

from the Enactment of the New Telecommunications Law



Introduction by the President

Two years from the enactment of the new Electronic Communications Law, the results of the regulatory policy are evident, both in the market as well as in the benefits reaped by the consumers

The coordinated actions by the Hellenic Telecommunications and Post Commission (EETT) for the collocation and the unbundling of the local loop have increased competition and have given impetus to the broadband development, with significant benefits for the consumer (new, innovative products and services, with higher broadband speeds at lower prices).

Our first year (2006) was the "year of preparation" (adaptation of the Community Law for Electronic Communications in the National Law, completion of the market analysis by EETT and issuance of the necessary regulatory acts). Our second year (2007) was the "year of application" (strict application of the regulatory acts by EETT), which has caused the operation model of the telecommunications market to change from reselling to investing on infrastructure networks, opened the market to competition and enabled alternative providers to offer new, innovative products -such as convergence of fixed - mobile telephony and combination of telephony, Internet and TV/Video- at higher speeds and lower prices. I am confident that our third year (2008) will constitute a landmark towards realizing our vision, which is the creation of a fully liberalized and competitive market of electronic communications that will focus on providing the best services to the consumer.

During this two-year period, the new regulatory environment, and especially the strict application by EETT of the regulations for the actual unbundling of the local loop, have encouraged alternative operators to invest in infrastructure networks, thus reducing their dependence on the Hellenic Telecommunications Organization (OTE). As a consequence, alternative operators have been able to promote new products on the market, which combine fixed and mobile telephony or broadband Internet access and fixed telephony services and television and/or video on demand over the Internet.

Access speeds to the Internet increased tremendously, while prices dropped significantly. This boom gradually spreads from Athens to the rest of the country, enabling an ever-increasing number of consumers to select the operator or the service, which best suits their needs. At the same time, the public gets more

and more acquainted with broadband, leading to an "avalanche" of broadband development. As a result, in 2007, Local Loop Unbundling (LLU) increased more than tenfold (!), and Greece emerged as one of the most rapidly developing broadband markets in the EU. At the same time, the deregulation of Wi-Fi networks, in conjunction with the emergence of (reasonably priced) mobile broadband services based on third-generation mobile communications networks, have freed broadband users from all restrictions.

This issue briefly presents the ten most significant developments in the sector during the first two years of our term of office and of the enforcement of the new Electronic Communications Law (the "top 10" during the two-year period).

So far, the conclusion drawn from the application by EETT of the new Law on Electronic Communications over the past two years is the following: "As long as the State empowers us with the appropriate legislative tools, we are able to produce remarkable results".

However, since Greece has been late in incorporating the Community Directives into the national legislation, it has fallen behind compared to the other EU member states. In order to bridge this gap, it is necessary (a) to remove the structural competition problems, which have existed in the market for a long time (for instance, by improving the buy-sell relation between OTE S.A. and the alternative operators, which does not work effectively) and (b) that all related organizations intensify their efforts. Furthermore, if we want to have a leading role in Europe, the rest of the State must adopt a more ambitious and aggressive policy, with well-informed and coordinated, groundbreaking and innovative actions. We believe that the new strategy of the Ministry of Transport and Communications for the development of fiber-to-the-home networks will contribute substantially in this direction.

Maroussi, March 2008

Professor Nikitas Alexandridis EETT President





Reinforcement of competition, development of broadband, significant benefits for the consumer

(Top 10 for the two-year period)

1. The only market with reducing prices

The only market where prices drop each year, in contrast to all other markets, where prices rise (4.2% reduction in prices for the period December 2005 - December 2007, according to the Consumer Price Index and a drop of 80%-90% in broadband access costs per Mbps for the same period).

2. Change of market operation model

Alternative operators invest in developing privately owned infrastructures and climb the ladder of investment, thus taking full advantage of the unbundling of the Local Loop.

3. Consumers are becoming more familiar with broadband services

The term "broadband" –which was unknown to most of the people two years ago– is now becoming part of our language and everyday life.

4. Rapid development of Unbundled Access to the Local Loop

The consumers that have been connected to alternative operators by using LLU Lines have increased over the past year from 20,000 to 274,000 (an increase of nearly 1300%), which corresponds to over 20% of broadband lines.

Skyrocketing increase of Internet access speeds

With the unbundling of the Local Loop, Internet access packages are offered today at speeds up to 24Mbps, whereas only two years ago they did not exceed 1Mbps.

Wide selection of innovative services for consumers

Over the past year, consumers have been able to choose among providers and innovative electronic communications

services that combine telephony, broadband Internet access and television or video through the Internet (IPTV/ Video on Demand).

7. Broadband connections have exceeded one

Broadband connections have increased within the past two years from 160,000 to over 1,000,000 (an increase of over 500%). In 2006, Greece ranked first worldwide with an annual increase rate of 215%.

8. Wireless broadband

Fixed Wireless Access (FWA) networks offer significant alternative possibilities for providing broadband services, especially in inaccessible regions. At the same time, licensing exemptions for Wi-Fi networks released broadband users of territorial restrictions, thus contributing in this way to the reduction of the digital gap.

9. Mobile broadband

Third-generation (3G) mobile communications networks have brought about their own revolution as they enable users with high mobility demands, to have broadband Internet access at any given time and from any given place (within the network's zone of coverage).

10. Increased Investments

Almost 4 billion Euros have flowed into the country through the buyouts of telecommunications companies. At the same time, investments in telecommunications infrastructures by alternative operatos are increasing. More specifically, the investments made by alternative operatos during the first two quarters of 2007 surpassed the total number of investments in 2006.



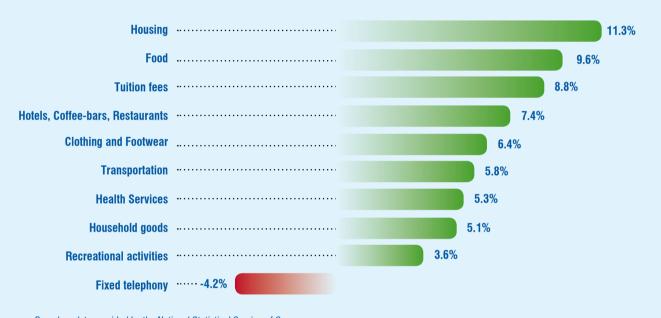
The only market with reducing prices

Communications are the only branch of the Consumer Price Index (CPI) that registers a constant reduction trend, as opposed to the General CPI and all other subindices.

Especially during the two-year period 2006-2007, fixed telephony costs have dropped significantly as opposed to all other basic goods and services (Diagram 1).

Diagram 1





Based on data provided by the National Statistical Service of Greece

This contrast is especially noticeable in broadband Internet access costs, which have registered a remarkable reduction during the past two years, as presented in Diagram 2 (based on data provided by the Observatory for the Information Society), which is also combined with an increase of the provided nominal access speeds.

More specifically, the average cost for low speed packages (384 Kbps and subsequently 768 Kbps), medium speed packages (512 Kbps and subsequently 1 Mbps) and high speed packages (1 Mbps and subsequently 2 Mbps) has dropped over the past two years by 54%, 65% and 76% respectively.

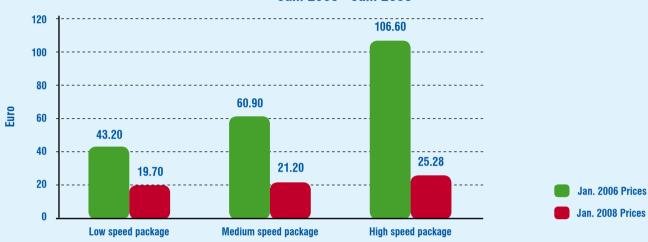
Even higher is the drop of the average broadband access cost per Mbps (Diagram 3), amounting during this period to 77%, 82% and 88% for low speed, medium speed and high speed packages respectively. Namely, in January 2008 the average cost per Mbps for a high speed package was approximately one tenth of the corresponding cost in January 2006.







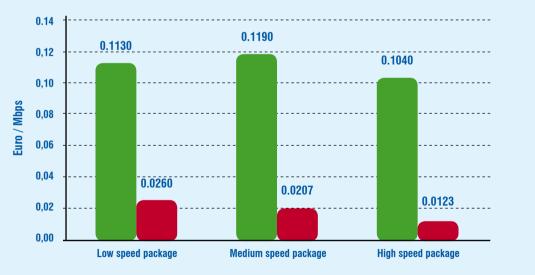
Change in Average Cost of broadband access packages per speed category Jan. 2006 - Jan. 2008



Based on data provided by the Observatory for the Information Society

Diagram 3

Change in Average Cost per Mbps of broadband access packages per speed category Jan. 2006 - Jan. 2008



Jan. 2006 Prices
Jan. 2008 Prices

Based on data provided by the Observatory for the Information Society



The market model changes: from reselling to competition through investments in infrastructures

During the two-year period 2006-2007, the Greek telecommunications market structure changed, as the transposition of Community Directives into the Greek legislation, and the regulatory decisions of EETT concerning the liberation of the markets, created an environment of intense competition. Alternative operators have gradually climbed the ladder of investment and decreased their

dependence on OTE, thanks to the unbundling of the Local Loop* which is achieved through the collocation**.

In order to achieve this, they develop their own networks which extend to reach the Local Exchanges of OTE, and they then rent the existing national access network, in order to provide a variety of services with especially competitive terms for consumers.

The stages of ladder of investment in fixed telephony



New operators begin their activities by providing services based on the incumbent's infrastructure (OTE), either reselling services of the incumbent, without the requirement of owned infrastructures, or providing their own services based on OTE's wholesale products (carrier selection/pre-selection, bitstream access).

As they gradually grow larger and financially stronger, they deploy and expand their own infrastructures. The first step in this direction is to develop extensive core networks which terminate at the incumbent's Local Exchanges. Then, they interconnect with the said Local Exchanges and rent Local Loops (access lines connecting consumers to the Local Exchanges), so as to offer a wide range of services to consumers.

In this way, they acquire two advantages that are crucial to their competitiveness: (a) they diminish their operational costs and (b) they acquire the capacity to provide new, diversified services that will attract market interest. A decisive condition for achieving these two advantages is the actual unbundling of the Local Loop and the provision of collocation facilities at the incumbent's Local Exchanges.

In a final stage, the new operators develop their own access networks that reach directly to the consumers, by-passing completely the incumbent's network. In most of the developed countries, this role is undertaken by existing cable television networks (Europe and the USA) or by new fiber-to-the-home networks that have been created specifically for this purpose (S. Korea, Japan).

- * A Local Loop is a telephone line that connects the consumer (subscriber) to the public telephone network and, in the case of Greece, it extends from the consumer's premises (home or office) to the nearest Local Exchange of OTE. The unbundling of the Local Loop has been a key factor for the liberalization of the electronic communications market in Europe.
- ** In order to utilize the Local Loop unbundling, an alternative operator must deploy a core network, which will extend to OTE's Local Exchanges. Then, the operator must interconnect this network to OTE's Local Exchanges, so that each unbundled Local Loop rented by OTE can be connected to his own network. In order to achieve this, the operator "installs" equipment inside the Local Exchanges (or at a very a close distance) and connects it to OTE's equipment. This "installation" process is called collocation.





The public is becoming more familiar with broadband

The revolution brought about in the telecommunications market -and especially in the broadband sector- made a tremendous impact on the Greek public during 2007. Terms such as broadband or ADSL, which two years ago were unknown for most people are now becoming an integral part of our language and everyday lives in terms of work, education, entertainment etc.

The declaration by the Prime Minister of 2007 as The Year of Broadband along with a multitude of awareness-raising activities by the involved parties has played a significant role in this direction.

EETT specifically has initiated in 2007 an awareness campaign, focusing mainly on the organization of various events and the publication of informative brochures. In this framework, EETT organised a Broadband Week in the Syntagma Square Metro Station, in which visitors had the opportunity to "experiment" with various applications and learn about actions, which are carried out or planned by the State, in the aim of broadband development, Furthermore, **EETT organized the annual International Conference on** Broadband Internet and two events with current and specialized topics, such as Next Generation Networks and the importance of quality in telecommunications services. Another initiative was the publication and distribution of two brochures on the Internet and Broadband. Finally, EETT launched the portal www.broadband.gr, which provides among others, news on broadband from Greece and the World, as well as useful information and studies concerning the development of the broadband market etc.



Rapid development of Unbundled Access to the Local Loop

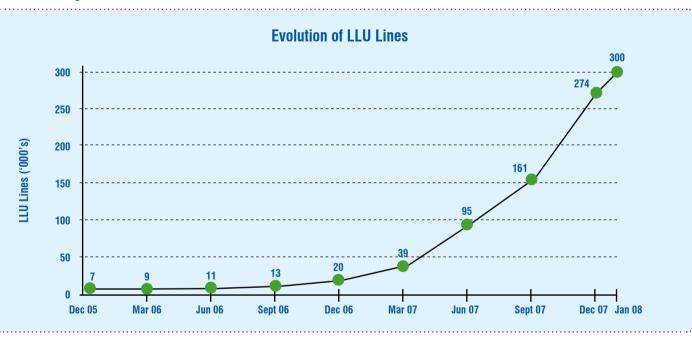
Despite the fact that the unbundling of the Local Loop in Greece dates from the beginning of 2002, the transition of the alternative providers from the second to the third stage of the ladder of investment practically started at the end of 2006. It is worth noting that in mid-2006, the number of Unbundled Local Loops provided by OTE was almost 16,000 and only one alternative operator had more than 2,000 local loops.

In 2007, Local Loop Unbundling (LLU) saw an explosive development amounting to 274,000 Loops by the end of the

year, as opposed to 20,000 at the beginning of it (an increase of 1300% within a year!). Already, by the end of January 2008, over 300,000 subscribers in 28 Greek cities used LLU.

Even though this development is mainly centered in Athens, it is now starting to expand in the regional areas of Greece as well. The number of LLU lines outside Athens and Thessaloniki, which at the end of 2006 was no higher than 600, approached 5,000 at the end of 2007, and reached 8,000 at the end of January 2008.

Diagram 4



This development was made feasible due to the significant increase of physical collocation sites, from 1 at the end of 2005, to 38 at the end of 2006 and 119 at the end of 2007. By the end of January 2008, the number of OTE's Local Exchanges with physical collocation exceeded 130. Through these sites, the alternative operators acquire access and the possibility to provide services directly, without any intervention from the part of OTE, to 70% of the subscribers.







Skyrocketing increase of Internet access speeds

Internet access speeds skyrocketed during 2006-2007.

The progress that has been made thereon is demonstrated by the fact that at the beginning of 2006 broadband access speeds were of the order of 374, 512, and 1,024 Kbps (download), with the majority of the subscribers (82.7%) using the basic package at 374 Kbps (download speed). Two years later, the picture has changed completely. The majority of the packages (60,7%) begins at 1 Mbps and reaches up to 24 Mbps (download).

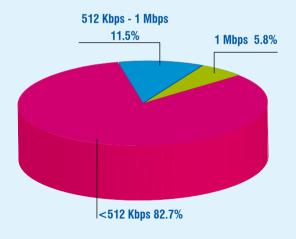
The increase in access speeds is attributed to three interlinked factors:

 The effective unbundling of the Local Loop by EETT was the main factor, since it allowed alternative providers to invest in collocation infrastructures, and to be the first to launch broadband access packages with high access speeds (over 10 Mbps) at highly competitive terms.

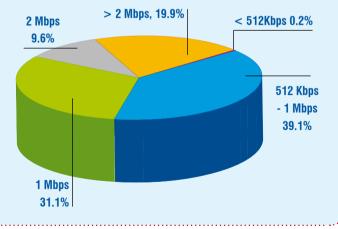
- At the end of 2006, OTE doubled the nominal speeds of ADSL products (from 374 to 768 Kbps, from 512 to 1,024 Kbps and from 1,024 to 2,048 Kbps). Although this increase reflects OTE's efforts to reinforce the broadband market, basically it is an effort to enhance the competitiveness of its products in view of the LLU development.
- The steep drop in prices eliminated the price gap between low, medium and high speed packages. To illustrate this, it is worth noting that the difference between the average costs of low and medium speed packages decreased from 17.7 Euros/month in January 2006 to 1.5 Euros/month in January 2008 (a reduction of more than 91%). Similarly, the difference between the average costs of medium and high speed packages decreased from approximately 46 Euros/month in January 2006 to approximately 4 Euros/month in January 2008 (a reduction of 91%).

Diagram 5

Distribution of DSL line speeds 12/2005



Distribution of DSL line speeds 12/2007



Wide selection of innovative services for the consumers

Until recently, the consumers were practically compelled to rely on OTE for having access to the public telephone network. Their choices were limited and consisted in using an alternative provider for telephone-call services through carrier selection or pre-selection, or in having Internet access with terms similar to those offered by OTE.

The development of collocation and of the Local Loop Unbundling (LLU) has radically changed this picture, since it allows alternative operators to provide services to their subscribers directly, without any intervention by OTE, and consequently, without the restrictions that such an intervention may impose. In addition, it enables them to develop and promote new, innovative —for the Greek standards— products and creates a variety of choices for the consumers:

 The majority of consumers may now choose among a significant number of operators for access services to the public telephone network.

- In almost all cases, the operators offer packages that combine broadband Internet access at high speeds (up to 24 Mbps) and telephony services (that often include a high or unlimited number of free national and even international calls). The packages that combine two types of services are called double-play packages.
- Often, to the above services are added services for television over the Internet (IPTV) or video-on-demand. The packages that combine three types of services are called triple-play.

However, the new choices for the consumers are not credited only to the alternative operators. OTE responds to this challenge by enhancing the attractiveness and competitiveness of its products and packages. This increases further the choices for the consumers and triggers a chain-reaction in the electronic communication products, to the benefit of the consumer.



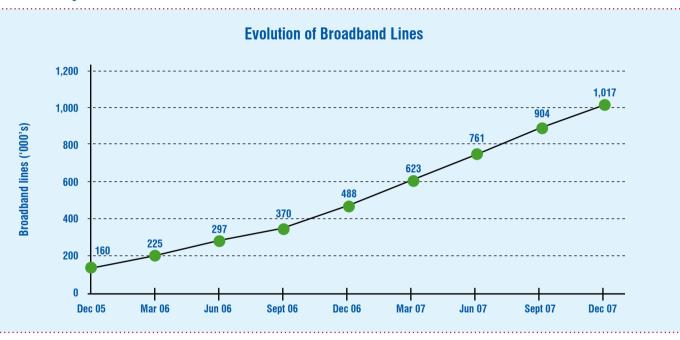


Broadband connections have exceeded one million

The major changes that have taken place in the telecommunications market - especially as a result of the intensification of competition - and the continuously increasing public awareness regarding new technologies, have led to a rapid increase of broadband connections.

More specifically, during 2007, the number of broadband connections exceeded 1,000,000; in other words, it more than doubled, compared to the beginning of the year, and increased sixfold compared to the beginning of 2006. During this period, Greece was ranked among the leading countries of the world as regards the percentage increase of broadband lines (1st in 2006 and 4th in 2007). Especially in 2007, Greece enters for the first time on a convergence course with the rest of Europe, as broadband penetration (broadband lines per inhabitant) has increased more rapidly in Greece than in the EU.

Diagram 6







Wireless Broadband Access

Fixed Wireless Access (FWA) networks allow the provision of broadband services through wireless means and constitute a significant alternative solution compared to wired copper or optical fiber networks. Their main advantage –as opposed to wired networks—lies in their easy deployment, considering that for the implementation of one line it is enough to establish two base stations with visual contact. This flexibility permits the deployment of access networks, even in inaccessible or sparsely inhabited regions, where the installation or the usage of wired networks is economically unpractical or even technically impossible.

Despite this advantage, FWA networks have not met expectations to date, as they are only used by a small fraction of the market. Nevertheless, technological advancements have renewed the interest of telecommunications operators, as demonstrated by their wide participation in the auction, which was carried out by EETT for the issuance of FWA licence at the 3.5 GHz band that enables deployment of wireless access network based on WiMAX technology.

The terms of the license, and especially the requirement from the part of the licensee to deploy the necessary infrastructure so as to cover at least 20% of the population in every one of seven predetermined geographical zones within four years from the issuance of the license, is expected to give impetus to the development of wireless broadband services in the regional areas of Greece.

In addition, the rapid development of wireless Wi-Fi networks has resulted in the release of broadband users from territorial limitations, contributing also to the reduction of the digital gap. The development of wireless Wi-Fi networks has been facilitated significantly by a series of interventions from the part of EETT, and mainly the abolishment of the requirement for the licensing of such networks. As a result, it becomes an increasingly frequent phenomenon to see students or professionals using laptops in parks, squares, coffee-bars, restaurants and hotels, to work or simply "surf" the Net, thanks to public or private Wi-Fi networks.







Mobile broadband

Third-generation (3G) mobile communications networks allow access to broadband services by means of laptops or third-generation cellular devices in any place —even while in motion—as long as the user is located within the zone of coverage of his/ her network.

This market, which already thrives in many European countries, has also made significant strides in Greece during the past two years, and especially in 2007. Access speeds have increased considerably, thanks to the deployment of HSDPA networks and are becoming competitive to basic DSL packages, while new, innovative technologies promise an even higher effectiveness in providing advanced digital content services.

At the same time, the two main factors inhibiting market development are progressively removed. The first one is the cost factor. Continuous reductions in the prices of 3G packages render mobile broadband services increasingly affordable, even though they are still expensive compared to corresponding DSL-based services. The second one concerns service availability. Third-generation mobile networks are gradually expanding, covering a significant part of the country and enabling the use of such services by an ever increasing part of the population. The combination of the above factors makes the networks of mobile broadband services a good alternative solution for users who are required to move frequently.

According to data collected by EETT, the number of subscribers who have access to mobile broadband services, either through the use of appliances connected to laptops in order to have Internet access at any time, or though 3G mobile phones, is already approaching 1,000,000.





Increased Investments Telecommunications is one of the most signi

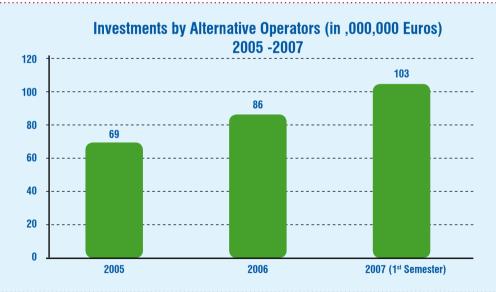
Telecommunications is one of the most significant sectors of the Greek economy, particularly with respect to attracting foreign investments. During the two-year period 2006-2007, nearly 4 billion Euros have flowed into the country for full or partial buyouts of telecommunications companies. The biggest one was the buyout of "TIM Hellas" (renamed to "Wind Hellas") for 3.4 billion Euros. Other recent important capital inflows concerned the acquisition of 21% of "Forthnet" by "Emirates International Telecommunication Ltd." (EIT), for approximately 95 million Euros, and the buyout of "Tellas" by the "Weather Investment Group" for approximately 175 million Euros. These

figures are further increased if we take into account the approximately 2 billion Euros spent by "Marfin Investment Group" (MIG) for the acquisition of an almost 20% share of OTE.

At the same time, especially in 2007, investments by alternative operators increased substantially. More precisely, according to data submitted by licensed operators, investments made by alternative operators during the first half of 2007 amounted to 103 million Euros. In other words, they exceeded their total investments in 2006 (86 million Euros) and in 2005 (approx. 69 million Euros)

Two Years from the Enactment of the New Telecommunications Law

Diagram 7









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