle international shipments.

The recession has negatively affected the growth rates of transport companies and Courier operators alike. This sector's recovery shall depend on the performance of member states with regard to certain macroeconomic indicators as well as the evolution of the price of oil. In the meantime, consumers have been replacing expensive Courier Services with cheaper, standardized services based on simple transport. Environmental issues and the progress of electronic commerce are both important factors affecting the landscape in this market. In the long term, it is expected that a small number of strong transport/ Courier service companies operating on a European level shall emerge. In the medium term, the multinational companies shall penetrate deeper into the Courier market by further enhancing their global networks, the Courier SMEs shall attempt to enter international markets by offering specialized services and the transport companies shall attempt to reinforce their position in the Courier market through intra-European partnerships.

Appendix

A. The OECD Methodology for Fixed Telephony Usage Baskets

The comparative presentation of the average monthly expenditure for residential and business users among the 27 EU member states results from a methodology employed by both the EU and the Organization for Economic Co-operation and Development (OECD) for the comparison of international tariffs. According to this methodology, the average expenditure is calculated based on a specified call basket which has been determined by the OECD and is applied on the basic tariff scheme of the incumbent operator of each member state.

On an annual basis, the expenditure for the residential user entails:

- The fixed expenditure defined as the monthly rental plus any installation charge for a new connection, depreciated over a 5-year period and including VAT.
- The usage expenditure, i.e., the variable expenditure which:
  - For the low usage basket, it refers to 456 calls to national fixed lines, 114 calls to mobile networks, and 30 international calls.
  - For the medium usage basket, it refers to 900 calls to national fixed lines, 276 calls to mobile networks, and 24 international calls.
  - For the high usage basket, it refers to 1,560 calls to national fixed lines, 744 calls to mobile networks, and 96 international calls.

Residential user calls are mainly placed during off-peak hours and are typically long.

On an annual basis, the expenditure for the business user entails:

- The fixed expenditure defined as the monthly rental plus any installation charge for a new connection, depreciated over a 5-year period and including VAT.
- The usage expenditure, i.e., the variable expenditure:
  - For the SoHo enterprises, it refers to 1,206 calls to national fixed lines, 522 calls to mobile networks, and 72 international calls.
  - For the SMEs, it refers to 2,016 calls to national fixed lines, 560 calls to mobile networks, and 224 international calls.

Business user calls are mainly placed during peak hours and are typically short.

B. The OECD Methodology for Mobile Telephony Usage Baskets

The data result from the methodology employed by both the EU and the OECD for the comparison of international tariffs. According to this methodology, the average expenditure is calculated based on specified call baskets which have been determined by the OECD and are applied on the respective post-paid packages of the two most prominent MTOs of each EU member state, based on subscriber numbers available.

More specifically, the baskets include calls to several mobile networks and voicemail but exclude international calls. They include data pertinent to Short Message Service (SMS) and Multimedia Messaging Service (MMS) separated into peak and off-peak times as well as on-net and off-net destinations. There are three different baskets based on usage degree (low, medium, and high).

On an annual basis, the expenditure for each mobile telephony user entails:

- The fixed expenditure defined as the monthly rental plus any registration/connection fee for a new connection, depreciated over a 3-year period and including VAT.
- The usage expenditure, namely the variable expenditure:
  - For the low usage basket, it refers to 30 outgoing calls per month, 33 SMS and 2/3 MMS. 22% of calls are to fixed line phones, 70% to mobile phones, and 8% to voicemail. 48% of calls are placed during peak hours, 25% during off-peak hours and 27% on weekends.
  - For the medium usage basket, it refers to 65 outgoing calls per month, 50 SMS and 2/3 MMS. 21% of calls are to fixed line phones, 72% to mobile phones, and 7% to voicemail. 50% of calls are placed during peak hours, 24% during off-peak hours and 26% on weekends.
  - For the high usage basket, it refers to 140 outgoing calls per month, 55 SMS and 1 MMS. 20% of calls are to fixed line phones, 73% to mobile phones, and 7% to voicemail. 60% of calls are placed during peak hours, 19% during off-peak hours and 21% on weekends.

C. Assumptions of the Study for the Retail Cost of Broadband Access

- The basis of comparison is the lowest price in each country. Consequently, the study does not take into account the price range or whether a package is representative in terms of consumption.
- The compared prices are after VAT and have taken into account the Purchasing Power Parity (PPP).
- In order to compare packages that are as similar as possible, the study categorizes them into baskets based on the type of service and speed. There are 4 service-based baskets (Internet, Internet and telephony, Internet and television, Internet and telephony and television) and 7 speed-based baskets (144 to 512 Kbps, 512 to 1024 Kbps, 1024 to 2048 Kbps, 2048 to 4096 Kbps, 4096 to 8192 Kbps, 8192 Kbps to 20 Mbps and 20+Mbps).
- The study is limited to preset packages excluding any 'a la carte' ones. It also excludes discounts and special offers.
- The study takes into account not only the monthly charge but also any one-off non-recurring charges such as connection fee, equipment (e.g. router), installation costs, etc. Unfortunately, it is not entirely clear what has been taken into account in each case. These charges are distributed over an assumed, standard contract period of 12 months, unless the duration of the contract period is a smaller one. In the Charts, the amount corresponding to non-recurring costs is defined as "Non-Recurring Charges", as opposed to the monthly costs which are defined as "Monthly Recurring Charges".
- The study takes into account packages with time-based or volume-based charging. In order to ensure comparability of the packages, the study assumes a minimum time of use and volume of downloaded data. In the various charts, the cost of such minimum usage is defined as "Additional Recurring Internet Charges". This assumption does not affect Greece since none of the examined packages offer either time-based or volume-based charging.
- There is also a normalization parameter of minimum consumption time in the cases of fixed telephony services. In the various charts, the cost of such minimum usage is defined as "Additional Recurring Telephony Charges".
- The study is limited to a targeted 80% market coverage. In some cases, this goal has not been fully met. Especially in the case of Greece, the study takes only the prices of OTE and HOL into account. If the sample for Greece had been considerably wider, it would have yielded lower prices.

8.2. Glossary

TERM	DEFINITION
Acid Test Ratio	It shows the quantitative relation between the assets' elements that can be liquidated instantly and the short-term liabilities of the operator. The Acid Test Ratio presents a stricter estimation of the operator's ability to meet its current liabilities and is considered satisfactory when it exceeds one unit.
Active Mobile Telephony Subscribers	The term refers to all subscribers under contract or prepaid status who during the past, three consecutive months have contributed to the generation of revenue, either retail (call or SMS/MMS, etc) or wholesale (call acceptance or SMS/MMS, etc).
Activity Ratios	They demonstrate the efficient use of an operator's assets. Specifically, the average collection period is the elapsed time period necessary for the operator to collect its receivables. Respectively, the payable period is the number of days during which the operator's liabilities remain not settled. If the first ratio is lower than the second, the operator's liabilities are settled at a slower pace than the time period the operator needs to collect its receivables. Thus, the operator does not need to keep a great amount of cash at hand. This is the case for both fixed and mobile telephony operators.
Charter of Obligations to Consumers (COC)	The providers of Postal Services under a General Authorization must prepare a COC to include: (a) a description of the provided service's characteristics and the time constraints within which it is provided, (b) information for users on prices based on the data affecting them including expected improvement of service quality, (c) the Dispute Resolution Committee with the participation of a users' representative and right of attendance by the interested user (consumer). The COC also contains all other necessary information in relation to the characteristics of the Postal Services providers, those providers' obligations and commitments to users, the management of postal items user service and potential compensation.
Equity to Total Liabilities Ratio	It is employed in confirming whether or not an operator has over-borrowed. In other words, it is a safety indication that the operator offers its debtors. Ratios that exceed the unit imply that the shareholders/owners of the company participate in it with more capital than the debtors.
General Consumer Price Index (CPI)	It is calculated on a monthly basis by the National Statistical Service of Greece (NSSG). It is used in measuring the general price level of goods and services that an average household buys and is revised at regular intervals. It should be mentioned that according to the last revision the base year of the CPI is 2005. The general CPI is composed of partial indexes (Sub-indexes), which reflect the price level of goods and services of specific categories. The Communications' Sub-index is 99% related to expenditures made for services of fixed and mobile telephony. The remaining 1% concerns Postal Services (0.5%) and telephony equipment (0.5%).
Gross Profit	It is the difference between turnover and the cost of goods sold. Its presentation is more complex since, as opposed to OTE and COSMOTE, the majority of the listed operators' financial statements do not include the operators' operational expenditures (administration, distribution, research, and development) in the cost of goods sold.
Gross Profit Margin Ratio	It demonstrates the operating efficiency of the operator as well as its tariff policy. The higher the Gross Profit Margin Ratio, the better the situation for the operator as far as profits are concerned, since it can easily meet any increase in the cost of the operator's product. It should be mentioned that a company can operate with a low profit margin and still increase its turnover through a dynamic sales policy thus offsetting the low profit margin.
National Incoming Traffic	The total traffic terminating to an operator's network and originating in the networks of other domestic fixed or mobile telephony operators (OTE and alternative operators).
National Outgoing Traffic	The total traffic originating in an operator's network and terminating at the networks of other domestic fixed or mobile telephony operators (OTE and alternative operators).
On-Net Traffic	It is the traffic among the subscribers on the same MTO's network and constitutes a significant part of each MTO's traffic. At the same time, it is a substantial source of revenue, since it is not affected by the Interconnection agreements with other operators.
Total Assets	The total financial resources that an operator owns including fixed (buildings, machinery, etc) as well as current assets (cash, receivables, inventories, etc).

Turnover	The total revenues during the financial year. It concerns licensed operators whose balance sheets are publicly available.
Universal Service in the Postal Services Sector	The right granted to Postal Service users, regardless of their location within the Greek territory, to permanently and affordably enjoy special quality Postal Services. The Universal Service in the Postal Services sector includes: (a) the collection, transportation, sorting, and distribution of postal items up to 2kg, (b) the collection, transportation, sorting, and distribution of postal parcels up to 20kg, (c) services of registered mail and deliveries with declared value. The Universal Service includes both national and cross-border services.
Universal Service Provider - USP (in the Postal Services Sector)	The operator designated by the Greek State as having the obligation to ensure provision of the Universal Postal Service. Hellenic Post (ELTA) is the current USP.

8.4. Index of Charts and Tables

Charts

Tables

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