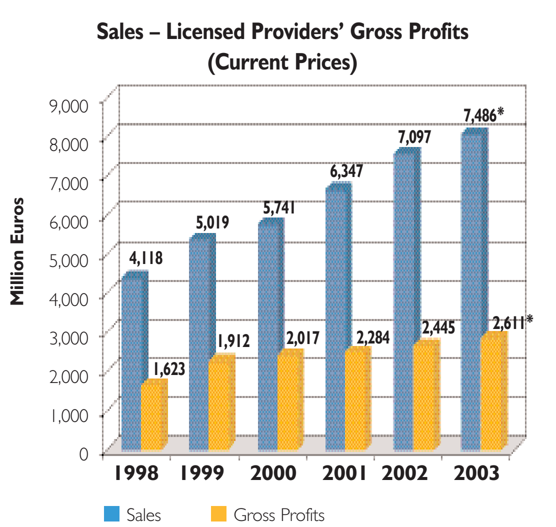
1. Overview of Markets

In this Chapter, quantitative data on the telecommunications and postal services markets is included, which demonstrates the significant development of the aforementioned markets. Specifically for the telecommunications sector, among others, general financial data is presented, such as the assets and profits of providers active in the Greek market, as well as other market data such as the number of active providers, the traffic from telephone calls and data that concerns the existing telecommunications infrastructure. At the same time, comparisons with relative data from other European countries are presented. In the sector of postal services we present data concerning the number of active providers and handled postal items, the percentage distribution of domestic and international handled items, as well as Universal Service (US) data.

Chart 1



**Estimate*

Source: EETT

1.1. Telecommunications

1.1.1. Financial Data of Telecommunications Market

In this Section the most significant financial data of the Greek telecommunications market is presented, as derived from the analysis of published balance sheets of licensed providers for the years 1998 - 2002. For the year 2003, the data provided is an estimate based on the published nine-month period balance sheets of providers, under the obligation to publish the specific balance sheets.

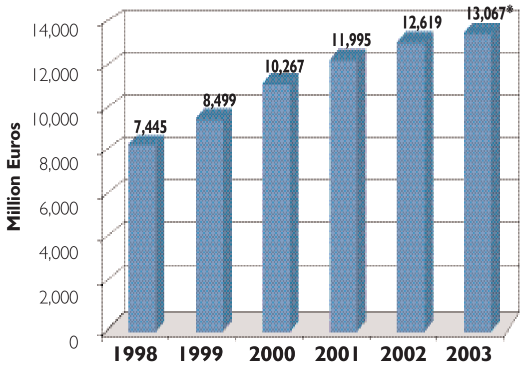
According to the data mentioned above, the domestic telecommunications market, based on the turnover (sales) of active providers in the sector, is estimated to have presented an increase of 5.4%, instead of 11.8 % in 2002. The market's size for 2003, as it appears in Chart 1, is estimated in current prices at 7.5 billion euros, instead of 7 billion euros for 2002. Based on the same estimates, in 2003 the Hellenic Telecommunications Organisation (OTE) owned a share of more than 50%, while the mobile telephony providers more than 40%, of the aforementioned revenues. Furthermore, in Chart 1, the profit (gross profits) of providers is presented, which in 2003 is estimated to exceed 2.5 billion euros (increase of 6.7%), and generally presented a stable increasing trend during the period 1998 - 2003. Furthermore, in 2003, earnings before interest, taxes, depreciations and amortisations (EBITDA) of the market are estimated to amount to 1.3 billion euros, while net profits barely exceeded 1 billion euros (all in current prices).

An equally interesting element is the financial robustness of the market, which is also demonstrated by total assets, which are estimated at 13 billion euros for 2003 (increase rate 3.5%), in comparison to 12.6 billion euros for 2002 (see Chart 2). In what concerns the total of property assets of the telecommunications market, OTE owned more than 60%, compared to 30% owned by mobile telephony providers.

Finally, the figure of man power employed by licensed providers, varies between 24,500 and 25,500 persons, with OTE and mobile telephony providers employing more than 67% and 23% respectively, of the total of employees.

Chart 2

Licensed Providers' Total Assets (Current Prices)

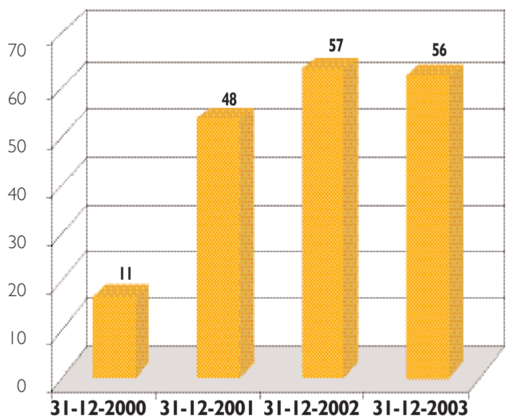


**Estimate*

Source: EETT

Chart 3

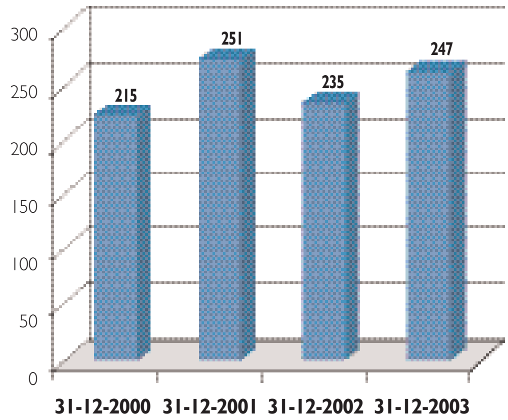
Number of Individual Licences



Source: EETT

Chart 4

Number of General Authorisations



Source: EETT

Table 1

Number of Individually Licensed Providers per Activity, 31-12-2003

Activity	Number of Providers[1]
Voice Telephony and Development of Fixed Network	13
Voice Telephony	11
Development of Fixed Network	2
Satellite	10
2nd Generation Mobile Telephony	4
3rd Generation Mobile Telephony	3
TETRA	1
W-LAN	3

Source: EETT

1.1.2. Licensing

In Charts 3 and 4 the fluctuation of the number of licensed providers (owners of Individual Licences and General Authorisations) is presented, from the beginning of 2001 until the end of 2003. It is noted that an Individual Licence is required for the installation of telecommunications networks through public areas

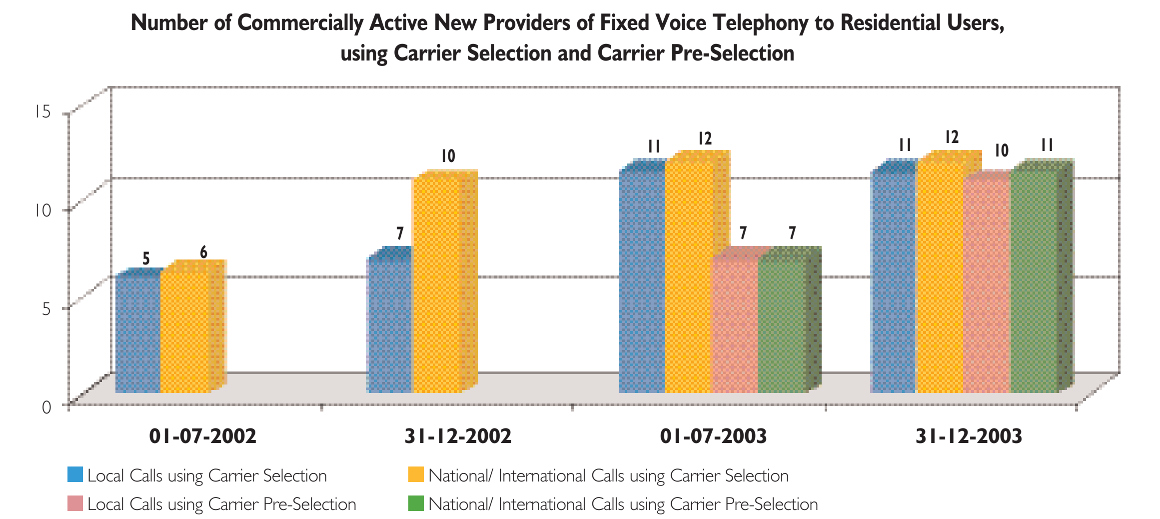
[1] *A provider may be granted Individual Licences for different activities.*

(transit rights), as well as for the provision of telecommunications services requiring scarce resources. Furthermore, a General Authorisation is required for the exercise of any telecommunications activity that does not fall under the framework of Individual Licences. In Table 1, the number of Individual Licences owners per activity is presented, as it was shaped at the end of 2003.

1.1.3. Fixed Voice Telephony

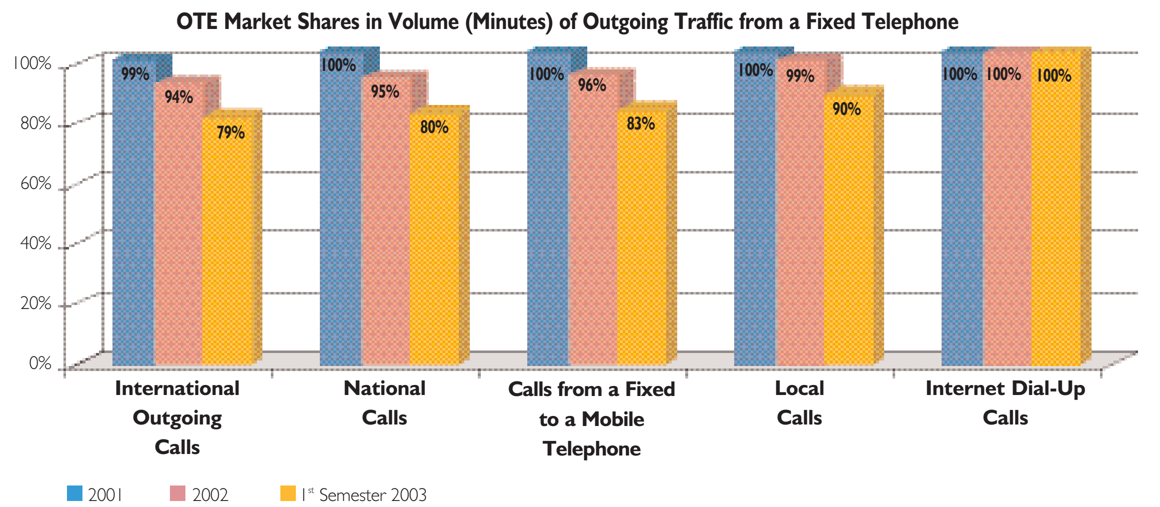
In 2003, three years had passed from the full liberalisation of the Greek market of fixed voice telephony, characterised by a rapid increase in the number of new providers and intensification of competition. The latter mostly concerned the provision of fixed voice telephony through Carrier

Chart 5



Source: EETT

Chart 6

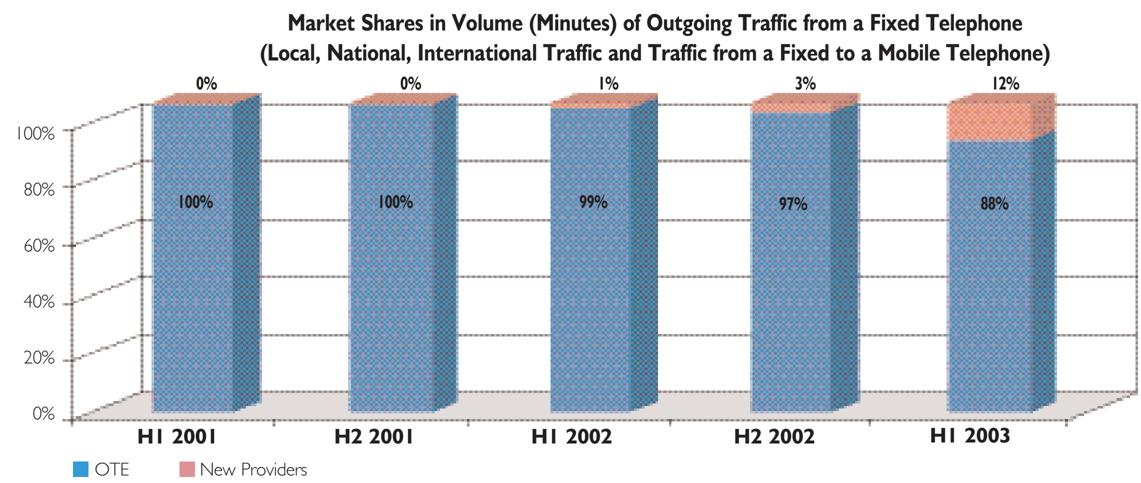


Source: EETT

Selection and Carrier Pre-selection, services that started being provided to residential users in the beginning of 2002 and 2003 respectively. At the end of 2003 (see also Chart 5), 12 providers were commercially active in the provision of calls through Carrier Selection service, 11 of which were also active through Carrier Pre-selection service.

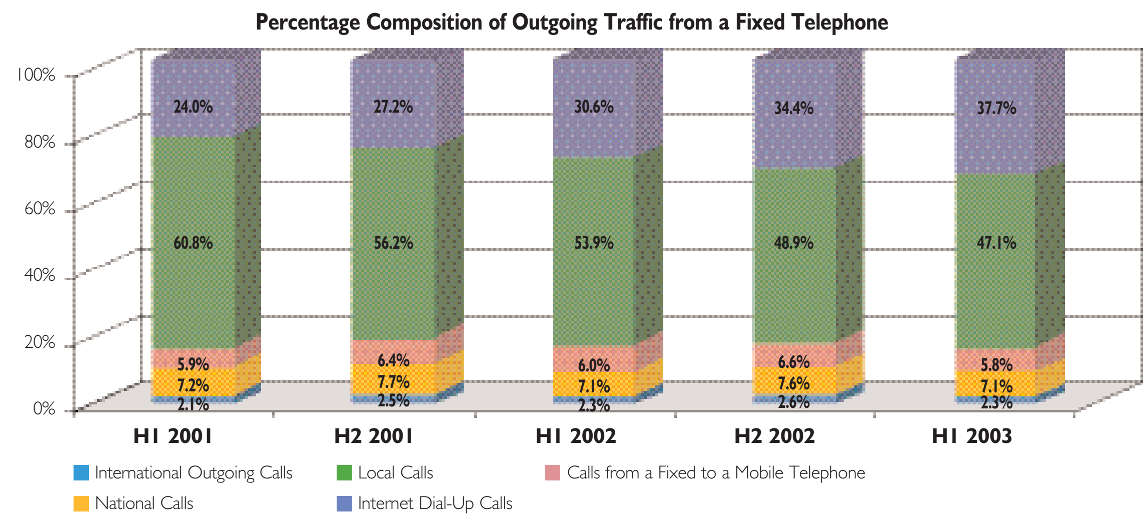
In Chart 6 (page 27) we present the shares of OTE, throughout the years, per outgoing call category, based on the traffic initiated from a fixed phone and include the following call categories: local, national, international, to mobiles and to the Internet. Taking into consideration the aforementioned categories, with the exception of calls to the Internet, the market share gained by the new providers is estimated at 12% during the first semester of 2003 (see Chart 7).

Chart 7



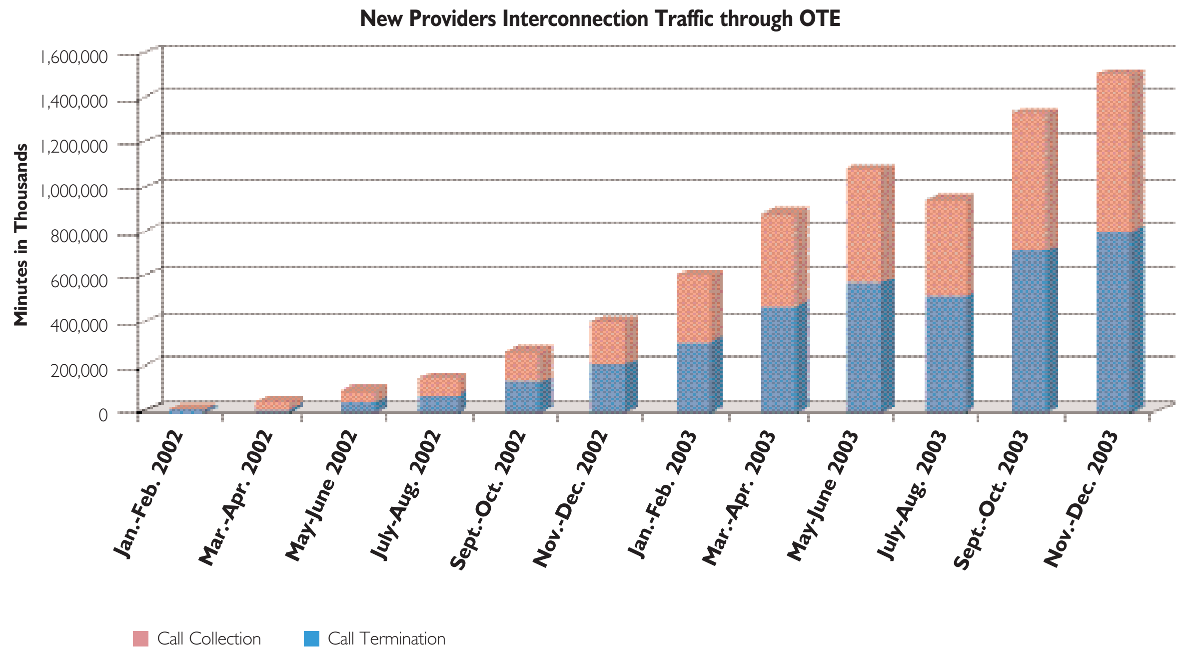
Where H= Semester

Chart 8



Source: EETT

Chart 9



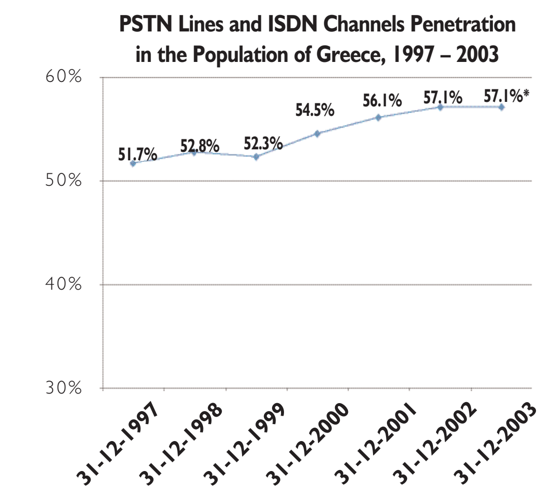
Source: EETT

In Chart 8, we present the percentage composition of outgoing traffic from a fixed telephone (local, national, international, to mobiles and to the Internet), according to which the largest part of traffic concerns local calls and calls to the Internet.

The majority of new voice telephony providers, as it was already mentioned, provides services through the Carrier Pre-selection or Carrier Selection. Thus, the majority of their traffic utilises the network of OTE. In Chart 9, the evolution of Interconnection traffic is presented, which has been collected by OTE's network and terminated in its network, on account of the new voice telephony providers. The rapid increase of Interconnection traffic is remarkable, a fact that reflects the increase of the level of competition in the fixed voice telephony market.

It should be noted that collection traffic is defined to be the traffic that initiates from a fixed phone of an OTE subscriber, through the service of Carrier Selection or Carrier Pre-selection, on account of a new telecommunications provider. Whereas call termination traffic is defined to be the traffic that terminates at a fixed phone of an OTE subscriber and which comes from the network of a new fixed voice telephony telecommunications provider.

Chart 10



**Estimate*

Source: EETT

Table 2

Access Lines to the Public Telephone Network (Lines in Operation)

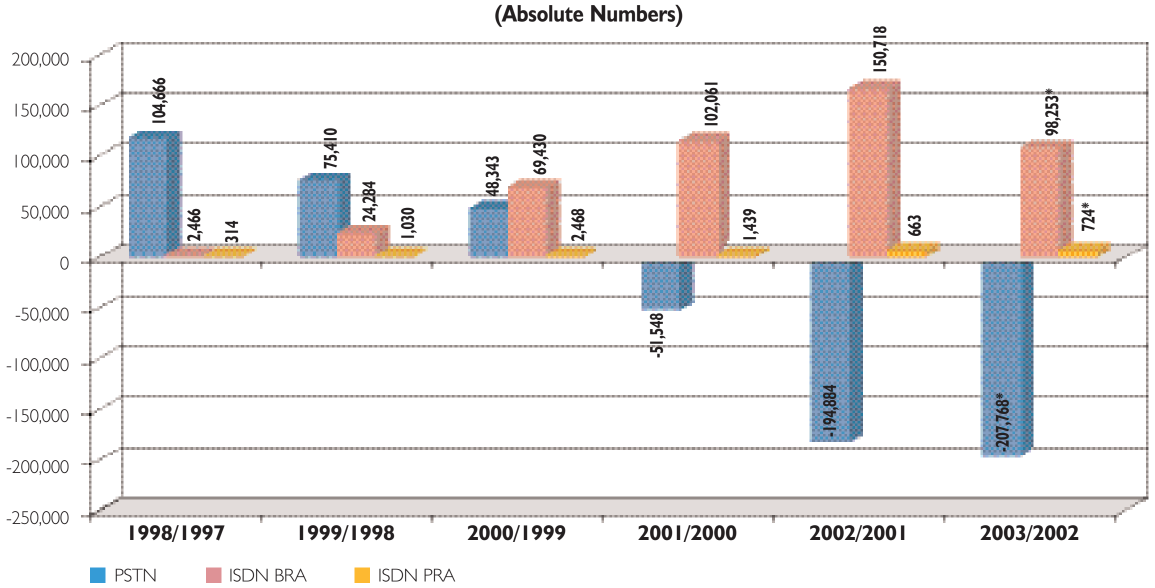
	31-12-1997	31-12-1998	31-12-1999	31-12-2000	31-12-2001	31-12-2002	31-12-2003*
PSTN	5,430,855	5,535,521	5,610,931	5,659,274	5,607,726	5,412,842	5,205,074
ISDN BRA	792	3,258	27,542	96,972	199,033	349,751	448,004
ISDN PRA	134	448	1,478	3,946	5,385	6,048	6,772
Penetration	51.7%	52.8%	52.3%	54.5%	56.1%	57.1%	57.1%

**Estimate*

Source: EETT

Chart 11

Changes per Year of Access Lines in Operation
(Absolute Numbers)



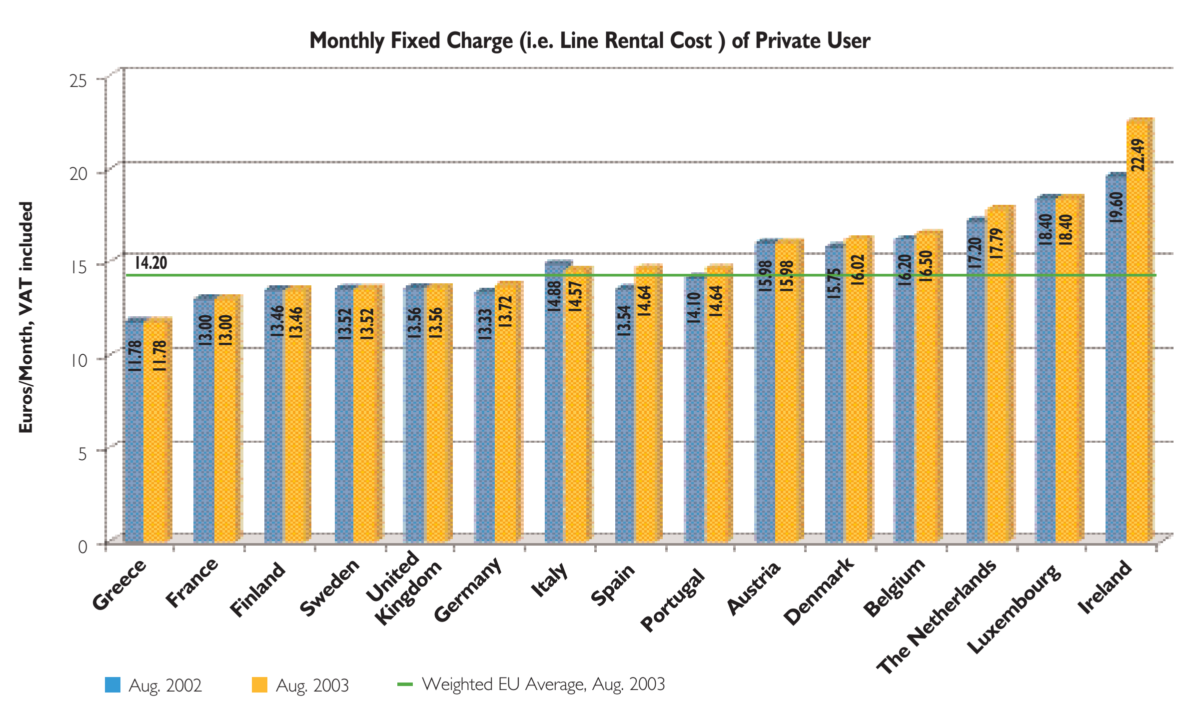
**Estimate*

Source: EETT

The penetration of fixed voice telephony in the population, measured in 64 Kb/s equivalent channels, is estimated to have remained stable, at 57.1% (see Chart 10 and Table 2) and OTE's respective share fluctuated to over 99%. In absolute numbers, the changes of access lines in operation per year, are presented in Chart 11.

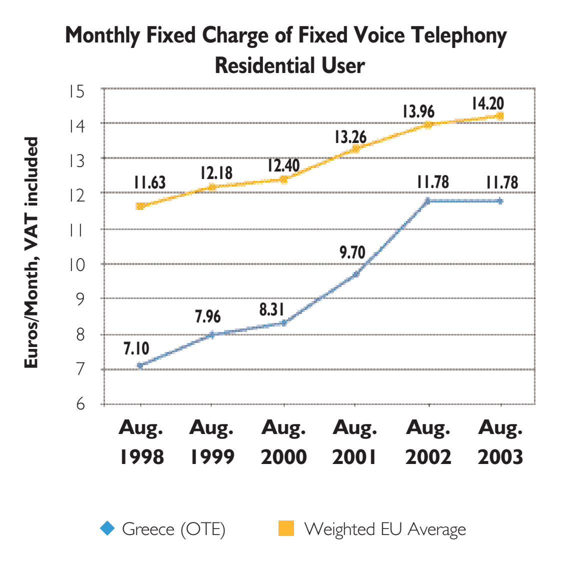
According to the 9th Report by the European Commission, the OTE tariffs of fixed voice telephony, are among the lowest in comparison to the respective tariffs of the historically prevailing telecommunications providers of the other European Union (EU) member-states. More specifically, as displayed in Chart 12, the monthly OTE rental charge is the lowest for residential users and business users. In Chart 13, we present the evolution of OTE's fixed charge, in comparison to the weighed (in relation to the population of each member-state) average of monthly rental charge applied by the remaining EU historically prevailing providers.

Chart 12



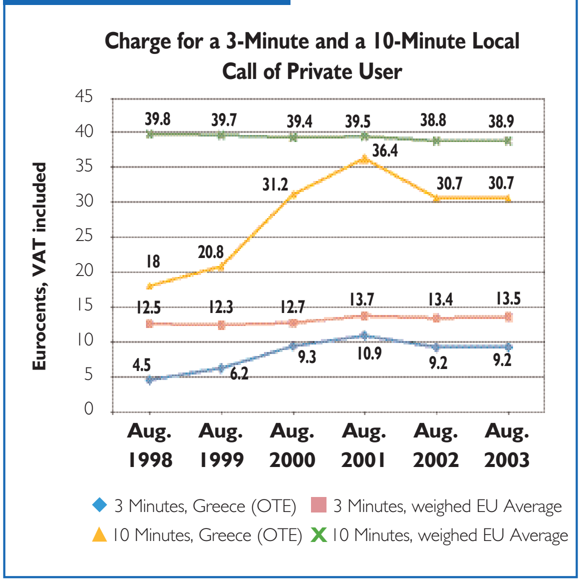
Source: 9th European Commission Report

Chart 13



Source: EETT and 9th European Commission Report

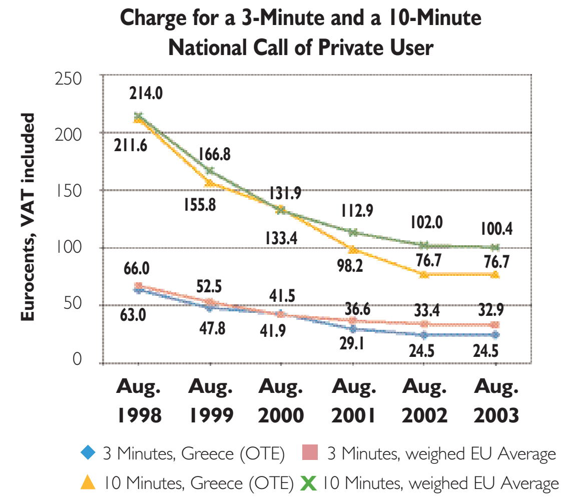
Chart 14



Source: EETT and 9th European Commission Report

Respectively in Chart 14, one can see the evolution of charges for a residential user making a 3-minute and a 10-minute local call in rush hours, in comparison to the other EU member-states.

Chart 15

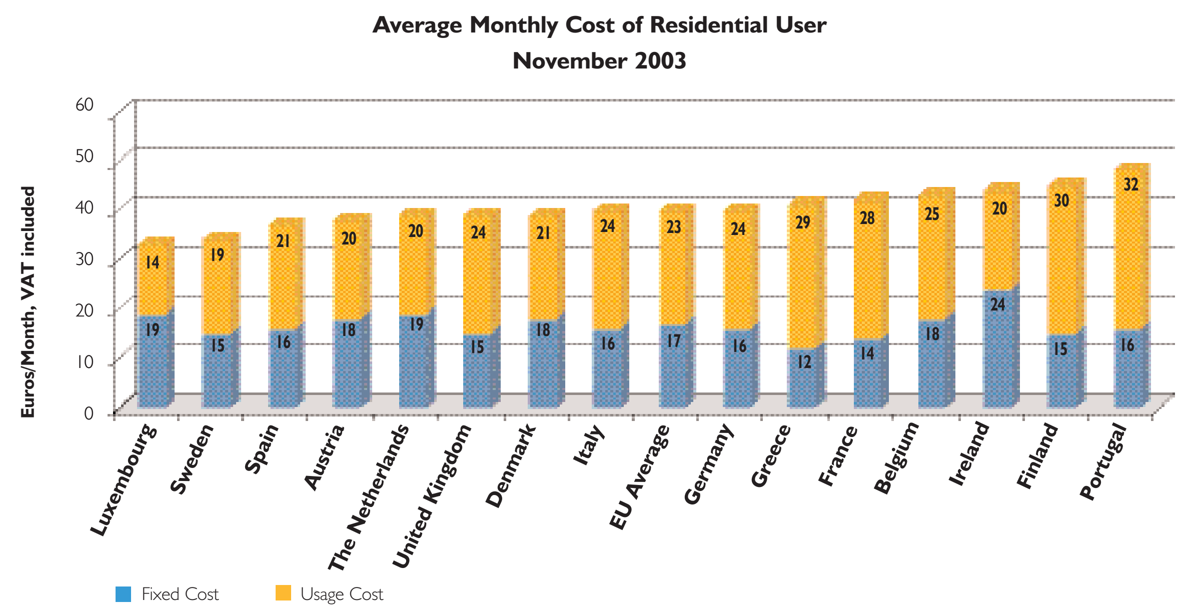


Source: EETT and 9th European Commission Report

For a national call, the respective data is presented in Chart 15.

The total monthly expense of a private user of fixed voice telephony (under the condition however that the user displays a specific use of his/her telephone, which is described by a defined "basket" of calls based on a methodology of the Organisation for Economic Cooperation and Development–OECD), is presented per member-state in Chart 16. Respectively, in Chart 17 one can see the total monthly expense of a business user. It should be noted that the comparisons are presented per country, but in essence they concern the historically prevailing telecommunications provider of each country.

Chart 16

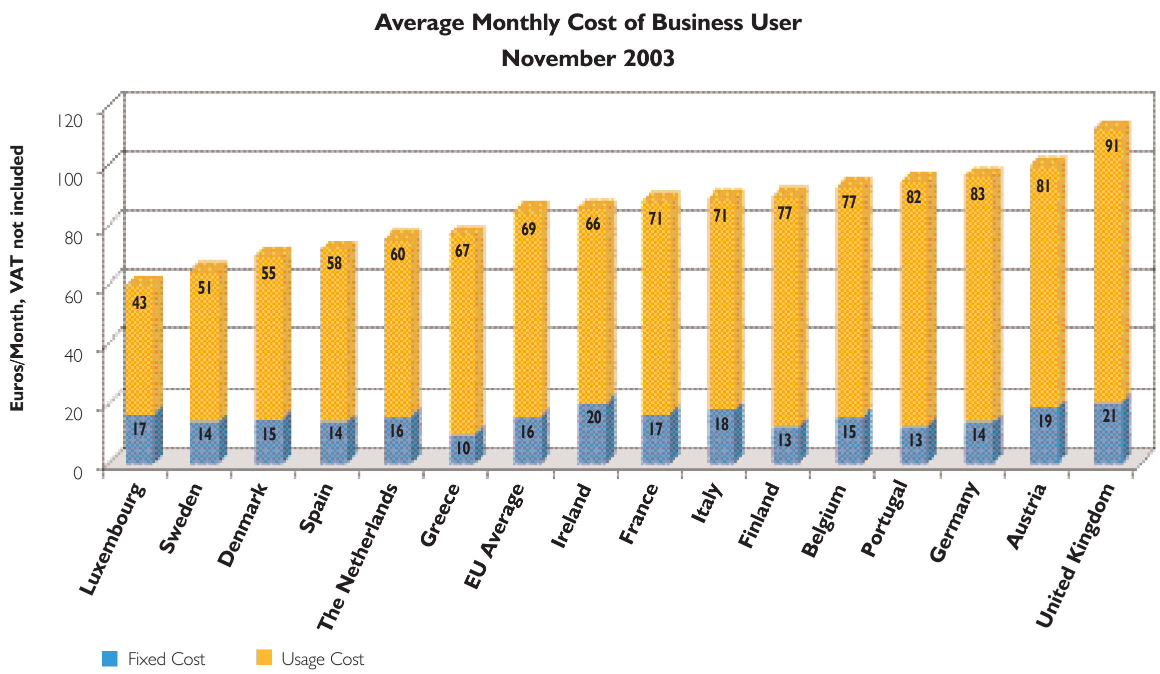


Source: EETT, based on OECD methodology

Note 1: The above data derives from a methodology used by the EU as well as by the OECD in international tariff comparisons. According to that methodology, a "basket" is set, which includes specific, and well-defined telecommunications services and then the cost created from the use of services in the aforementioned basket, for the user of the prevailing telecommunications provider of each member-state, is calculated.
Note 2: The cost of the residential user, based on the applied methodology, includes on an annual basis: a) the fixed cost which is defined as the monthly fixed charge plus the installation cost for a new connection (amortised in 5 years) and b) the usage cost (i.e. the variable expense), which refers to 1,200 national calls to a fixed phone, 120 calls to a mobile phone[2] and 72 international calls[3].

[2] *That is, 10% of the total calls to a fixed telephone.*
[3] *That is, 6% of the total calls to a fixed telephone.*

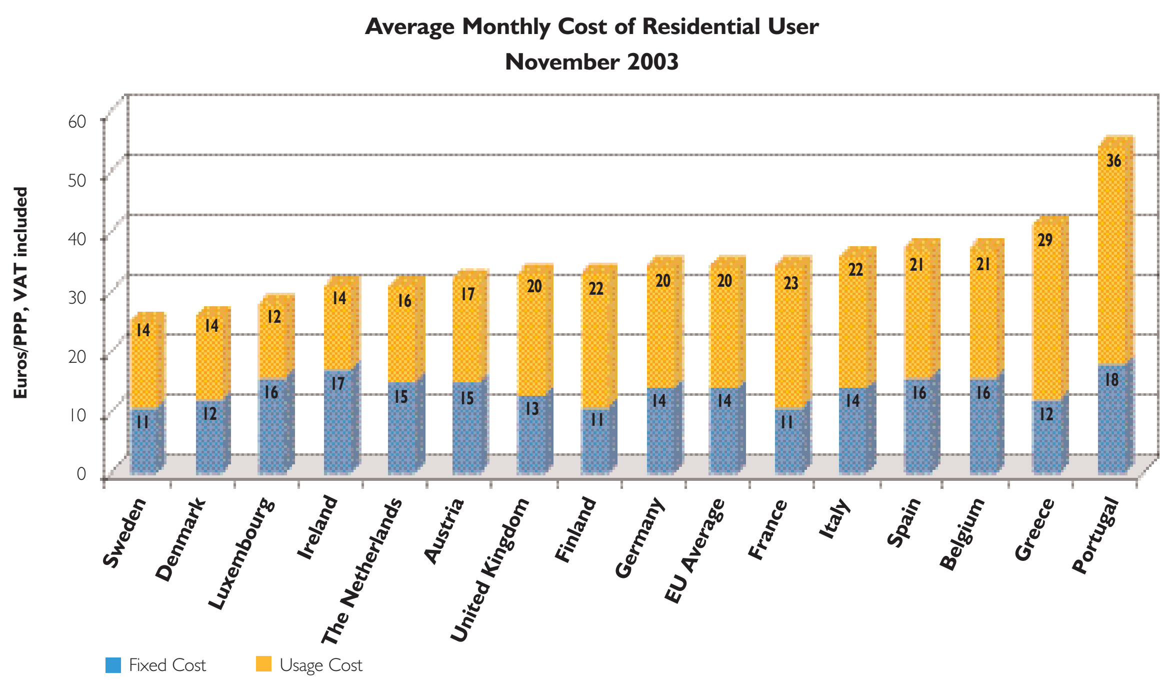
Chart 17



Source: EETT, based on OECD methodology

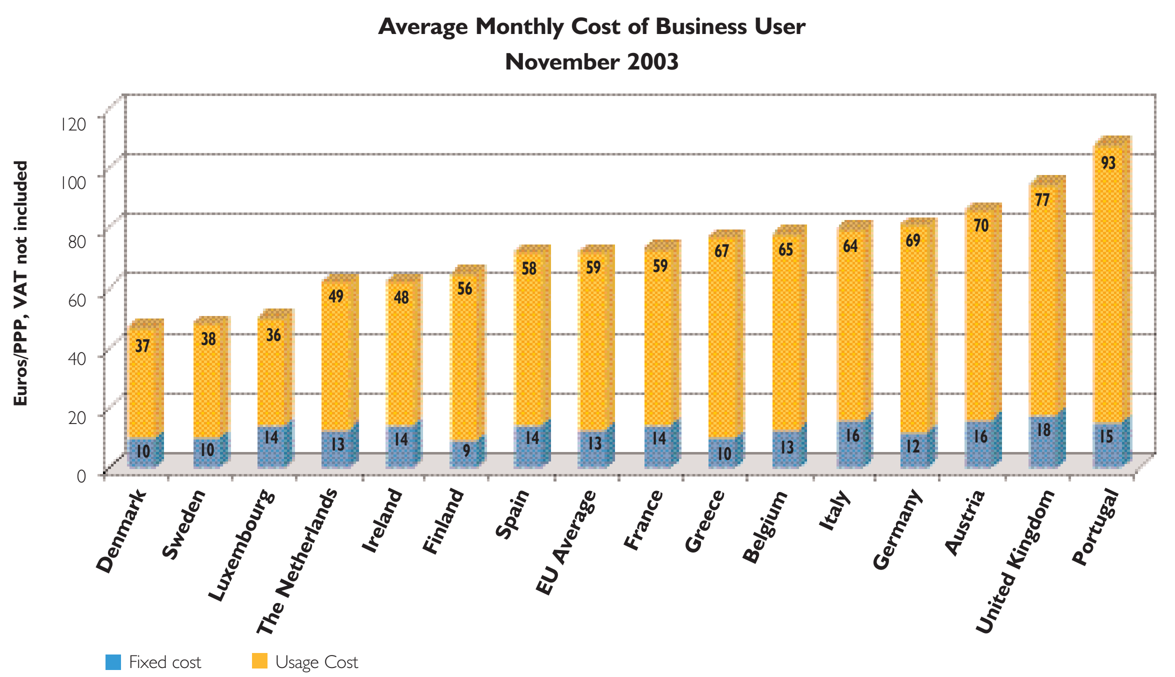
As it can be seen in Charts 16 and 17, the cost in the case of Greece is close to the EU average. However, the situation is different if one takes into consideration the purchasing power parities of each country. In that case (see Charts 18 and 19), Greece is placed 14th (from 10th) for the highest expense of a private user and 9th (from 6th) for the highest expense of a business user.

Chart 18



Source: EETT, based on OECD methodology

Chart 19



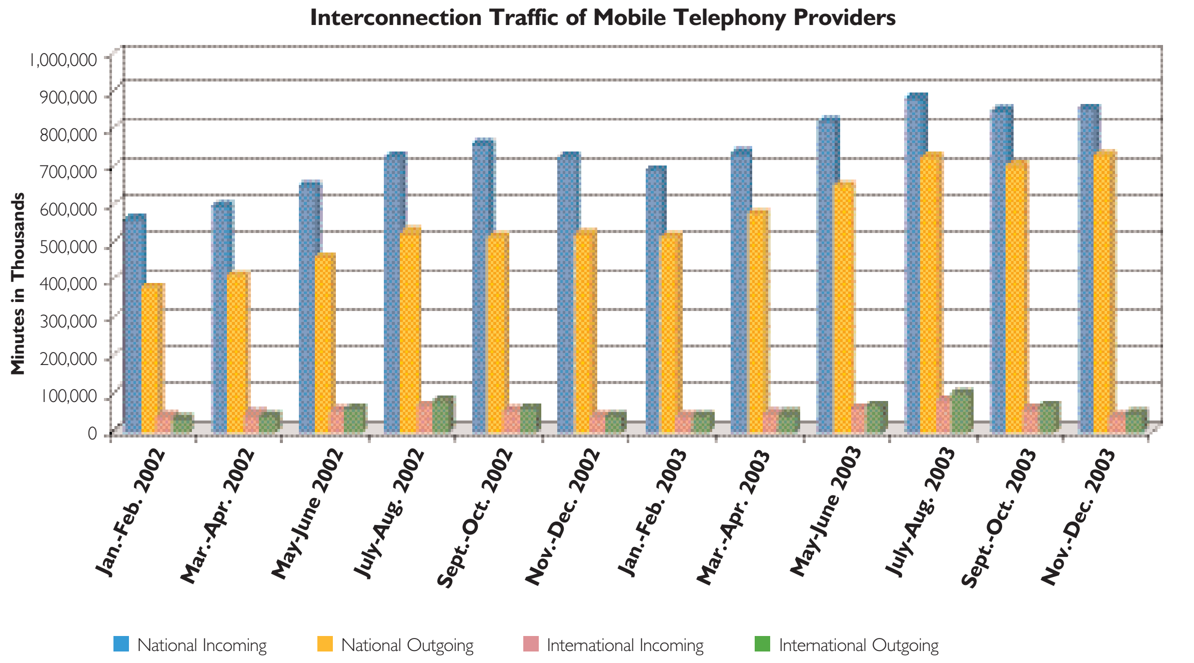
Source: EETT, based on OECD methodology

1.1.4. Mobile Telephony

The year 2003 was an important year for all four providers active in the mobile telecommunications sector in Greece, due to an increase of their financial and commercial figures (income, subscribers, telecommunications traffic etc.), as well as due to the preparation of the three providers –COSMOTE S.A., STET HELLAS S.A. and VODAFONE- that hold a relevant Licence for the commercial distribution and exploitation of 3rd Generation (3G) networks. In addition, the providers focused on the increase of mobile devices use by consumers, the expansion of their customer base and the increase of consumer choices in relation to the provided services.

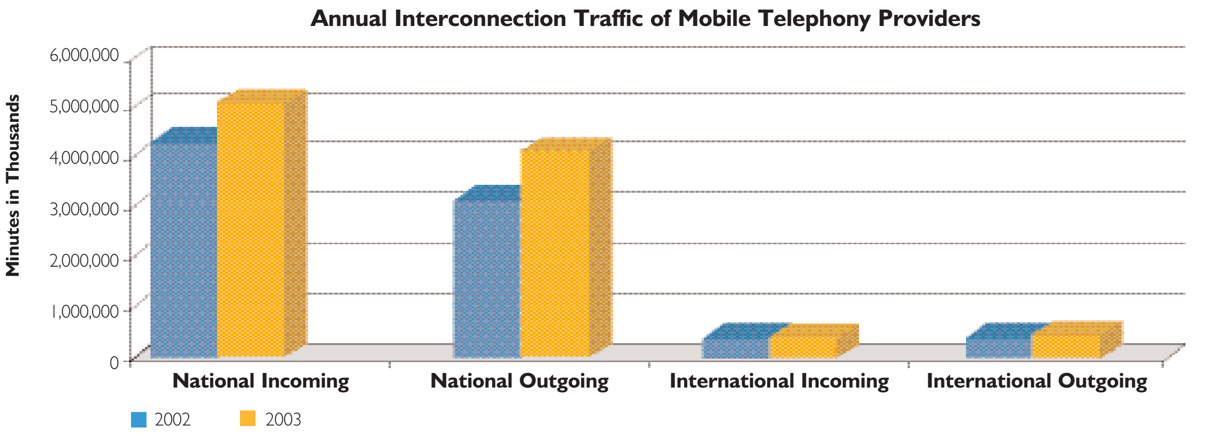
The Interconnection traffic of mobile telephony providers, as it appears in Chart 20, presented increasing trends. In this Chart, the national and international Interconnection traffic (incoming and outgoing) is presented for the four mobile telephony providers. National traffic relates to traffic originating from (incoming) or is intended for (outgoing) other domestic fixed and mobile telephony providers, whereas international traffic originates from or is intended for providers abroad. In Chart 21 (page 36) the aforementioned traffic is presented per year.

Chart 20



Source: EETT

Chart 21

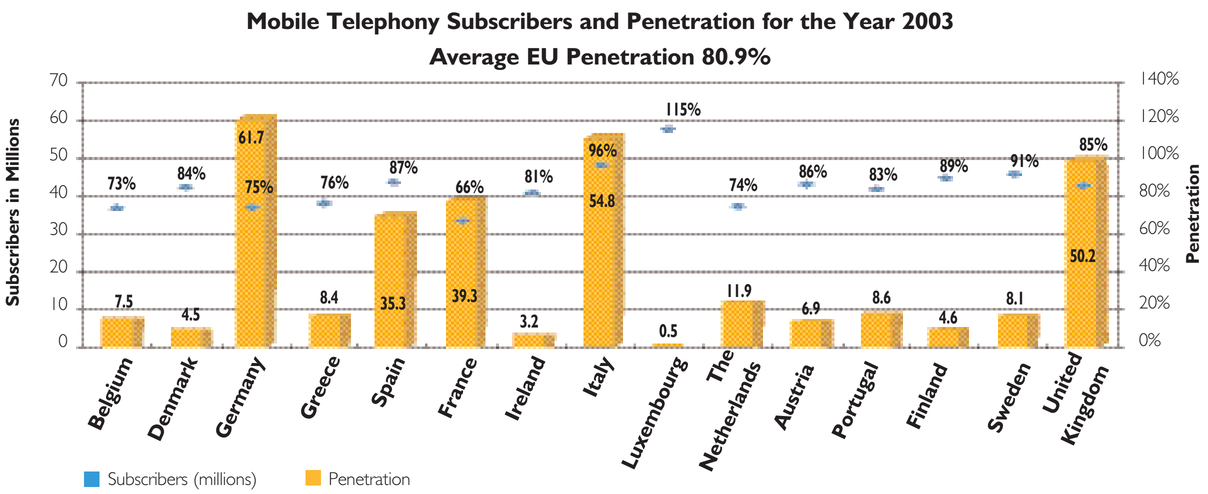


Source: EETT

In total, the sector is estimated to have presented an increase in all its basic financial figures, in relation to 2002. In detail and based on the published balance sheets (2003 nine month period) of the providers, it is estimated that sales will present an increase of 17%, reaching 3.4 billion euros for 2003. Respectively, it is calculated that the sector's profits (before tax, interests and amortisations) will amount to 790 million euros (an increase of 18% in relation to 2002) and the number of employees is estimated around 6,000 (an increase of 4 to 4.5% in relation to the former year).

The number of active subscribers by the end of 2003 is estimated at 8.9 million. As active subscribers are defined all contract and prepaid card subscribers from whom an income has been produced during the last trimester. Based on the above number of subscribers, the penetration in the country's population is estimated to be 80.9%. It should be noted that the same index was estimated at 76% in mid 2003 (see Chart 22).

Chart 22



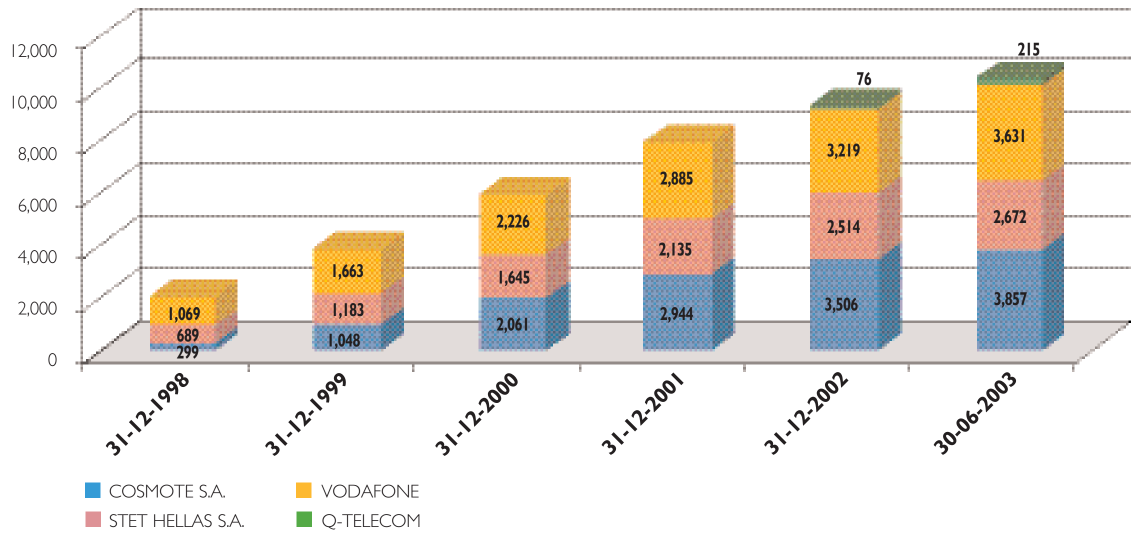
Source: 9th European Commission Report

The data on Denmark, Greece, Portugal, Sweden and the United Kingdom refers to July 1st, 2003. The data on Spain refers to June 1st, 2003, whereas for Finland and Italy the reference point is the end of September 2003.

As to the subscriptions, based on the announcements made by mobile telephony subscribers, their number amounted to 10.4 million in mid 2003 (see Chart 23 and Table 3). It is estimated that this number includes subscribers with more than one connection as well as inactive subscribers. Based on the above data, in Chart 24, the evolution of providers' market shares is presented, and Chart 25 (page 39) depicts the percentage composition of the total customer base for all four providers.

Chart 23

Evolution of Mobile Telephony Subscriptions in Greece (in thousands)



Source: EETT

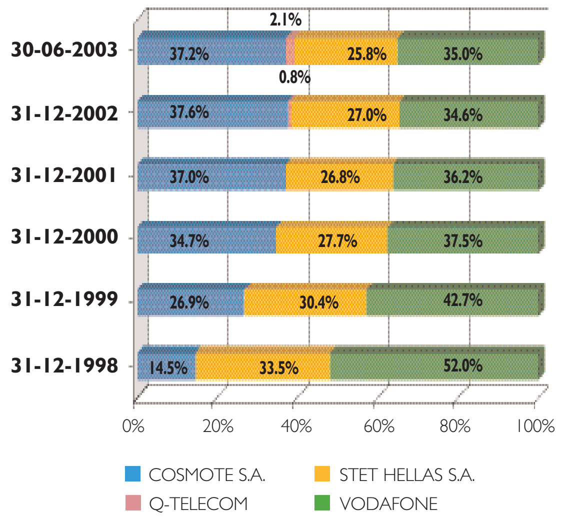
Table 3

Subscriptions of Mobile Telephony Providers

	31-12-1998	31-12-1999	31-12-2000	31-12-2001	31-12-2002	30-06-2003	31-12-2003
COSMOTE S.A.							
Number of prepaid card subscriptions	36,684	370,586	855,946	1,481,765	1,954,897	2,277,207	2,321,158
Number of contract subscriptions	262,154	677,766	1,205,065	1,461,767	1,551,441	1,579,358	1,595,852
Total subscriptions	**298,838**	**1,048,352**	**2,061,011**	**2,943,532**	**3,506,338**	**3,856,565**	**3,917,010**
Q-TELECOM							
Number of prepaid card subscriptions	–	–	–	–	57,222	186,968	336,189
Number of contract subscriptions	–	–	–	–	18,341	28,169	30,347
Total subscriptions	**–**	**–**	**–**	**–**	**75,563**	**215,137**	**366,536**
STET HELLAS S.A.							
Number of prepaid card subscriptions	297,464	733,470	1,128,014	1,472,575	1,745,726	1,880,196	1,584,863
Number of contract subscriptions	391,150	449,281	517,378	662,763	767,916	792,071	817,914
Total subscriptions	**688,614**	**1,182,751**	**1,645,392**	**2,135,338**	**2,513,642**	**2,672,267**	**2,402,777**
VODAFONE							
Number of prepaid card subscriptions	382,166	948,029	1,485,000	2,074,674	2,308,278	2,589,155	Not Available
Number of contract subscriptions	686,466	715,180	741,000	810,198	910,439	1,041,915	Not Available
Total subscriptions	**1,068,632**	**1,663,209**	**2,226,000**	**2,884,872**	**3,218,717**	**3,631,070**	**Not Available**
TOTALS							
Number of prepaid card subscriptions	716,314	2,052,085	3,468,960	5,029,014	6,066,123	6,933,526	Not Available
Number of contract subscriptions	1,339,770	1,842,227	2,463,443	2,934,728	3,248,137	3,441,513	Not Available
Total subscriptions	**2,056,084**	**3,894,312**	**5,932,403**	**7,963,742**	**9,314,260**	**10,375,039**	**Not Available**

Chart 24

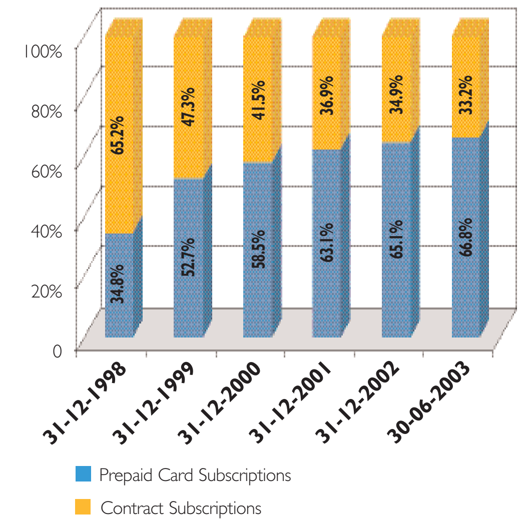
Evolution of Market Shares as a Proportion of Total Subscriptions



Source: EETT

Chart 25

Evolution of Percentage Composition of Total Subscriptions

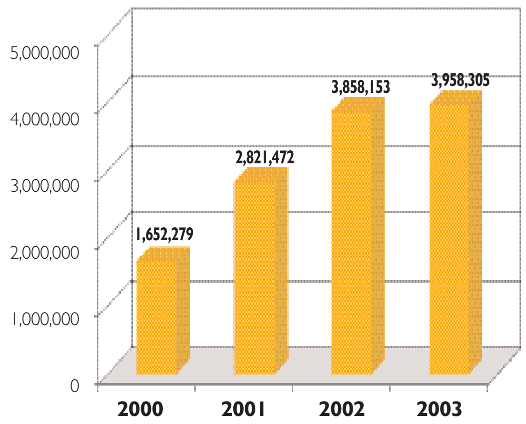


Source: EETT

It is also observed that the sector's providers are steadily oriented towards the further development and exploitation of high added value services. Thus, all providers offer integrated services in the sector of information (stock exchange, weather, health, sports), in entertainment (movies, theatre, night clubs), as well as in recreation (special ringtones, logos, knowledge games). One of the basic sources of income is the Short Message Service (SMS), which is increasingly used (see Chart 26) by the public. In 2003, their number approached 4 billion messages. As far as the number of outgoing Multimedia Message Service (MMS), it is estimated to have amounted to 6,610,000 in 2003.

Chart 26

Number of Outgoing SMS (thousands) per Year



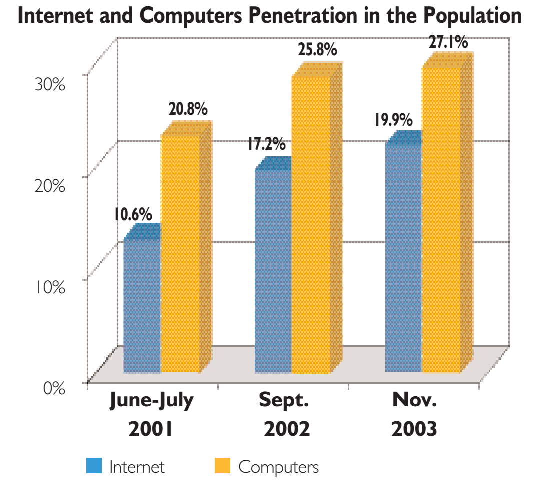
Source: EETT

The provision of 3G Mobile Telephony services is highly anticipated. Among other this will enable the users to make a video-call, meaning that the users will be able to see their interlocutor on the screen of their mobile phone during the call, to connect to the Internet at a high speed and generally enjoy services, which demand high data transfer rates. The demand for 3G services is expected to be especially high during the 2004 Olympic Games in our country. It is noted that 3G services, according to the 9th Report of the European Commission, were already being provided at the issue date of the Report (November 2003) at least in four EU countries (Italy, United Kingdom, Sweden and Austria).

1.1.5. Internet

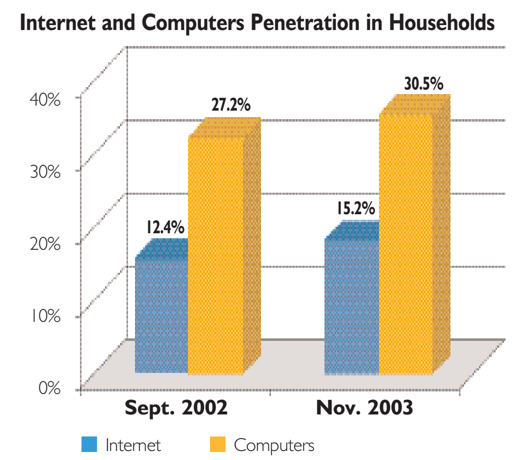
According to a recent pan-Hellenic market research executed on account of the National Research and Technology Network (GRNET), in the framework of the e-business Forum (http://www.ebusinessforum.gr), the penetration of Internet use in adult (>15 years old) population is estimated that in November 2003 amounted to 19.9% and the Internet users were approximately three fourths of computer users (see also Chart 27). As to the ownership of computers and connection of the household to the Internet, a relatively small increase was noted in relation to the previous year (Chart 28). According to the same source, the average usage hours of the Internet is estimated at 6.6 hours per week, from 6.3 hours estimated in September 2002.

Chart 27



Source: Market Research for GRNET

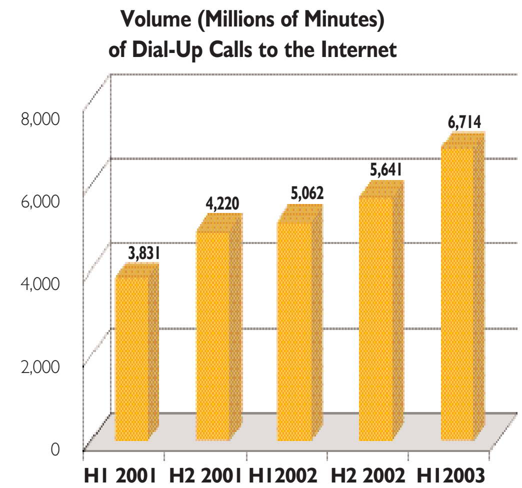
Chart 28



Source: Market Research for GRNET

The increased Internet use during the last few years is also demonstrated by the significant increase of the total dial-up calls duration in the Internet, presented in Chart 29.

Chart 29

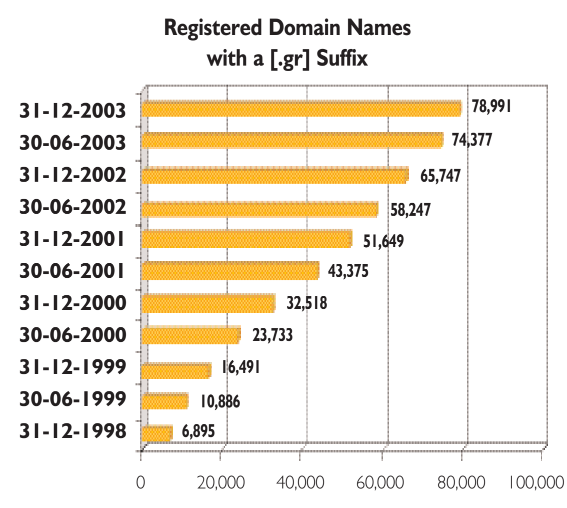


Where H= Semester

Source: EETT

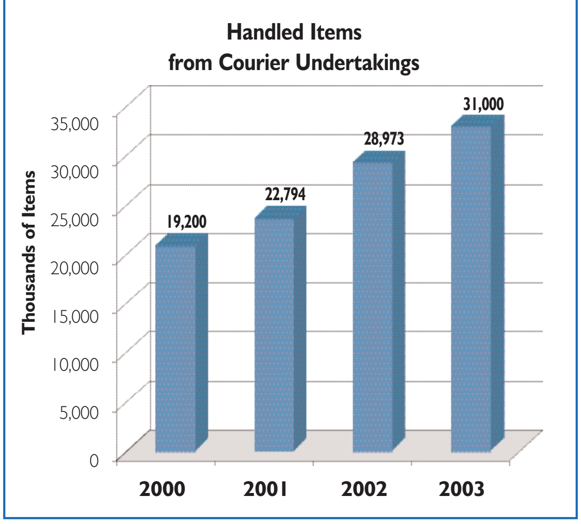
Finally, in Chart 30, we present the development of the number of listed Domain Names with a [.gr] suffix through the years.

Chart 30



Source: *Data from the Institute of Computer Science of the Foundation for Research and Technology Hellas (FORTH-ICS)*[4]

Chart 31



Source: *EETT*

1.2. Postal Services

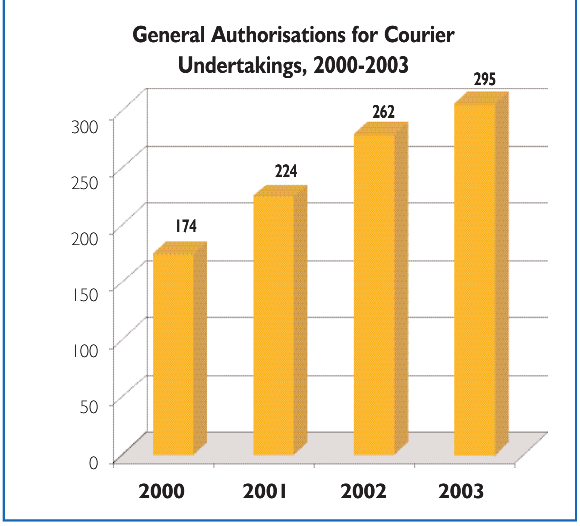
1.2.1. Courier Services Market

During the last years, the Courier Services market in Greece is growing at a fast rate. This is also evident from the total increase of the relevant market figures (number of active undertakings, volume of handled postal items, number of employees).

More specifically, the number of undertakings active in the Courier Service market during 2000-2003, was increased by 69.3%. It should be noted that in 2003, EETT granted licences to 54 undertakings. The turnover of undertakings in 2003 amounted to 203 million euros. Furthermore, the number of postal items handled by the undertakings is estimated to have amounted to 31 million, instead of 19.2 million in 2000, presenting for the period 2000-2003 an average annual increase rate of 17.3% (Chart 31).

In Chart 32, we present the increase in the number of licensed undertakings (General Authorisations) since the beginning of 2000 until the end of 2003. It is noted that a General Authorisation is required for the provision of services that are not part of the US, to which mostly belong Courier Services, as they are defined in article 1 of Law 2668/1998.

Chart 32



Source: *EETT*

[4] *The department of Domain Names Management (GR-Hostmaster) of the Institute of Computer Science of the Foundation for Research and Technology Hellas (FORTH-ICS) is responsible for the management of domain name assignment for the Top Level Domain [.gr] for EETT.*