



A. Telecommunications Sector

1. General Overview of the Sector

1.1. Introduction

Just before the transition to a new Regulatory Framework which is addressed to markets that are already liberalised and introduces convergence in the electronic communications sector, according to which all transmission networks and services should be governed by a single Regulatory Framework, 2002 was a year during which the existing Regulatory Framework was completed and clarified, complemented by monitoring and improvement actions regarding its application.

The chapters that follow present the key features of the new Regulatory Framework, which is to succeed the existing one, together with a first assessment regarding impending changes. Under the new Framework, enforcement of regulatory obligations is connected to the lack of effective competition in the corresponding markets, under the rationale that, in a liberalised market, interventions should be decreasing over time. This approach is based on the principle that, within increasingly more competitive and technologically converging markets, National Regulatory Authorities (NRAs) should be able to assess the level of competition and implement regulatory obligations in advance only in cases where competition is not effective. In this framework, as noted by the European Commission in its 8th Report, NRAs are called upon to clearly play a major role in the new regulatory regime. NRAs will in particular have to assess the degree of effective competition in relevant markets, and decide the regulatory obligations to be enforced on players with Significant Market Power (SMP).

However, as pointed out by the European Commission in its 8th Report, "Successful transition to the new

framework depends on the full implementation of the current framework, including universal service and consumer protection measures." This is particularly true in the case of the Greek telecommunications market, where full liberalisation was introduced by Law 2867/2000 only in late 2000, that is to say with a delay of two years compared to other member states, and, consequently, the requirements for regulatory interventions to implement liberalisation quickly and to secure conditions of effective competition in practice acquired an imperative character.

Thus, the work accomplished by EETT during 2002 must be viewed and assessed in the light of the above remarks, in terms of ex ante regulatory interventions, through the institution of measures necessary for the operation of the liberalised market, but also in terms of ex post interventions aimed at ensuring conditions of fair competition and to correct behaviours deviating from those appropriate under free competition.

The presentation that follows demonstrates that, during 2002, the efforts made by EETT to consolidate competition and ensure a healthy framework for the development of the telecommunications market, while at the same time protecting the rights of telecommunications services consumers, made a significant contribution to maximising benefits for consumers and for the national economy in general.

In this framework, EETT interventions in the telecommunications sector, during 2002, were of a regulatory, monitoring and suppressive nature. To a large extent, the regulatory work of EETT during 2002 was the continuation and completion of actions and interventions which had already been initiated in 2001, but whose implementation and results materialised during the past year. In parallel by completing the range of measures necessary for the implementation of the existing Regulatory

Framework, EETT paved the way for the implementation of the forthcoming framework in full compliance with the provisions of Community Directives.

The following is an indicative list of the areas on which the most important regulatory interventions by EETT focused during 2002:

- ▶ Access (Interconnection, Local Loop Unbundling-LLU, Leased Lines).
- ▶ Internet, Domain Names and Electronic Signature. Specifically, the conditions and procedures for assigning [.gr] Domain Names were determined, and issues related to the provision of Electronic Signature certification services were regulated.
- ▶ Universal Service - US (Designation of the Operator under obligation to provide the service, and determination of its contents and costing principles).
- ▶ Numbering (Determination of the procedures concerning provision of Carrier Pre-selection and Number Portability services).
- ▶ Assignment of Individual Radio Frequencies for private use, and specification of the relevant procedures.

Moreover, the most important Decisions adopted by EETT in 2002 included decisions designating Telecommunications Operators with SMP for the provision of Leased Lines, as well as corresponding decisions for the markets of public networks and mobile telephony services.

The overview of the sector is not exhausted with the description of the existing and forthcoming regulatory framework and of the key EETT Regulatory Acts regarding its implementation, but is coupled with the presentation of detailed data that demonstrate the impact of the above-mentioned regulatory interventions on the market, at the level of both providers and consumers of telecommunications services. This is so because the aim of all these efforts was to establish the smooth operation of the market to the benefit of consumers, especially by ensuring the existence of adequate options for

serving consumer needs in terms of both quality and pricing. A key precondition for achieving this aim is to secure that consumers are adequately and reliably informed and are provided with all the data which allow them to exercise in full the right of choice being offered to them.

The efforts to establish the (regulatory) preconditions to allow spreading of broadband access by Greek users to electronic communications networks and services should also be viewed in this framework. A number of additional interventions (W-LAN licensing, Part Circuits, audit of cost-orientation of prices for LLU.) created the conditions for provision of broadband services, with a significant increase expected in broadband access levels in Greece during 2003.

The quantitative data from the market overview, which are presented in the following sections, confirm the positive results of EETT interventions in the individual areas. The marked increase in the options available to a significant part of the Greek population regarding selection of an operator to handle their local/ national/ international calls, is indicative of this. In addition, the mobile telephony market in Greece appears particularly robust and dynamic, with penetration rates exceeding the European average. It should be noted that in September 2002 a fourth mobile telephony company started operating in Greece. It is estimated that during the first three quarters of 2002 the turnover of telecommunication services providers in Greece increased by more than 10% compared to the first three quarters of 2001, with the forecasted Gross Domestic Product (GDP) growth rate for the same period standing at 4%.

To confirm the above, the European Commission acknowledged the positive results of EETT interventions, a fact that encourages and strengthens EETT's future efforts and the soundness of its activities. As mentioned in the 8th Report of the European Commission² on telecommunications, there was a marked improvement in the performance of EETT with regard to the exercise

² Eighth Report from the Commission on the Implementation of the Telecommunications Regulatory Package, COM (2002) 695 Final.



of its regulatory role, as well as increased transparency in its decision-making procedures. The Report characteristically states that “the overall performance of the independent body may quite simply be improved through the transfer of all regulatory powers from the Ministry, as has been the case for example in Greece.” Moreover, regarding the adoption by EETT of the new Regulation on Hearings concerning Telecommunications Issues, the Commission considers that, by providing for its power to adopt effective interim measures for regulating a particular situation, EETT is expected to respond to relevant concerns voiced by market players.

Positive comments were also expressed concerning EETT activities in the area of radio frequency management, for which the Commission characteristically reports that, following the transfer to EETT in 2001 of the authority to allocate radio frequencies, the problems which had occurred in the past in connection with the assignment of radio frequency spectrum were overcome, while in parallel the times required to process applications for assignment of radio frequencies were significantly improved.

1.2. Legislative Framework 2002

The legislative framework in force, which regulates the telecommunications sector comprises Law 2867/2000³, as further specified and implemented through a series of EETT Decisions, and a number of Presidential Decrees (PDs) that have remained in force after the aforementioned Law was ratified. This Law is, in effect, a “Framework Law”, which marked the conclusion of the liberalisation of the telecommunications sector in Greece as of 31 December 2000, laying the foundations necessary for introduction

and consolidation of competition in the Greek telecommunications market and establishing the role of EETT as the NRA responsible for telecommunications issues.

The above-mentioned Law follows the dictates of the 1998 Community Regulatory Framework, and is supplemented by a number of PDs, which regulate, among other things, issues concerning Leased Lines, Interconnection and US. These PDs were issued for the purposes of harmonisation with the corresponding Community Directives⁴, and remained in force after publication of Law 2867/2000. The regulatory framework for telecommunications is completed by Regulation 2887/2000 laying down the terms for provision of LLU, and its application was further specified and implemented through EETT Decisions.

Moreover, concerning the new regulatory legislation introduced in 2002, it should be mentioned that Law 3082/2002⁵ supplements article 12 of Law 2867/2000 to afford EETT the power to adopt interim measures in cases where violation of the provisions of Law 2867/2000 or of the relevant secondary legislation is thought likely and in order to avert potential risk or irreparable damage to the claimant or to the public interest. In parallel, PD 388/2002⁶ introduced provisions regarding the organisation of Standing EETT Arbitration and determined the disputes that may be referred to this arbitration. The aim is to establish an arbitration mechanism for resolving disputes which arise between telecommunications undertakings or between such undertakings and the State or users / private individuals and concern the application of the legislation on telecommunications or of competition rules. The possibility offered to resolve disputes through this mechanism is expected to have a significant impact,

³ FEK Issue 278/A/19-12-2000.

⁴ These are primarily the following: PD 156/1999 (FEK Issue 153/A/29-07-1999), on the Amendment of PD 40/1996 in compliance with Directive 1997/51/EC of the European Parliament and of the Council amending Council Directives 1990/387/EEC and 1992/44/EEC for the purposes of adaptation to a competitive environment in telecommunications; PD 165/1999 (FEK Issue 159/A/04-08-1999), in harmonisation with Directive 1997/33/EC; and PD 181/1999 (FEK Issue 170/A/20-08-1999), in harmonisation with Directive 1998/10/EC.

⁵ FEK Issue 316/A/16-12-2002.

⁶ PD 388/2002 “Determination of the disputes that may be referred to the National Telecommunications and Post Commission’s Standing Arbitration, and organisation of such arbitration”, FEK Issue 335/A/31-12-2002.

given the increased specialisation of the arbitration body and its capability to apply more flexible procedures.

In the area of the radio frequency spectrum, the main legislative act is Law 2801/2000⁷, as well as PD 44/2002 on Radio Equipment and Telecommunications Terminal Equipment (RE-TTE) and the mutual recognition of the conformity of such equipment, by which the Greek law was harmonised with the provisions of Directive 1999/5/EC⁸.

During 2002 EETT exercised its regulatory competence by issuing a large number of Regulatory Acts on sector issues, especially in relation to Interconnection, LLU, provision of Leased Lines, Numbering and other Open Network Provision (ONP) issues, US and users' rights, Internet issues, Domain Names, Electronic Signature, the Hearings procedure and the procedures for adoption of interim measures, as well as issues relating to operation/management and monitoring of the radio frequency spectrum.

Prior to presenting the key Regulatory Acts issued by EETT in 2002, it is worth pointing out that the European Commission, in its 8th Report, and in reviewing the implementation of the current Regulatory Framework in member states, formulated the key principle that "Successful transition to the new framework depends on the full implementation of the current framework, including US and consumer protection measures".

Designation of Telecommunications Operators with Significant Market Power (SMP) in the Provision of Leased Lines⁹

EETT designated OTE as SMP Operator in the market for the provision of Leased Lines, specifying that OTE

should fulfil all relevant obligations as these are provided for by the applicable national and European legislation.

Designation of Telecommunications Operators with Significant Market Power in the Market of Mobile Telephony Networks and Public Mobile Telephony Services¹⁰

By virtue of this Decision, EETT designated COSMOTE S.A. and VODAFONE-PANAFON as SMP Operators in the market for Mobile Telephony Networks and Public Mobile Telephony Services, specifying that they should fulfil all relevant obligations as these are provided for by the applicable national and European legislation.

Access Issues (Interconnection, Local Loop Unbundling, Leased Lines, Numbering)

Regulation of Matters concerning Provision of Leased Lines¹¹

By virtue of this Decision, EETT regulated matters concerning the provision of Leased Lines, in the framework of the obligations undertaken by SMP Operators in this market and especially with regard to the obligation of such Organisations to publish a relevant Offer with specific minimum contents and validity.

Approval of OTE's Leased Lines Offer¹²

By virtue of this Decision, EETT approved (with modifications) the Leased Lines Offer submitted by OTE in accordance with the provisions of PD 40/1996¹³ -as amended by PD 156/1999¹⁴- and of EETT Decision 255/84/14-06-2002.

⁷ FEK Issue 46/A/03-03-2000.

⁸ PD 44/2002 "Radio equipment and telecommunications terminal equipment and mutual recognition of their conformity. Adaptation of Greek legislation to Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999", FEK Issue 44/A/07-03-2002.

⁹ EETT Decision 251/77/2002, FEK Issue 527/B/29-04-2002.

¹⁰ EETT Decision 248/68/2002, FEK Issue 382/B/29-03-2002.

¹¹ EETT Decision 255/84/2002, FEK Issue 810/B/28-06-2002.

¹² EETT Decision 269/73/2002, FEK Issue 17/B/14-01-2003.

¹³ FEK Issue 276/A/22-02-1996.

¹⁴ FEK Issue 153/A/29-07-1999.



Introduction of Part Circuits in the Greek Market¹⁵

EETT approved the introduction of Part Circuits¹⁶ in the Greek market, designating all SMP Operators in the Market for Leased Lines as operators under obligation to provide this service. The relevant Decision recognises the right of every lawfully authorised telecommunications operator (holder of an Individual Licence and/or General Authorisation) to apply for offering this service, taking into account the relevant prices mentioned in the 8th Report of the European Commission.

Prices for Fully Unbundled and Shared Access to the Local Loop¹⁷

By virtue of this Decision, EETT determined provisional prices for the individual elements/services of Fully Unbundled and Shared Access to the Local Loop of OTE, until OTE itself determines, and EETT approves, cost-oriented prices based on the approved "Long-Run Average Incremental Costs based on Current Costs for assets (LRAIC-CC)" costing system. The same Decision recognises the right of every Beneficiary to challenge the cost-orientation of the prices proposed by OTE, as well as the latter's obligation to prove such cost-orientation in all cases.

Provisional Interconnection Charges for Call Termination to the OTE Network for Year 2002¹⁸

EETT determined provisional prices for the basic Interconnection services -call collection and call termination- at the three levels (Local, Single Transit,

Double Transit), effective as of 27 January 2002. These prices, which were the result of a costing study conducted by an independent consulting firm and were further processed by EETT, represented an interim solution until OTE determines cost-oriented Interconnection prices based on the LRAIC-CC methodology approved by EETT.

Approval of OTE's Reference Interconnection Offer for Year 2002¹⁹

In order to ensure compliance with the principles of transparency, impartiality and non-discriminatory access to the fixed public telecommunications network, EETT approved (with modifications) OTE's Reference Interconnection Offer (RIO) for 2002. The 2002 RIO was published in fulfilment of OTE's obligations, as these result from the applicable Greek and Community legislation, for publication of the terms, conditions and prices for the Interconnection services offered. It should be noted that the approved 2002 RIO is considerably improved in comparison to the 2001 RIO, particularly in what regards the Interconnection services offered.

Publication of Certificate of Compliance regarding OTE's Costing System for Interconnection Services²⁰

This refers to the publication by EETT of a Certificate of Compliance by OTE with the EETT-approved costing system for the Interconnection services offered (call termination to, and call origination from, OTE's network), in accordance with PD 165/1999 and Directive 1997/33/EC.

¹⁵ EETT Decision 268/77/2002, FEK Issue 1604/B/30-12-2002.

¹⁶ According to article 1 of the above EETT Decision, a Part Circuit is defined as a Leased Line with one terminating point located in the beneficiary's premises and the other in the premises of the end-user, and with a length not exceeding 5 kilometres.

¹⁷ EETT Decision 253/87/2002, FEK Issue 720/B/13-06-2002.

¹⁸ EETT Decision 247/63/2002, FEK Issue 319/B/19-03-2002.

¹⁹ EETT Decision 261/142/2002, FEK Issue 1199/B/16-09-2002.

²⁰ EETT Decision 267/123/2002, FEK Issue 1531/B/09-12-2002.

Regulation on the Introduction of Carrier in the Greek Market²¹

Taking into consideration the results of the Public Consultation held on the introduction of Carrier Pre-selection and Number Portability, EETT laid down detailed rules concerning introduction of the Carrier Pre-selection facility in the telecommunications market. According to the relevant Decision, the pre-selection facility, together with the corresponding prices for its provision, must be published in the RIO of the telecommunications operator under obligation to provide it.

Approval of Attachment to OTE's Reference Interconnection Offer for Year 2002 concerning Provision of Carrier Pre-selection²²

This Decision approved the terms for provision of Carrier Pre-selection by OTE, which were published as Attachment to OTE's 2002 RIO.

Regulation on the Introduction of Number Portability in the Greek Market²³

By this Regulation EETT laid down detailed rules for introduction of Number Portability in the market, regarding geographical numbers (fixed telephony numbers), non-geographical numbers (freephone numbers, premium rate numbers etc.), and mobile telephony numbers. According to the Regulation, Number Portability should be available as of 1 January 2003 for geographical and non-geographical

numbers, and as of 1 July 2003 for mobile telephony numbers.

Dates for Commencement of the Third Stage in the Introduction of the new National Numbering Plan²⁴ and Determination of the Use of the "696" Series of Numbers under the National Numbering Plan²⁵

By virtue of this Decision, EETT modified the dates for commencement of the last (third) stage in the introduction of the new National Numbering Plan (NNP), as well as the dates for termination of the parallel operation of the old and new dialing schemes, with the aim to allow for more efficient introduction of the new numbering plan and ensure detailed and prompt provision of information to the citizens concerning impending changes. In parallel, EETT issued a Decision determining the series of numbers under the new NNP to be used for Numbering purposes in connection with Public Terrestrial Trunked Radio (TETRA) Digital Mobile Radiocommunication Networks.

Internet, Domain Names and Electronic Signature Issues

Regulation on Assigning and Managing [.gr] Domain Names²⁶

This Regulation determined the procedure for Assignment by EETT of [.gr] Domain Names on the basis of a three-tier scheme (Registrants - Registrars - Registry), and laid down the legal framework for the operation of the Registrars and of the Registry.

²¹ EETT Decision 254/70/2002, FEK Issue 773/B/21-06-2002.

²² EETT Decision 269/66/2002, FEK Issue 1616/B/31-12-2002.

²³ EETT Decision 254/71/2002, FEK Issue 791/B/26-06-2002.

²⁴ EETT Decision 240/5/2002, FEK Issue 25/B/16-01-2002.

²⁵ EETT Decision 265/122/2002, FEK Issue 1440/B/15-11-2002.

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



*Regulation on the Provision of Electronic Signature Certification Services*²⁷

EETT issued a Regulation on issues related to the provision of Electronic Signature certification services (qualified certificates, provisions for monitoring and control of Electronic Signature Certification Services Providers established in Greece, organisation and operation of a relevant EETT Registry etc.)

Universal Service Issues

*Regulatory Provisions on Universal Service*²⁸ / *Determination of Universal Service Content*²⁹

By virtue of this Decision, EETT regulated issues concerning the application of US, and especially the power of EETT to assign the provision of US to authorised telecommunications undertakings other than the US Provider (USP). In parallel, EETT issued a Decision determining the contents of US, which is a minimum set of telecommunications services that must be provided to the public regardless of the particular geographic location within the Greek territory and at an affordable price.

*Regulation on Universal Service Costing and Pricing Principles*³⁰

After determining the services to be provided under the US, EETT regulated the principles that must govern costing and pricing for such services.

*Designation of Operators under Obligation to provide US*³¹

It should be noted that OTE was re-designated as

Operator under Obligation to Provide US until 31 December 2003.

Publication of Certificate of Compliance regarding OTE's Costing System for Voice Telephony³²

This refers to the publication of a Certificate regarding Compliance by OTE with the EETT-approved Operational Costing System (OCS) for voice telephony services. Publication took place in accordance with the provisions of PD 181/1999 and the corresponding Directive 1998/10/EC.

Regulation on Hearings concerning Telecommunications Issues³³

In the framework of the efforts to modernise and improve its operations, EETT issued a new Regulation on Hearings which considerably simplifies the relevant procedures and shortens the times required for Decisions to be issued, while at the same time allows EETT to intervene and regulate a particular situation through the adoption of interim measures.

Regulation of Issues concerning Payment of Operating Fees for Private Mobile Radio Networks³⁴

By virtue of this Decision, the parties under obligation to pay operating fees for PMR Networks were given the opportunity to apply to EETT for arranging the method of payment of the operating fees due for 2002. In addition, EETT modified the existing Regulation on the Determination of Operating Fees for PMR Networks³⁵.

²⁷ EETT Decision 248/71/2002, FEK Issue 603/B/16-05-2002.

²⁸ EETT Decision 244/124/2002, FEK Issue 188/B/20-02-2002.

²⁹ EETT Decision 255/83/2002, FEK Issue 874/B/12-07-2002.

³⁰ EETT Decision 261/143/2002, FEK Issue 1208/B/18-09-2002.

³¹ EETT Decision 264/140/2002, FEK Issue 1368/B/24-10-2002.

³² EETT Decision 266/96/2002, FEK Issue 1440/B/15-11-2002.

³³ EETT Decision 249/115/2002, FEK Issue 642/B/23-05-2002.

³⁴ EETT Decision 253/88/2002, FEK Issue 709/B/11-06-2002.

³⁵ EETT Decision 220/10/2001, FEK Issue 939/B/29-07-2001.

Regulation on the Assignment of Individual Radio Frequencies to Radiocommunication Stations for Private Use³⁶, Regulation on the Determination of Spectrum Usage Fees and of Radio Frequency Assignment Fees for Private Use and Regulation of Issues regarding Payment of Radio Frequency Spectrum Usage Fees³⁷

EETT regulated the procedures for assignment of individual radio frequencies for private use, as well as the terms and conditions of their use in specific cases (strictly limited to those specifically mentioned in the Regulation), and then proceeded to regulate the method used for calculation and payment of assignment and usage fees for the radio frequency spectrum assigned for private use.

1.2.1. Regulatory Framework for Electronic Communications Networks and Services - The Key Provisions of the New Framework

The existing Regulatory Framework on telecommunications in the European Union (EU) aims to create conditions of effective competition in the sector during the transition from a monopolistic environment to a fully competitive one.

The new Regulatory Framework on electronic communications networks and services reviews the above Framework with the following aims: (a) to ensure further development of effective competition within a fully liberalised market, (b) to expand the range of options available to consumers, and (c) to protect goals of public interest. It consists of a number of measures of a binding nature (Directives, Decisions) and of texts of non-binding nature (soft law).

More specifically, the new Regulatory Framework comprises:

- ▶ Five Directives of the European Parliament and of the Council, of which one is a Framework Directive³⁸ and four are Specific Directives³⁹.
- ▶ A Decision of the European Parliament and of the Council concerning the radio spectrum policy⁴⁰.
- ▶ A Decision of the European Commission⁴¹ establishing the European Regulators Group (ERG).

As regards the texts of non-binding nature, which are a requisite tool for NRAs in order to harmonise and apply the new Framework, these include the following:

- 1) Commission Guidelines on market analysis and the assessment of SMP under the Community Regulatory Framework for electronic communications networks and services⁴².

³⁶ EETT Decision 254/72/2002, FEK Issue 895/B/16-07-2002.

³⁷ EETT Decision 266/93/2002, FEK Issue 1458/B/20-11-2002.

³⁸ Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common Regulatory Framework for electronic communications networks and services (Framework Directive), Official Journal (OJ) L 108, 24/04/2002, pp. 0033-0050.

³⁹ Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) OJ L 108, 24/04/2002 pp. 0021- 0032; Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive), OJ L 108, 24/04/2002, pp. 0007-0020; Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on US and users' rights relating to electronic communications networks and services (US Directive), OJ L 108, 24/04/2002, pp. 0051-0077; Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications), OJ L 201, 31/07/2002, pp. 0037-0047; Commission Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services, OJ L 249, 17/09/2002, pp. 0021-0026.

⁴⁰ Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision), OJ L 108, 24/04/2002, pp. 0001-0006.

⁴¹ 2002/627/EC: Commission Decision of 29 July 2002 establishing the European Regulators Group for electronic communications networks and services, OJ L 200, 30/07/2002, pp. 0038-0040.

⁴² 2002/C/165/03.



2) Commission Recommendation on Relevant Product and Services Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council.

The key regulatory provisions introduced by the new Regulatory Framework concern:

- Its scope.
- The role of NRAs, to which EETT belongs.
- The spirit and purpose of the revision.

More specifically, regulatory interventions in the market - through the enforcement of obligations in advance - are restricted under the new Framework, while the application of competition rules and principles is strengthened.

In parallel, the convergence of the telecommunications, media and information technology sectors is realised through the introduction of a "Horizontal Approach". According to this approach, a single Regulatory Framework, regardless of the type of information transferred, governs all transmission networks and services, including networks used for radio-TV broadcasts and cable television networks. It should be noted that the contents of the services provided through electronic communications networks remain outside the scope of application.

Acting as a driving force in the process of liberalisation of the telecommunications market, NRAs see their role further strengthened and consolidated under the new Regulatory Framework. NRAs are now elevated to trustees of the electronic communications market, as they assume the main responsibility for implementation and application of the new Framework.

Their broad-ranging powers refer to the analysis and definition of relevant markets, the designation of SMP Operators and the enforcement and/or lifting of obligations. In performing their tasks, they also have broad-ranging powers for information/data gathering from market players.

Member states are called upon to guarantee the independence of NRAs, ensuring that these are legally separate and operationally independent from all network operators, equipment suppliers or electronic communications services providers. The main goals are to ensure impartiality and transparency of NRAs in the exercise of their powers, as well as to make available to them the resources that they need in order to accomplish their tasks, in terms of personnel, expertise and funds.

Actions by NRAs must observe the fundamental principles of proportionality and technological neutrality, which are founded on specific policy goals. More specifically, in terms of goals, NRAs are called upon to promote competition and the interests of EU citizens, and to contribute to the development of the internal market.

The fundamental rationale underlying the new Regulatory Framework is the reduction of regulatory interventions in the market. In parallel, the capability for NRAs to intervene, where this is necessary, is recognised. An additional goal is to improve cooperation between the Commission and NRAs, through the introduction of a new consultation and transparency mechanism⁴³, which acts as counterbalance to the increased flexibility granted to NRAs.

Under the new Framework, the Commission in the relevant Recommendation identifies national markets under regulation at a first level, and then they are

⁴³ Articles 6 and 7 of the Framework Directive provide for the obligation to hold consultations at the national level (article 6), and at the European level with other NRAs [Framework Directive, article 7(2), 7(3)] and with the Commission Framework Directive, article 7(3) or article 7(4)].

also identified by NRAs, who may derogate from the Commission Recommendation, provided that such derogation is necessitated and justified by national circumstances. In defining markets, NRAs are called upon to follow the methodology of competition law.

NRAs then intervene in the relevant markets only in cases where effective competition does not exist, by enforcing obligations on operators with SMP, a concept which is now equated to that of Dominant Position, as the latter has been defined in the jurisprudence of the European Court of Justice (ECJ)⁴⁴.

The provisions of the new Regulatory Framework ensure a smooth transition from the current to the forthcoming Framework. More specifically, according to the Framework Directive⁴⁵, the procedure for the analysis of markets must begin as soon as possible after the adoption of the Commission Recommendation. NRAs are called upon to review the obligations enforced on the basis of the current Regulatory Framework. In parallel, provisions have been made to maintain all the above obligations in force until the review procedure for the relevant markets has been completed.

Harmonisation of the Greek law with the new Regulatory Framework, through the enactment of all necessary legislative, regulatory and administrative acts, must be completed by 24 July 2003 at the latest, in order to enter into effect as of 25 July 2003.

Until the harmonisation process carried out by the Ministry of Transportation and Communications, is completed, EETT is preparing the application of the forthcoming Framework which will be called upon to implement, and is actively following the relevant international developments. More specifically, in

the framework of the Independent Regulators Group (IRG), EETT is actively participating in the work of the relevant Group (Implementation Working Group), whose mandate is to identify and formulate a common approach during the harmonisation process carried out by member states, with the aim to achieve the highest degree possible in the harmonised transposition and subsequent application of the Directives in the national jurisdictions.

The purpose of the legislative framework governing the operation of the telecommunications sector, as implemented and specified by EETT through interventions of a regulatory nature, is to achieve full liberalisation of the telecommunications sector, ensure smooth operation of competition in the relevant markets, and develop new innovative networks and services which are available to the public at affordable prices. Consequently, the individual regulations are supplemented and assessed on the basis of their practical results.

The market overview that follows (sub-section 1.3.), leads to useful conclusions regarding the impact of EETT's regulatory interventions in the Greek market, and highlights the positive effect of liberalisation on the telecommunications sector in terms of increased competition between service providers / network operators, as well as in terms of the benefits to the consumers, who enjoy high-quality services at lower prices.

1.3. Market Overview

The evolution of the Greek telecommunications services market in 2002 was characterised by reductions in the prices for telecommunications services, intense competition in the mobile services market, expansion

⁴⁴ More specifically, according to the definition given in article 14, par. 2 of the Framework Directive, an undertaking shall be deemed to have SMP if, either individually or jointly with others, it enjoys a position equivalent to Dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and, ultimately, consumers.

⁴⁵ Article 16, paragraph 1.

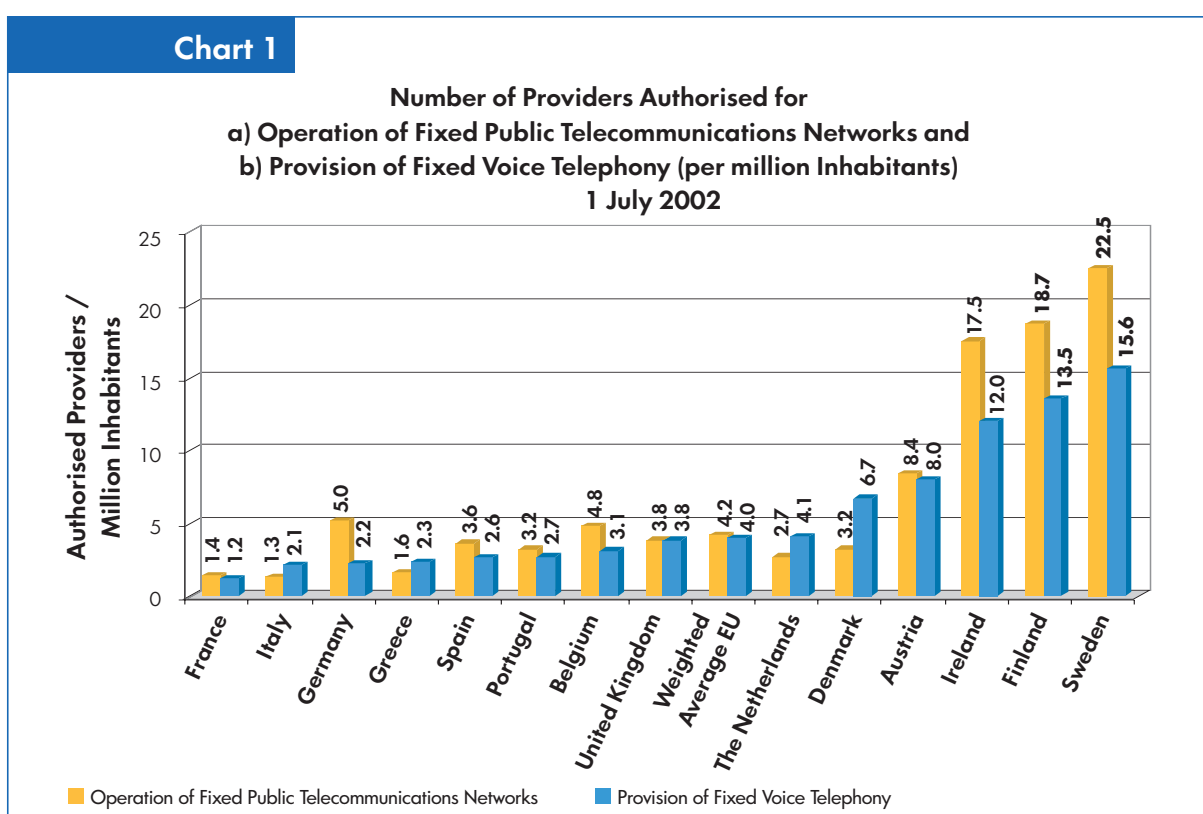


of the range of options available to users in the fixed telephony market, and increase in the use of Internet, Leased Lines and data transmission services.

The turnover of telecommunications services providers in Greece is estimated to have increased by more than 10% during the first three quarters of 2002 compared with the first three quarters of 2001, with the forecasted GDP growth rate for the same period standing at 4%⁴⁶.

For the combined 15 EU member states, the growth rate for the telecommunications services market for 2002 is estimated to vary from 5%⁴⁷ to 7%⁴⁸, with the forecasted EU GDP growth rate standing at 1%⁴⁹.

Chart 1 presents two indicators of the business interest in the Greek market for fixed public telecommunications networks and voice telephony services, as these indicators stood in mid-2002, and compares them to the situation in the markets of EU member states⁵⁰.



Source: 8th Report of the European Commission

Note 1: Both provider categories shown in the chart include Providers Authorised for Operation of Fixed Public Telecommunications Networks and for Provision of Fixed Voice Telephony.

Note 2: Fixed Voice Telephony Providers include, in the case of Greece at least, only the Corresponding Individual Licences.

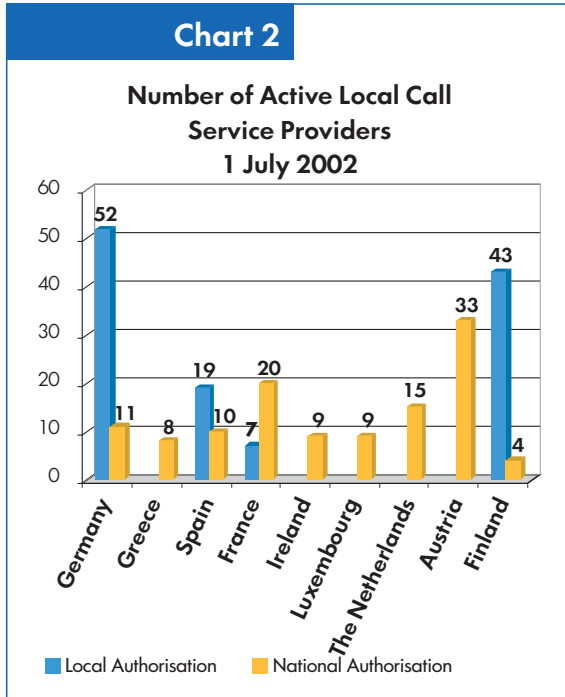
⁴⁶ Source: based on National Statistical Service data.

⁴⁷ Source: 8th Report of the European Commission, EITO (European Information Technology Observatory) 2002.

⁴⁸ Source: 8th Report of the European Commission, IDATE, Telecoms in Europe, November 2002.

⁴⁹ Source: 8th Report of the European Commission, European Commission Services.

⁵⁰ Excluding Luxembourg.



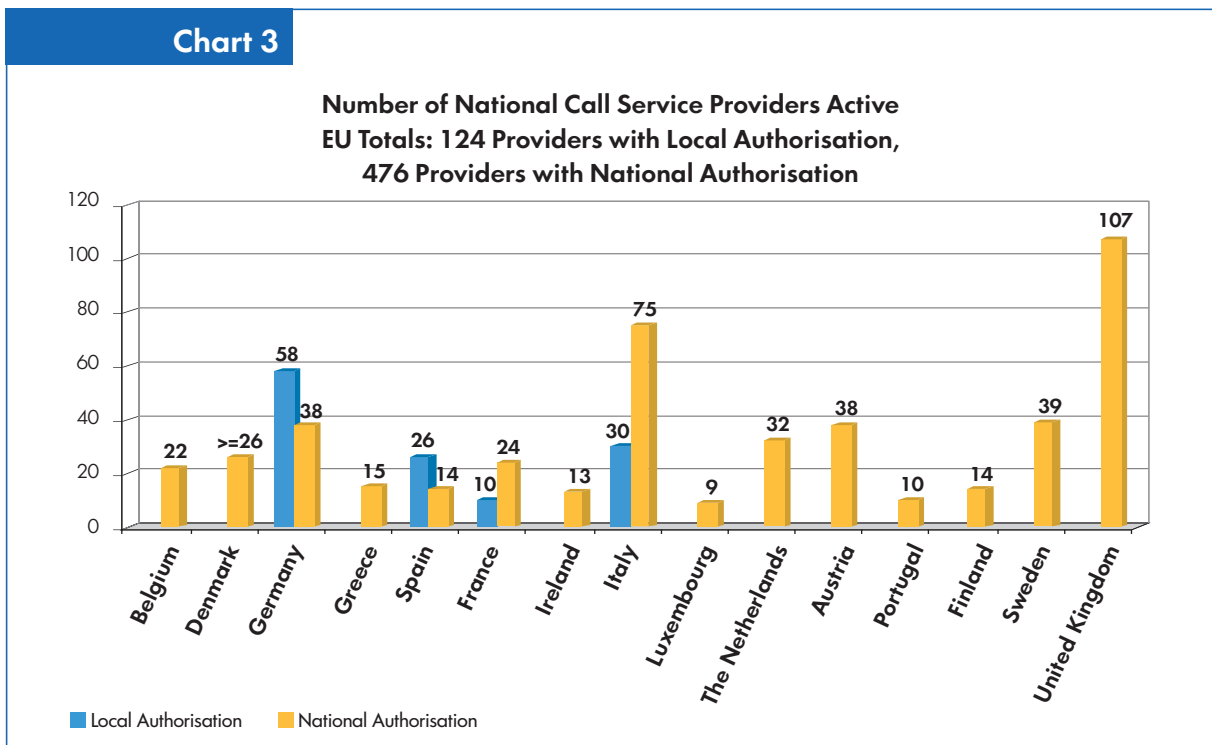
In terms of absolute values, in mid-2002 the companies holding an Individual Licence for operation of a fixed public network and provision of fixed voice telephony in Greece were 17 and 24, respectively. Concerning in particular the provision of fixed voice telephony; of these 24 companies 15 were active in mid-2002, of which 8 in the provision of local calls. Charts 2 to 4 highlight the competition dynamics by type of service provided in Greece compared to the other member states.

In these charts, operators under National Authorisation are the operators holding an authorisation which covers - in geographical terms - the entire country, or an authorisation whose range is unspecified (depending on the authorisation regime applicable in each country).

Source: 8th Report of the European Commission

Note 1: Only Fixed Voice Telephony Providers holding Individual Licences are included.

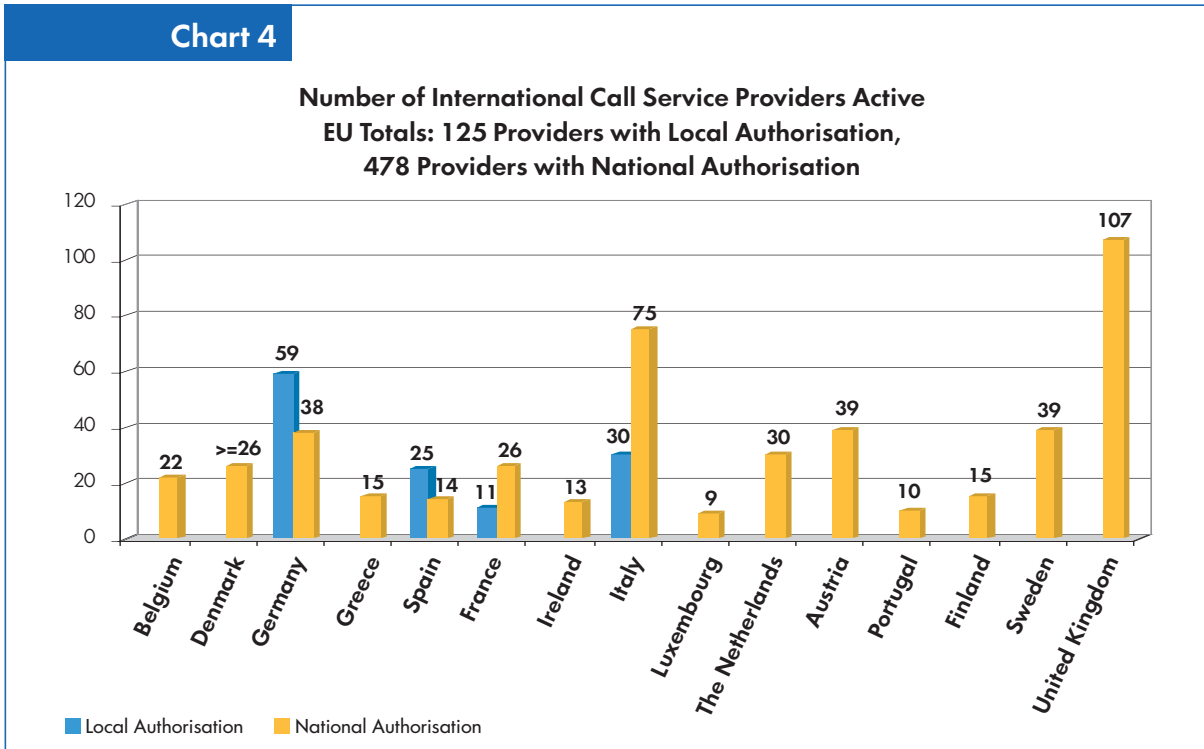
Note 2: Information is not available for member states not included in the Chart.



Source: 8th Report of the European Commission

Note 1: Only Fixed Voice Telephony Providers holding Individual Licences are included.

Note 2: For Belgium, Denmark, Italy, Portugal, Sweden and the United Kingdom, no distinction is possible by type of calls provided (local, national, international). In addition, no distinction is made between Local and National Authorisations in the United Kingdom.



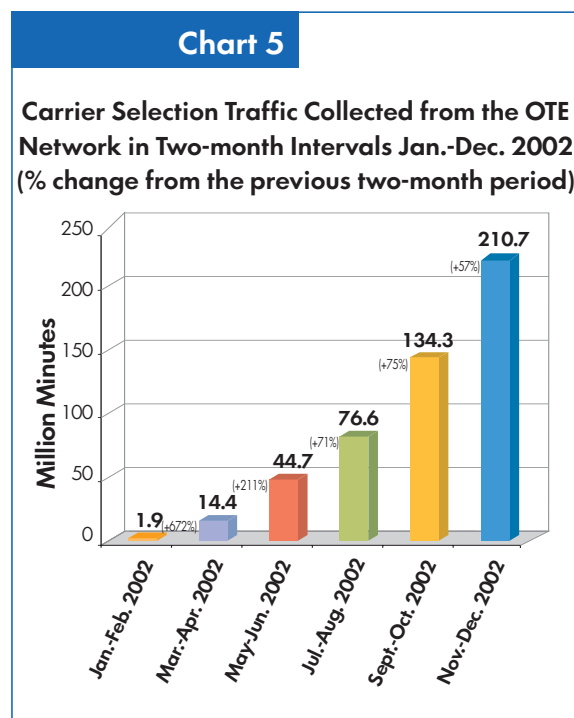
Source: 8th Report of the European Commission

Note 1: Only Fixed Voice Telephony Providers holding Individual Licences are included.

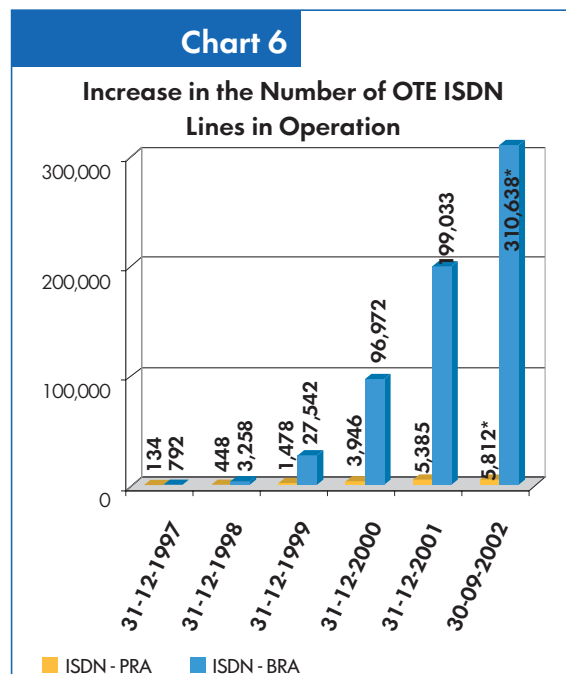
Note 2: For Belgium, Denmark, Italy, Portugal, Sweden and the United Kingdom, no distinction is possible by type of calls provided (local, national, international). In addition, no distinction is made between Local and National Authorisations in the United Kingdom.

Competition in the Greek market for fixed voice telephony started to grow in 2002: this is attributed mainly to the gradual launch of commercial operations by companies providing relevant services using Carrier Selection.

Based on EETT data, the number of operators using Carrier Selection in mid-2002 and at the year-end was 7 and 11, respectively. The number of private and business users of voice telephony services via Carrier Selection was around 140,000 in mid-2002, a figure that corresponds to around 2.4% of OTE connections (the operator with Dominant Market Position). The evolution of fixed voice telephony interconnection traffic collected from OTE's network via Carrier Selection in the period January-December 2002 (see Chart 5) illustrates the intensification of competition in this market.



Based on provisional OTE data for the first three quarters of 2002, the number of Integrated Services Digital Network (ISDN)-based telephony users in Greece continued to rise. At the end of the first three quarters of 2002, the numbers of OTE subscriber lines for ISDN Basic Rate Access (ISDN BRA - 2 Channels) and ISDN Primary Rate Access (ISDN PRA - 30 channels) are estimated to have increased by 56% and 8%, respectively, compared to the beginning of the same year (see Chart 6 and Table 1).



* Based on provisional OTE data

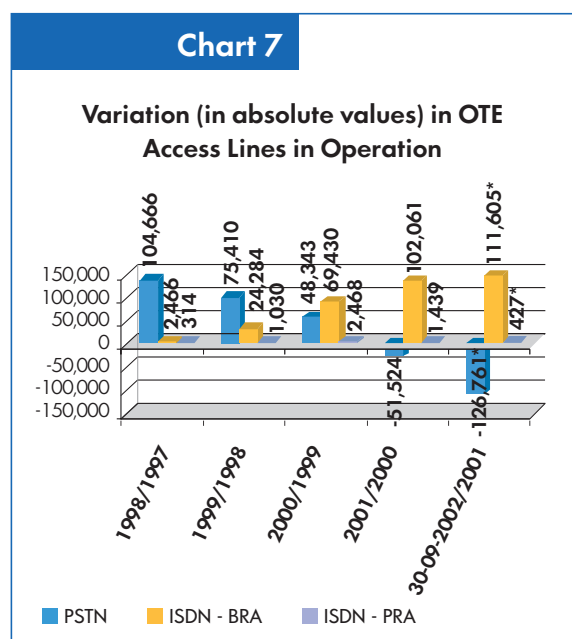
Table 1

OTE Data	31-12-1997	31-12-1998	31-12-1999	31-12-2000	31-12-2001	30-09-2002
PSTN access lines in operation	5,430,855	5,535,521	5,610,931	5,659,274	5,607,750	5,480,989*
ISDN BRA access lines in operation - Basic Rate Access (2 channels)	792	3,258	27,542	96,972	199,033	310,638*
ISDN PRA access lines in operation - Primary Rate Access (30 channels)	134	448	1,478	3,946	5,385	5,812*

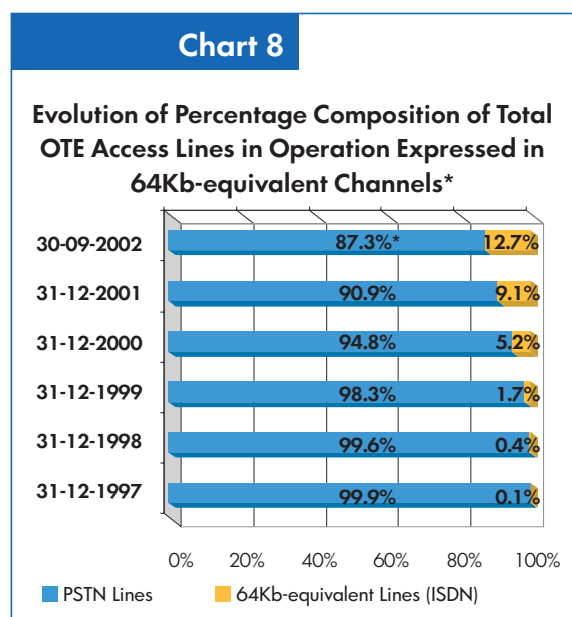
* Based on provisional OTE data



However, a decrease is observed in Public Switched Telephone Network (PSTN) subscriber lines, which may be explained by the fact that subscribers upgrade their PSTN connections to ISDN (see Charts 7 and 8).

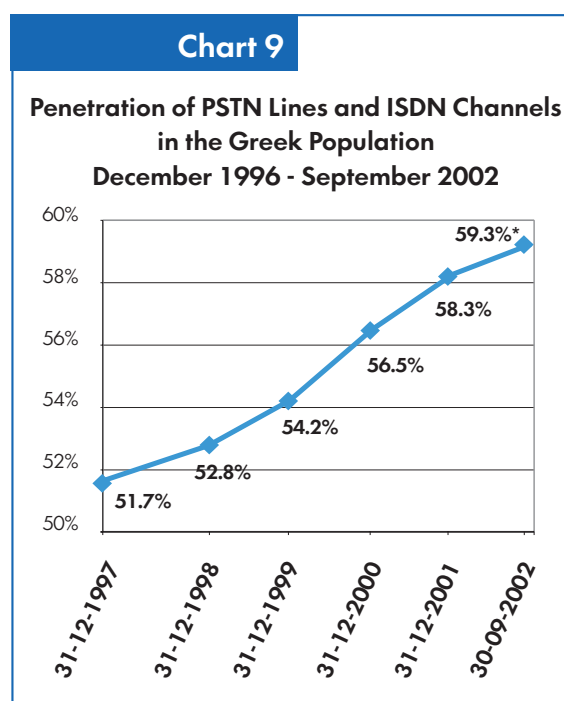


* Based on provisional OTE data



* Based on provisional OTE data

The total number of OTE access channels, measured in 64Kb-equivalent channels, shows an upward trend. Thus, penetration of PSTN lines and ISDN channels in Greece at the end of September 2002 is estimated to be of the order of 59.3% (see Chart 9).



* EETT estimate

As regards tariffs for fixed voice telephony, in January 2002 OTE reduced the call charge unit cost for local calls to 0.026 euro/min. (8.9 GRD/min.) from 0.031 euro/min. (10.50 GRD/min.)⁵¹, and that for national calls to 0.063 euro/min. (21.5 GRD/min.) from 0.082 euro/min. (28 GRD/min.)⁵². At the same time, OTE increased the monthly rental charge from 8.22 euro (2,800 GRD) to 9.98 euro (3,400 GRD).

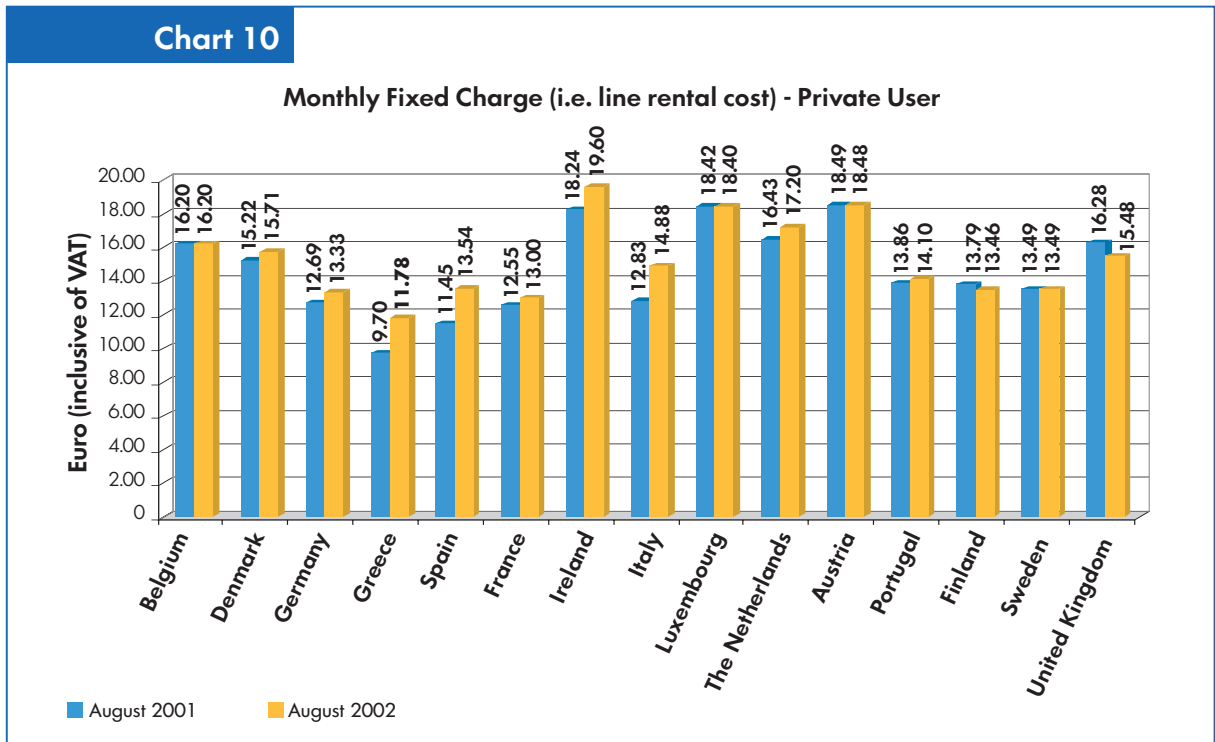
Based on August 2002 data, OTE remains, in terms of the monthly rental charge, the lowest-price operator

⁵¹ OTE is using a charging system based on charge units. For national calls where the calling party and the called party belong to primary exchanges in different prefectures and the distance between such primary exchanges is greater than 45 kilometres, the charging applied is 0.026 euro per 24.9 seconds. A call part with a duration of less than 24.9 seconds, if any, is rounded up to 24.9 seconds and charged at 0.026 euro.

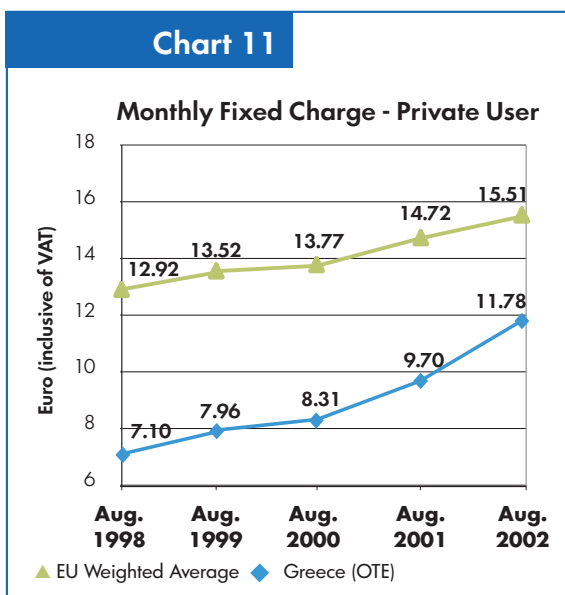
⁵² The corresponding charging rate applied before January 2002 (for national calls where the calling party and the called party belong to primary exchanges in different prefectures and the distance between such primary exchanges is greater than 45 kilometres) is 0.031 euro per 22.5 seconds.

with Dominant Market Position in comparison to corresponding operators in the other EU, member states, for both private users (see Chart 10) and business users.

It should be noted that purchasing power parities have not been taken into account in the estimates presented for each country in this paragraph, as the unit used for comparisons is the euro.



Source: 8th Report of the European Commission



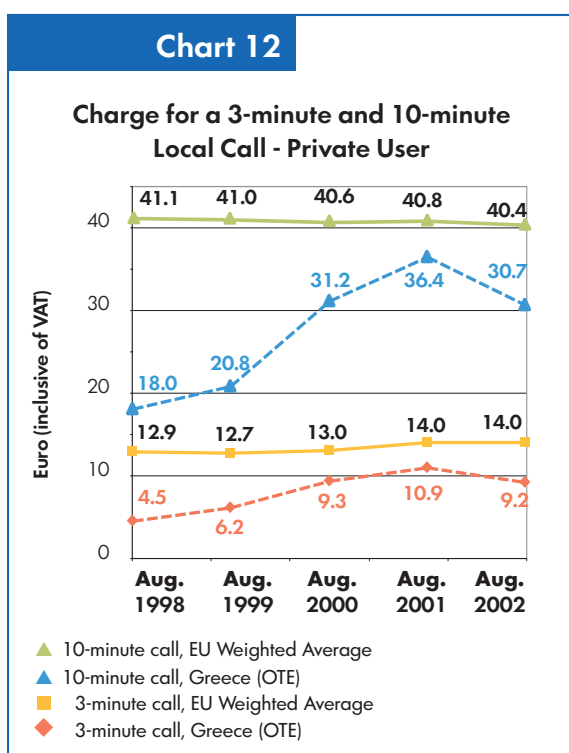
Source: EETT and 8th Report of the European Commission

The weighted (by the population of each member state) average of the monthly rental charge applied by EU operators with Dominant Market Position shows an upward trend, as also is the case with the monthly rental charge of OTE (see Chart 11).

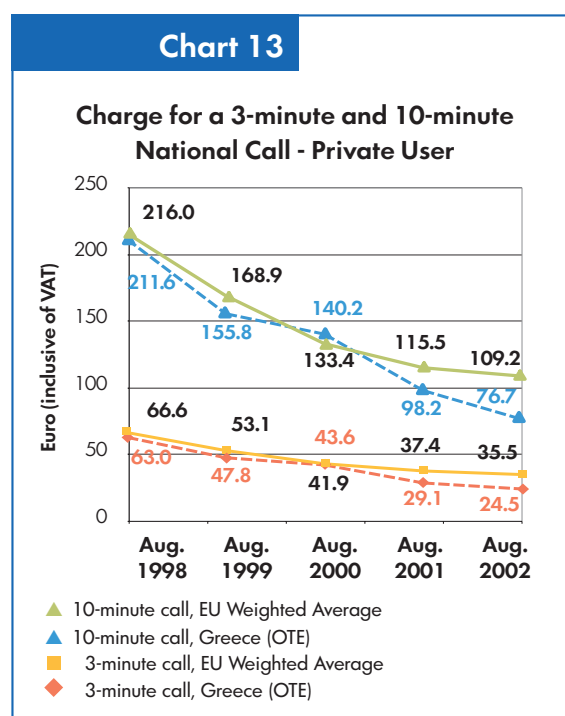


In Chart 12, the dotted line is used to show the evolution of charges for a private user making a three-minute and a ten-minute peak-time local call through OTE⁵³. The same data are also shown on the Chart for the EU weighted average (that is, taking into account the weighted average of the corresponding tariffs of the incumbent operator in each EU member state). Based on August 2002 data, OTE was the second lowest-price operator with Dominant Market Position in the EU for a three-minute call, and the fifth lowest-price operator for a ten-minute call. In both cases, OTE charges are lower than the EU weighted average.

Similarly, Chart 13 presents the evolution of charges for a three-minute and a ten-minute peak-time national call for a private subscriber of OTE, together with the corresponding values for the EU weighted average. In August 2002, OTE was ranked sixth and seventh lowest-price operator among EU operators with Dominant Market Position for a three-minute and a ten-minute national call, respectively, and its charges were again lower than the EU average.



Source: EETT and 8th Report of the European Commission

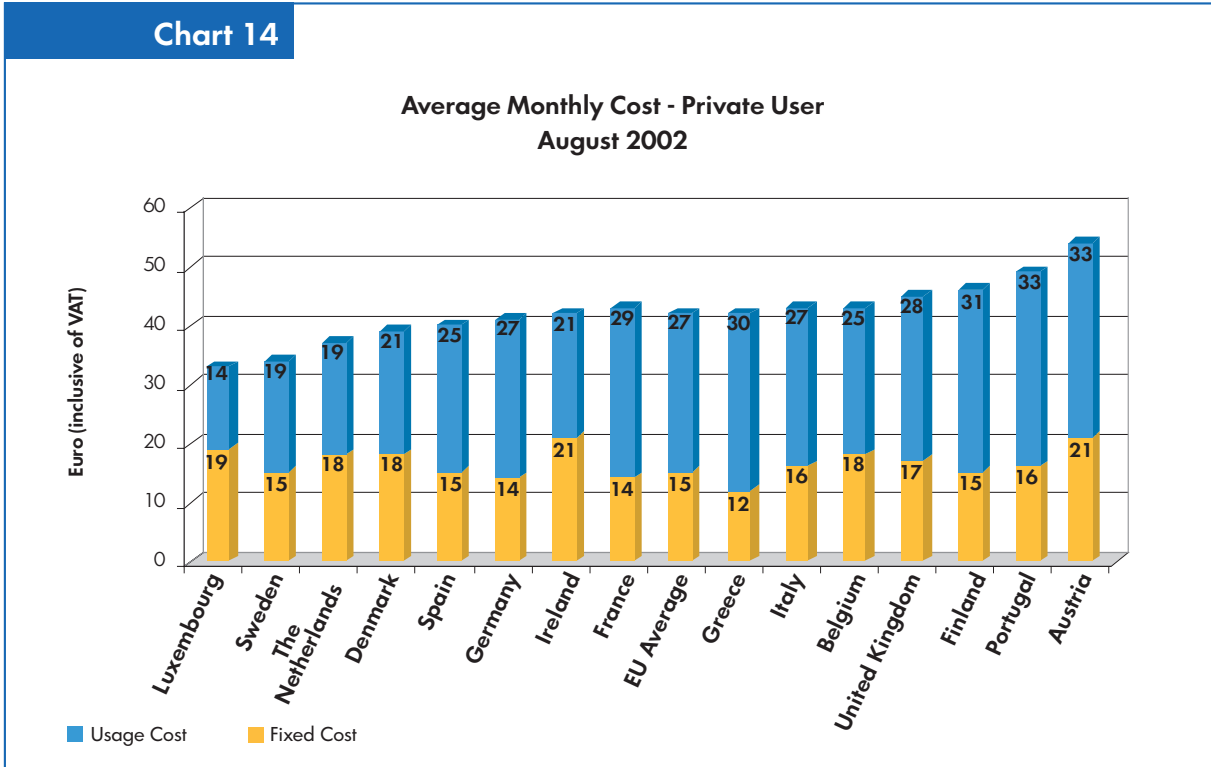


Source: EETT and 8th Report of the European Commission

Finally, Chart 14 presents, for each member state, the average monthly expenditure for a private user for the calls made using a fixed telephone. Comparison data are presented for each country, but in essence they refer to the operator with Dominant Market Position in each country.

⁵³ It should be noted that under the new tariffs mentioned, no distinction is made anymore between peak time and off-peak time charges.

Chart 14



Source: 8th Report of the European Commission

Note 1: The data shown above are derived on the basis of a methodology developed by the Organisation for Economic Cooperation and Development (OECD) and also applied by the EU in international tariff comparisons. According to this methodology, a "basket" containing specific and clearly described telecommunications services is first defined, and is then used to calculate the cost to the user of the incumbent telecommunications provider in each member state of using the services contained in that "basket".

Note 2: According to the methodology applied, the cost to a private user is defined in such a way so as to include, on an annual basis: (a) the fixed cost, defined as the monthly rental charge plus installation costs for a new connection (amortised in 5 years); and (b) the usage cost (i.e. variable cost), which refers to 1,200 national calls to fixed phones, 120 calls to mobile phones⁵⁴ and 72 international⁵⁵ calls.

As shown in Chart 14, and based on the methodology applied, in August 2002 this average monthly expenditure in Greece was very close to the EU average. It should be noted that, compared to August 2001, this expenditure has decreased (in current prices) by 5%⁵⁶.

Intensification of the competition in the sector of Second Generation (2G) Mobile Communications Services in Greece during 2002 led to considerable developments in this market.

The three operators already active in the sector (COSMOTE S.A., STET HELLAS S.A., VODAFONE-PANAFONE) were joined by Q-TELECOM, which started its commercial activities in the provision of 2G Mobile Communications Services in June 2002.

The turnover of the above companies is estimated to have increased by more than 25% in the first three quarters of 2002, compared to the same period in 2001⁵⁷.

⁵⁴ i.e. 10% of the number of calls to fixed phones.

⁵⁵ i.e. 6% of the number of calls to fixed phones.

⁵⁶ Source: EETT, 8th and 7th Report of the European Commission.

⁵⁷ It should be noted that in the case of Q-TELECOM, only the turnover from mobile services has been taken into account.



According to the 8th Report of the European Commission, the number of mobile telephony subscribers in the EU continued to increase in 2002, albeit at a lower rate compared to previous years, due also to the relative saturation that has already been reached in the corresponding market of some member states. The average mobile penetration rate for EU was estimated at 75% in August 2002, compared to 70% in August 2001. An increase, although at a lower annual rate, was also observed in the number of mobile telephony subscribers in Greece. Based on the above source, mobile penetration in Greece reached EU average.

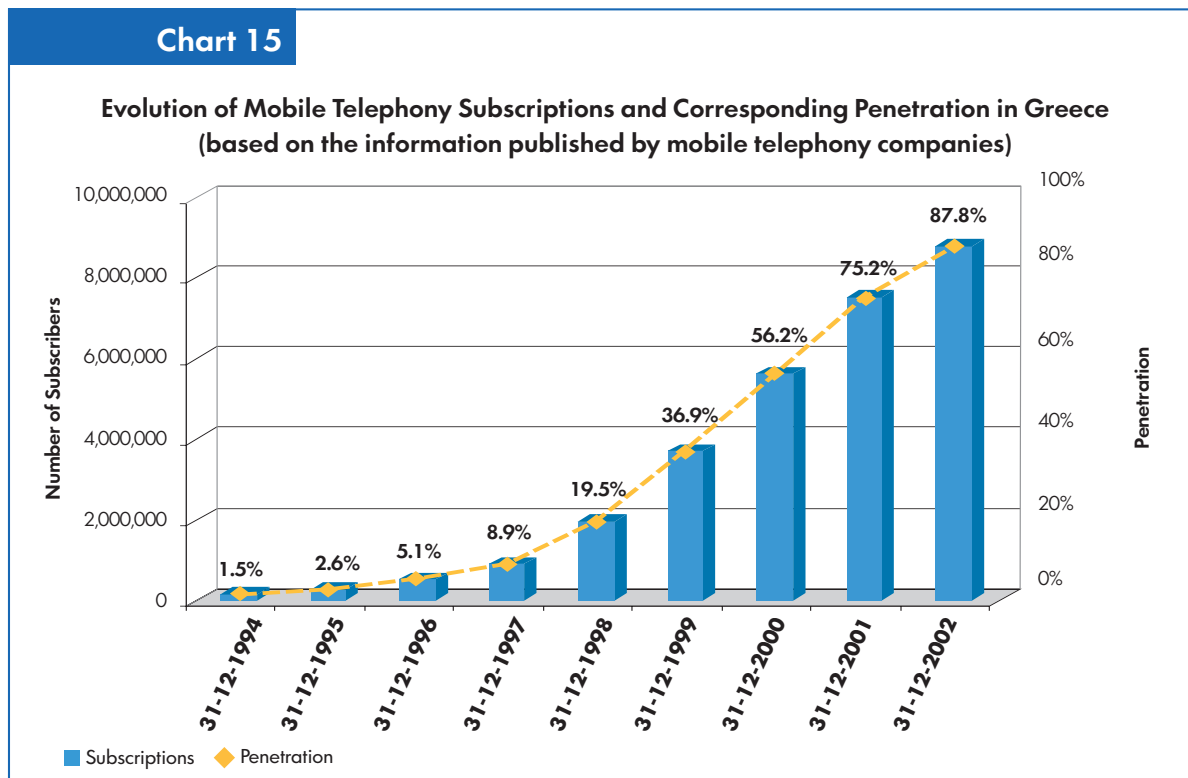
It should be noted that the quantitative data (subscriptions, penetration, market shares) given in the paragraphs that follow are based on information published by the operators.

Based on the relevant announcements made by the mobile telephony operators, mobile telephony subscriptions in Greece are estimated to have reached 9.31 million at

the end of 2002, a 17% increase compared to the end of 2001. The figures announced also take into account subscribers with more than one subscription, as well as non-active subscribers.

According to a country-wide survey, conducted for the second year running on behalf of the National Research and Technology Network (GRNET)⁵⁸ and based on a sample representative of the national population, in September 2002 the number of adult (i.e. over 15 years old) mobile telephone owners was estimated at 5,574,169, a figure that corresponds to 63.6% ($\pm 1.9\%$) of the country's adult population. In the corresponding survey conducted last year (June-July 2001), mobile penetration had been estimated at 49.8% ($\pm 1.3\%$) of the adult population, which corresponded to 4,399,265 adult mobile telephone owners.

Chart 15 and Table 2 present the evolution over time of mobile telephony subscriptions and penetration in Greece, based on the announcements made.



⁵⁸ The survey sample comprised 2,464 persons of over 15 years of age in an equal number of households; data were also recorded for the remaining 5,566 members of the households surveyed.

Table 2

Evolution of Mobile Telephony Subscriptions and Penetration in Greece (based on information published by mobile telephony operators)									
	31-12-1994	31-12-1995	31-12-1996	31-12-1997	31-12-1998	31-12-1999	31-12-2000	31-12-2001	31-12-2002
Subscriptions	153,830	272,950	531,488	938,038	2,056,084	3,894,312	5,932,403	7,963,742	9,314,260
Annual change		77%	95%	76%	119%	89%	52%	34%	17%
Penetration (based on subscriptions)	1.5%	2.6%	5.1%	8.9%	19.5%	36.9%	56.2%	75.2%	87.8%

In addition, Chart 16 presents separately the evolution of the numbers of mobile prepaid card subscribers and contract subscribers. The annual growth rates of these categories for 2002 were 20.6% and 10.7%, respectively.

Chart 17 presents the evolution over time of the market shares of mobile telephony operators, as a proportion of their total number of subscribers (see also Table 3).

Chart 16

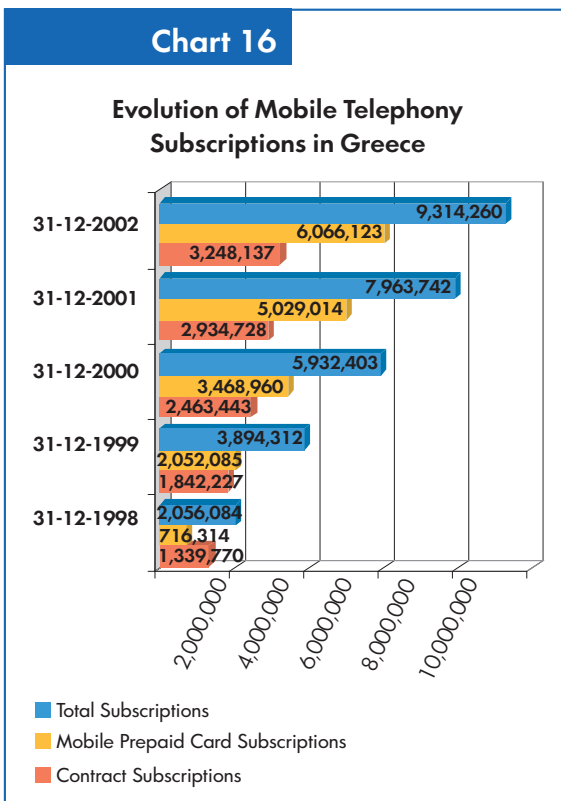
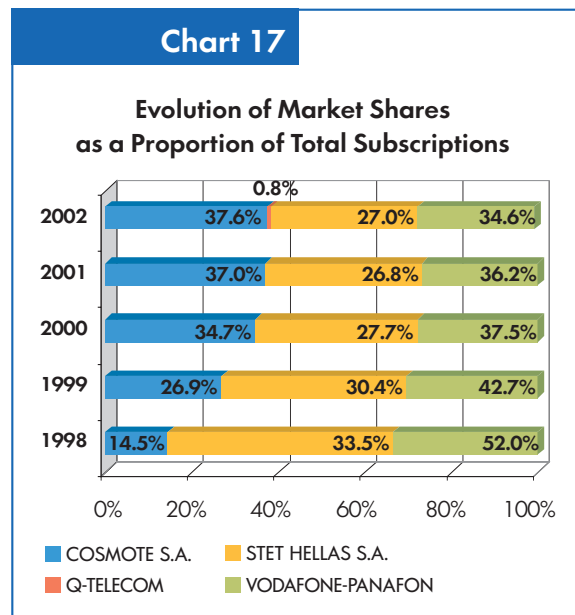


Chart 17



**Table 3****Subscribers of Mobile Telephony Operators**

	31-12-1998	31-12-1999	31-12-2000	31-12-2001	31-12-2002
COSMOTE S.A.					
Mobile prepaid card subscribers	36,684	370,586	855,946	1,481,765	1,954,897
Contract subscribers	262,154	677,766	1,205,065	1,461,767	1,551,441
Total subscribers	298,838	1,048,352	2,061,011	2,943,532	3,506,338
Q-TELECOM					
Mobile prepaid card subscribers	-	-	-	-	57,222
Contract subscribers	-	-	-	-	18,341
Total subscribers	-	-	-	-	75,563
STET HELLAS S.A.					
Mobile prepaid card subscribers	297,464	733,470	1,128,014	1,472,575	1,745,726
Contract subscribers	391,150	449,281	517,378	662,763	767,916
Total subscribers	688,614	1,182,751	1,645,392	2,135,338	2,513,642
VODAFONE-PANAFON					
Mobile prepaid card subscribers	382,166	948,029	1,485,000	2,074,674	2,308,278
Contract subscribers	686,466	715,180	741,000	810,198	910,439
Total subscribers	1,068,632	1,663,209	2,226,000	2,884,872	3,218,717
Totals					
Mobile prepaid card subscribers	716,314	2,052,085	3,468,960	5,029,014	6,066,123
Contract subscribers	1,339,770	1,842,227	2,463,443	2,934,728	3,248,137
Total subscribers	2,056,084	3,894,312	5,932,403	7,963,742	9,314,260

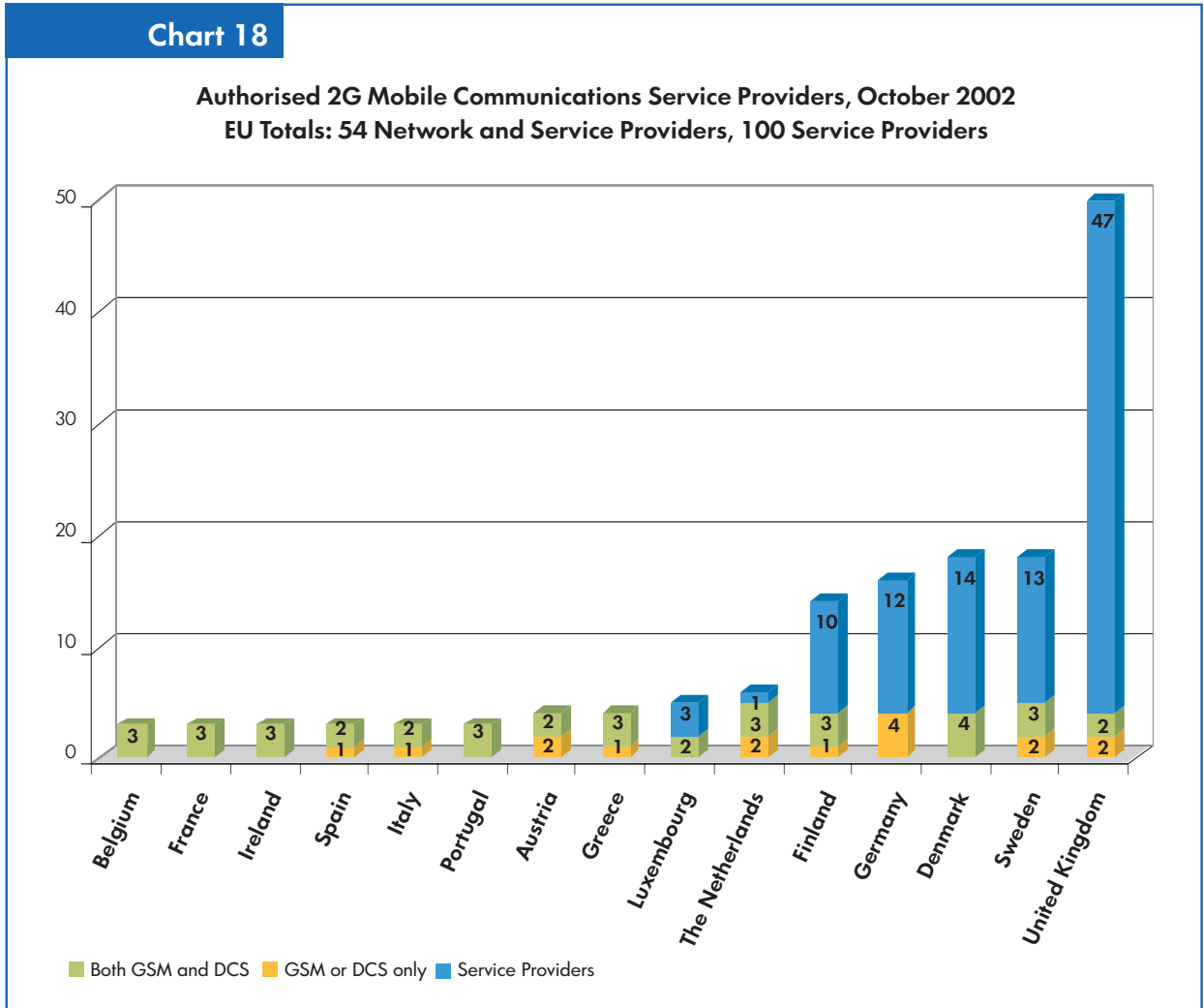
In 2002, the Greek mobile services market was characterised by the ever-increasing offer of data transmission and value-added services which cover a broad range of requirements. The key categories of these services cover information update (news on the economy, sports, weather etc.), entertainment and interpersonal communications. Through the use of standalone services or integrated service packages, subscribers are offered the opportunity to communicate with each other, download special ringtones and logos, participate in knowledge games, retrieve information on entertainment events and locations etc.

Short Message Service (SMS) and access via voice-gateways are the basic methods used for providing these services, while WAP-based (Wireless Application Protocol) access enjoys less preference. In addition, as of the end of 2002 services of this type are also offered through transmission and reception of Multimedia Message Service (MMS) messages.

Value-added services addressed to corporate users, such as the capability to access a subscriber's corporate network through a mobile phone ("Mobile Office" type of service), are also exhibiting significant growth.

As regards the Third Generation (3G) Mobile Communications Authorisations granted within the EU up to October 2002, the majority of them were issued to operators active in the 2G Mobile Communications

Services market, while only 14 were issued to new entrants. The situation in the authorisations for 2G and 3G Mobile Communications Services is shown by member state in Charts 18 and 19, respectively.

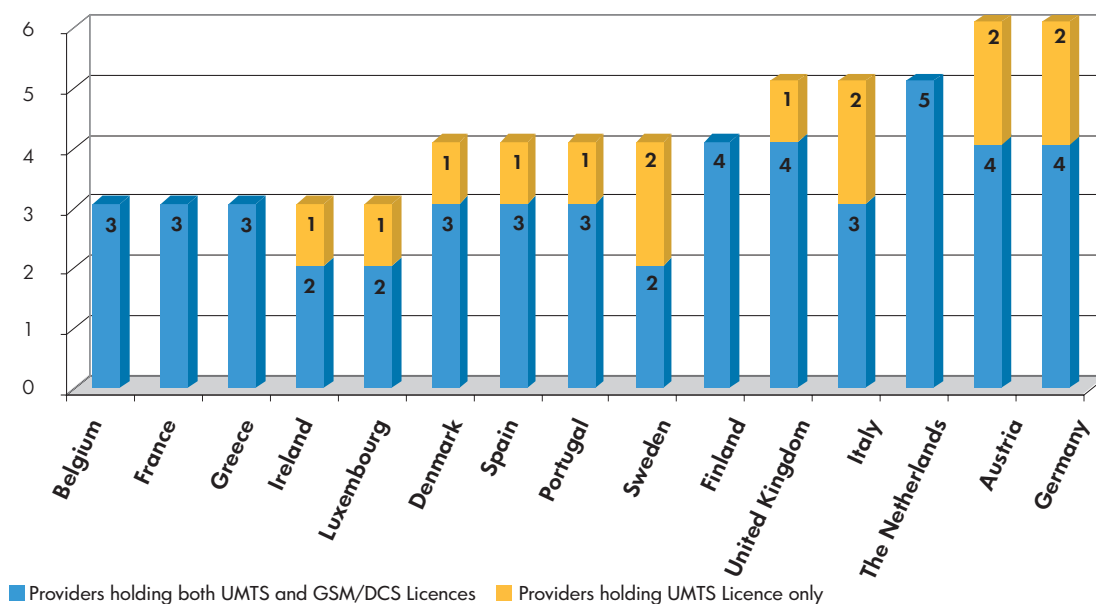


Source: 8th Report of the European Commission



Chart 19

Licences for 3G (UMTS) Mobile Services, October 2002
EU Total: 62 Licences



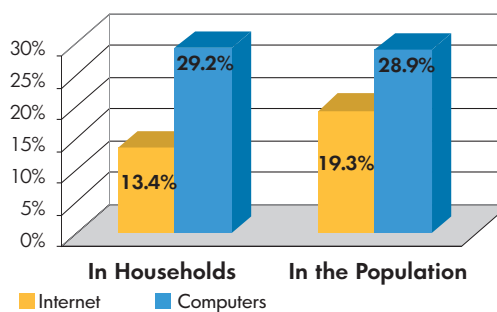
Source: 8th Report of the European Commission

Concerning Internet, its growing use in Greece during the last two years is evidence of promising prospects, despite delays in relevant advances compared to other EU member states. For example, it is reported that broadband access services for residential users and Small and Medium Enterprises - SMEs (e.g. ADSL-based) are not yet offered in Greece, in contrast to the situation in all other EU member states and despite increasing needs for provision of these services.

According to a recent market survey, Internet penetration in the adult population (i.e. over 15 years old) is estimated to have reached 19.3% in September 2002 (a percentage corresponding to 1,704,936 users), with penetration in households estimated at 13.4% (based on which a total of 429,314 households are estimated to have a connection to the Internet). These penetration rates are presented in Chart 20, together with the percentage of adult computer users and the percentage of households owning a computer.

Chart 20

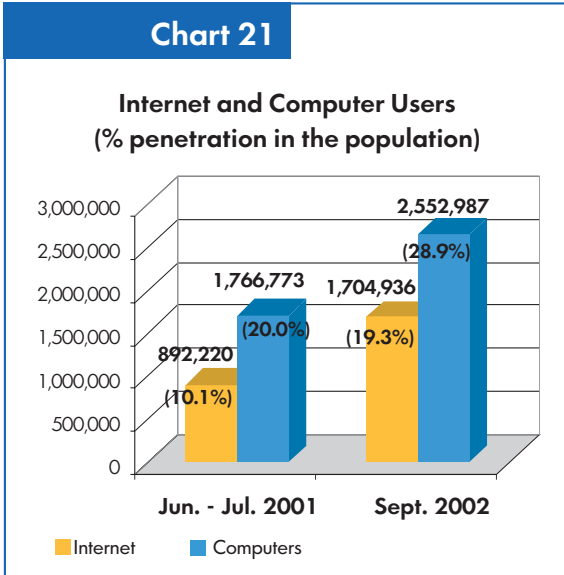
Internet and Computer Penetration in Households and in the Population, September 2002



Source: Market Survey on behalf of GRNET

Chart 21 presents estimates on the evolution of the number of users and on Internet and computer penetration⁵⁹ from mid-2001 to September 2002.

⁵⁹ For the purposes of simplification, use of the terms "user" and "penetration in the population" in the present document shall hereinafter refer to adult users and to penetration in the adult population.



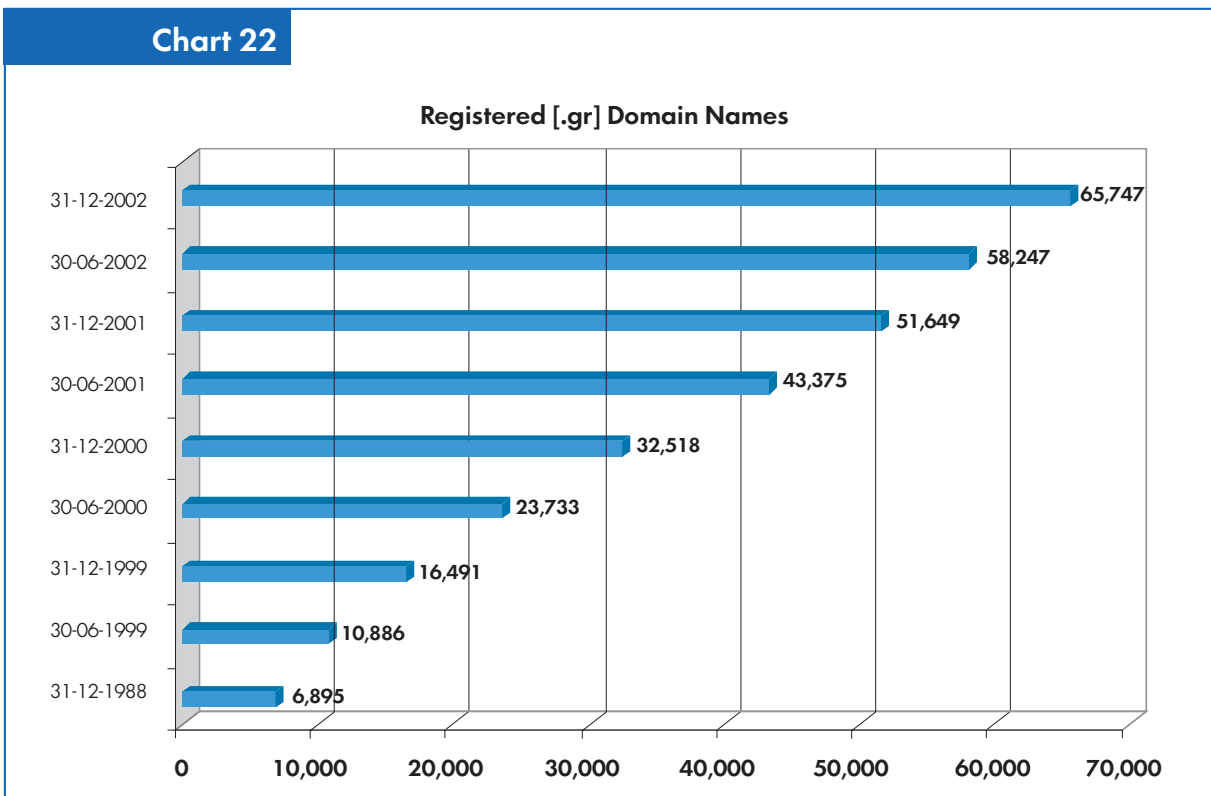
Source: Market Survey on behalf of GRNET

On the basis of the above estimates, Internet users as a percentage of computer users increased to

66.8% in September 2002, from 50% in mid-2001. The average number of Internet and computer usage hours in September 2002 is estimated at 6.3 and 14.2 hours/week, respectively.

The survey also reported that 8.3% of households stated their intention to buy a computer, and 8.4% of them stated their intention to acquire a connection to the Internet (which translate into 265,918 new computer purchases and 269,122 new connections). Based on the above, households owning both a computer and a connection to the Internet are expected to increase as a percentage of the households that only own a computer (this percentage is estimated at 45.9% for September 2002).

As shown in Chart 22, registered [.gr] Domain Names continued to increase in 2002, at an annual increase rate estimated at 27% at the year-end.



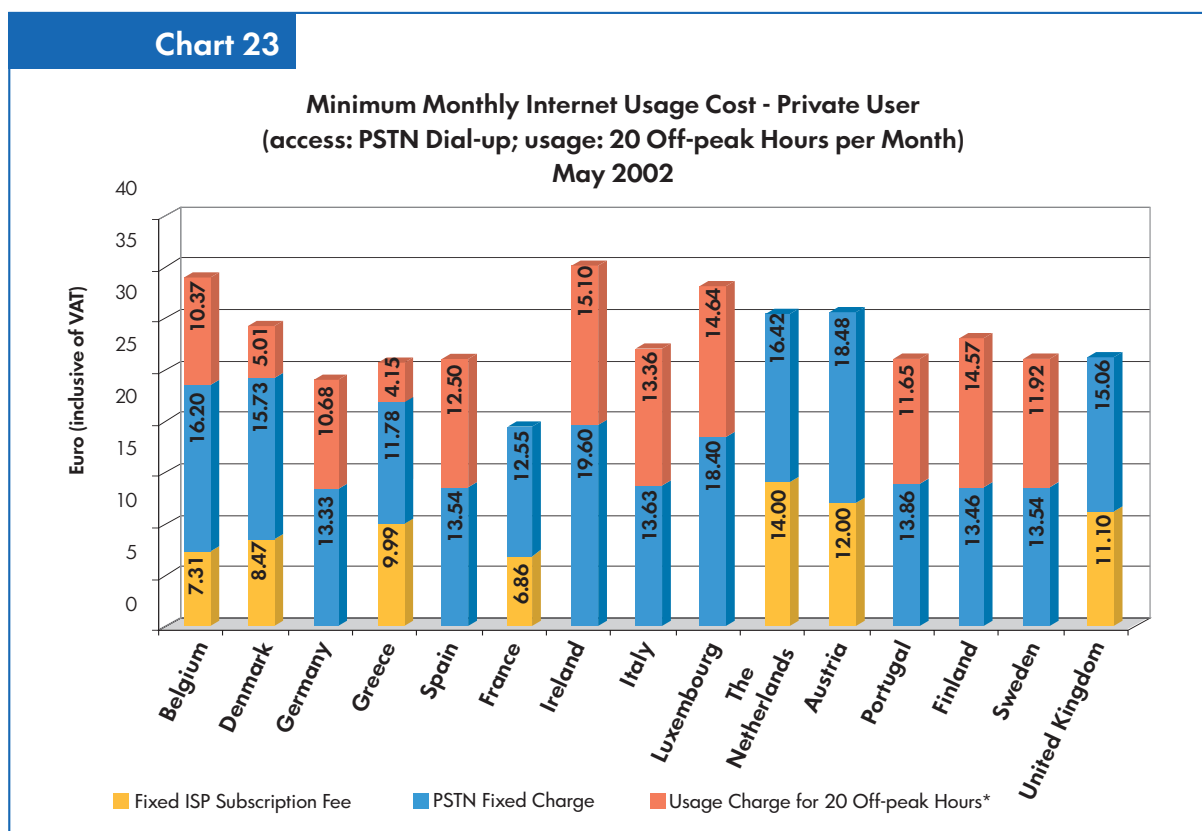
Source: Foundation for Research and Technology Hellas - Computer Science Institute (FORTH-ICS)⁶⁰ data.

⁶⁰ The Internet Domain Name Management unit (GR-Hostmaster) of the Computer Science Institute of the Foundation for Research and Technology Hellas is responsible for technical management of [.gr] Domain Names, under the supervision of EETT.



Chart 23 presents the minimum monthly expenditure for a residential Internet user (by member state), assuming use of a PSTN dial-up access and 20 off-peak Internet usage hours per month. The data are based on a survey conducted in May 2002 on behalf

of the European Commission, where the various packages offered by the large Internet Services Providers (ISPs) in each country were examined, and then the package which results in the minimum monthly expenditure for the user was chosen.



Source: 8th Report of the European Commission and EETT

* The "usage charge" refers to: (a) the charge for the PSTN calls made to access to the Internet; and (b) the charge (if any) applied by the ISP in connection with the time that the subscriber spends using the Internet. If the ISP offers free access time as part of the monthly subscription fee, then the "usage charge" paid by the subscriber refers only to the number of hours in excess of the free hours included in the monthly subscription.

It should be noted that for Greece the "usage charge" refers only to charges for calls made using Unified Panhellenic Call Number (EPAK) - Unified Regional Panhellenic Call Number (PEAK) numbers.

1.4. Consumer Rights and Benefits

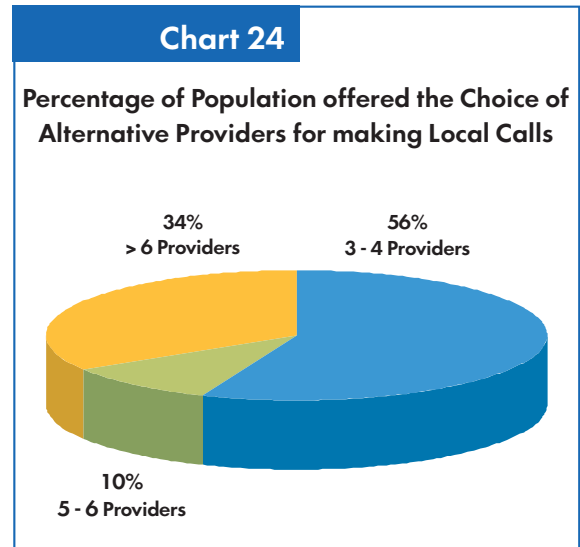
Expansion of the Range of Options Available

The full liberalisation of the telecommunications market and the abolition of its monopolistic features had immediate positive results for consumers, who have benefited significantly, while this trend is expected to continue. New companies offering conventional as well as cutting-edge services have entered the market, which is now fully open, while consumers have for the first time acquired full rights regarding the choice of provider in fixed voice telephony.

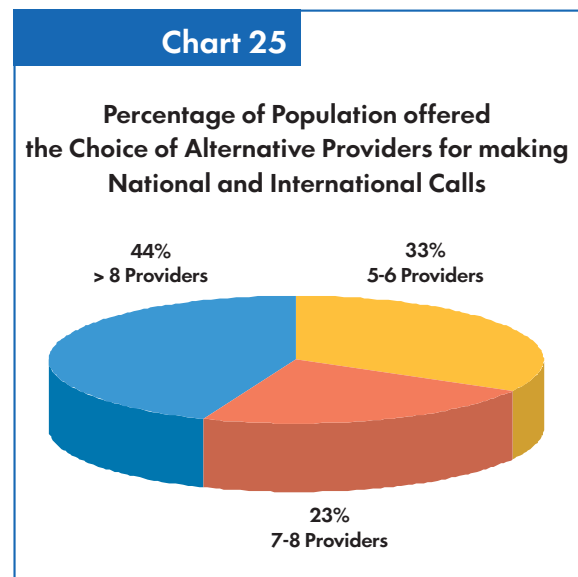
Existence of an adequate number of undertakings is a key precondition for the development of competition in telecommunications. In the last two years a large number of providers have launched their commercial operations, thus boosting competition considerably. In addition, the options available to consumers, in terms of choosing a telecommunications provider to handle their calls, as well as in terms of the services offered, have also increased.

A significant number of alternative fixed voice telephony providers started offering their services across the country, using mainly Carrier Selection⁶¹. In mid-2002, consumers had the following options available for local, national and international calls:

- For local calls, 56% of the population could choose between 3 or 4 new providers, 10% between 5 or 6, and 34% between more than 6 (Chart 24).



- For national and international calls, 33% of the population could choose between 5 or 6 new providers, 23% between 7 or 8, and 44% between more than 8 (Chart 25).



It should also be noted that as of mid-2002 Q-TELECOM, the fourth mobile telephony company, authorised in 2001, started to provide its services.

⁶¹ Carrier Selection is the capability offered to OTE subscribers to make calls via another provider, by dialing the special four - or five - digit Carrier Selection Code for that particular provider.



1.4.1. New Capabilities - Services

Carrier Pre-selection

The full liberalisation of telecommunications and the entry of new providers in the fixed voice telephony market offered users the possibility to choose, depending on their personal user profile and needs, between a large number of providers and services.

One such service offered is Carrier Pre-selection. This is the capability offered to OTE subscribers to choose on a permanent basis, if they so wish, the telecommunications provider to handle one or more categories of telephone calls (local, national, international and calls to mobiles), without the need to dial the four - or five - digit short code, as is the case with Carrier Selection.

For example, a subscriber can use Carrier Pre-Selection to make international calls through company A and national calls and calls to mobiles through company B, without having to dial, prior to making each call, the four - or five - digit Carrier Selection Code necessary for connecting to company A or company B.

In the framework of the introduction of Carrier Pre-Selection and Number Portability in the Greek market, EETT held a Public Consultation from 11 February to 12 March 2002. Participations included fixed and mobile telecommunications service providers as well as private users. For Carrier Pre-Selection, the purpose of the Consultation was to record the views of the parties concerned on the procedure for providing Pre-Selection and on all issues requiring regulation, in order for the regulatory framework for timely and efficient introduction of the service

to be determined at the next stage.

EETT then issued the Regulation⁶² on the introduction of Carrier Pre-Selection in the Greek market. According to the provisions of this Regulation, the service will be available to subscribers for the following categories of calls:

- Options 1:** International Calls
- Options 2:** National Calls and Calls to Mobiles
- Options 3:** International, Local and National Calls, and Calls to Mobiles

Option 1 is already available as of 1 December 2002. Options 2 and 3 will be available as of 1 February 2003.

Options 1 and 2 can be combined, so that users can pre-select the same provider, or different providers, for making national calls as well as calls to mobiles and international calls. Calls under categories, for which no Carrier Pre-selection has been requested by the subscriber, are handled by OTE. In addition, subscribers may cancel pre-selection for a particular call, by dialing, prior to making the call, the Carrier Selection Code of the provider - including OTE - through which they want to make that call.

Carrier Pre-selection is provided to subscribers through a one-stop procedure. Interested subscribers submit an application for Pre-selection to the operator of their choice, who then handles the request accordingly.

Given that it has proved very popular with subscribers in the other EU countries, Carrier Pre-selection is expected to also contribute significantly to boosting competition in the Greek telecommunications market during next year.

⁶² EETT Decision 254/70/2002, FEK Issue 773/B/21-06-2002.

Personal Numbers

Personal numbers are a new facility offered to the users of telecommunications services. A user can give to all persons who wish to call him/ her a single phone number to call. All personal numbers will begin with the digit 7.

Calls will be routed to the telephone number selected by the user (e.g. to the user's home number or mobile phone).

In this way, the subscriber of a personal number can:

- Give to all persons wishing to call him/ her a single number containing no location-specific information.
- Specify the times during the day and the corresponding numbers to which calls during such times will be routed in all cases.
- Select where calls are to be routed.

For example, the calls made to a subscriber's personal number (e.g.: 712 345 6789) can be forwarded to the user's office number during the morning, to the user's home number in the afternoon and to his/her mobile number in the evening, according to the user's instructions.

Provision of this facility is expected to be very popular with users, as it offers to them a tool that will significantly help them in their everyday life.

Itemized Billing

For users of voice telephony services, itemized billing is a basic tool enabling them to control the cost of the public telephone services they use. This facility provides users with detailed information on the charges they have to pay, while at the same time safeguarding their

interests. For this purpose, EETT issued a Decision⁶³ determining that all providers of fixed telephone networks and services are obliged to provide their users with a basic level of itemized billing free of charge. This basic level is provided at the subscriber's request and includes detailed information on the services billed, together with all subscriber discounts and other charges (connection charge, fixed charges etc.).

The information on the services billed consists of an analysis of the calls whose charges exceed 7.33 eurocents (exclusive of VAT). This analysis is given for all categories of calls and contains at least the following information:

- Number called.
- Date.
- Call start time.
- Call duration.
- Corresponding charge.

Itemized bills also contain aggregate information, such as total number, duration and charge for the other non-freephone calls for which itemized billing is not provided free of charge.

The number of subscribers requesting itemized billing is expected to increase during the next year.

Number Portability

Number portability is expected to contribute significantly to further boosting competition in the domestic telecommunications market during 2003, as it allows a subscriber to switch from one telecommunications provider to another while keeping the same telephone number. This facility applies to fixed and mobile telephony numbers, as well as to non-geographical numbers (i.e.

⁶³ EETT Decision 233/34/2001, FEK Issue 1501/B/08-11-2001.



numbers prefixed by 800, 801, 807 and 90).

Through the Public Consultation held in the period from 11 February to 12 March 2002 on the Introduction of Number Portability and Carrier Pre-selection in the Greek market, EETT invited views on Portability issues requiring regulation. The aim was to establish an appropriate regulatory framework for prompt and efficient introduction of this service.

EETT then issued a Regulation on the introduction of Number Portability in the Greek market. The Regulation provides for the introduction of the Number Portability facility as of 1 January 2003 for fixed telephony and non-geographical numbers, and as of 1 July 2003 for mobile telephony numbers.

Electronic Signature

Aiming to promote electronic transactions in Greece, while ensuring at the same time the protection of consumers, EETT laid the foundations for the use of Electronic Signature and for the development of the corresponding market.

Electronic transactions refer to the exchange of information and data of a binding nature for the transacting parties. Securing the reliability of such transactions involves the capability to determine and identify the source of the electronic information (i.e. the sender's identity) and to authenticate it, in a manner similar to a handwritten signature, which uniquely determines the identity of, and is binding on, the signatory.

These needs are addressed by the Electronic Signature, which represents a user's personal digital certificate and contains data in electronic format that are used for authenticating the information transmitted. Using Electronic Signature, consumers will be able to

conclude a number of transactions (such as banking transactions, purchases over the Internet, payments, transactions with public insurance funds, tax authorities etc.) with public -and private-sector entities, without the requirement to be present in person. In this way, the time-consuming procedures for handling handwritten applications, which involved several entities, will be replaced by swift and flexible electronic transactions free from the need for handwritten signatures and certifications. Under certain conditions, the use of Electronic Signature fulfils these requirements (see sub-section 1.1.7.).

EETT has established the necessary conditions that will allow provision of reliable Electronic Signature services and will help disseminate their use. Through a series of actions and interventions during 2002, EETT laid the foundations for stimulating and developing the corresponding market. These actions had multiple goals, and primarily addressed the following aspects:

1. Laying the foundations for the development of many new services, capable of supporting advanced and reliable electronic transactions, in line with the trend emerging in both the Greek and the European environment (e-government).
2. Facilitating long-term co-existence and interoperability of different infrastructures and technologies.
3. Contributing to the common effort, undertaken by various States and entities, to establish a common global basis for the use of Electronic Signature, through adoption and use of recognised standards and specifications.

Broadband Services

Broadband services are those that require high-speed data transmission, for example high-speed Internet access, video-on-demand, and videoconference.

Promotion of these services in the Greek market is one of EETT's top priorities.

Dissemination of broadband services requires the existence of competition in the access network: this ensures that consumers are provided with these services, and leads to improvements in their quality. Promotion of competition in the access network is achieved by granting to telecommunications operators more favourable terms for the provision of Leased Lines, by promoting OTE's LLU and its procedures for provision of ADSL access, as well as by introducing new access infrastructures and technologies (such as Fixed Wireless Access - FWA).

During 2003, particular emphasis will be placed on monitoring the progress made in the implementation of LLU, and on accelerating the procedures for the provision of ADSL access by OTE.

1.4.2. Universal Service

US is the provision of a set of basic telecommunications services that are provided to all citizens, regardless of geographic location and depending on local conditions, at an affordable price. In the framework of its responsibilities, EETT established the list of the parties under obligation to provide US, determined the minimum set of services and the technical features contained in the US, the costing principles that USPs must observe, and all other matters pertaining to the implementation of the US. It should be clarified that USPs are the entities (telecommunications undertakings) under obligation to provide the above services.

Following the relevant Public Consultation conducted in 2001, EETT issued in 2002 a Decision⁶⁴ determining the contents of the US. According to this Decision, the US includes:

1. Capability for connection to the fixed public telephone network.
2. Telephone directory enquiry service and telephone directories.
3. Installation of public pay telephones across the Greek territory.
4. Facilities for people with special needs.
5. Operator-assisted subscriber services.
6. Free access to emergency services using the single European emergency number "112" or other emergency numbers.

The EETT Decision lays down in detail the above provisions to the public and determines the obligations of the USP(s).

Telephone Directory Enquiry Service and Telephone Directories

Telephone directories will contain the fixed and mobile telephone numbers of the subscribers of all telecommunications operators in the country. The importance of telephone directories lies in the fact that, by using this service, consumers will be able to obtain the fixed or mobile number of a subscriber, regardless of the telecommunications operator to which the particular subscriber belongs.

Subscribers of other telecommunications operators will have the possibility to request non-disclosure of their telephone number to the USP.

Furthermore, the USP will provide at least one telephone directory enquiry service on a 24-hour basis to all users, including users of public pay phones. This service will cover the fixed and mobile telephone numbers of all telecommunications operators in the country. Mobile prepaid telephony subscribers wishing to be listed in telephone directories or in databases used to provide telephone directory enquiry services, should notify this in writing to their telecommunications operator.

⁶⁴ EETT Decision 255/83/2002, FEK Issue 874/B/12-07-2002.



Installation of Public Pay Telephones across the Greek Territory

The USP must install public pay phones, which will meet the reasonable needs of users in terms of both the number of inhabitants and of geographical coverage. Public pay phones must ensure that emergency calls can be made free of charge and without using coins or cards.

More in particular, the above-mentioned Decision specifies a population-based criterion, according to which the USP must ensure that by 2003 at least one public pay telephone per 300 inhabitants will be in operation. Most of these telephones will be card phones. Public pay phones must also be installed at selected busy locations (e.g. railway stations, post offices, rest areas on national roads), if no other service can be provided to the users at such locations.

Facilities for People with Special Needs

In providing the telecommunications services under the US, the USP must take into consideration issues concerning people with special needs.

More specifically, the USP must:

- ▶ Provide to last-stage renal patients up to 1,000 units of fixed telephony service per month free of charge, for a single connection.
- ▶ Offer a discount of 16 euro on the monthly bill for transmission services to blind people, deaf people, and people with a degree of disability higher than 67%, as well as to the families of persons with severe intellectual deficiency, paraplegics, quadriplegics or persons with cerebral palsy and a degree of disability higher than 67%.
- ▶ Offer to blind people and to people with severe sight impairments, the possibility to make up to 20 calls per month to the telephone directory enquiry service free of charge. Given the difficulties

involved in the use of telephone directories by blind people and people with severe sight impairments, and the financial burden that their dependence on the telephone directory enquiry service entails, this discount helps to place these people on an equal standing with the other users. The USP is under obligation to make available to blind people electronic telephone directories for residential numbers in text-only format, on CD-ROM, as well as through the USP website.

This measure is of practical use, given that graphics slow down the performance of the software that blind people and people with severe sight impairments use to consult electronic telephone directories.

- ▶ Provide, on a permanent basis, to people with special needs and to persons who would be vulnerable to the loss of a telephone connection (such as the elderly, heart patients, renal patients, etc.), and who are in arrears to the USP, the possibility to receive incoming calls and to call emergency numbers free of charge.
- ▶ Make available to persons with special needs terminal equipment for teletext application (easy-to-use device for people with sight impairments) or other special-purpose equipment at cost.
- ▶ Ensure that persons with special needs and persons, who would be vulnerable to the loss of telephone communication, are given priority regarding both connection and repair of their telephone connections.
- ▶ Provide the selective call barring service for outgoing calls free of charge to blind subscribers or to subscribers with severe sight impairments.
- ▶ Provide blind people or people with sight impairments, at their request, with alternative schemes that will help them obtain a basic level of itemized billing. In these particular cases, the basic level of itemized billing will include the following:
 - The called number.
 - The date on which the call was made.
 - The charge of the call.

- Ensure that 60% of the public pay telephones to be installed are configured in a way allowing access and use by wheelchair users.
- Obtain the prior written approval of EETT for removing public pay telephones from locations with a high circulation of people with special needs or of patients.

The aim of the above facilities is for the people mentioned above to be provided with access to the network and services of the USP, so that they may participate in economic and social life and in the technological advances taking place in the telecommunications market.

Resolution of Disputes concerning Payment of Bills

In cases where a telephone connection is temporarily discontinued due to the subscriber being in arrears, the USP is under obligation not to discontinue the provision of outgoing telephone communication for calls to emergency numbers. In addition, in cases involving the dispute of exorbitant bills for premium rate services (e.g. audiotext), subscribers must continue to enjoy access to basic telephone services until such dispute has been resolved.

The USP shall ensure that payment of the bills for services coming under the scope of the US is made using all suitable means. In cases of persons with special needs, it should be possible for them to pay the amounts due from their home.

Following a relevant request submitted by the subscriber, and provided that the technical capabilities exist, the USP will inform the subscriber on the amount of the telephone charges on a monthly basis.

Furthermore, the USP is under the obligation to meet the following quality performance levels:

- Time to provide an initial connection: 1 week for 95% of applications.
- Frequency of failures per 100 connections, per year: 13.5.
- Unsuccessful call ratio: 2%.
- Fault repair rate by the next working day: 85%.
- Response time for operator-assisted services: 20" (average response time).
- Response time for directory enquiry services: 15" (average response time).
- Percentage of public pay phones (coin-operated and card phones) in operation: 93%.
- Complaints regarding errors in bills: 0.2%.

1.4.3. Consumer Protection & Information - Issues regarding Transmitting/ Receiving Antenna Installations

Consumer Protection & Information

In exercising its regulatory role, EETT provides for smooth operation of the telecommunications market and observance of the legislation on telecommunications, with the overriding goal to protect the rights of consumers and safeguard their interests.

In this framework, EETT intervenes for the resolution of disputes arising between consumers and telecommunications undertakings or between telecommunications undertakings. EETT thus receives relevant requests and complaints, which it then investigates, intervening where needed in order to ensure that these are handled efficiently.

During 2002, a considerable number of requests/complaints were notified to EETT. Regarding consumers, the majority of their complaints concerned the charges billed or the conditions under which telecommunications services were provided



(e.g. exorbitant bills, discontinuation of connections, fixed charges). In the cases of complaints filed by telecommunications providers concerning potential violations of the provisions of the legislation in force and of the competition rules, EETT held Hearings and, in certain cases, imposed fines.

With the aim to establish a more effective management of, and provide a better service of, the requests/complaints submitted by consumers, EETT created in 2002 the Consumer Services Division, whose operation is expected to contribute to:

- ▶ Faster resolution of issues of concern to consumers.
- ▶ Establishing detailed records on the problems arising.
- ▶ The adoption of measures for improving the conditions under which services are provided.

In this framework, a Help Line (801 11000 80) was created, which users can call in order to submit enquiries or file complaints. A corresponding e-mail address is also in operation (katanalotes@eett.gr).

In the two months during which the Division has been operating, 341 calls were registered and 37 complaints were received in writing for resolution.

Issues regarding Transmitting/Receiving Antenna Installations

Mobile telephony systems require a dense network of base stations located within built-up areas, in order to guarantee reliable communications, using a clear signal free of interference or interruptions and, in parallel, serving the ever-increasing number of subscribers. For this reason, antenna mast constructions are installed on rooftops and within built-up areas.

It should be noted that the higher the number of antennas installed in a particular area, the lower the electromagnetic radiation by each antenna

and the overall radiation level in that area are.

Joint Ministerial Decision⁶⁵ (“Measures for protection of the public from the operation of land-based antenna installations”), has set clear conditions providing that, prior to the issue of each Licence for Mobile Telephony Antenna Mast Construction, the measures necessary for protection of the public are taken. Moreover, the Decision appoints the Hellenic Atomic Energy Commission as the authority responsible for protection of the general public from non-ionising radiations.

EETT, as the authority responsible for the development of telecommunications networks, fully respecting the rights of citizens and the environment, seeks to ensure strict observance of the legislation in force. To this end, in all cases EETT reviews in detail the supporting documents, required to ensure the above conditions, and intends to act as a liaison for cooperation between mobile telephony companies on the joint use of antennas, so that the number of antennas is reduced as far as possible.

During 2002, EETT received requests/complaints by citizens and other organisations concerning mobile telephony antenna mast constructions. More specifically, information were provided for 274 cases concerning antenna mast constructions, of which 130 had been illegally installed.

In cases of illegal constructions, EETT conducts the on-site inspections required and imposes the administrative penalties as stipulated by the legislation. After issuing the relevant Decision, EETT promptly informs the local Town Planning Department and Public Prosecutor’s Office, in order to secure removal of the illegal constructions and imposition of the criminal penalties, respectively, pursuant to the relevant provisions of Law 2801/2000. During 2002, EETT imposed administrative fines in some 60 cases of illegal mobile telephony antenna mast constructions.

⁶⁵ Joint Ministerial Decision No 53571/3839/2000, FEK Issue 1105/B/06-09-2000.