



TELECOMMUNICATIONS SECTOR



3. Telecommunications Sector

In this Chapter, we present EETT's main actions in the telecommunications market. These actions support two main strategic goals, which were included in EETT's Business Plan for 2003: the establishment of conditions for the development of modern networks and innovative services, as well as the promotion and safeguarding of competition between network and service providers. To achieve each individual strategic goal, EETT undertook specific actions, which mainly concerned the completion of the current regulatory framework, the control and monitoring of the telecommunications market, the promotion of electronic transactions, as well as actions for the further establishment of competition, such as the designation of Organisations with Significant Market Power (SMP) in relevant markets and the introduction of Number Portability.

3.1. Development of Modern Networks and Innovative Services

3.1.1. Completion of an Up to Date Regulatory Framework

Completion of the Current Numbering Framework

In 2003, the last phase of the National Numbering Plan (NNP) introduction was completed, having as a result the successful implementation of a three-year effort aiming at the gradual transition to the new numbering plan. EETT, as the competent authority,

promoted in 2001 and 2002, the introduction and implementation of the new ten-digit NNP and issued all the required Regulations related to the numbering spectrum management and to the Number Portability.

The numbering system in force in Greece till 2001, was unable to cover the increasing needs in numbers due to the entry of new providers and the provision of new services. Specifically, the last NNP introduction phase was implemented successfully in January 2003, with the change of the first digit 0 of mobile telephony subscriber numbers to 6.

At the same time, the current institutional framework was completed with the issuance of two Regulations¹⁶, which among other things regulate the management of:

- ▶ The NNP's short codes for the provision of directory enquiry services. This regulation establishes the use of five-digit codes in the form 118YX –where $Y=\{1,\dots,9\}$, $X=\{0,1,\dots,9\}$ - and supports competition development in the directory enquiry services market, as well as new innovative services.
- ▶ The NNP's routing numbers are used for call routing among networks or/ and nodes of the same network.

Reformation of Pricing Regulation

The increased consumers' need for adequate information and the need for safeguarding healthy competition in the telecommunications market were the main reasons for the regulatory framework reformation concerning the procedures definition for setting providers' tariffs. EETT, in May 2003, issued a Regulation¹⁷ on the definition, control and publication of telecommunications providers' tariffs procedures. This Regulation replaced the one in

¹⁶ EETT Decisions 276/39/2003 and 276/40/2003, GG Issue 604/B/15-05-2003.

¹⁷ EETT Decision 277/64/2003, GG Issue 514/B/02-05-2003.



force¹⁸ which was confined on the definition of a timeframe for tariffs' publication prior to their implementation.

Specifically, the new Regulation defined the approval procedure of retail and wholesale services under the obligation of cost-orientation (such as monthly voice telephony rental charge, local and national charge, Leased Lines tariffs, Interconnection services and Local Loop Unbundling (LLU) etc.), as well as the approval procedure of offers and discount packages, which concern services under the obligation of either cost-orientation or reasonable price. Furthermore, the new Regulation defined the approval procedure of wholesale prices for services included in the annual Reference Offers of the provider under obligation. At the same time, the new Regulation describes the procedure for data submission necessary for EETT's control of proposed tariffs, so that the planning and implementation of pricing policies by providers subject to cost-orientation, is facilitated.

As for the publication of tariffs, the new Regulation requires that all voice telephony providers publish detailed leaflets describing individual charges imposed per service. These leaflets will be distributed to the public from the providers' selling points. Alternatively, providers can provide tariff information through call centers. Furthermore, provided they have a website, providers will have to publish their tariffs there as well.

Specifically, this Regulation states that for the retail prices of the aforementioned services, providers are under the obligation to publish the proposed tariffs or any changes therein before their implementation, in two daily political

and one financial newspaper, all of pan-Hellenic circulation. Furthermore, providers subject to cost-orientation, are under the obligation to submit to EETT the clippings of newspapers relevant to the proposed tariffs, for clarity reasons.

As far as offers and discount policies on cost-oriented or reasonably priced services, the Regulation provides that prices must be transparent to avoid cases of cross subsidisation.

EETT expects that the new Regulation will enhance the further development of competition ensuring at the same time transparency and promotion of non discrimination among providers.

Licensing Status for Satellite Services Activation Points

During 2003, EETT, after a collaboration with the Ministry of Transportation and Communications (MTC) and the Ministry of Mercantile Marine, issued a Regulation¹⁹ on the authorisation of bodies as Points of Inmarsat Services Activation (PSA), clarifying their operation status. The PSA are bodies that enter in agreement with the satellite organisation Inmarsat and following an approval/ authorisation by the National Regulatory Authorities (NRAs), they receive and process applications by owners of Mobile Earth Stations (MES), for the use of a satellite segment of the Inmarsat satellite organisation.

The Inmarsat satellite organisation manages five geostationary satellites and operates as a mobile satellite telecommunications provider on a universal level.

¹⁸ EETT Decision 208/1/2001, GG Issue 193/B/28-02-2001.

¹⁹ EETT Decision 269/50/2004, GG Issue 1660/B/12-11-2003.



In Greece, according to the aforementioned Regulation, providers that wish to operate as a PSA for mobile earth stations are classified in the category of simple telecommunications services resellers and their sole obligation is to provide EETT a written statement regarding information on their activities. EETT maintains a Registry with information on providers authorised to operate as PSAs and publishes relevant information on its website²⁰.

Virtual Providers Operational Framework

During 2003, for the first time in the Greek market, providers expressed interest in providing telecommunications services through the model of the Virtual Network Operator (VNO). A virtual operator is the one that has not developed its own network and offers services based on the networks of other providers.

Until today, providers develop networks and provide services simultaneously, due to fixed and mobile voice telephony and Internet access driven demands. In the near future, given the rapid technological advancement, especially the implementation of Intelligent Networks (IN) which operate complementarily and in collaboration with Public Switched Telephone Network (PSTN), broadband networks and 3G Mobile Communications networks, new attractive services are expected to be developed to exploit the infrastructure and capabilities of the aforementioned networks. These services may also be developed by providers that do not have their own network and wish to specialise in the development of services, satisfying consumer needs.

In this view, in 2003, the first application for the operation of a virtual network operator was submitted

to EETT. EETT responded to the request, examined the Greek market needs and the relevant regulatory framework of other European countries. Then, EETT introduced a new category of Individual Licence due to the fact that virtual network operators provide telecommunications services to the public, using the networks of licensed telecommunications providers, after entering in an agreement with them and using Carrier Selection and Carrier Pre-selection codes assigned by EETT. The examination and completion of the aforementioned request constituted the introduction of the virtual network operator concept in the Greek telecommunications market.

To protect consumers and secure the continuous provision of services virtual network operators, besides the obligations applying on voice telephony providers, are also obliged to conclude into at least two agreements with licensed telecommunications providers. At least two months prior to their termination, these agreements, have to be renewed or replaced by others and then notified to EETT. EETT expects that virtual network operators will lead to an increase of consumer choices and further strengthen the competition in the market.

Standing EETT Arbitration

The institution of Standing EETT Arbitration, was introduced by Presidential Decree (PD) 388/2002²¹ and defines the type of disputes among telecommunications providers that can be brought under EETT's Standing Arbitration, sets the procedures that must be followed and finally, describes the basic principles for the drafting of the Arbitrators list by EETT. Until then, the aforementioned disputes were resolved either through

²⁰ www.eett.gr, Telecommunications/ Licensing/ PSA for Inmarsat Section.

²¹ PD 388/2002, GG Issue 335/A/31-12-2002.



complaints to EETT following the Hearings procedure, or through recourse to civil courts.

Within EETT's competences are mostly disputes that arise from:

- ▶ The provision of telecommunications activities, such as access, Interconnection, LLU.
- ▶ The non implementation of competition rules when exercising telecommunications activities.
- ▶ The installation of telecommunications networks, especially when accessing or/and coming through public or/ and common use areas or/and third party properties.
- ▶ The assignment of Domain Names with a [.gr] suffix, as well as the Electronic Signature.
- ▶ The obligation to provide Universal Service (US).
- ▶ The installation and operation of mobile telephony antenna mast constructions and terminal equipment.

The Standing Arbitration can be addressed by any person, legal entity or association with or without a legal status. In order for the disputes to be brought under EETT's arbitration, a written consent of the interested parties is required or classification of one party and acceptance by the other. EETT drafts a relevant list of Arbitrators which is renewed each year. The Arbitrators are selected according to their scientific training and their expertise in issues of telecommunications or competition legislation. The interested parties select the Arbitrators from EETT's relevant list. Based on the provisions of the aforementioned PD and EETT's competences, a Decision²² was adopted, regulating all issues related to the drafting of the Arbitrators list and then EETT proceeded to the actions that led to the list's drafting. The aforementioned Decision describes the qualifications that must be satisfied by anyone who wishes to be included in the Arbitrators list and the procedure that

EETT should follow in order to draft and renew the list.

3.1.2. Monitoring and Control Procedures for the Smooth Operation of the Telecommunications Market

In 2003, EETT intensified its interventions for a more effective supervision of the telecommunications market and in particular:

- ▶ The control and assessment on abiding by the individual terms of agreements between the SMP operator and the other providers.
- ▶ The investigation of complaints sent to EETT by providers and consumers.
- ▶ The regular contacts with providers for issues related to the smooth operation of the telecommunications market.

These interventions mostly concerned issues of Licensing, Interconnection, Leased Lines and Bitstream Access, given their importance for the establishment of competition in the telecommunications market. Below, we present in more detail, some of EETT's relevant actions during 2003.

Licensing

In the context of monitoring providers with an Individual Licence, EETT proceeded to the implementation of control procedures for the conformity of these providers to the network coverage terms obligations mentioned in their Licences.

Interconnection

Ensuring Interconnection among telecommunications networks, is one of the most important conditions

²² EETT Decision 281/54/2003, GG Issue 1029/B/24-07-2003.



for the smooth operation and the development of the telecommunications market, given the fact that it allows communication between all users of the same or different networks, as well as their access to all provided services by the aforementioned networks.

EETT's actions concerning Interconnection issues, aimed at the assessment of OTE's conformity to the provisions of the relevant regulatory framework, and especially the strict and full implementation of the Reference Interconnection Offer (RIO) provisions. The RIO constitutes the negotiating basis for the conclusion of an Interconnection agreement between providers and OTE. The main problem identified was the non provision of Interconnection services, in order for OTE subscribers to gain access to audiotext services, which were provided by other networks, as well as access by subscribers of other providers to audiotext services provided by OTE's network. A Hearing was carried out by EETT in order to resolve this issue and the relevant Decision is expected to be issued in the beginning of 2004.

Leased Lines – Part Circuits

Leased Lines are used by telecommunications providers for the development of backbone network and the enablement of subscribers to access their network. Part Circuits are Leased Lines whose one terminal point is located in the end-user's premises and the other in the provider's premises, and their length does not exceed 5 kilometers. It is evident that Leased Lines and Part Circuits are extremely important for the development of competition.

Through its controlling interventions, EETT aimed at the control of Leased Lines and Part Circuits provision according to the current regulatory framework, especially related to OTE, the SMP operator in the relevant market.

ADSL Access (Bitstream Access)

The interested telecommunications providers with ADSL Access can provide services to end users by utilising OTE's relevant installed xDSL infrastructure.

EETT, after OTE notified its intention to provide ADSL Access, proceeded to a series of actions, aiming at safeguarding competition in the relevant market and at promoting the rapid provision of broadband services to consumers. More specifically, EETT carried out a series of meetings with OTE and the telecommunications providers, in order to resolve issues that arose during the provision of ADSL Access. At the same time, trying to ensure the non discriminatory and transparent provision of this service, EETT proceeded to the clarification of relevant provisions in the Offer published by OTE.

Furthermore, EETT summoned OTE to a Hearing to ascertain any violations of the relevant telecommunications legislation, concerning the imposition by OTE of exclusive procurement and installation of terminal equipment for the provision of ADSL Access. The Decision on the aforementioned Hearing will be issued in the beginning of 2004.

During 2003, successive reductions of OTE's retail tariffs were announced related to the provision of ADSL Access and this is expected to have a great impact on the increase of broadband services penetration in our country. Due to this, EETT will continue to examine OTE's technical and commercial terms of provision for this specific service.

Price Control for OTE Cost-Oriented Services

During 2003, EETT, with the assistance of independent auditors, performed the following two audits in OTE's cost accounting system:



1. Cost Control of Tariffs for Fully Unbundled and Shared Access to OTE's Local Loop.

This refers to the audit of cost-oriented prices for Fully Unbundled and Shared Access to the Local Loop for all services included in OTE's relevant Offer. The audit²³ led to the detailed definition of prices for all services required for the provision of LLU, however no cost-oriented prices resulted for the monthly rental charge and the lump sum connection fee. EETT, until the cost-orientation of the aforementioned services is proven, defined prices for Fully Unbundled as well as Shared Access to the Local Loop services.

2. Annual Audit of OTE's Costing Accounting System

The annual audit had as an objective:

- ▶ The control of OTE cost accounting systems compliance with EETT's approved methodologies, including the related improvement proposals EETT had submitted to OTE and resulted from the previous annual audits. These methodologies are based on the Fully Distributed Cost (FDC) model using as a cost basis the Historic Cost (FDC – HC), and on the model of the Long-Run Average Incremental Cost (LRAIC) using as a cost basis the Current Cost (LRAIC – CC).
- ▶ The general audit of cost-oriented tariffs for services under regulation in 2003, based on the 2001 actual data.

Specifically, the audit focused on OTE's tariffs on services of Voice Telephony, Leased Lines, Interconnection and LLU, and it was conducted during the period August – November 2003. (The audit results are indicated in the relevant Decisions²⁴ issued by EETT).

It is noted that for some services, OTE did not submit adequate data for the calculation of cost-oriented prices. For these services, estimating that any omissions by OTE should not lead to aggregating results for the relevant markets in Greece, EETT set prices using available information from OTE's cost accounting system audit and methodologies commonly accepted by international practices.

In the context of the annual control of its cost accounting system, OTE, in November 2003, submitted for approval to EETT a pricing policy proposal on voice telephony, with the following principal characteristics:

- ▶ Per second charge option.
- ▶ Discounts depending on the amount of the bill.
- ▶ Definition of different tariffs for rush hours or non rush hours, for retail services of voice telephony as well as for Interconnection services.

EETT issued a Decision²⁵ on OTE's proposed pricing policy, following the audit's completion, especially in what concerns OTE's compatibility with its cost-orientation obligations and competition principles. EETT also examined the possible existence of price/ margin squeeze.

Framework Definition for Telecommunications Emergency Conditions

EETT, according to the provisions of Law 2867/2000, controls and ensures the protection of users' rights, among which the unimpeded and quality use of telecommunications services is included.

Due to this responsibility, EETT began the necessary actions for the formulation of action plans, concerning the management by providers of emergency conditions that

²³ EETT Decision 277/63/2003, GG Issue 331/B/20-03-2003.

²⁴ EETT Decisions 300/47/2003 and 299/46/2003, GG Issue 1925/B/24-12-2003.

²⁵ EETT Decision 301/30/2003, GG Issue 1925/B/24-12-2003.



may appear in telecommunication networks. In the context of these actions, as emergency conditions are considered those during which, due to external or internal factors (i.e. national or religious holidays, international cultural or athletic events, political crises, natural or industrial disasters), a telecommunications network can not respond to the communications needs of users and offer the agreed usual service quality.

EETT's goal is to define specific national action plans in order to face emergency conditions, which will aim at defining specific procedures and steps, and will describe the role of each provider in detail.

The participation and the wide acceptance of project outcomes by telecommunications providers, is important for its success, as these providers will be called to implement the action plans. To this end, in September 2003, EETT carried out a Public Consultation on the definition of the project's technical content, which will lead to the formulation of those plans.

Telecommunications providers, equipment providers and consulting companies participated in the Consultation. The participants' comments were indexed and the results were published in EETT's website. Furthermore, the Consultation's conclusions were taken into consideration during the finalisation of Tender Documents for the aforementioned project, which will begin in January 2004.

3.1.3. Internet – Electronic Transactions

Domain Names with a [.gr] suffix

Among EETT's competencies is the assignment and management of Domain Names with a [.gr] suffix. In 2002, EETT issued a Regulation²⁶, which defines the framework

concerning the regulation of domain name issues. Specifically, it defines, among other things, the Domain Name assignment procedures and provides for: a) the operation of a three-tier scheme "Registrar-Registrant-Registry" and the definition of obligations that govern the operation of Registrars and the Registry and b) the selection of Registry, after a tender procedure, which undertakes the technical tasks of activation and management of Domain Names with a [.gr] suffix for EETT.

More specifically, the Registry undertakes the organisation, management and operation of Domains with a [.gr] suffix. The Registry's competences include, among other things, the maintenance of databases with the registration data, the provision of search facilities and the registration of Names. The Registrars are Internet Service Providers (ISPs), or other bodies who undertake the management of applications for the assignment of Domain Names and at the same time provide relevant services to interested parties.

Implementing this Regulation, EETT proceeded to an invitation to tender in May 2003, for the selection of the aforementioned body. In July 2003, the Institute of Computer Science of the Foundation for Research and Technology Hellas (ICS-FORTH) was declared the Contractor. The latter, in close collaboration with EETT and under its guidance, has begun the implementation of the [.gr] Registry and the project is expected to be completed in the beginning of 2004.

The Registry that will result from the project's completion will technically manage the Domain Name System (DNS) with a [.gr] suffix, providing high quality services, such as reduced system response time and high system availability. Furthermore, the Registry's

²⁶ EETT Decision 268/73/2002, GG Issue 1617/B/31-12-2002.



operation will signal the commencement of operation for Registrars. The operation of Registrars will be based on the existence of an approved by EETT list of providers that will meet specific conditions and thus will be able to provide reliable services to the end user, in what concerns Domain Names.

With the commencement of operation of the three-tier scheme, EETT expects that the majority of issues that have arisen from the intense Internet development will be resolved, thus safeguarding the rights of Internet users in Greece.

Electronic Signature

EETT, aiming to promote electronic transactions and at the same time, protect consumers, issued in 2003 three Regulations,²⁷ introducing the implementation rules of Voluntary Accreditation of Electronic Signature Certification Service Providers (CSP). Since 2002, EETT had already defined through a Decision²⁸ the procedures for monitoring and control established CSPs in Greece which issue certificates or provide other services related to Electronic Signature.

Specifically, the first among the Regulations, issued in 2003, defines the procedures of Bodies designation – private or public – in order to:

- ▶ Ascertain the compliance of Secure Signature Creation Devices²⁹ for Electronic Signature and secure cryptographic units to PD 150/2001³⁰.
- ▶ Ascertain the compliance of CSPs to the Voluntary Accreditation criteria.

The Regulation defines the beneficiary Designated Bodies, who may also be based abroad, their appointment criteria, as well as their obligations. Furthermore, it describes the revocation and suspension procedures of services of the Designated Body aiming to protect CSPs and consumers.

The second Regulation defines the compliance criteria and control procedure of secure signature creation devices for Electronic Signature and the secure cryptographic units to PD 150/2001. Furthermore, it defines the procedures of issuance, revocation and publicity of Compliance Certificates.

The third Regulation concerns the criteria for the Voluntary Accreditation of CSPs that issue Qualified Certificates, have previously been designated according to the relevant Regulations and provide at least the basic certification services. These services in the framework of Voluntary Accreditation include the registration of subscribers, the issuance of certificates, the directory services and the accreditation revocation services. Furthermore, the Regulation defines the Voluntary Accreditation procedure, as well as the rights and obligations of those requesting Voluntary Accreditation as well as of the Accredited CSPs.

Having defined the principal regulatory axes, EETT will further support in 2004, the promotion and spread of Electronic Signature. In this manner, EETT will contribute to the promotion of electronic transactions and communication through the Internet

²⁷ EETT Decisions 295/63/2003, 295/64/2003 and 295/65/2003, GG Issue 1730/B/24-11-2003.

²⁸ EETT Decision 248/71/2002, GG Issue 603/B/16-05-2002.

²⁹ Secure signature creation device: Hardware (i.e. smartcards, tokens) or software, which is under the exclusive possession of the person signing electronically and which ensures the uniqueness and secrecy of the Electronic Signature. Providing that the specific requirements as determined by the European and Greek legislation in force are fulfilled, then the signatures generated by such a device are legally equivalent to handwritten ones.

³⁰ GG Issue 125/A/25-06-2001.



in the public (e-Government) and in the private sectors, as well as in the sensitisation of the public in matters of Electronic Signature use.

3.2. Promotion of Competition in Networks and Services

3.2.1. Interventions based on the Framework in Force

Organisations with Significant Market Power in the Mobile Telephony Market

In 2002, EETT issued a Decision designating providers COSMOTE S.A. and VODAFONE as Organisations with SMP in the public networks and mobile telephony services market. In the beginning of 2003, EETT issued a Decision³¹ designating the providers COSMOTE S.A., STET HELLAS S.A. and VODAFONE as SMP Operators in this market.

It is noted that the goal of the relevant legislative framework is to develop the principles of Open Network Provision (ONP), which render feasible the access of subscribers from one telecommunications provider to the other. This is also a necessary precondition for the entry of new providers to the wider telecommunications market.

Specifically, in this context, Organisations with SMP must satisfy all reasonable requests for network access, including access to points other than the terminating network points that are mentioned to the majority of end users. Furthermore, they have to abide by the principles of non discrimination and transparency as to the Interconnection offered to

third parties and to treat all providers requesting Interconnection or Special Access, in an equal manner. Non discrimination requires that providers' requests are satisfied in equivalent conditions, in equivalent circumstances and for equivalent services.

Implementing the same principle, the SMP Operators in the market of public networks and mobile telephony services, are under the obligation to provide information and services concerning Interconnection and Special Access to third parties, under the same conditions and of the same quality as their own provided services or the services of their subsidiaries or partners. Finally, it is noted that these Organisations are under the obligation to provide, following a request, all the necessary information and specifications to providers that are examining the prospect of Interconnection, in order to facilitate the conclusion of the agreement.

Organisations with Significant Market Power in the Interconnection Market

EETT, by Decision³², designated the telecommunications providers COSMOTE S.A., OTE and VODAFONE as Organisations with SMP in the Interconnection Market of public telecommunications networks. The aforementioned Organisations have to fulfill all the relevant obligations provided by the national and European legislation in force.

More specifically, their obligations, as they result from the Directive 1997/33/EC and PD 165/1999³³, are among others, the following:

- ▶ To satisfy all reasonable requests for access to the public telecommunications network, including

³¹ EETT Decision 278/65/2003, GG Issue 338/B/20-03-2003.

³² EETT Decision 275/72B/2003, GG Issue 148/B/12-02-2003.

³³ PD 165/1999, GG Issue 159/A/04-08-1999.