

Finally, EETT, following completion of the last phase of Communication and with the transposition of the new Regulatory Framework in the Greek legislation, will be in the position to proceed to the imposition of obligations described in the draft provision.

#### 4.2.2. Analysis of Other Markets

Following a tender in 2004, EETT assigned to an independent consultant the preparation of a study on the identification and analysis of the level of competition in all electronic communication markets, except the one of voice call termination to individual mobile networks (Market 15 according to Table 18).

At the same time, EETT continued the collection, processing and checking of quantitative and qualitative data in relation to the progress of the electronic communications market in Greece and the competition level of this market (see Section 4.6.). This preparatory work is very important for the quick completion of the market analysis, since it minimizes the time required to collect the necessary data.

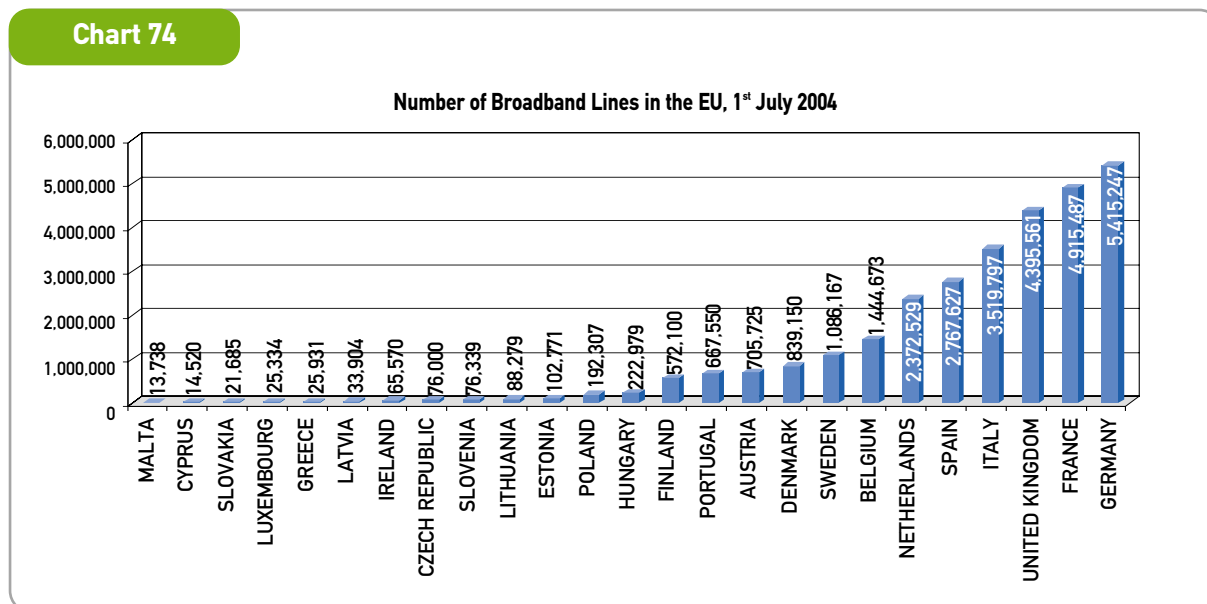
In addition, EETT grouped the markets shown in Table 18 and selected those markets where priority will be given, taking into account the national conditions of those markets and the completeness of the data collected. The markets selected for immediate intervention were those of broadband access and wholesale Interconnection. The identification and analysis of competition in those markets is expected to be complete in the first half of 2005, while the analysis of all remaining markets will have been completed by the end of 2006.

### 4.3. Actions for Broadband Development

#### 4.3.1. Broadband in Greece

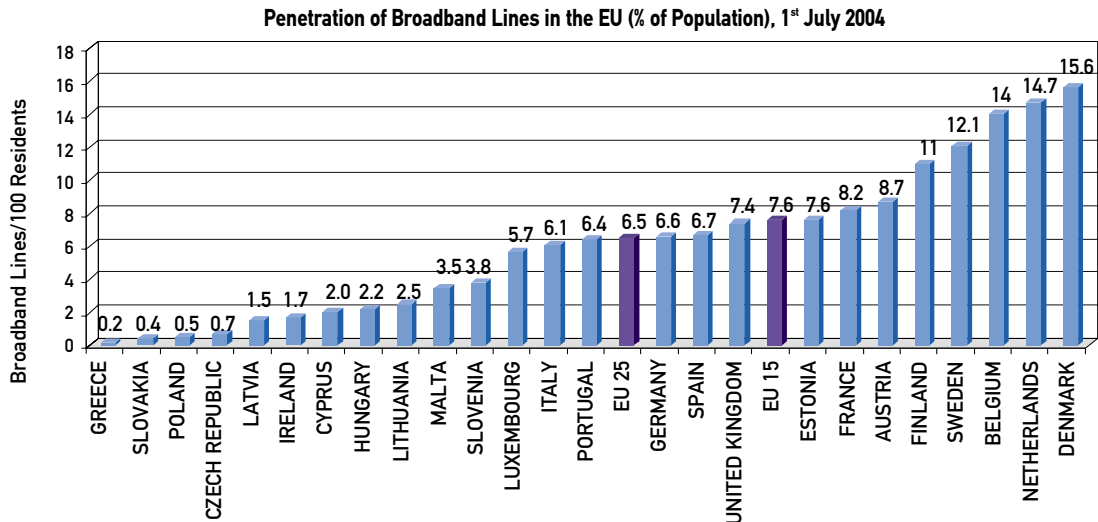
According to the 10<sup>th</sup> Report of the European Commission (see subsection 7.1.4.), Greece lags significantly in broadband access behind the other EU member states. This lag is shown in Charts 74 and 75 presenting the penetration of broadband lines in Greece as compared to other EU member states at the end of the first half of 2004.

Chart 74



Source: EETT and 10<sup>th</sup> Report of the European Commission

Chart 75



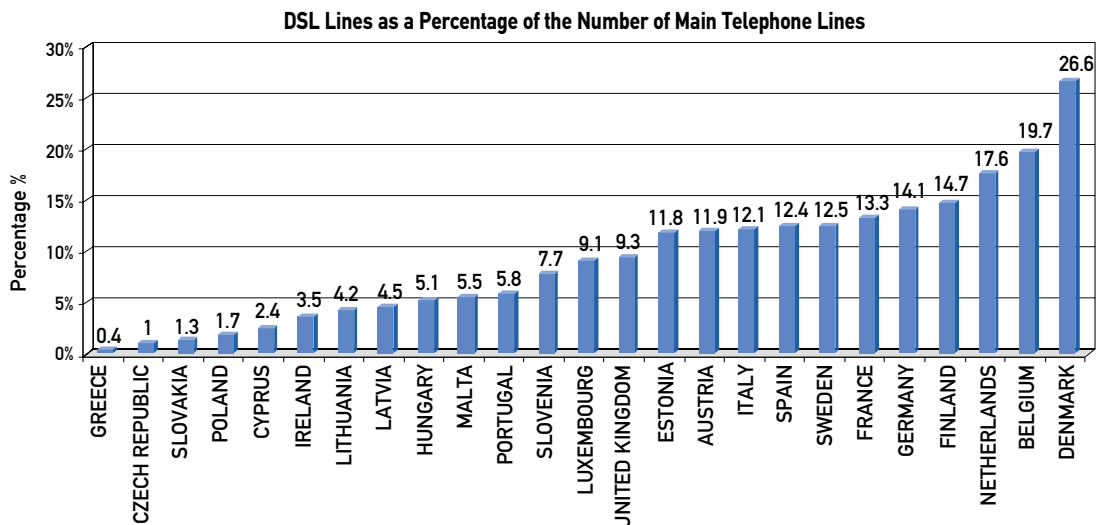
Source: EETT and 10<sup>th</sup> Report of the European Commission

This lag is due to three main factors. The first two are related to the significant delay in the development of LLU and ADSL markets, which is reflected in the number of ADSL lines, as shown in Chart 76. It is noted that out of all broadband lines, 78% corresponds to ADSL lines-including LLU (July 2004 data).

The third factor is related to the absence of Cable

Television (CATV) networks in Greece. Those networks form an important part of the European broadband infrastructure and correspond to about 20% of broadband lines in the EU. It is noted that the remaining 2% of EU broadband lines mainly relates to satellite links and fiber-optic connections while the contribution of Fixed Wireless Access (FWA) is extremely low.

Chart 76



Source: EETT and 10<sup>th</sup> Report of the European Commission

The following subsections present the actions taken by EETT in 2004 in order to develop the broadband market based on the existing regulatory framework.

#### **4.3.2. Unbundled Access to Local Loop**

The critical role of broadband access in the promotion of electronic communications services and the significant delay observed in the Greek market, have led EETT to hold a meeting in June 2004 on the implementation and problems faced in the provision of LLU and ADSL access. All the companies that had expressed their interest in the aforementioned services, including OTE, attended the meeting. The outcome of the meeting was the set up of a "Collaboration Group for LLU Development", with the participation of EETT, OTE and those providers who have signed contracts with OTE for the provision of LLU.

The "Collaboration Group for LLU Development", that was chaired by EETT, was holding regular meetings in 2004 in order to examine the main problems in LLU provision, as they were highlighted by interested providers at the meetings. The results of these meetings can be summarized as follows:

##### **Provision of Information**

With respect to this issue OTE either failed to provide with the alternative providers the necessary information for the development of their business plans in relation to LLU or this information was provided with unaccepted delay. The Group decided that OTE would provide the information about the geographic boundaries of local exchanges that providers characterized as of top priority, as well as prepare and update a directory with local exchanges where external Optic Network Fibers have been installed and operate.

##### **Provision of Collocation and Local Loops**

OTE has committed to create a ditch dedicated to alternative providers in order to distribute the cost and to facilitate common use of the main local exchange centre by many providers. In addition, contacts were made between providers and OTE to resolve issues related to the implementation of Physical Collocations considering the significant problems that were faced in the implementation of provisions included in the existing Reference Unbundled Offers (RUO).

##### **Copper Management**

The interested parties agreed on the need to prepare a Spectrum Management Plan for the copper infrastructure of OTE's access network. However no agreement was reached in relation to the management of copper cables that are replaced by Optical Fibers.

##### **Service Level Agreements (SLA)**

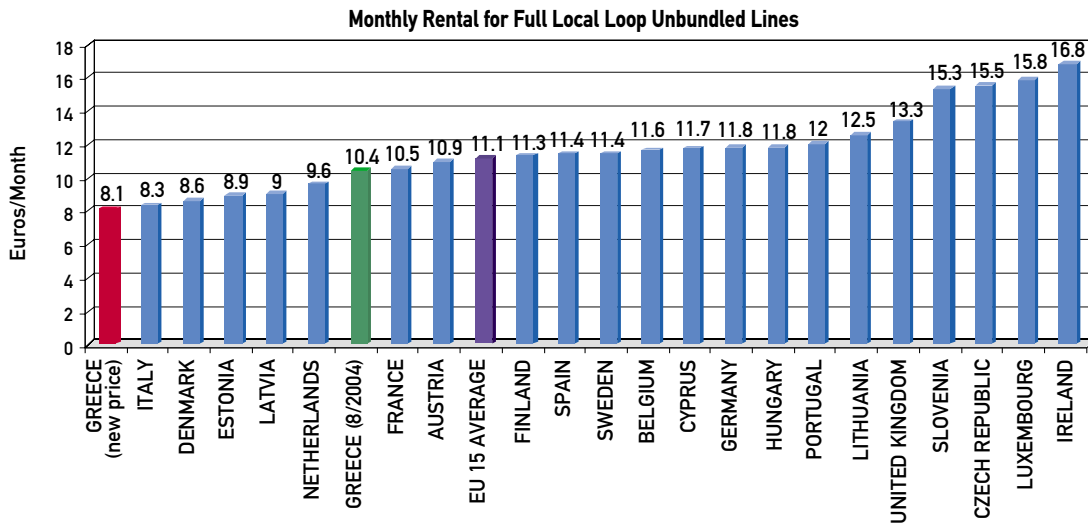
The issue was discussed but no progress was made. Despite the operation of the Collaboration Group and the improvement of OTE's behaviour in relation to individual provisions of the Reference Offers (i.e. reliability of provided information and level of cooperation), several providers continued to face delays in the delivery of local loops. In addition they faced cases of refusal or unjustified impediments in the implementation of the collocation procedures. Therefore, EETT summoned OTE to a Hearing in December 2004 on those issues. The Hearing is expected to take place in early 2005.

It is noted that the cost accounting of OTE (see subsection 4.1.5.) led to the readjustment of LLU prices. This readjustment is expected to contribute further to the development of the relevant markets. In particular, the monthly rental for the Full Local Loop Unbundled Lines was further reduced (Chart 77) even though it was lower than EU average. The connection fee for new

line connections, that was one of the lowest in the EU, was increased (Chart 78). Accordingly, the monthly rental for the Shared Local Loop Unbundled Lines was

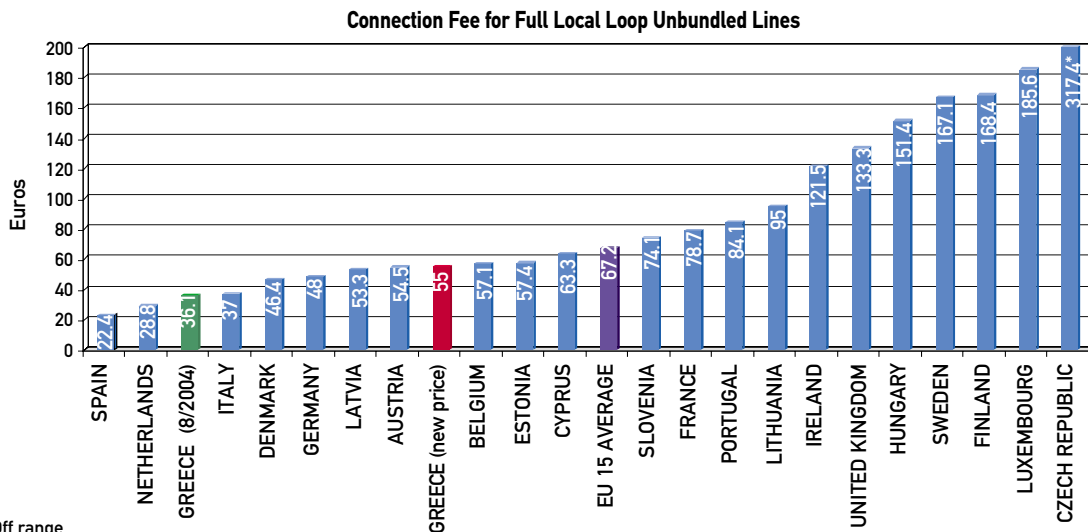
reduced, approaching the EU average (Chart 79), while the connection fee was increased, also approaching the EU average (Chart 80).

Chart 77



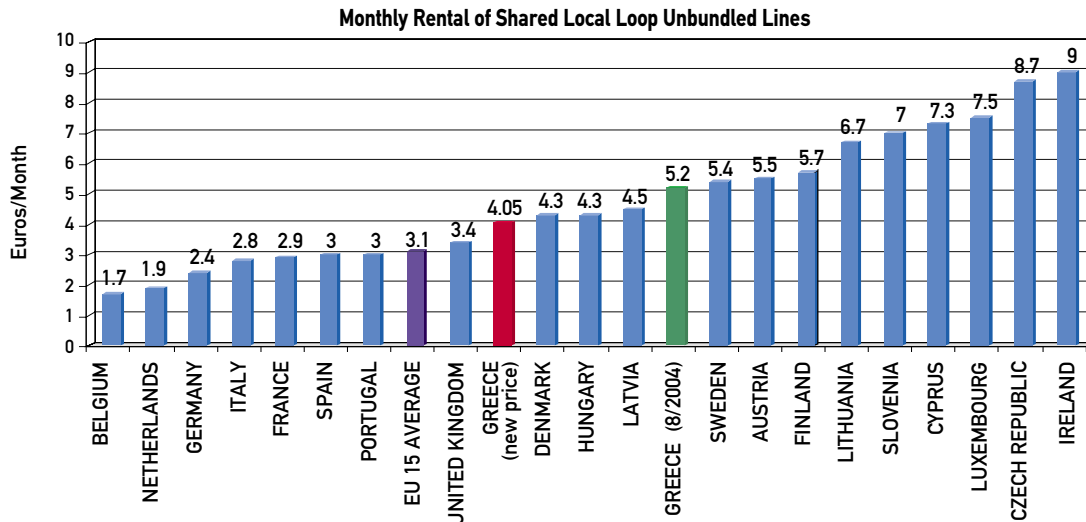
Source: EETT and 10<sup>th</sup> Report of the European Commission

Chart 78



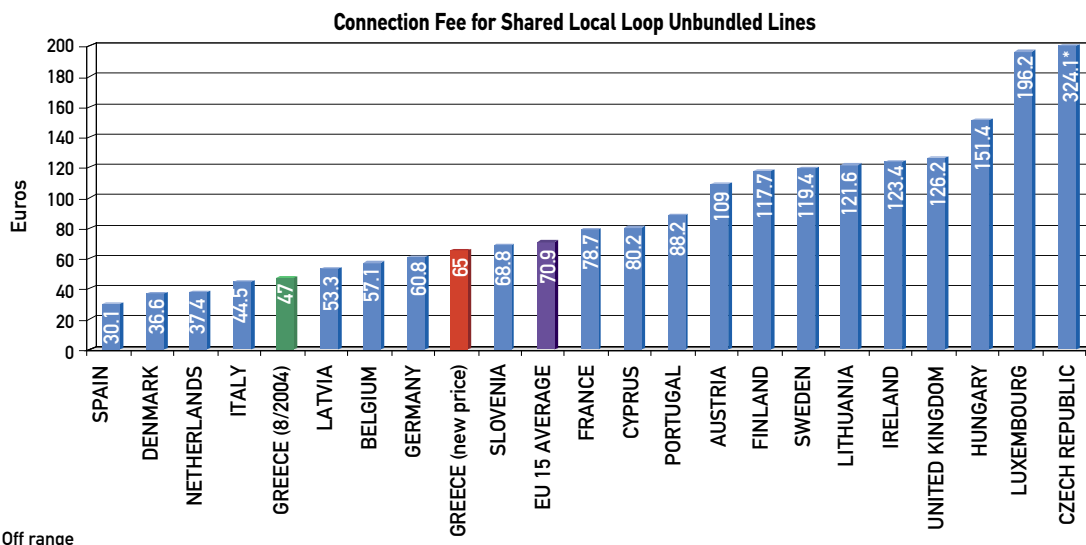
Source: EETT and 10<sup>th</sup> Report of the European Commission

Chart 79



Source: EETT and 10<sup>th</sup> Report of the European Commission

Chart 80



Source: EETT and 10<sup>th</sup> Report of the European Commission

The progress of LLU lines in Greece is shown in subsection 1.1.5.

EETT's target for 2005 is the full compliance of OTE with its obligations, -as laid down in the Reference

Offer and the provisions of law of competition-, as well as the improved collaboration between OTE and the interested telecommunications providers in order to achieve greater broadband penetration through LLU.

### 4.3.3. ADSL

As a result of the meeting that took place in order to examine the progress of implementation and the individual problems faced in the provision of LLU and ADSL access (see subsection 4.3.1. and Chart 76), the set up of a "Collaboration Group for ADSL Access" was decided. EETT, OTE and the providers who have signed relevant contracts with OTE would participate at this group.

The Group has focused its activities on the problems faced by interested providers in the provision of ADSL access by OTE. The results of these works can be summarized as follows:

#### "Port" Availability

OTE announced that the "port" availability (from its own stock) problems has been almost eliminated and reviewed its initial intention to interrupt the provision of information to interested providers in relation to "port" availability per local exchange centre.

#### Marketing of ADSL Access

The main issues related to the marketing of ADSL access were recorded and discussed as they were posed by the providers. The list includes issues like the low discount on wholesale prices, the twelve-month obligation to pay the wholesale service despite not being a similar term for retail service, and the provision of technical support for wholesale and retail service through a common number. OTE recognized the need to differentiate technical support for the wholesale service, but opposed all other issues.

#### Provision of Service Quality Guarantee by OTE

EETT placed particular emphasis on the issue of service quality guarantees by OTE so that the interested providers can offer differentiated services as well as guaranteed quality of services. Regarding this issue OTE avoided to refer to the quality of its services and make any commitments.

#### Provision of Access with Own Means

The issue was discussed but no progress was made. According to the existing legislative framework in Greece, ADSL access is considered as a special type of access and the power of EETT to intervene in the ADSL market is significantly limited. Therefore, the relevant ADSL access offer of OTE is not subject to EETT approval. Nevertheless, as it was also found out from the discussions at the relevant Collaboration Group, ADSL access needs significant improvements, especially regarding the clarity of procedures, the provided services (range, quality, etc) and time schedules as well as the non-compliance clauses.

Two Hearings of OTE were held in the second half of 2004 in relation to ADSL access. The first one was related to FORTHNET request for adoption of Interim Measures as regards the release of the Conn-x package by OTE, where EETT rejected that request, since no immediately impending risk for irreversible damage was proved. The second Hearing was held after a complaint from TELLAS mainly related to the review of price squeeze due to the low discount in the wholesale prices as compared to retail prices. The final Decisions of EETT on the above are expected to be issued in early 2005.

The progress of ADSL lines in Greece is shown in subsection 1.1.5.

The target of EETT for 2005 is the full compliance of OTE with its obligations and the improved collaboration with the interested providers in order to achieve greater penetration of broadband through ADSL access.

### 4.3.4. Wi-Fi

Wi-Fi (Wireless Fidelity) is a wireless local area network which uses radio frequencies to transmit and receive data and is based on the IEEE 802.11 family of standards. In recent years, Wi-Fi are

internationally used in various sectors such as health and education as well as from residential users, universities, offices, etc. The easy installation of a Wireless Local Area Network (W-LAN) is one of the main factors contributing to the rapid development of such networks.

These wireless networks are widely spread in Greece. EETT, following the principle of technology neutrality, keeps a positive attitude towards the expansion of this type of networks since they are expected to substantially contribute to the development of broadband services as well as to the penetration of the Internet and the general networking of remote and isolated areas.

Via the necessary EETT regulatory interventions the market development of such networks is rendered feasible. This will offer subsequent benefits to the average consumer in terms of variety, quality and prices for different services.

Under the existing legal and regulatory framework the development of W-LAN for own use is excluded from licencing, while the commercial operation of wireless networking technology (except of FWA services) is allowed upon granting of an Individual Licence.

The rapid spread and the particular importance of these networks requires the revision of the existing legislation. The later is essential for the appropriate adjustment of the regulatory framework and for dealing with various issues, so that this technology offers a greater and easier access to Information Society.

EETT held a Public Consultation on W-LAN in the period between 5 August to 30 September 2004. The main object of this consultation was to record the views of interested parties in relation to the consequences of W-LAN operation in the Greek market and the possibility to allow the provision of

services to the public with the use of this technology (ETSI, EN 300 328) for FWA implementation. At the Consultation text it was pointed out that in December 2000 the FWA Licences for the frequency zones of 3.5 GHz and 26 GHz were granted through an auction process.

Twenty-one (21) interested parties participated in the Consultation whose main conclusions are summarized below:

- Half of the participants agreed in general with the provision of FWA services in the 2.4 GHz zone, while 40% of them disagreed.
- About 55% of participants supported the limitation of the FWA services to the 2.4 GHz zone -if this is allowed- to non-urban areas only.
- Regarding the quality of services provided, 55% supported the view that there can be no guaranteed quality, while 40% expressed the opinion that existing quality is satisfactory taking into account parameters such as the type of service, the number of users, etc.
- The majority of participants pointed out that the service providers should inform the users on the quality of the services provided.
- The vast majority of the participants expressed the opinion that W-LAN networks may constitute, under certain conditions, a reliable and sustainable way to offer telecommunication services.
- There were divergent opinions in terms of offering a guaranteed quality of the services provided. Regarding this issue, 40% of the participants expressed the opinion that the quality of services provided to users could be subject to interference since W-LANs operate in unlicensed spectrum. However, about 33% of the participants believed that quality could be ensured with the establishment of provisions and technical specifications. In addition, 22% expressed the opinion that quality could only be ensured with licensing or limitation of spectrum use.

The Public Consultation text and the relevant results are available on EETT's website<sup>23</sup>.

#### **4.4. Promotion of Internet Electronic Services**

##### **4.4.1. Electronic Signature**

Regarding the issue of Electronic Signature, EETT completed in 2004 the regulatory framework for the Voluntary Accreditation (VA) of Certification Service Provider (CSP) in Greece.

In that context, CSPs interested in receiving voluntary accreditation should select a Designated Body (DB), authorized by EETT to perform the necessary audits to ascertain compliance with VA criteria.

Aiming at the faster implementation and operation of VA, and having taken into account that the market of Electronic Signature certification services is not adequately developed and competitive, EETT decided<sup>24</sup> to adopt the electronically Signed List for the implementation of a Registry of VA providers. This means that the voluntarily accredited CSPs as well as their details and the services for which they have received accreditation shall be registered in an electronic list accessible from EETT's website. This list shall be managed and signed by EETT, ensuring authenticity and integrity of its content.

As a next step, EETT published an invitation for tender in order to identify those DBs which will be responsible for the following tasks:

- a) To ascertain compliance of Electronic Signature products (i.e. secure signature devices like smartcards, etc.) - with Presidential Decree (PD) 150/2001 and compliance of the secure codification units with Annex III and II(f) of PD 150/2001).
- b) To ascertain compliance of CSPs with VA criteria.

Following the aforementioned invitation, a number of informative meetings took place with the bodies which expressed their interest to participate in the process.

In order to achieve a greater expansion of the use of Electronic Signature, EETT informed the Ministry of Economy and Finance, the Union of Greek Banks and other public and private bodies about general issues associated with the Electronic Signature such as the existing regulatory framework, and especially the VA procedure.

In addition, EETT introduced the use of Electronic Signature in the procedure of submitting the applications to the Registry of Domain Names holding the [.gr] suffix by the Registrars. Accordingly, it introduced the use of Electronic Signature in the procedure of submitting the applications for Carrier Pre-Selection (CPS) by subscribers. EETT has also set up and operates a Private Certification Authority for the issue and use of Digital Certificates for the internal correspondence of its staff.

During 2005, EETT will focus its efforts on the implementation and operation of the electronically Signed List for the support of CSP VA. EETT is also going to continue the promotion and dissemination of Electronic Signatures in Greece. The operation of VA is expected to create the necessary framework for the provision of high-level services in terms of security and quality. This is going to encourage the use of Electronic Signature and support consumers' confidence in electronic communications and commerce.

##### **4.4.2. Domain Names holding the [.gr] Suffix**

Under the EETT's responsibilities with respect to Internet issues, and according to the Regulation specifying the procedures for the assignment of Domain Names holding the [.gr] suffix, the operation of the "Registrants- Registrars-Registry" scheme started on 5<sup>th</sup> April 2004.

<sup>23</sup> [http://www.eett.gr/gr\\_pages/telec/adeiodotisi/](http://www.eett.gr/gr_pages/telec/adeiodotisi/) (Available in Greek only).

<sup>24</sup> EETT Decision 308/37/2004.